



मेकॉन लिमिटेड (भारत सरकार का संस्थान) MECON LIMITED (A GOVT. OF INDIA ENTERPRISES)



13वां एवं 15वां तल, नार्थ टॉवर, स्कोप मीनार, लक्ष्मी नगर व्यवसायिक केन्द्र, दिल्ली-110092, (भारत)
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GSTIN : 07AACCM2119B1Z4 वेबसाइट / Website : <http://meconlimited.co.in>

FAX OF ACCEPTANCE (FOA)

FOA NO. 05/51/Q7NT/GAIL/001-IV-06/FOA/907

DATE: 02.03.2023

TO : M/S APOORV AIR CONTROL
EMAIL : APOORVGUPTA0708@GMAIL.COM
ATTN : MRS. ALKA GUPTA, PROPRIETOR
FROM : SR. GM (CONTRACTS), MECON LIMITED, DELHI

PLEASE REFER TO YOUR OFFER NO. NIL DATED NIL (NIC BID ID: 501045) AND ALL OTHER SUBSEQUENT CORRESPONDENCE AGAINST BIDDING DOCUMENT NO. 05/51/Q7NT/GAIL/001-IV-06 DATED 03.12.2022 (TENDER ID: 2022_GAIL_137109) & COMMERCIAL CORRIGENDUM#1 DATED 17.12.2022 FOR MECHANICAL AND ELECTRICAL WORKS FOR CONSTRUCTION OF CNG STATIONS AT RANCHI AND JAMSHEDPUR GA (1.5 YEARS ARC) FOR CGD PROJECT AT SIX GAS OF M/S GAIL (INDIA) LIMITED (.)

WE HEREBY ISSUE THIS FAX OF ACCEPTANCE (FOA) FOR AWARD FOR COMPLETE SCOPE OF WORK OF TENDER AT AN ESTIMATED CONTRACT VALUE OF RS. 3,01,47,890/- (INDIAN RUPEES THREE CRORES ONE LAKH FORTY-SEVEN THOUSAND EIGHT HUNDRED NINETY ONLY) EXCL. GST. GST SHALL BE PAYABLE EXTRA AS PER TENDER PROVISIONS. (PRESENT RATE OF GST@18%). The breakup of prices is enclosed at Annex-I.

THE COMPLETION PERIOD SHALL BE AS PER TENDER DOCUMENT (.)

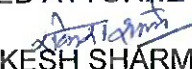
PLEASE SUBMIT CONTRACT PERFORMANCE BANK GUARANTEE@ 3% OF ANNUALISED CONTRACT/ORDER VALUE [EXCLUDING GST] AS PER CL. NO.37 OF ITB AND CONTRACT AGREEMENT AS PER CL. NO.36 OF ITB OF TENDER DOCUMENT (.)

. YOU ARE REQUESTED TO CONTACT PROJECT COORDINATOR (MR. PRATEEK MAHESHWARI, MANAGER (CGD), MECON LIMITED, EMAIL ID: PMAHESHWARI@MECON.CO.IN) FOR FURTHER INSTRUCTIONS (.)

ALL OTHER TERMS AND CONDITIONS SHALL BE AS PER BIDDING DOCUMENT & CORRIGENDUM THERE OF AS STATED ABOVE AND AS AGREED TILL DATE (.)

A DETAILED LOA SHALL FOLLOW (.)

FOR & ON BEHALF OF GAIL (INDIA) LIMITED
(BY ITS CONSTITUTED ATTORNEY)


RAKESH SHARMA
SR. GM (CONTRACTS)
MECON LIMITED, DELHI

CC: BY COURIER TO:
M/s Apoorv Air Control
322, 2nd Floor, Apex Mall, Tonk Road, Jaipur-302015
Tel. No. +91- 0141 4022992, 9928076463

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Sl. No.	Item Description	Quantity	Units	APOORV		AHR Items
				UNIT RATE INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT (IN INR)	TOTAL AMOUNT INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT (IN INR)	
1	Mechanical & Piping Works					
2	SECTION-A : SS TUBE & FITTING - SUPPLY, LAYING & TESTING					
3	Laying, testing and commissioning of SS tubes along with fittings as per Technical Specification, Typical P & ID for type of CNG station and scope of work including handling, lifting, transportation from stores to CNG stations.					
4	½" OD X 0.095" min Wall thk. SS Tube (Refer TS Section III - A)	1400	RM	2,000	2,800,000	AHR
5	½" OD X 0.083" min Wall thk. SS Tube (Refer TS Section III - A)	250	RM	1,500	375,000	AHR
6	SUPPLY OF SS TUBES as per Technical Specification					
7	½" OD X 0.095" min Wall thk. Material SS316SS Tube (Refer TS Section III - A)	300	RM	2,500	750,000	AHR
8	½" OD X 0.083" min Wall thk. Material SS316 SS Tube (Refer TS Section III - A)	50	RM	2,000	100,000	AHR
9	Note: Quantities beyond mentioned quantities may be provided as free issue.					
10	Supply of SS Fittings, Valves					
11	Quick Connect Body & Stem					
12	End connection: ½" Tube OD, for stem & ½" NPT (F) for body Material : SS316; Rated pressure : 5000 PSI @ 70°F Temperature: 0°F to 400°F	14	Nos.	17,000	238,000	AHR
13	Plug					
14	Size : ½" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	1,000	10,000	
15	Size : ¾" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	1,800	18,000	
16	Caps					
17	Size : ½" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	1,600	16,000	AHR
18	Size : ¾" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	1,100	11,000	
19	Union					
20	Size : ½" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	250	Nos.	3,400	850,000	
21	Size : ¾" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	14	Nos.	2,200	30,800	
22	Reducing Union					
23	Tube OD ¾" x Tube OD 1/2", Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	85	Nos.	4,300	365,500	
24	Equal Tee					
25	Size: ½" OD x ½" OD x ½" OD, Material: SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	5	Nos.	4,300	21,500	
26	Size: ¾" OD x ¾" OD x ¾" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	60	Nos.	5,800	348,000	
27	Reducing Union Tee					
28	¾" OD x ½" OD x ¼" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	2	Nos.	6,700	13,400	
29	Tube End Connection					
30	½" Tube End & ¾" OD with Ferrule Fitting, SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	85	Nos.	2,700	229,500	
31	Nut					
32	¾" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	650	6,500	
33	½" OD, Material : SS316 (Rated pressure : 6000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	400	4,000	
34	Front Ferrule					
35	¾" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	350	3,500	
36	½" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	250	2,500	
37	VOID					
38	Back Ferrule					
39	¾" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	350	3,500	
40	½" OD, Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	250	2,500	
41	Male Connector					
42	Size ¼" NPT (M) x ¾" OD, SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	1,200	12,000	
43	Size 1/2" NPT (M) x ¾" OD, SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	10	Nos.	1,700	17,000	
44	Cross					
45	¾" OD X ¾" X ¾" OD X ¾" OD Material : SS316 (Rated pressure : 5000 PSI @ 70°F Temperature : 0°F to 400°F)	2	Nos.	8,000	16,000	
46	SS Ball Valves, conforming to MECO's Technical Specification No. MEC/TS/05/62/048 for SS Ball Valves of following sizes, specifications as indicated below :					
47	2-Way Trunnion Normal Bore Ball Valve ¾"	5	Nos.	25,000	125,000	
48	2-Way Floating Normal Bore Ball Valve ¾"	154	Nos.	16,000	2,464,000	
49	2-Way Trunnion Normal Bore Ball Valve ½"	5	Nos.	25,000	125,000	
50	2-Way Floating Normal Bore Ball Valve ½"	85	Nos.	14,000	1,190,000	
51	3-Way Trunnion Mounted, Reducer Bore Ball Valve ½" OD end Connection and ¼" NPT (F) bottom end connection	14	Nos.	30,000	420,000	
52	Conductive Core Thermoplastic Hose					
53	¾" ID Conductive Core Thermoplastic Hose for CNG Service with break away coupling	14	Nos.	75,000	1,050,000	AHR
54	Supply of SS 304 Tubes along with isolation valves, reducers & fittings etc. as per Technical Specification, Typical schematic drg. for Ins. air line of CNG station and scope of work including handling, storage, lifting, transportation upto CNG stations. (Note: Total no. of ferrule fittings may be considered as one jointing ferrule at every 5.0 m)					
55	½" OD X 0.083" min Wall thk. SS Tube (Refer TS Section III - A)	550	RM	75	41,250	

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**MECHANICAL AND ELECTRICAL WORKS FOR CONSTRUCTION OF CNG STATIONS AT RANCHI AND JAMSHEDPUR GEOGRAPHICAL AREAS
(1.5 YEARS ARC) OF M/S GAIL(I) LTD.
Tender No: 05/51/Q7NT/GAIL/001-iv-06**

Sl. No.	Item Description	Quantity	Units	APOORV		AHR Items
				UNIT RATE INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN B/D DOCUMENT [IN INR]	TOTAL AMOUNT INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN B/D DOCUMENT [IN INR]	
56	Laying, testing and commissioning of SS 304 Tubes along with isolation valves, reducers & fittings etc.as per Technical Specification, Typical schematic drg. for Ins. air line of CNG station and scope of work including handling, storage, lifting, transportation upto CNG stations. (Note: Total no. of ferrule fittings may be considered as one jointing ferrule at every 5.0 m)					
57	½"OD X 0.083" min Wall thk. SS Tube (Refer TS Section III - A)	550	RM	75	41,250	
58	SECTION-B : ERECTION OF MECH. EQUIPMENT					
59	Handling (including lifting and transportation from Client's store within city to CNG stations) and erecting in position, the following equipment either on the foundation at Ground level or on roof at 3.5 m above ground level. Contractor's scope shall include supply of all material and accessories including but not limited to any fixtures, clamps, gasket, nut bolts, etc. :					
60	Cascade 4500/3000/2200 L water capacity. Erection at + 4.0 M level (Refer TS Section III - B)	4	Nos.	45,000	180,000	
61	Cascade 4500/3000/2200 L water capacity. Erection at + Ground level (Refer TS Section III - B)	14	Nos.	30,000	420,000	
62	Dispenser Erection at + Ground Level	28	Nos.	15,000	420,000	
63	Note: The quantities given above against individual items are indicative and shall not be considered to be binding. The quantities may increase or decrease at site at the time of actual execution and as per the discretion of Owner/ Engineer-in-charge. The unit rate shall be operated to work out the final payment due to Contractor.					
64	SECTION-C : SUPPLY, ERECTION & COMMISSIONING OF MISCELLANEOUS ITEM					
65	Supply, erection & commissioning of following miscellaneous items as per technical specification and at locations (within the stations) as directed by EIC					
66	Air compressor pump (Refer TS Section III - C) (Tyre Inflator)	5	No.	10,000	50,000	
67	Water cooler (Refer TS Section III - C)	5	No.	10,000	50,000	
68	Fire fighting Equipments (Refer TS Section III - C)					
69	DCP - 9 Kg	70	Nos.	8,000	560,000	
70	DCP - 75 Kg	10	Nos.	25,000	250,000	
71	CO2 - 4.5 Kg	10	Nos.	10,000	100,000	
72	Sand Bucket (4 Nos. on each strand)	10	Nos.	5,000	50,000	
73	SECTION-D : SUPPLY AND INSTALLATION OF ABOVEGROUND STEEL PIPING AT CNG STATIONS.					
74	SUPPLY OF ASSORTED PIPE, FITTINGS AND FLANGES Complete work of supply of pipes, flanges and fittings including all taxes, duties, transportation and inspection charges but not limited to, the following items in accordance with PMS (piping material specification), relevant specifications & drawings indicated in scope of work indicated in SCC and instructions of Engineer-in-charge and as per all provisions of the CONTRACT DOCUMENT. Handling including lifting, transportation from Contractor Stores to CONTRACTOR's workshop for fabrication and/ or to work site for field fabrication and erection for all piping items supplied by Contractor.					
75	Carbon Steel Pipe (A 106, Gr. B, Seamless, B-36.10)					
76	Size Rating/ Schedule					
77	4" NB, BE STD	30	Meter	1,000	30,000	
78	2" NB, BE XS	30	Meter	1,400	42,000	
79	1" NB, PE XS	15	Meter	450	6,750	
80	¾" NB, PE S160	15	Meter	400	6,000	
81	Flanges					
82	Weld Neck (A105, 300#, B-16.5, 125AARH)					
83	Size Rating/ Schedule					
84	4" NB, RF End thickness to match with pipe wall thickness	4	Nos.	2,700	10,800	
85	2" NB, RF End thickness to match with pipe wall thickness	4	Nos.	1,900	7,600	
86	Blind Flanges (A105, 300#, B-16.5, 125AARH)					
87	Size Rating/ Schedule					
88	4" NB, RF STD	4	Nos.	1,485	5,940	
89	2" NB, RF XS	4	Nos.	1,000	4,000	
90	Elbow (Seamless)					
91	90° Elbow (A234 Gr. WPB, B-16.9, 1.5D)					
92	Size Rating/ Schedule					
93	4" NB STD	4	Nos.	1,500	6,000	
94	2" NB XS	4	Nos.	1,000	4,000	
95	1" NB XS	4	Nos.	500	2,000	
96	45° Elbow (A234 Gr. WPB, B-16.9, 1.5D)					
97	Size Rating/ Schedule					
98	4" NB STD	4	Nos.	1,000	4,000	
99	2" NB XS	4	Nos.	500	2,000	
100	Tees (Seamless)					
101	Equal Tee (A234 Gr. WPB, B16.9)					
102	Size Rating/ Schedule					
103	4" NB x 4" NB x 4" NB STD x STD	4	Nos.	2,500	10,000	
104	2" NB x 2" NB x 2" NB XS	4	Nos.	2,000	8,000	
105	Unequal Tee (A234 Gr. WPB, B16.9)					
106	Size Rating/ Schedule					
107	4" NB x 4" NB x 2" NB STD x XS	4	Nos.	3,000	12,000	
108	Socketlet (A105, B16.11, 3000# / 6000#)					
109	Size Rating/ Schedule					

SCHEDULE OF RATES
MECHANICAL AND ELECTRICAL WORKS FOR CONSTRUCTION OF CNG STATIONS AT RANCHI AND JAMSHEDPUR GEOGRAPHICAL AREAS
(1.5 YEARS ARC) OF M/S GAIL (I) LTD.
Tender No: 05/51/Q7NT/GAIL/001-iv-06

Sl. No.	Item Description	Quantity	Units	APOORV		AHR Items
				UNIT RATE INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	TOTAL AMOUNT INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	
110	4" x 1" NB	4	Nos.	800	3,200	
111	4" x 3/4" NB	4	Nos.	675	2,700	
112	2" x 3/4" NB	4	Nos.	850	3,400	
113	Reducer (A234 Gr. WPB, B.16.9)					
114	Size					
115	4" NB x 2" NB	4	Nos.	2,500	10,000	
116	Note: 1) The quantities mentioned above are tentative. 2) For all the supply items mentioned above, procurement shall be made as per specification after due approval of Engineer-in-charge.					
117	Supply of valves Complete work of supply of valves including all taxes, duties, transportation and inspection charges but not limited to, the following items in accordance with relevant Specifications & relevant Data Sheets indicated in scope of work indicated in SCC, drawings, specification and instructions of EIC and as per all provisions of the CONTRACT DOCUMENT.					
118	Flanged/ Welded Valves (Full Bore/ Reduced Bore)					
119	Ball / Glove					
120	Size					
121	4" NB RB	4	Nos.	40,000	160,000	
122	2" NB FB	4	Nos.	20,000	80,000	
123	Socket Welded Valve (Ball / Glove Valve)					
124	Size					
125	1" NB	4	Nos.	5,500	22,000	
126	3/4" NB	4	Nos.	4,000	16,000	
127	1/2" NB	4	Nos.	3,000	12,000	
128	STATION PIPING (ABOVEGROUND) Transportation of all piping items from Owner's and/ or Contractor's storage point to work at site/ workshop as applicable, complete work of fabrication, erection, painting, testing of pipes, flanges and fittings and making ready for further Commissioning / Start-up of carbon steel piping of all sizes and ratings including supply of all consumables, equipment, manpower and other resources and execution of, but not limited to, the following works in accordance with relevant specifications listed in list of specification / standards for mechanical works attached with Section-D under Part-III of Volume - II of II and scope of work, Typical layout drawings of MS and OLS, specification and instructions of Engineer-in-charge and as per all provisions of the CONTRACT DOCUMENT. Fabrication including cutting, edge preparation, inclusive of grinding the edges of pipes, fittings, flanges etc. to match with the matching edges of uneven/different thickness wherever required, welding, attachment of all pipe fittings like elbows, tees, reducers. Supply of nipples, coupling etc. as required for completion of job. Weldolets, sockolets, flanges, vent and drain point connection etc., including providing stub-in connections, fabricated fittings and reinforcement pads etc., as required. Erection including prior cleaning, lifting, placing on pipe sleepers and supports, overhead on racks, skids and at all elevations including installation and carrying out connected activities for all types of valves including supply and fixing of gaskets, studs/ bolts, nuts wherever required for all sizes, levelling, aligning, joining of flanges, blind flanges, connecting with equipment, nozzles, strainers, tie-in with existing piping/facilities, etc. tapping for inline instruments like pressure gauges, thermowells, sample connection, etc. Preparation of final bill of material based on piping GADs. Preparation of isometric and fabrication drawings. Carrying out Non-destructive testing as required except items mentioned in Sl. no. 137 of SOR. Surface preparation before application of primer by means of sand blasting including supply of approved quality of sand, manpower, machineries, tools & tackles to achieve required roughness as per specification and as per instruction of Engineer-in-charge. Painting of entire system (including aboveground all pipes fittings, flanges and accessories) as per specification MEC/S/05/62/07A suitable for highly corrosive area environment including supply of approved paints and primers, application of primer and paints, identification lettering/ numbering, colour coding, etc. as specified including rub down & touch up of shop primer or scrapping of shop primer wherever required by COMPANY and providing scaffolding for all heights etc. Cleaning and flushing by water/ compressed air, testing of the systems including hydrostatic, pneumatic and any other type of testing as specified, draining, drying by compressed air/other methods approved by					
129	Complete Carbon Steel aboveground Piping Work with painting including all fittings, flanges and supply of all required gaskets, studs bolts & nuts etc. as described under item 2.0 above					
130	Carbon Steel Pipe (A 106, Gr. B, Seamless, B-36.10)					
131	Size					
132	4" NB, BE	50	Meter	3,000	150,000	
133	2" NB, BE	12	Meter	3,000	36,000	AHR
134	1" NB, PE	6	Meter	1,200	7,200	
135	3/4" NB, PE	6	Meter	750	4,500	
136	Note: 1) Pipe Specification and thickness may vary depending upon availability of pipe. No extra payment shall be made for this. 2) All butt welded fittings end shall generally match with connecting pipe wall thickness. However, in case of misalignment, Contractor shall have to do end preparation without any extra cost. 3) All coupling, nipples stud, bolts, nuts and gaskets etc. as required shall be supplied by contractor but no separate payments shall be made as it is covered under erection rate.					

Sl. No.	Item Description	Quantity	Units	APOORV		AHR Items
				UNIT RATE INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	TOTAL AMOUNT INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	
137	RADIOGRAPHY Performance of radiographic inspection by gamma radiation as per scope of work and as per specifications in piping of all types and thickness including providing/hiring of all necessary equipments, supply of all consumables, and whatever else even though not expressly mentioned but required to perform the work as per specifications and instructions of Engineer-in-Charge (full circle re-radiography of the repaired joint and additional radiography necessitated due to poor performance of contractor's welder shall be carried out by the Contractor at his own cost and shall not be paid extra by Company). Radiographs shall be submitted to the Engineer-in-Charge for acceptance, whose decision shall be final and binding.					
138	Size					
139	4" NB	60	of Jo	1,000	60,000	
140	2" NB	40	of Jo	1,000	40,000	
141	Note: The quantities mentioned above are tentative.					
142	Aboveground erection of Valves Handling including lifting and transportation from COMPANY's warehouse to CONTRACTOR'S Stores and/or work site and installation of all types of valves, insulating joint, flow tee including assembly of valve accessories, (if any) by bolting, threading or welding, supply and insertion of gaskets, nuts & bolts, nipples, etc. at all elevations of pipe sleepers, supports or overhead on racks, equipments nozzle, skid & painting etc. supply of all consumables, manpower, equipment, etc. for completion of all works as per scope of work and as per drawings, specifications and instructions of Engineer-in-charge including servicing/ cleaning of valve wherever required.					
143	Flanged/ Welded Valves (Full Bore/ Reduced Bore)					
144	Ball / Glove					
145	Size Rating/ Schedule					
146	4" NB 300# #	1	Nos.	5,000	5,000	
147	2" NB 300# #	2	Nos.	3,000	6,000	
148	Socket Welded Valve (Ball / Glove Valve)					
149	Size Rating/ Schedule					
150	1" NB 800#	6	Nos.	1,000	6,000	
151	1/2" NB 800#	6	Nos.	1,000	6,000	
152	1/2" NB 800#	6	Nos.	1,000	6,000	
153	STRUCTURAL WORKS					
154	Pipe Supports & Other Structures					
155	Supply, fabrication and erection of all types of pipe supports like clamps, saddle, guide stops, cradles, turn buckles, anchors, T-posts; stockade/ trestle and pipe bridge for overhead piping; frames for canopy, approach ladders and platforms, crossover, cable tray supports, etc. including painting suitable for highly corrosive area as per specification labour and supervision & complete work as per drawings, specifications and instruction of Engineer-in-charge. (Bolts, nuts, washers, U-clamps etc. for supporting shall be supplied by the Contractor within the rates quoted. These items will not be measured and paid separately). The work is to be completed in all respect as per scope of work and specification.	5	M.Ton	100,000	500,000	
156	Notes: 1)The quantities indicated above are tentative estimated values and hence are approximate. Final payment will be made based on actual quantities to be certified by the Owner/Owner representative. 2)The cost of MS bolts (permanent and service), washers, electrodes, putty, gases, cost of straightening the raw materials, cutting of flats from plates and providing splices, paints, tools, plants etc., as required for the work shall be deemed to be included in the quoted rates. 3)All handling and transport charges of raw materials and fabricated structures including double handling, as required, for completion of work in accordance with time schedule, are deemed to be included in the quoted rates.					
157	PRESSURE GAUGES					
158	Supply, installation and calibration of pressure Gauges and their accessories inclusive of supply of necessary piping materials/tubings alongwith all necessary valves & fittings, fabrication and installation of impulse lines/manifolds as per D. S. No. MEC/23H7/05/E5/1/001/DS-PG.	6	No.	6,000	36,000	
159	ELECTRICAL WORKS (SUPPLY)					
160	SUPPLY					
161	Design, engineering, manufacture, shop testing, supply including packing and forwarding, transportation, delivery at storage and from storage to site of power distribution board (PDB) :					

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SCHEDULE OF RATES
MECHANICAL AND ELECTRICAL WORKS FOR CONSTRUCTION OF CNG STATIONS AT RANCHI AND JAMSHEDPUR GEOGRAPHICAL AREAS
(1.5 YEARS ARC) OF M/S GAIL(I) LTD.
Tender No: 05/51/Q7NT/GAIL/001-iv-06

Sl. No.	Item Description	Quantity	Units	APOORV		AHR Items
				UNIT RATE INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN B/D DOCUMENT [IN INR]	TOTAL AMOUNT INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN B/D DOCUMENT [IN INR]	
162	415 V, 36 KA single front type indoor PDB to receive input power consisting of bus bar chamber, cable alley, outgoing with Fuse complete with wiring, indication lamp, ammeter, voltmeter, MFM (Multi Function Meter) etc including all labour and materials with operating mechanism, all accessories, mandatory spares as per data sheet, auxiliaries with FLP LCS (Local Control switch) for tripping the main incomer of PDB etc complete in all respects as specified in technical specification, data sheet & SLD no. MEC/Q7NT/05/E9/E/1081B & as per standard Specification. Dual In-comer of 125 Amp & 125 Amp (with Single phase preventer) (with Single phase preventer) 4P MCCB (with Micro processor and based O/C, S/C & E/F RELEASE with LSIG & Shunt trip) Electrical (via Power contactor) & Mechanical interlock for both the incomer. Outgoing with 01 no. 80 Amp TPN MCCB (with TM based O/C, S/C & E/F RELEASE) for Booster Compressor. Outgoing with 01 no. 63 Amp TPN MCCB (with TM based O/C, S/C & E/F RELEASE) for APFC panel. Outgoing with 02 nos. 32 Amp TPN MCCB (with TM based O/C & S/C RELEASE) for UPS and Static Bypass. Outgoing with 1 no. 40A Fuse and 3 nos. 10A DP MCB with Timer (24Hrs) Auto/Manual Outgoing with 1 no. 40A Fuse and 3 nos. 10A DP MCB without Timer	1	Nos.	650,000	650,000	AHR
163	Floor mounted APFC Panel of 10KVAR capacitor bank in steps of 4x2.5 KVAR capacitors consisting of bus bar chamber, cable alley incoming (FSU), outgoing feeder (FSUs) as specified in tender specification	14	Nos.	25,000	350,000	
164	Outdoor type dust & weather proof sheet steel (2 mm thick) enclosed MCCB of following rating for mounting on wall or pedestal. 160A, 415V, 3 Pole & Neutral AC-23 duty and suitable for termination of 3.5 x 95/50 sq.mm A2XFY cable on incomer terminals and outgoing terminals.	14	Nos.	35,000	490,000	
165	Design, engineering, supply including packing and forwarding, transportation, delivery at storage, of the complete earthing and lightning protection system, earth electrodes/ pit, earth main ring, earthing of electrical equipments, instrument panels, field instruments, process equipments and pipes/ flanges including all associated civil work with all material (Like Bitumen coating) and labour as per specification and drawings approved by the company in with IS 3043.					
166	Earth Pits- GI PIPE Electrode with 6 mm thick chequered plate cover	70	Nos.	12,000	840,000	
167	Earth Pits- Copper plate Electrode with 6 mm thick chequered plate cover	14	Nos.	15,000	210,000	
168	GI Strip (50X6) mm	1400	Mtrs	300	420,000	
169	GI Strip (25X3) mm	2800	Mtrs	140	392,000	
170	Advance maintenance free earthing system with 3mtr earth electrode of low carbon steel with 250 micron copper coating with carbon based backfill compound as per IS 3043/IEEE-80.	1	Nos.	11,000	11,000	
171	Arrangement for Earthing of LCV with Flexible green Cu wire (25 sqmm of approx 30 Meter length) , Clamp (including bolting arrangement) , Flexible PVC, crocodile clamps (2 nos. each) and other item etc. including MS enclosure box with door of sheet thk (2.00mm) color etc.	14	Sets	5,000	70,000	
172	Design, engineering, supply including packing and forwarding, transportation, delivery at storage, of the 1.1kV grade XLPE insulated, PVC sheathed, FRLS power and control cables (conforming to IS:7098 and specification) including Cable glands & Lugs etc. of following sizes in trenches/ excavated under ground trench /trays, pulling through pipes and its proper sealing, cutting of paved area, roads etc.					
173	3.5x 120 mm2 A2XFY	100	Mtrs.	1,600	160,000	
174	3.5x 95 mm2 A2XFY	10	Mtrs.	1,200	12,000	
175	3.5x 50 mm2 A2XFY	1400	Mtrs.	260	364,000	
176	4x 25 mm2 A2XFY	280	Mtrs.	200	56,000	
177	4x10 mm2 2XWY	280	Mtrs.	450	126,000	
178	4x 6 mm2 2XWY	700	Mtrs.	300	210,000	
179	4x 2.5 mm2 2XWY	11200	Mtrs.	200	2,240,000	
180	Supply including packing and forwarding, transportation, delivery at storage of lighting fixtures complete with mounting bracket, flame proof/non flame proof, control gear box as per the type of fixture, lamps etc. including civil work with pipe inserts for cables and connecting work, with all material and labour as per specifications, drawings and instruction of Engineer-in-charge. Work to be completed in all respects.					
181	Street lighting, integral flame proof well glass fixture (CMIFR approved for Zone-1/2 gas group IIA & IIB) with 72 W LED luminaire with flame proof control gear Model no. FLPW-1095 of Baliga make or equivalent)	84	Nos.	10,000	840,000	
182	Street lighting pole 6mtr high GI octagonal pole (Type BOP-6030 of Bajaj make or equivalent) complete with bracket, GI clamps for fixing flame proof control gear box as per standard drawing & specification.	84	Nos.	12,000	1,008,000	
183	UPS SYSTEM Design, supply, packing, forwarding, delivery by equipment supplier at site including commissioning spares as required of UPS systems as per specification, datasheet, block diagram of the following rating :					
184	3KVA, 230 V Single phase, 50 Hz, single industrial type, UPS system suitable for input Power supply voltage of 320V-460V- TPN (184-265V/Ph) , output 230 V +/- 1%, AC with Bypass supply, Battery Bank , ACDB (Incomer 32A DP MCB & Outgoing 4 Nos. 6A DP MCB & 6 nos. 10A DP MCB) and 2.0 hrs. Battery backup (VRLA, 12V) and battery capacity shall not be less than 14 KVAh (where KVAh = battery AH x 12 V x No. of Batteries). Charger rating shall not be less than 6.5 kW. All interconnecting cables among UPS, Rectifier, battery stand, ACDB etc (30 mtr shall be considered between battery bank and UPS panel, 30 mtr cable shall be considered between ACDB and UPS panel and any other cable which is not defined here but necessary for satisfactory operation of the UPS system).	1	Set	750,000	750,000	

Sl. No.	Item Description	Quantity	Units	APOORV		AHR Items
				UNIT RATE INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	TOTAL AMOUNT INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	
185	Supply,Transportation at site of following sizes of HDPE Pipe in required length fixed on steel, concrete or similar structure, laid in trenches, digging, construct conduit ductbank and buried in concrete including cutting, bending and similar works, supply of clamps, small iron structures, spacers and installation of seats, plugs, bushings etc., civil works and its materials, including all labour and materials complete as per approved drawings and directions of Engineer-In-Charge.					
186	50 mm NB	5000	Mtrs	200	1,000,000	
187	100 mm NB	2000	Mtrs	400	800,000	
188	Supply of following Hot Dip Galvanized Ladder/Perforated Type cable trays (as per IS 2629) including bends, tee, crosses, horizontal and vertical splices along with cable tray cover(Wherever required for Asthetic look) etc. as required including supply of all G.I hardware, all labour and material as required as per standard drawings, specification and direction of Engineer-in-charge					
189	Perforated type, made from 50mm height and 2.5 mm thick sheet steel & galvanized (86 microns) of following sizes.					
190	150mm wide	140	Mtrs	800	112,000	
191	300mm wide	140	Mtrs	1,000	140,000	
192	Erection Material					
193	Supply of MS base frame support for switch gear and bracket for misc. electrical equipment, cable tray support out of roled MS section, pipes, plates etc including welding, bolting, releveling, supply of necessary anchor bolts and grouting etc supply of paints applying one coat of anti rust primer two finish coats of approved synthetic enamel paints including bracking walls, floors etc for structure as required including supply of all GI hardware materials including all labour and materials complete as required and the direction of Engineer-in-charge.					
194	For RO/DODO/DBS	14	Lump sum	35,000	490,000	
195	Supply of the following including the supply of necessary clamp, bolts, rawl plugs etc. breaking and making good of walls, if required , and including all labour and materials complete as per directions of Engineer-In-Charge, applicable standards and Indian Electricity rules.					
196	Shock hazard charts complete with frame and glass	14	Nos.	1,000	14,000	
197	First Aid Boxes	14	Nos.	4,000	56,000	
198	Carbon-di-oxide(CO2) type fire extinguisher 4.5 Kg capacity Complete with gunmetal valve conforming to IS : 3224 With ISI mark , Discharge horn with bend & wall fixing Bracket With Mfg. Test certificate	28	Nos.	10,000	280,000	
199	Caution boards (Danger, High Volatage) including supply of necessary clamps, bolts and other hardware.	14	Nos.	1,750	24,500	
200	Single Line Diagram complete in glass frame.	14	Nos.	5,500	77,000	
201	Supply of Insulating Mats 11kV grade (as per IS:15652 - 2006) of 1000mm width, required for maintenance of electrical equipment in substation as required including cutting to required shape in running length and including all labour and materials etc. complete and as per directions of Engineer-In-Charge as per applicable Indian or International standards and Indian Electricity Rules.	42	Mtrs	2,000	84,000	
202	Supply of electrical accessories including, cable tags, cable tie ,Flexible pvc conduit,cable marker, nickle plated lugs, double compressed brass cable glands,brass adaptor/reducers/nipples, fixing of metallic anchor fasteners for supporting of cable trays and misc. electrical switchgear including all labour and materials complete as required and as per directions of Engineer-In-Charge.					
203	For RO/DODO/DBS	14	Lump sum	14,000	198,000	
204	Supply of required material for construction of Cable pit with pit cover (SFRC cover HD-20 of IS-12592) including civil works repair, concrete wall/brick wall & its materials, cable conduits interface & its water sealing, cable support structure including all labour and materials complete in all aspect as per approved drawings and directions of Engineer-In-Charge.					
205	500X500(of inside clearance)X 600(Depth)	70	Nos.	1,000	70,000	
206	750X750(of inside clearance)X800(Depth)	70	Nos.	1,250	87,500	
207	1000X1000(of inside clearance)X1000(Depth)	28	Nos.	1,500	42,000	
208	ELECTRICAL WORKS (Erection)					
209	ERECTION, TESTING AND COMMISSIONING					
210	Erection Testing and Commissioning of power distribution board (PDB):					

**MECHANICAL AND ELECTRICAL WORKS FOR CONSTRUCTION OF CNG STATIONS AT RANCHI AND JAMSHEDPUR GEOGRAPHICAL AREAS
(1.5 YEARS ARC) OF M/S GAIL(I) LTD.
Tender No: 05/51/Q7NT/GAIL/001-iv-06**

Sl. No.	Item Description	Quantity	Units	APOORV		AHR Items
				UNIT RATE INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	TOTAL AMOUNT INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	
211	415 V, 36 KA single front type indoor PDB to receive input power consisting of bus bar chamber, cable alley, outgoing with Fuse complete with wiring, indication lamp, ammeter, voltmeter, MFM (Multi Function Meter) etc including all labour and materials with operating mechanism, all accessories, mandatory spares as per data sheet, auxiliaries with FLP LCS(Local Control switch) for tripping the main incomer of PDB etc complete in all respects as specified in technical specification, data sheet & SLD no. MEC/Q7NT/05/E9/E/1081B & as per standard Specification. Dual In-comer of 125 Amp & 125 Amp (with Single phase preventer) (with Single phase preventer) 4P MCCB (with Micro processor and based O/C, S/C & E/F RELEASE with LSIG & Shunt trip) Electrical (via Power contactor) & Mechanical interlock for both the incomer. Outgoing with 01 no. 80 Amp TPN MCCB (with TM based O/C, S/C & E/F RELEASE) for Booster Compressor. Outgoing with 01 no. 63 Amp TPN MCCB (with TM based O/C, S/C & E/F RELEASE) for APFC panel. Outgoing with 02 nos. 32 Amp TPN MCCB (with TM based O/C & S/C RELEASE) for UPS and Static Bypass. Outgoing with 1 no. 40A Fuse and 3 nos. 10A DP MCB with Timer(24Hrs) Auto/Manual Outgoing with 1 no. 40A Fuse and 3 nos. 10A DP MCB without Timer	1	Nos.	30,000	30,000	
212	Floor mounted APFC Panel of 10KVAR capacitor bank in steps of 4x2.5 KVAR capacitors consisting of bus bar chamber, cable alley incoming (FSU), outgoing feeder (FSUs) as specified in tender specification	14	Nos.	1,000	14,000	
213	Outdoor type dust & weather proof sheet steel (2 mm thick) enclosed MCCB of following rating for mounting on wall or pedestal. 160A, 415V, 3 Pole & Neutral AC-23 duty and suitable for termination of 3.5 x 95/50 sq.mm A2XFY cable on incomer terminals and outgoing terminals.	14	Nos.	1,000	14,000	
214	Erection Testing and Commissioning of the complete earthing and lightning protection system, earth electrodes/ pit, earth main ring, earthing of electrical equipments, instrument panels, field instruments, process equipments and pipes/ flanges including all associated civil work with all material (Like Bitumen coating) and labour as per specification and drawings approved by the company in with IS 3043.					
215	Earth Pits- GI PIPE Electrode with 6 mm thick chequered plate cover	70	Nos.	3,000	210,000	
216	Earth Pits- Copper plate Electrode with 6 mm thick chequered plate cover	14	Nos.	3,000	42,000	
217	GI Strip (50X6) mm	1400	Mtrs	50	70,000	
218	GI Strip (25X3) mm	2800	Mtrs	50	140,000	
219	Advance maintenance free earthing system with 3mtr earth electrode of low carbon steel with 250 micron copper coating with carbon based backfill compound as per IS 3043/IEEE-80.	1	Nos.	3,000	3,000	
220	Arrangement for Earthing of LCV with Flexible green Cu wire (25 sqmm of approx 30 Meter length) ,Clamp (including bolting arrangement) ,Flexible PVC, crocodile clamps(2 nos.each) and other item etc. including MS enclosure box with door of sheet thk (2.00mm) color etc.	14	Sets	500	7,000	
221	Laying, Termination, Glanding, Testing and Commissioning of the 1.1kV grade XLPE insulated, PVC sheathed, FRLS power and control cables (conforming to IS:7098 and specification) including Cable glands & Lugs etc.of following sizes in trenches/ excavated under ground trench /trays, pulling through pipes and its proper sealing, cutting of paved area, roads etc.					
222	3.5x 120 mm2 A2XFY	100	Mtrs.	10	1,000	
223	3.5x 95 mm2 A2XFY	10	Mtrs.	10	100	
224	3.5x 50 mm2 A2XFY	1400	Mtrs.	10	14,000	
225	4x 25 mm2 A2XFY	280	Mtrs.	10	2,800	
226	4x10 mm2 2XWY	280	Mtrs.	10	2,800	
227	4x 6 mm2 2XWY	700	Mtrs.	10	7,000	
228	4x 2.5 mm2 2XWY	11200	Mtrs.	40	448,000	
229	Erection Testing and Commissioning of of lighting fixtures complete with mounting bracket, flame proof/non flame proof, control gear box as per the type of fixture, lamps etc. including civil work with pipe inserts for cables and connecting work, with all material and labour as per specifications, drawings and instruction of Engineer-in-charge. Work to be completed in all respects.					
230	Street lighting, integral flame proof well glass fixture (CMIFR approved for Zone-1/2 gas group IIA & IIB) with 72 W LED luminaire with flame proof control gear Model no. FLPW-1095 of Baliga make or equivalent)	84	Nos.	1,000	84,000	
231	Street lighting pole 6mtr high GI octagonal pole (Type BOP-6030 of Bajaj make or equivalent) complete with bracket, GI clamps for fixing flame proof control gear box as per standard drawing & specification.	84	Nos.	3,000	252,000	
232	UPS SYSTEM Erection Testing and Commissioning of including supervision of testing and commissioning by equipment supplier at site including commissioning spares as required of UPS systems as per specification, block diagram and following rating:					
233	3KVA, 230 V Single phase, 50 Hz, single industrial type, UPS system suitable for input Power Erection voltage of 320V-460V- TPN (184-265V/Ph) , output 230 V +/- 1%, AC with solid state voltage stabilizer for Bypass Erection, Battery Bank ,ACDB (Incomer 32A DP MCB & Outgoing 4 Nos. 6A DP MCB & 6 nos.10A DP MCB) and 2.0 hrs. Battery backup (VRLA, 12V) and battery capacity shall not be less than 14 KVAh (where KVAH = battery AH x 12 V x No. of Batteries). Charger rating shall not be less than 6.5 kW.All interconnecting cables among UPS, Rectifier, battery stand, ACDB/DCDB etc (50 mtr shall be considered between battery bank and UPS panel, 30 mtr cable shall be considered between ACDB and UPS panel and any other cable which is not defined here but necessary for satisfactory operation of the UPS system).	1	Set	25,000	25,000	

SCHEDULE OF RATES
MECHANICAL AND ELECTRICAL WORKS FOR CONSTRUCTION OF CNG STATIONS AT RANCHI AND JAMSHEDPUR GEOGRAPHICAL AREAS
(1.5 YEARS ARC) OF M/S GAIL(I) LTD.
Tender No: 05/51/Q7NT/GAIL/001-iv-06

Sl. No.	Item Description	Quantity	Units	APOORV UNIT RATE INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	AHR TOTAL AMOUNT INCLUSIVE OF ALL TAXES, DUTIES, LEVIES, FREIGHT, INSURANCE, INCLUDING INSURANCE OF FREE ISSUE MATERIALS, TAXES ON BUILDING AND OTHER CONSTRUCTION WORKERS, ETC. BUT EXCLUDING GST AS DEFINED IN BID DOCUMENT [IN INR]	AHR Items
234	Erection of following sizes of HDPE Pipe in required length fixed on steel, concrete or similar structure, laid in trenches, digging, construct conduit ductbank and buried in concrete including cutting, bending and similar works, supply of clamps, small iron structures, spacers and installation of seats, plugs, bushings etc., civil works and its materials, including all labour and materials complete as per approved drawings and directions of Engineer-In-Charge.					
235	50 mm NB	5000	Mtrs	50	250,000	
236	100 mm NB	2000	Mtrs	50	100,000	
237	Erection of following Hot Dip Galvanized Ladder/Perforated Type cable trays (as per IS 2629) including bends, tee, crosses, horizontal and vertical splices along with cable tray cover (Wherever required for Asthetic look) etc. as required including Erection of all G.I hardware, all labour and material as required as per standard drawings, specification and direction of Engineer-In-charge					
238	Perforated type, made from 50mm height and 2.5 mm thick sheet steel & galvanized (86 microns) of following sizes.					
239	150mm wide	140	Mtrs	100	14,000	AHR
240	300mm wide	140	Mtrs	100	14,000	AHR
241	Erection Material					
242	Erection, Fixing and Commissioning of MS base frame support for switch gear and bracket for misc. electrical equipment, cable tray support out of roled MS section, pipes, plates etc including welding, bolting, reventing, Erection of necessary anchor bolts and grouting etc Erection of paints applying one coat of anti rust primer two finish coats of approved synthetic enamel paints including bracking walls, floors etc for structure as required including Erection of all GI hardware materials including all labour and materials complete as required and the direction of Engineer-in-charge.					
243	For RO/DODO/DBS	14	Lump sum	2,000	28,000	
244	Erection Testing and Commissioning of the following including the Erection of necessary clamp, bolts, rawl plugs etc. breaking and making good of walls, if required , and including all labour and materials complete as per directions of Engineer-In-Charge, applicable standards and Indian Electricity rules.					
245	Shock hazard charts complete with frame and glass	14	Nos.	400	5,600	
246	First Aid Boxes	14	Nos.	400	5,600	
247	Carbon-di-oxide(CO2) type fire extinguisher 4.5 Kg capacity Complete with gun/metal valve conforming to IS : 3224 With ISI mark , Discharge horn with bend & wall fixing Bracket With Mfg. Test certificate	28	Nos.	550	15,400	
248	Caution boards (Danger, High Volatage) including Erection of necessary clamps, bolts and other hardware.	14	Nos.	500	7,000	
249	Single Line Diagram complete in glass frame.	14	Nos.	450	6,300	
250	Laying and Pasting of Insulating Mats 11kV grade (as per IS:15652 - 2006) of 1000mm width, required for maintenance of electrical equipment in substation as required including cutting to required shape in running length and including all labour and materials etc. complete and as per directions of Engineer-In-Charge as per applicable Indian or International standards and Indian Electricity Rules.	42	Mtrs	250	10,500	
251	Erection Fixing and Commissioning of electrical accessories including, cable tags, cable tie ,Flexible pvc conduit, cable marker, nickle plated lugs, double compressed brass cable glands, brass adaptor/reducers/nipples, fixing of metallic anchor fasteners for supporting of cable trays and misc. electrical switchgear including all labour and materials complete as required and as per directions of Engineer-In-Charge.					
252	For RO/DODO/DBS	14	Lump sum	1,500	21,000	
253	Construction of Cable pit with pit cover (SFRC cover HD-20 of IS-12592) including civil works repair, concrete wall/brick wall & its materials, cable conduits interface & its water sealing, cable support structure including all labour and materials complete in all aspect as per approved drawings and directions of Engineer-In-Charge.					
254	500X500(of inside clearance)X 600(Depth)	70	Nos.	1,000	70,000	
255	750X750(of inside clearance)X800(Depth)	70	Nos.	1,000	70,000	
256	1000X1000(of inside clearance)X1000(Depth)	28	Nos.	1,000	28,000	
257	All works relating to statutory approvals of the installation from competent authority like Electrical Inspectorate, CEA, DGMS, SEB etc. including carrying out of all required modifications in design / Manufacturer / Installation to meet the requirement of Indian Electricity rules and other statutory regulations in force, carrying out necessary paper work and liasion with the authorities to obtain all necessary clearances for charging of installation as per relevant national standards. However the official fees towards the approvals shall be reimbursed by the client.	14	Lump sum	25,000	350,000	
258	Net Total Amount of quoted price (inclusive of all applicable taxes & duties except GST (CGST&SGST/UTGST or IGST)				30,147,890	
259	GST (CGST & SGST / UTGST or IGST) @ 18% of Net Total Amount mentioned at Sl. No. 258 above				5,426,620	
	Total Amount Including GST				35,574,510.2	