



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

No. AAI/CA/AMED-VII/ Painting /2021-22/A-1A

Date: 06.05.2022.

To

M/s. Balaji Engineering

Flat No 18, 3rd Floor, Queens Castle,
7th Street, Lakshmi Nagar,
Nanganallur, Chennai - 600 061.

Sub: M/R to Power Supply & Standby DG Sets at Chennai Airport. SH: Painting of Power Supply Installations, Cleaning of RCC Walkable Cable Trench, Cladding of Exhaust Pipe and Associated Works.

Ref: e- Tender ID: 2022_AAI_109216_1

e- Tender Ref. No.: AAI/CHE/AMED-VII/2021-22/05.

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. 41,34,500.00** (Rupees Forty One Lakhs Thirty Four Thousand and Five Hundred Only) which is 16.61% below the estimated Cost of **Rs. 49,58,040.00** (Rupees Forty Nine Lakhs Fifty Eight Thousand and Forty Only). The amount is inclusive of all the taxes, duties, levies and octroi etc., Excluding GST which will be paid at actual.
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 **15.05.2022** 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 deposit is not applicable in the above e- Tender. You are requested to submit Bank Guarantees for an Amount of **Rs. 4,13,450.00** (Rupees Four Lakhs Thirteen Thousand Four Hundred and Fifty Only) is to be deposited by you towards 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 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.
5. 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 who will arrange to hand over site to you.

Contd... 2

फैक्स: 044 - 2256 0008 ई पी ए बी एक्स: 2256 0551, चेन्नई हवाई अड्डे, चेन्नई - 600 027.

Fax: 044 - 2256 0008 EPABX: 2256 0551, Chennai Airport, Chennai - 600 027.



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

-2-

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 of issue of this letter
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,

-Sd/-

(G.N.D. Kennedy)
Joint General Manager (Engg - Elect)-I,

Encl: Schedule of Quantity (Page no. 1 to 6).

Copy to:

EXTERNAL:

1. The Commercial Tax Officer, Chennai – 600 006.
2. The Income-Tax Officer, Chennai – 600 034.
3. The Regional Labour Commissioner, Chennai – 600 006.
4. Uploading online portal of mem.epfindia.gov.in

INTERNAL:

1. Airport Director, AAI, Chennai Airport, Chennai.
2. The General Manager (Engg. - Elect), Chennai Airport.
3. The joint General Manager (F&A), with ref. to FC/ EE /22-23/029, Dated: 06.05.2022.
4. The Joint General Manger (Vigilance), SR, Chennai Airport.
5. The Asst. General Manager (Engg. - Elect) - AMED-VII.
6. The Asst. General Manager (Engg. - Elect) - Planning,
7. Agreement.
8. Award Letter File.

(G.N.D. Kennedy)
Joint General Manager (Engg - Elect)-I,
For and on behalf of the Chairman,
Airports Authority of India.

फैक्स: 044 - 2256 0008 ई पी ए बी एक्स: 2256 0551, चेन्नई हवाई अड्डे, चेन्नई – 600 027.

Fax: 044 - 2256 0008 EPABX: 2256 0551, Chennai Airport, Chennai – 600 027.



AIRPORTS AUTHORITY OF INDIA

CHENNAI AIRPORT

CHENNAI -600 016

SCHEDULE OF QUANTITIES

NAME OF WORK: M/R to Power Supply & Standby DG Sets at Chennai Airport. SH: Painting of Power Supply Installations, Cleaning of RCC Walkable Cable Trench, Cladding of Exhaust Pipe and Associated Works.

Sl. No.	Description of Item	Qty		Rate	Amount
1.00	Painting of Power Supply Installations.				
1.01	Spray Painting of following DG Sets along with Fuel Tank and the AMF Panel with two coats of synthetic enamel paint of approved shade, quality and brand after cleaning the surface including painting of silencer pipe with anti-corrosion thermal paint, painting of radiator/ ducts with enamel/ Aluminium paint including scrapping, cleaning and providing putty/ Primer wherever required before starting painting, inscription of feeder details after painting by sticker/ painting of approved colour as required and as per instructions of Engineer-In-Charge.				
1.02	1500 KVA LT DG Set at Central SS (Approx. area per Job = 46 Sq.mtr.)	4.00	Job	7,500.00	30,000.00
1.03	1500 KVA HT DG Set at Central SS (Approx. area per Job = 46 Sq.mtr.)	8.00	Job	7,500.00	60,000.00
1.04	1010 KVA DG Set with accoustic encloser at ICC PH (Approx. area per Job = 140 Sq.mtr.)	1.00	Job	7,500.00	7,500.00
1.05	500 KVA DG Set with accoustic encloser at ICC PH (Approx. area per Job = 83 Sq.mtr.)	1.00	Job	6,000.00	6,000.00
1.06	437.5 KVA DG Set with accoustic encloser at ICC PH (Approx. area per Job = 54 Sq.mtr.)	2.00	Job	6,000.00	12,000.00
1.07	320 KVA DG Set with accoustic encloser at OIT PH (Approx. area per Job = 77 Sq.mtr.)	1.00	Job	6,000.00	6,000.00
1.08	320 KVA DG Set with accoustic encloser at CISF Barracks (Approx. area per Job = 77 Sq.mtr.)	1.00	Job	6,000.00	6,000.00
2.00	Spray Painting of Power Transformers at following Locations with two coats of synthetic enamel paint of approved shade, quality and brand after cleaning the surface including scrapping, cleaning & providing putty/ primer wherever required on the surface before painting, marking of oil level, inscription of rating & feeder details after painting by sticker/ painting of approved colour as required and as per instructions of Engineer-In-Charge.				
2.01	Central Sub Station				
2.02	2 MVA Oil type Transformer (Approx. area per Job = 46 Sq.Mtrs)	4.00	Job	10,000.00	40,000.00
2.03	International RHS				
2.04	2 MVA Dry type Transformer (Approx. area per Job = 33 Sq.Mtrs)	3.00	Job	10,000.00	30,000.00
2.05	International LHS				
2.06	2 MVA Dry type Transformer (Approx. area per Job = 33 Sq.Mtrs)	3.00	Job	10,000.00	30,000.00
2.07	Domestic LHS				
2.08	2 MVA Dry type Transformer (Approx. area per Job = 33 Sq.Mtrs)	3.00	Job	10,000.00	30,000.00
2.09	Domestic RHS				
2.10	2 MVA Dry type Transformer (Approx. area per Job = 33 Sq.Mtrs)	3.00	Job	10,000.00	30,000.00
2.11	CCR Power House				
2.12	2 MVA Oil type Transformer (Approx. area per Job = 46 Sq.Mtrs)	2.00	Job	10,000.00	20,000.00
2.13	Admin Building Power House				
2.14	2500 KVA Oil type Transformer (Approx. area per Job = 55 Sq.Mtrs)	2.00	Job	10,000.00	20,000.00

Sl. No.	Description of Item	Qty		Rate	Amount
2.15	AAI Residential Colony Sub-Station				
2.16	500 KVA Oil type Transformer (Approx. area per Job = 14 Sq.Mtrs)	1.00	Job	5,000.00	5,000.00
2.17	Remote Bay SS				
2.18	500 KVA Oil type Transformer (Approx. area per Job = 37 Sq.Mtrs)	2.00	Job	6,000.00	12,000.00
2.19	Old Power House				
2.20	1000 KVA Oil type Transformer - I (Approx. area per Job = 21 Sq.Mtrs)	1.00	Job	6,000.00	6,000.00
2.21	Integrated Cargo Complex PH				
2.22	2500 KVA Oil type Transformer (Approx. area per Job = 55 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
2.23	1600 KVA Oil type Transformer (Approx. area per Job = 35 Sq.Mtrs)	3.00	Job	9,000.00	27,000.00
2.24	Package Sub-Station				
2.25	Package SS (HT Panel & LT Panel) (Approx. area per Job = 30 Sq.Mtrs)	1.00	Job	5,000.00	5,000.00
2.26	Solar Plant at Cargo Complex				
2.27	2 MVA Dry type Transformer (Approx. area per Job = 30 Sq.Mtrs)	1.00	Job	5,000.00	5,000.00
3.00	Spray Painting of HT & LT Panels at following Locations with two coats of synthetic enamel paint of approved shade, quality and brand after cleaning the surface including scrapping, cleaning and providing putty / Primer (only minor area) wherever required on the surface of panel, inscription of feeder details after painting by sticker/ painting of approved colour including providing masking by suitable means for all meter, relays & indication lamps before painting and cleaning of meters, relays & indication lamps after painting for removal of paint, if any as required and as per instructions of Engineer-In-Charge.				
3.01	Central Sub Station				
3.02	11 KV 8 panels, Battery Charger & DC DB (Approx. area per Job = 67 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.03	11 KV 19 Panels, Battery Charger & DC DB (Approx. area per Job = 107 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.04	11 KV 10 Panels, Battery Charger & DC DB (Approx. area per Job = 57 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.05	HT Capacitor Panel I & II (3000KVAR) (Approx. area per Job = 114 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.06	HT ATS Panel (Approx. area per Job= 199 Sq.Mtrs)	1.00	Job	15,000.00	15,000.00
3.07	LT ATS Panel I, II, III & IV (Approx. area per Job = 52 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.08	LT Panels (Approx. area per Job = 150 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.09	APFC Panel No.1 - 250 KVAR (Approx. area per Job = 13 Sq.Mtrs)	1.00	Job	5,000.00	5,000.00
3.10	APFC Panel No. 2, 3 & 4 - 150 KVAR (Approx. area per Job = 12 Sq.Mtrs)	2.00	Job	5,000.00	10,000.00
3.11	Active Harmonics Filter Panel (Approx. area per Job = 28 Sq.Mtrs)	4.00	Job	5,000.00	20,000.00
3.12	DG 27 Panels & 30V DC Battery Charger (Approx. area per Job = 83 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.13	DG Ventilation Panel (Approx. area per Job = 15 Sq.Mtrs)	4.00	Job	3,000.00	12,000.00
3.14	DG NGR Panel (Approx. area per Job = 14 Sq.Mtrs)	4.00	Job	3,000.00	12,000.00
3.15	DG Aux Panel 7.1 & 9.1 (Approx. area per Job = 34 Sq.Mtrs)	1.00	Job	5,000.00	5,000.00
3.16	LT C&R Panel (Approx. area per Job = 69 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00

Sl. No.	Description of Item	Qty		Rate	Amount
3.17	HT C&R Panel (Approx. area per Job = 45 Sq.Mtrs)	1.00	Job	6,000.00	6,000.00
3.18	DG Ventilation Distribution Panel (Approx. area per Job = 4 Sq.Mtrs)	18.00	Job	1,000.00	18,000.00
3.19	International LHS				
3.20	11 KV HT Panel, Battery Charger & DC DB (Approx. area per Job = 58 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.21	LT Panels (Approx. area per Job = 140 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.22	APFC Panel No.1 - 250 KVAR (Approx. area per Job = 13 Sq.Mtrs)	1.00	Job	2,000.00	2,000.00
3.23	APFC Panel No.2 & 3 - 150 KVAR (Approx. area per Job = 4 Sq.Mtrs)	2.00	Job	1,000.00	2,000.00
3.24	Active Harmonics Filter Panel (Approx. area per Job = 7 Sq.Mtrs)	3.00	Job	1,000.00	3,000.00
3.25	International RHS				
3.26	11 KV HT Panel, Battery Charger, DC DB (Approx. area per Job = 69 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.27	LT Panels (Approx. area per Job = 139 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.28	APFC Panel No.1 - 250 KVAR (Approx. area per Job = 13 Sq.Mtrs)	2.00	Job	2,000.00	4,000.00
3.29	APFC Panel No.2 & 3 - 150 KVAR (Approx. area per Job = 12 Sq.Mtrs)	2.00	Job	2,000.00	4,000.00
3.30	Active Harmonics Filter Panel (Approx. area per Job = 7 Sq.Mtrs)	3.00	Job	1,000.00	3,000.00
3.31	Domestic LHS				
3.32	11 KV HT Panel, Battery Charger & DC DB (Approx. area per Job = 67 Sq.Mtrs)	1.00	Job	7,000.00	7,000.00
3.33	LT Panels (Approx. area per Job = 142 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.34	APFC Panel 1 250 KVAR (Approx. area per Job = 13 Sq.Mtrs)	2.00	Job	2,000.00	4,000.00
3.35	APFC Panel (2,3)150 KVAR (Approx. area per Job = 12 Sq.Mtrs)	2.00	Job	2,000.00	4,000.00
3.36	Harmonics Filter (Approx. area per Job=7 Sq.Mtrs)	3.00	Job	1,000.00	3,000.00
3.37	Domestic RHS				
3.38	11 KV HT Panel & DC DB (Approx. area per Job = 66 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.39	LT Panels (Approx. area per Job = 127 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.40	APFC Panel No.1 - 250 KVAR (Approx. area per Job = 13 Sq.Mtrs)	1.00	Job	2,000.00	2,000.00
3.41	APFC Panel No.2 & 3 - 150 KVAR (Approx. area per Job = 12 Sq.Mtrs)	2.00	Job	2,000.00	4,000.00
3.42	Active Harmonics Filter Panel (Approx. area per Job = 7 Sq.Mtrs)	3.00	Job	1,000.00	3,000.00
3.43	GATE - 6 Feeder				
3.44	Localiser Feeder (Approx. area per Job=53Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.45	AAI Residential Colony SS				
3.46	Non-Essential Panel with Change Over Switch Panel and Capacitor Bank Panel (Approx. area per Job = 19 Sq.Mtrs)	1.00	Job	3,000.00	3,000.00
3.47	Remote Bays SS.				
3.48	11KV Panel (Approx. area per Job = 47 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.49	Non-Essential Panel (Approx. area per Job = 61 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.50	Essential Panel (Approx. area per Job= 32 Sq.Mtrs)	1.00	Job	5,000.00	5,000.00
3.51	Old Power House				
3.52	LT Panel near Police station (Neptune)/ Changeover LT Panel (Approx. area per Job = 15 Sq.Mtrs)	1.00	Job	3,000.00	3,000.00

Sl. No.	Description of Item	Qty		Rate	Amount
3.53	Gate No.6 (Approx. area per Job = 56 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.54	Integrated Cargo Complex PH				
3.55	Non-Essential Panel (Approx. area per Job = 144 Sq.Mtrs)	1.00	Job	10,000.00	10,000.00
3.56	Essential Panel (Approx. area per Job= 67 Sq.Mtrs)	1.00	Job	7,500.00	7,500.00
3.57	110KV Intake Sub Station				
3.58	Emergency Staircase (Approx. area per Job = 25 Sq.Mtrs)	1.00	Job	6,500.00	6,500.00
3.59	Cargo Complex Solar Plant				
3.60	11KV Panel, Inverter panel, Transformer (Approx. area per Job = 46 Sq.Mtrs)	1.00	Job	5,500.00	5,500.00
4.00	Painting of following LT Side Bus Bar Trunking at the following Locations with two coats of synthetic enamel paint of approved shade, quality and brand after cleaning the surface including scrapping, cleaning and providing putty/ primer wherever required on the surface before painting as required and as per instructions of Engineer-In-Charge.				
4.01	Central Sub Station				
4.02	Busducts from TFR to LT ATS (Approx. area per Job = 29 Sq.Mtrs)	1.00	Job	5,000.00	5,000.00
4.03	Integrated Cargo Complex PH				
4.04	Busducts from TFR-I to NE Panel (Approx. area per Job = 29 Sq.Mtrs)	1.00	Job	5,000.00	5,000.00
4.05	Busducts from TFR-II to NE Panel (Approx. area per Job = 21 Sq.Mtrs)	1.00	Job	4,000.00	4,000.00
4.06	Busducts from TFR-III to NE Panel (Approx. area per Job = 22 Sq.Mtrs)	1.00	Job	4,000.00	4,000.00
4.07	Busducts from TFR-IV to NE Panel (Approx. area per Job = 12 Sq.Mtrs)	1.00	Job	2,000.00	2,000.00
4.08	Busducts from NE Panel to AMF-IV (Approx. area per Job = 22 Sq.Mtrs)	1.00	Job	4,000.00	4,000.00
4.09	Busducts from Ess. Panel to AMF-IV (Approx. area per Job = 14 Sq.Mtrs)	1.00	Job	2,000.00	2,000.00
5.00	Painting of Chequered Plate cover of cable trench, MS angle / channel supports / LT Panel of various equipments with two coats of synthetic enamel paint of approved shade, quality and brand after cleaning the surface including scrapping, cleaning and providing putty/ primer wherever required on the surface before painting as required and as per instructions of Engineer-In-Charge.				
5.01	All Power Houses	2,000.00	Sq.mtrs	200.00	4,00,000.00
				Total SH-I:	₹ 11,77,000.00
6.00	Cladding of HT/LT DG Sets Exhaust pipe line.				
6.01	Providing and Fixing of new Cladding for DG sets Exhaust pipe line with 26 SWG thick aluminium sheet and Thermal Insulation with one layer of 75mm thick mineral wool / Rockwool (150 Kg/m3 density) including dismantling of existing cladding & thermal insulation of exhaust pipe complete as per standard practice as required and as per instructions of Engineer-In-Charge.				
6.02	For DG Sets to Exhaust on tersest				
6.03	350 mm dia Exhaust pipe (Height of Stack shall be 12 Nos x 22 Mtrs. From substation roof top to Stack end for each exhaust pipe)	264.00	Mtrs	3,000.00	7,92,000.00
				Total SH-II:	₹ 7,92,000.00

Sl. No.	Description of Item	Qty		Rate	Amount
7.00	Cable trench Cleaning and cable Relaying				
7.01	Cleaning of RCC covered cable duct (size 1.90M width x 1.80M depth) by removing waste materials like soil, malba, debris etc., including transporting and disposing the same away from Airport premises, closing of cable & pipe entry opening in side walls by cement mortar / 1:2:4 concrete mix to arrest water entry and provision of required cleaning tools, safety gadgets like helmet, gloves & safety shoe & Oxygen Cylinder with mask (for emergency situation) etc. complete as required and as per instructions of Engineer-In-Charge.				
7.02	Intake Sub Station to Central Sub Station	1,260.00	Mtrs	500.00	6,30,000.00
8.00	Lifting of one number PVC/XLPE insulated and PVC sheathed power cable of 11KV / 1.1KV grade of size exceeding 120 Sqmm but not exceeding 400 Sqmm from the floor of RCC cable duct (size 1.90M width x 1.80M height) and relaying of the cable in the existing MS angle cable support and provision of suitable clamping arrangement including provision of required safety gadgets like helmet, gloves safety shoe & Oxygen Cylinder with mask (for emergency situation) etc., complete as required and as per instructions of Engineer-In-Charge.	5,000.00	Mtrs	30.00	1,50,000.00
Total SH-III:					₹ 7,80,000.00
9.00	Supply and Fabrication of MS ladder and welded mesh				
9.01	Supply, fabrication and Fixing of Ladder made out of 50 x 5 mm thick MS L Angle for DG Set Exhaust Pipe (from central substation roof to stack end) including Cutting, Welding, Grinding and painting with two coat of Red Oxide and two coats of enamel paint of approved shade, quality and brand as required and as per instructions of Engineer-In-Charge.	2,200.00	Kgs	125.00	2,75,000.00
10.00	Supply, fabrication and fixing of Welded wire Mesh of opening size 25mm X 25mm made out of 3mm thick wire along with L angle frame made out of 25 x 25 x 6 mm including cutting, welding, grinding and painting with two coat of Red Oxide and two coats of enamel paint of approved shade, quality and brand and fixing the frame with adjacent wall/ beam by MS angle/ flat using anker fastener as required and as per instructions of Engineer-In-Charge.	130.00	Sq.mtr	450.00	58,500.00
11.00	Supply of High voltage detector Nominal range: 10 kV to 36 kV with discharge Insulating rod 2Mtr Length suitable for CC-765-10/36-K."Ultra compact series" for indoor and outdoor use. Universal application 50 / 60 Hz and wide band of voltage from 10 kv to 36 kV (Make:CATU, MOTWANE).	8.00	Nos	9,000.00	72,000.00
12.00	Providing and fixing of 100Watt Cartridge type Heating Element in the existing HT 11 KV Panel cable chamber (End termination side), i/c Control Wiring/ Interconnection of existing heating circuit, earthing, etc. as required. (Make:Indian Ancillary / Zodiac / APT-Controls/ GIRISHEGO).	160.00	Nos	5,000.00	8,00,000.00

Sl. No.	Description of Item	Qty		Rate	Amount
13.00	Supply, Fabrication and Fixing of 50 mm x 8 mm thick MS flat including providing and fixing of 50 mm x 50 mm x 6 mm thick angle iron supports the perforated type plate for covering the cable trenches, around the flat by welding, applying red oxide of two coats, painting the same with Siemens grey at various Power House and difference size etc., as required.	1,200.00	Kgs	150.00	1,80,000.00
				Total SH-IV:	₹ 13,85,500.00
				Total (SH-I+SH-II+SH-III+SH-IV)	₹ 41,34,500.00
				Say Total	₹ 41,34,500.00

(Rupees Forty One Lakhs Thirty Four Thousand and Five Hundred Only)

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

[Handwritten Signature]
AGM(E-I)
06/05/22

[Handwritten Signature]
06/05/2022
(G.N.D. Kennedy)
Jt. Gen. Manager Engg (E)-I