



No: AAM/ENGG/ELEC/AMED-II/UPS/ 2022-23/A-40

Date: 02.11.2022

To

M/s. VK Sam Engineering
No. 5, Rajiv Gandhi Nagar,
Ekkaduthangal,
Chennai – 600 032.

Name of Work: "Replacement of Existing UPS & Panel for Terminal Building and Utility Building at Chennai Airport".

- 1. Ref: - Tender ID. 2022_AAI_126713_1.**
- 2. Your E-Tender Opened on 24.08.2022.**

Dear Sirs,

1. Your tender for the work mentioned above is hereby accepted on behalf of the Chairman, Airports Authority of India, at the item rates quoted by you totaling to **Rs.1,12,07,224.00 (Rupees One Crore Twelve Lakhs Seven Thousand Two Hundred and Twenty-Four Only) Excluding GST** which is 8.85% below the Estimated Cost put to tender Rs.1,22,95,785.00 (Rupees One Crore Twenty-Two Lakhs Ninety-Five Thousand Seven Hundred and Eighty-Five Only) excluding GST and buy back item (SH-II) of Rs.22,50,009.00 excluding GST.
2. Joint General Manager Engineering (Elec)-II EMD, Operational Office, Airports Authority of India, Chennai Airport, Chennai – 600016 shall be the Engineer-in charge of the work. You are requested to attend the office of Joint General Manager Engineering (Elec)-II, AAI, Chennai Airport on or before 11.11.2022 to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value of Rs.100/- (Rupees One Hundred Only) and the cost of the stamp paper shall be borne by you.
3. 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 there of Central and State Governments.
4. You are also directed to contact Manager Engineering (Electrical) / Asst. Manager (Electrical) Airport Maintenance Electrical Division II, Operational Office, Airports Authority of India, Chennai Airport immediately who will arrange to hand over the site to you.
5. Please note that the time allowed for carrying out the work shall be **04 (Four) Months** and same shall be reckoned from 10th day of issue of work order.

(Page 1 of 2)



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

6. Any further correspondence in connection with the contract should normally be addressed to the Engineer-in charge.
7. 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,


S.NATARAJAN.

Jt. General Manager (Engg. -Elect.)-II
AAI Chennai.

Encl: Schedule of Quantities (03 Pages)

(Page 2 of 2)



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA
चेन्नै ऐयरपोर्ट:: चेन्नै 600 016
CHENNAI AIRPORT:: CHENNAI 600 016
Schedule of Quantity

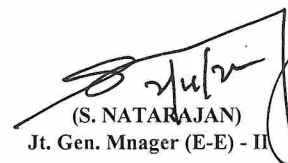
NAME OF WORK : Replacement of Existing UPS, Batteries, Panel for Terminal Building and Utility Building at Chennai Airport.

Sl.No.	Description of Item	Qty	Unit	Rate	Amount
	SH: I : SITC OF UPS AND BATTERIES				
1	Supply, Installation Testing and Commissioning of Parallel Configuration Type of 2 x 30KVA Online Three phase input/Three phase output next Generation Double conversion online UPS system, High Efficiency IGBT based rectifier inverter / UPS (With input current THD less than 3% power factor =0.99) with static bypass standby supply, with auto bypass switch and Unity power factor with periodic battery testing feature, inbuilt lightning and surge protection, Rack Mountable or Expandable Model with BMS compatibility operating on 415Volt , 50Hz as per Technical Specification etc. as required	4	Job	6,39,000.00	25,56,000.00
2	Supply, Installation Testing and Commissioning of Standalone Type of 1 x 30KVA Online Three phase input/Three phase output next Generation Double conversion online Ups system, High Efficiency IGBT based rectifier inverter / UPS (With input current THD less than 3% power factor =0.99) with static bypass standby supply, with auto bypass switch and Unity power factor with periodic battery testing feature, inbuilt lightning and surge protection, Rack Mountable or Expandable Model with BMS compatibility operating on 415Volt , 50Hz as per Technical Specification etc., as required	1	Job	3,12,185.00	3,12,185.00
3	Supply, installation, Teating and Commissioning of Sealed Maintenance Free Batteries @ c10 rating 12v 65AH x 40 No's make for a back-up time of 30 minutes on 30KVA Load etc., as required.	9	set	2,17,000.00	19,53,000.00
4	Supply of Accessories like, New MS Rack anti static powder coated open type for mount 40 Nos. Batteries, Inter-connecting cable for batteries, cable from UPS to Battery bank Max of 5 meters and DC Breaker etc., as required.	9	set	15,660.00	1,40,940.00
	Total of SUB - HEAD -I Rs.				49,62,125.00
	SUB-HEAD - II : BUYBACK				
1	Less Buy-back of existing old 80 KVA Online 'UPS' system along with 34 No's of 12v 200AH Exide make SMF batteries.	9	sets	2,50,001.00	22,50,009.00
	Total of SUB - HEAD -II Rs.				22,50,009.00
	SUB-HEAD-III: SITC of LT Panel AND ITS ACCESSORIES				
1	Fabrication, Supply, Installation, Testing & Commissioning of Indoor type LT Panel Suitable for operation on 415V, 3 Phase, 4 Wire, 50Hz, AC Supply made out of CRCA Sheet for frame work and covers and gland plates, IP42 protection, Free standing Floor mounting/wall cubicle type construction, fully compartmentalised, extensible on both sides complete with powder coating in approved shade and Suitable size aluminium bus bars, fabrication shall be done in transportable sections, entire panel shall have a earth bar of size 20mm x 3 mm copper at the rear with 2 nos earth stud, control wiring FR PVC insulated copper conductor cable and with all accessories, interconnection, connection, earthing, powder coating, grouting, marking and Cable Entry etc. as required complete as per technical specification and comprising of following:- a. 200Amps , 36 KA, 4P MCCB (ICU=ICS) with Rotary Handle as incomer with R,Y,B,ON, OFF, Trip indication lamps, resin cast CT's with multifunction meter - 1 set as incomer b. 100Amps , 36 KA, 4P MCCB(ICU=ICS) with Rotary Handle as outgoing - 3 Nos. set as outgoing (a to b above)	5	Job	1,35,000.00	6,75,000.00

Sl.No.	Description of Item	Qty	Unit	Rate	Amount
2	Fabrication, Supply, Installation, Testing & Commissioning of Indoor type LT Panel Suitable for operation on 415V, 3 Phase, 4 Wire, 50Hz, AC Supply made out of CRCA Sheet for frame work and covers and gland plates, IP42 protection, Free standing Floor mounting cubicle type construction, fully compartmentalised, extensible on both sides complete with powder coating in approved shade and Suitable size aluminium bus bars, fabrication shall be done in transportable sections, entire panel shall have earth bar of size 20mm x 3 mm copper at the rear with 2 nos earth stud, control wiring with FR PVC insulated copper conductor cable and with all accessories, interconnection, connection, earthing, powder coating, grouting, marking and Cable Entry from top etc. as required complete as per technical specification and comprising of following:- a) 2Nos. 100A FP MCCB having 36KA breaking Capacity(ICU=ICS) with multi-function meter, CT and with Led indication Lamps, with rotary handle etc as incomer. b) 1 No. 100A FP MCCB having 36KA breaking capacity(ICU=ICS), with rotary handle. - 1No. as bus cupler c) Outgoings in LHS 32A FP MCB 10KA breaking capacity . - 20 Nos. d) Outgoings in RHS 32A FP MCB 10KA breaking capacity - 15 Nos. (a to d as above)	4	Job	2,88,127.00	11,52,508.00
3	Fabrication, Supply, Installation, Testing & Commissioning of Indoor type LT Panel Suitable for operation on 415V, 3 Phase, 4 Wire, 50Hz, AC Supply made out of CRCA Sheet for frame work and covers and gland plates, IP42 protection, Free standing Floor mounting cubicle type construction, fully compartmentalised, extensible on both sides complete with powder coating in approved shade and Suitable size aluminium bus bars, fabrication shall be done in transportable sections, entire panel shall have a common earth bar of size 20mm x 3 mm at the rear with 2 nos earth stud, control wiring with FR PVC insulated copper conductor cable and with all accessories, interconnection, connection, earthing, powder coating, grouting, marking and Cable Entry etc. as required complete as per technical specification and comprising of following:- a. 100Amps , 36 KA, 4P MCCB (ICU=ICS) with Rotary Handle as incomer with R,Y,B,ON, OFF, Trip indication lamps, resin cast CT's with multifunction meter - 1 set as incomer b. 32A, Four Pole MCB, 10KA, as outgoing - 15 Sets. As outgoing (a to b above)	1	Job	1,26,500.00	1,26,500.00
4	Supply of following size of 1.1kv grade multistrand Copper conductor XLPE insulated and PVC sheathed armoured cable as per IS : 7098 (part1)1988 with up to date amendments. (a) 4 x 16 Sq. mm.	100	mtr	725.00	72,500.00
5	Supply of following size of 1.1kv grade multistrand aluminium conductor XLPE insulated and PVC sheathed armoured cable as per IS : 7098 (part1)1988 with up to date amendments. (a) 4 C x 16 Sq. mm. (b) 3.5 x 70 Sq. mm	8500	mtr	140.00	11,90,000.00
		400	mtr	390.00	1,56,000.00
6	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required. (a) upto 35 sq. mm (clamped with 1mm thick MS flat clamp) (b) Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	8050	mtr	53.00	4,26,650.00
		350	mtr	80.00	28,000.00
7	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required. (a) upto 35 sq. mm (clamped with 1mm thick MS flat clamp) (b) Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	550	mtr	53.00	29,150.00
		50	mtr	80.00	4,000.00
8	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. (a) 4 C x 16 Sq.mm. (b) 3.5 C x 70 sq. mm	120	set	240.00	28,800.00
		20	set	400.00	8,000.00
9	Supply and making straight through cable joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC insulated PVC sheathed/XLPE Aluminium conductor power cable of 1.1KV grade as required. 3.5 x 35 Sq.mm.	100	Each	2,700.00	2,70,000.00

Sl.No.	Description of Item	Qty	Unit	Rate	Amount
10	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray cable tray with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc as required. 450 mm width X 50 mm depth X 2.0 mm thickness	100	mtr	1,800.00	1,80,000.00
11	Supply and fixing of nominal 2.0mm $\pm$ 10% thick, width 1mtr insulated Mat conforming to IS 15652: 2006 i/c proper cleaning, fixing with suitable adhesive/ chemibond, Puresin, water proofing compound and sealing material as per service recommendation of Annexure 'A' 'Clause C' of IS: 15652 and suitable for Class - A up to 3.3KV etc. complete as required.	50	sq.mtr	850.00	42,500.00
12	Providing & Laying of 40mm dia 'B' class G.I pipe with GI fittings i/c Concrete road cutting, excavation, laying the G. I Pipe in depth of 30cm, re-filling with cement concrete 1:3:6 and making good the same etc., as required. a) 40 mm dia.	150	Mtrs	1,285.00	1,92,750.00
13	Providing and fixing 25 mm X 3 mm copper strip in existing 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer etc. as required.	150	Mtrs	760.00	1,14,000.00
14	Providing and fixing 25 mm X 5 mm copper strip in existing 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer etc. as required	50	Mtr	1,435.00	71,750.00
15	Earthing with Copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement, 20mm GI watering pipe of 2.7 metre long with charcoal/ coke and salt etc., as required.	10	job	18,000.00	1,80,000.00
16	Providing and fixing 25 mm X 3 mm copper strip on existing tray or surface or in recess for connections etc. as required	1200	mtr	760.00	9,12,000.00
17	Dismantling of Existing UPS LT panels and its accessories in different locations (Domestic terminal building - Basement - 6Nos of size 4.25m length X1.85m height in 3 sections, (international terminal building - Basement - 6 Nos of size 4.25m length X1.85m height in 3 sections and Utility building - 2Nos of size 3.35m length X1.80m height in 2 sections) and Handed over to AAI Store as per the direction of Engineer - in - Charge.	1	job	75,000.00	75,000.00
Total of SUB - HEAD -III Rs.					59,35,108.00
Sub Head -IV : Water Fountains Coolers					
1	Supply installation, testing and commissioning of recessed bi level drinking water fountain coolers, with double ss finish bubbler with swan neck SS Drinking Pipe and one bottle filling station Drinking water fountain with 60 LPH cooling capacity, stainless steel body-304, Suitable size Recipients, SS bubbler guard operated between 50 to 120 PSI, chilling unit suitable for R134a refrigerant, adjustable thermostat, with UV and sediment filtration , with Touchless, sensor-activation with non flammable foam used in the chiller, designed for easy use With MDCU29, With normal and cold Option , supply complete with all accessories suitable to operate on single phase 230 V + 10%, AC 50HZ, Power Supply. The job is also inclusive of dismantling and shifting the existing water fountain coolers from different locations to AAI Store (Oasis make Model M8CRSBF or equivalent).	8	Job	3,20,000.00	25,60,000.00
Total of SUB - HEAD -IV Rs.					25,60,000.00
Total of SUB - HEAD - I ,III and IV Rs.					1,34,57,233.00
Less Buy Back Total of SUB - HEAD - II Rs.					22,50,009.00
(A-B) TOTAL Rs.					1,12,07,224.00

(Rupees One Crore Twelve Lakh Seven Thousand Two Hundred and Twenty Four Only)
(Plus GST)


(S. NATARAJAN)
Jt. Gen. Mnager (E-E) - II

Signature Not Verified