



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

No. AAI/CA/AMED-VII/ CCR Hall /2020-21/A- 05

Dated: 29.05.2020.

To

M/s. Sai Shakthi Electric Private Limited,

No. 8/2, Uttaradhimutt Road,
Shankarapuram, Bangalore- 560 004.

Sub: Replacement of Transformers, DG Set, LT panels at Old Power House and CCR Hall Power House at Chennai Airport. SH: Replacement of DG sets at CCR Hall Power House.

Ref: Tender ID: 2020_AAI_44583_1

Tender Ref. No.: AAI/CHE/AMED-VII/2019-20/11.

Dear Sir (s),

1. Your E-tender for the above mentioned work is hereby accepted on behalf of the Chairman, Airports Authority of India, at the item rates quoted by you totaling to **Rs. 1,16,11,611/-** (Rupees One Crore Sixteen Lakhs Eleven Thousand Six Hundred and Eleven Only) which is 19.22% below the Justified Cost of **Rs. 1,43,74,242/-** (Rupees One Crore Forty Three Lakhs Seventy Four Thousand Two Hundred and Forty Two Only) which is inclusive of all the taxes, duties and levies etc., Except GST which will be paid extra as applicable.
2. Joint General Manager (Engg-Elect)-I, AMED, Operational Office, Airports Authority of India, Chennai Airport, Chennai - 600 016 shall be the Engineer-In-Charge of the work. You are requested to attend to the Office of Joint General Manager (Engg-Elect)-I, AMED AAI, Chennai Airport by **08.06.2020** or within fifth day after withdrawal of countrywide lockdown (Whichever is later) to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs.100/- (Rupees One Hundred only) and the cost of the stamp paper shall be borne by you.
3. The earnest money amount of **Rs. 2,87,500/-** (Rupees Two Lakhs Eighty Seven Thousand and Five Hundred Only) received along with your E-tender will be treated and converted as part of Security Deposit as per Clause 1A of General Conditions of Contract. Please deposit the balance amount of **Rs. 8,73,661/-** (Rupees Eight Lakhs Seventy Three Thousand Six Hundred and Sixty One Only) towards balance Security Deposit within 10 days from the date of issue of this letter, failing which, the same will be deducted as per Clause 1A of General Conditions of Contract.
4. You are also directed to contact the Joint General Manager (Engg-Elect)-I, Airport Maintenance Electrical Division, Operational Office, Airports Authority of India, Chennai Airport or his Authorised representative immediately for the execution of the above work.
5. You are requested to comply with the provision of Contract Labour Regulation and Abolition) Act 1970 and Contract Labour (Regulation and Abolition) Central Rules 1971 and Minimum Wages Act and Rules thereof Central and State Governments.

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फैक्स: 044 - 2256 0008 ई पी ए बी एक्स: 2256 0551, चेन्नई हवाई अड्डे, चेन्नई - 600 016.

Fax: 044 - 2256 0008 EPABX: 2256 0551, Chennai Airport, Chennai - 600 016.



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6. Please note that the time allowed for carrying out the work shall be **4 (Four) Months** which shall be reckoned from the 10th day after withdrawal of lockdown enacted in view of corona pandemic as per Government of India/ State Government.
7. Any further correspondence in connection with the contract should normally be addressed to the Engineer-In-Charge.
8. Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after signing it to the undersigned as a token of acceptance.

Yours faithfully,

N. H. 29/5/2020

**Joint General Manager (Engg - Elect),
For and on behalf of the Chairman,
Airports Authority of India.**

Encl: Schedule of Quantity (03 Pages).

**AIRPORTS AUTHORITY OF INDIA
CHENNAI INTERNATIONAL AIRPORT
CHENNAI - 600 016**

SCHEDULE OF WORK

NAME OF WORK: Replacement of Transformers, DG Set, LT panels at Old Power House and CCR hall Power House at Chennai Airport. **SH:** Replacement of DG sets at CCR hall Power House.
e-Tender ID: 2020_AAI_44583_1

Sl. No.	Description of Items	Qty	Unit	Basic Rate inclusive of all Taxes Except GST	Amount
1	SH-I: Supply of DG Sets and Bus duct				
1.01	Supply of 625 KVA Prime Duty DG Set comprising of following:				
1.02	01 No. Alternator suitable for generating 500 KW/625 KVA at 415 V, 3 Phase, 50 Hz, 0.8 PF, 1500 RPM, Self Ventilated, Self Regulated and Self Excited with Brushless Type conforming to IS 4722 as specified and as required.				
1.03	01 No. Multi Cylinder, 4 Stroke, Turbo Charged Diesel Engine developing suitable BHP at 1500 RPM suitable for above Alternator and Complete with all accessories such as Base Frame, AVM Pads, Batteries 2 Nos. [12 Volts, 25 Plates 180 AH], All Types of Filters, Coupling, Starter, Residential Silencer, Lightning arrestor spike, Automatic Electronic Speed Governing Mechanism, Compact Radiator etc. and conforming to relevant IS with up to date amendments as specified and as required.				
1.04	1 No. Daily Service Fuel Tank of Capacity 990 Liters., fabricated out of 3 mm thick M.S sheet complete with all standard accessories and fuel piping between fuel tank and diesel engine with MS class 'C' pipes of suitable dia. complete with valves level indications and accessories as required as per specification.				
1.05	Customised Compact Modular Type Tested Acoustic Enclosure suitable for the above DG Set to limit the Noise Level to 75 dB (A) at a distance of 1 Mtr., from the Enclosure, made out of CRCA sheet of 1.6 mm thickness for the Outside Cover and Doors and for Inside Cover with 0.8 mm thick perforated GI Sheet, Louvers of thickness 1.6 mm CRCA Sheet for Fresh Air and Hot Air, Powder coated after Seven Tank Process, Neoprene Rubber Gasket and heavy duty SS locks with SS Hinges, Acoustic made up of high quality rock wool/glass wool/ mineral wool as per OEM design, Base Frame of suitable Size Channel, provision to accommodate Batteries, and Support for Silencers, provided with 4 Nos. LED Tube light Fittings of 2 feet and Switches as required.				
1.06	Exhaust gas piping for above DG of suitable dia. welded black MS, B class pipe confirming to IS:3589 cut to required lengths and installed with necessary bends, supports and clamps, bellows, residential silencer, insulation of exhaust system with mineral wool/Rockwool 50 mm thick, wire mesh & aluminium cladding of minimum thickness of 0.6 mm etc., as required as per specifications.				
1.07	G.S.S square/rectangular ducting for dissipation of hot air along with gaskets, elbows, supports, canvass with zip for cleaning of duct etc as required				
1.08	ALL AS ABOVE 1.01 To 1.07	2	Job	43,40,898.00	86,81,796.00
2	Supply of 400 Amps, 25 KA for 1 sec, Indoor IP 54 Sandwich Type Bus Trucking complying to IEC 61439-1 & 6 including fabrication, for use on 3 Phase 4 Wire, 415 Volts, 50 Hz AC supply with metal clad enclosure made of 1.6mm thick GI Sheet duly powder coated in convenient sections complete with 4 Nos. of Aluminium Bus Bars with Class F Insulation, necessary joints, elbow joints & expansion joints and bends, adopter box and Copper Flexible for Joints, with integral earth, suspenders, angle iron bracket, fasteners, connecting to earthing system etc., as required.				
2.01	Straight Run Bus Duct	40	Mtrs.	2,457.00	98,280.00
2.02	90 Degree Bend	10	Nos.	837.00	8,370.00
2.03	Phase Cross Over	4	Nos.	1,422.00	5,688.00
2.04	End Flange	4	Nos.	1,044.00	4,176.00
2.05	Adopter Box	4	Nos.	3,078.00	12,312.00
2.06	Copper Flexibles for End Termination	4	set	6,840.00	27,360.00

Sl. No.	Description of Items	Qty	Unit	Basic Rate inclusive of all Taxes Except GST	Amount
3	Supply of 630 Amps, 50 KA for 1 sec, Indoor IP 54 Sandwich Type Bus Trucking complying to IEC 61439-1 & 6 including fabrication, for use on 3 Phase 4 Wire, 415 Volts, 50 Hz AC supply with metal clad enclosure made of 1.6mm thick GI Sheet duly powder coated in convenient sections complete with 4 Nos. of Aluminium Bus Bars with Class F Insulation, necessary joints, elbow joints & expansion joints and bends, adopter box and Copper Flexible for Joints, with integral earth, suspenders, angle iron bracket, fasteners, connecting to earthing system etc., as required.				
3.01	Straight Run Bus Duct	40	Mtrs.	3,366.00	1,34,640.00
3.02	90 Degree Bend	10	Nos.	1,161.00	11,610.00
3.03	Phase Cross Over	4	Nos.	2,034.00	8,136.00
3.04	End Flange	4	Nos.	1,458.00	5,832.00
3.05	Adopter Box	4	Nos.	3,078.00	12,312.00
3.06	Copper Flexibles for End Termination	4	set	6,840.00	27,360.00
4	Supply of 1250 Amps, 50 KA for 1 sec, Indoor IP 54 Sandwich Type Bus Trucking complying to IEC 61439-1 & 6 including fabrication, for use on 3 Phase 4 Wire, 415 Volts, 50 Hz AC supply with metal clad enclosure made of 1.6mm thick GI Sheet duly powder coated in convenient sections complete with 4 Nos. of Aluminium Bus Bars with Class F Insulation, necessary joints, elbow joints & expansion joints and bends, adopter box and Copper Flexible for Joints, with integral earth, suspenders, angle iron bracket, fasteners, connecting to earthing system etc., as required.				
4.01	Straight Run Bus Duct	115	Mtrs.	4,563.00	5,24,745.00
4.02	90 Degree Bend	30	Nos.	1,548.00	46,440.00
4.03	Phase Cross Over	6	Nos.	2,691.00	16,146.00
4.04	End Flange	12	Nos.	1,926.00	23,112.00
4.05	Adopter Box	12	Nos.	3,078.00	36,936.00
4.06	Copper Flexibles for End Termination	12	set	13,608.00	1,63,296.00
5	Supply of 4000 Amps, 65 KA for 1 sec, Indoor IP 54 Sandwich Type Bus Trucking complying to IEC 61439-1 & 6 including fabrication, for use on 3 Phase 4 Wire, 415 Volts, 50 Hz AC supply with metal clad enclosure made of 1.6mm thick GI Sheet duly powder coated in convenient sections complete with 4 Nos. of Aluminium Bus Bars with Class F Insulation, necessary joints, elbow joints & expansion joints and bends, adopter box and Copper Flexible for Joints, with integral earth, suspenders, angle iron bracket, fasteners, connecting to earthing system etc., as required.				
5.01	Straight Run Bus Duct	30	Mtrs.	13,284.00	3,98,520.00
5.02	90 Degree Bend	10	Nos.	4,725.00	47,250.00
5.03	Phase Cross Over	2	Nos.	8,271.00	16,542.00
5.04	End Flange	4	Nos.	10,638.00	42,552.00
5.05	Adopter Box	4	Nos.	7,065.00	28,260.00
5.06	Copper Flexibles for End Termination	4	set	45,765.00	1,83,060.00
SH-I Total				₹	1,05,64,731.00
6	SH-II: Installation, Testing, commissioning of DG Sets and Bus duct				
7	Installation, Testing and Commissioning of 625 KVA Prime Duty DG Set mentioned at SH-I/ SOQ item no 1, including laying of fuel pipe lines, fixing of exhaust piping, GSS duct, demolition of existing RCC platform (approx. 4.4 m x 1.8 m x 0.3 m) and provision of suitable RCC foundation, Load test for the DG sets at site arranged with suitable load equipment etc. complete all as required.	2	Job	18,000.00	36,000.00
8	Installation, Testing and Commissioning of 415V, 1600 Amps Bus bar rating, AMF Panel at CCR Hall Power House including shifting and transporting of AMF Panel stacked at Old Airport Power House to CCR hall Power House etc. as required and complete all as required. (AMF Panel shall be supplied by AAI)	2	Job	9,000.00	18,000.00
9	Installation, Testing and Commissioning of 400/630 Amps, Indoor sandwich types Bus trucking system (Straight run bus Duct, Bend, Adopter Box, Phase crosss over and Copper flexibles for joints) mentioned at SH-I / SOQ Item no.2/3 complete all as required.	110	Mtr	1,539.00	1,69,290.00
10	Installation, Testing and Commissioning of 1250 Amps, 50KA S.C (RMS), Indoor sandwich types Bus trucking system (Straight run bus Duct, Bend, Adopter Box, Phase crosss over and Copper flexibles for joints) mentioned at SH-I / SOQ Item no.4 complete all as required.	150	Mtr	2,250.00	3,37,500.00

Sl. No.	Description of Items	Qty	Unit	Basic Rate inclusive of all Taxes Except GST	Amount
11	Installation, Testing and Commissioning of 4000 Amps, 65KA S.C (RMS), Indoor sandwich types Bus trunking system (Straight run bus Duct, Bend, Adopter Box, Phase cross over and Copper flexibles for joints) mentioned at SH-I / SOQ Item no.5 complete all as required.	40	Mtr	4,500.00	1,80,000.00
12	Dismantling of existing 320 KVA DG Set including AMF Panel from CCR Hall Power House including dismantling of fuel piping, exhaust piping, fuel tank, control cabling, Power cabling, earthing etc. and Handing Over of dismantled materials to AAI Store etc complete as required and as per the instructions of the Engineer-In-Charge.	2	Job	18,000.00	36,000.00
13	Dismantling of acoustic room enclosure (Approximate 6.8m x 9.6 m x 3 mtrs) of 2 x 320 KVA DG Set installed at CCR Hall Power house including dismanantling of supports, frames, disconnecting the electrical connections, exhaust fan, light etc and Handing Over of dismantled materials to AAI Store etc complete as required and as per the instructions of the Engineer-In-Charge.	1	Job	27,000.00	27,000.00
14	Supply and fixing of nominal 2.0 mm thick (Width 1 Mtr) PVC synthetic, electric insulated mats conforming to IS 15652-2006 having Dielectric strength of 30 KV, no adverse effect of mineral oil, high insulation resistance (Minimum 1,00,000 M Ω on wet condition with 5 KV meggar) etc., as required.	10	Sq.Mtr.	1,800.00	18,000.00
SH-II Total				₹	8,21,790.00
15	SH-III: LAYING OF CABLES AND ASSOCIATED WORKS				
16	Laying of one number multi core 1.5 sq.mm flexible stranded copper cable for control cabling in existing masonry open duct as required.(Control Cable shall be supplied by AAI)	30	Mtr.	45.00	1,350.00
17	Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including cutting the floor,excavation of soft soil and refilling, connection/ terminating with nut, bolt, spring washer etc. as required. (Jointing shall be done by overlapping and with 2 Sets of brass nut bolt & spring washer spaced at 50mm)	60	Mtr.	1,026.00	61,560.00
18	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode,including cutting the floor, excavation of soft soil and refilling connection/ terminating with G.I. nut, bolt, spring washer etc. as required. (Jointing shall be done by overlapping and with 2 Sets of G.I. nut bolt & spring washer spaced at 50mm)	160	Mtr.	225.00	36,000.00
19	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring washer excavation and re-filling etc. as required	30	Mtr.	1,260.00	37,800.00
20	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring washer excavation and re-filling etc. as required	30	Mtr.	459.00	13,770.00
21	Providing of earth pits using Copper bonded Earth electrode of 17.2 mm dia, 3 Metres installed vertically as per the site conditions, earth enhancing compound of 25 kgs. along with required masonry chamber, CI Cover including excavation & refilling etc as required.	10	Nos.	7,461.00	74,610.00
SH-III Total				₹	2,25,090.00
Total (SH-I+SH-II+SH-III)				₹	1,16,11,611.00

(Rupees One Crore Sixteen Lakhs Eleven Thousand Six Hundred and Eleven Only)

Note: Applicable GST will be paid extra as per actual.

H.K. 29/12/2020
Jt.General Manager(E-E)