



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

विद्युत अभियांत्रिकी अनुभाग
ELECTRICAL ENGINEERING WING

संदर्भ सं.: भा.वि.प्रा./BBSR/ उप महाप्रबंधक (अभि - विद्युत)/WO-08/2024-25/2456-63 दिनांक: 16.05.2024.

सेवा में/To,

स्पीडपोस्ट द्वारा / By Speed Post

मेसर्स वर्धमान एयरपोर्ट सॉल्यूशन प्राइवेट लिमिटेड e-mail:praveen.dubey@vardhmanairports.com

M/s Vardhman Airport Solution Pvt Ltd

पहली और दूसरी मंजिल, प्लॉट नंबर:-13/C और 13/3, रामा रोड साइड

1st & 2nd Floor, Plot No:-13/C & 13/3, Rama Road Side

इंडस्ट्रियल एरिया, नजफगढ़ रोड

Industrial Area, Najafgarh Road

दिल्ली-110015 / Delhi-110015

कार्य का नाम एसआईटीसी ऑफ 250 केवीए यूपीएस विध आउटगोइंग एलटी पैनल एंड कमर्शियल एलटी पैनल एट टी-1 टर्मिनल एट बि.पि. आई. एयरपोर्ट, भुवनेश्वर

Name of Work: SITC of 250KVA UPS with Outgoing LT Panel and Commercial LT Panel at T-1 Terminal at B.P.I. Airport, Bhubaneswar.

महोदय/Dear Sir(s),

Ref: Your e-Tender opened dated 06.05.2024 for Tender ID No. 2024_AAI_191172_1.

1. उपरोक्त कार्य के लिए आपकी निविदा अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से आप द्वारा उद्धरित मद दर जिसकी कुल राशि रु. 89,94,461.00 (नवासी लाख चौरानवे हजार चार सौ इकसठ रुपया मात्र) जीएसटी को छोड़कर जो कि निविदा की अनुमानित लागत रु. 1,04,58,127.00 से 14.00% नीचे है, स्वीकृत की जाती है।

अ/क

Your e-Tender for the work mentioned above is hereby accepted on behalf of Chairman, Airports Authority of India, at item rates quoted by you totalling to Rs.89,94,461.00 (Rupees Eighty Nine Lakhs Ninety Four Thousand Four Hundred and Sixty One Only) Excluding GST which is 14.00% (Fourteen Point Zero Zero Percent) below the Justified cost of Rs.1,04,58,127.00.

2. उप महाप्रबंधक (अभि-विद्युत), भारतीय विमानपत्तन प्राधिकरण, बी.प.अ. हवाई अड्डा, भुवनेश्वर इस कार्य के इंजीनियरिंग प्रभारी होंगे। आपसे अनुरोध है कि आप संविदा करार पर हस्ताक्षर करने एवं उसे पूरा करने हेतु दिनांक 27.05.2024 के अंदर उप महाप्रबंधक (अभि- विद्युत), भारतीय विमानपत्तन प्राधिकरण, बी.प.अ. हवाई अड्डा, भुवनेश्वर के कार्यालय में उपस्थित हों। संविदा करार रु 100/- (सौ रुपये मात्र) के न्यायिकेतर (नॉन ज्युडिशियल) स्टाम्प पेपर पर बनाया जाएगा और स्टाम्प पेपर की लागत आपको वहन करनी होगी।

Dy. General Manager Engg. (E), AAI, B.P. International Airport Bhubaneswar, shall be the Engineer-in-Charge of the work. You are requested to attend the office of the Dy. General Manager Engg. (E), AAI, B.P. International Airport, Bhubaneswar by 27.05.2024 to sign and complete the agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs.100.00 (Rupees One Hundred only) and the cost of stamp paper shall be borne by you.

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3. कृपया इस पत्र के जारी होने के 10 दिन के भीतर सुरक्षा जमा के लिए रु. 8,99,446.00 (आठ लाख निन्यानवे हजार चार सौ छियालीस रुपया मात्र) जमा करवा दें, ऐसा नहीं करने पर उक्त रकम संविदा दस्तावेज के पृष्ठ 16 पर दी गई शर्त 1A के अनुसार आपके रनिंग बिल से काट ली जाएगी।

Please deposit Rs. 8,99,446.00 (Rupees Eight Lakhs Ninety Nine Thousand Four Hundred and Forty Six Only) towards Security deposit within 10 days from the date of issue of this letter, failing which the same will be deducted as per conditions of Clause No - 1A page 16 of Clauses of the contract document.

4. आपसे अनुरोध है कि संविदा श्रमिक (विनियमन एवं समापन) अधिनियम 1970 और संविदा श्रमिक (विनियमन एवं समापन) केन्द्रीय नियमावली 1971 बाल श्रम (निषेध और विनियमन) अधिनियम 1986, निर्माण वर्कर्स (रोजगार और सेवा की शर्त का विनियमन) अधिनियम 1996, भवन और अन्य निर्माण श्रमिक कल्याण अपकर अधिनियम 1996 जैसा कि निविदा के जीसीसी के पृष्ठ संख्या 68 पर धारा 19 में जीसीसी आफ निविदा निर्दिष्ट है तथा केन्द्रीय और राज्य सरकारों के नियमों का अनुपालन करें।

You are requested to comply with the provisions of Contract Labour (Regulation & Abolition) Act of 1970 and Contract Labour (Regulation and Abolition) Central Rules-1971 Child Labour (Prohibition and Regulation) Act 1986, Construction Workers (Regulation of Employment and Condition of Service) Act 1996, Building and other construction Workers Welfare cess Act 1996 as specified in Clause-19 On Page No.68 of GCC of Tender and rules of Central and State Governments.

5. आपको निदेश दिए जाते हैं कि आप सहायक महाप्रबंधक (अभी.-विद्युत), भारतीय विमानपत्तन प्राधिकरण, बी.प.अ. हवाईअड्डा से तत्काल सम्पर्क करें जो कि आपको कार्यस्थल हस्तान्तर करने की व्यवस्था करेंगे।

You are also directed to contact the Asst General Manager Engg (E), AAI, B.P. International Airport, Bhubaneswar immediately, who will arrange to handover the site to you.

6. पया यह नोट कर लें कि काम पूरा करने का समय 04 (चार) महीने है, जिसे इस पत्र के जारी होने की तारीख से 10 दिन बाद गिना जाएगा।

Please note that the time allowed for carrying out the work shall be Four (04) Months and same shall be reckoned from 10th day after the date of issue of this letter..

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7. कृपया ध्यान दें कि त्रुटि की देयता अवधि कार्य पूरा होने की तारीख से बारह महीने की होगी।

Please note that the defect liability period shall be **Twelve Months** from the date of completion of work.

8. संविदा के संबंध में आगे किया जाने वाला पत्राचार सामान्यतः प्रभारी इंजीनियर से किया जाए।

Any further correspondence in connection with the contract should normally be addressed to the Engineer - in - Charge.

9. कृपया ध्यान दें कि यदि उपरोक्त हिंदी और अंग्रेजी संस्करण के प्रावधान में कोई अंतर/विसंगति या विरोधाभास है, तो अंग्रेजी संस्करण मान्य होगा।

Please note if there is any difference/discrepancy or contradiction in the provision of Hindi and English version in above, the English version shall prevail

10. कृपया इस पत्र की पावती भेजें तथा साथ में संलग्न इस पत्र की दूसरी प्रति पर स्वीकारोक्ति के रूप में विधिवत हस्ताक्षर करके हमें वापस भेजें।

Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after signing it to undersigned as a token of acceptance.

धन्यवाद / Thanking you,

भवदीय / Yours Faithfully,

— SD —

उप महाप्रबंधक (अभी. – विद्युत)/Dy.GM. Engg. (Elect.)

भा.वि.प्रा., बी.प.अ. हवाईअड्डा, भुवनेश्वर / AAI, B.P. I. Airport, Bhubaneswar
कृते अध्यक्ष, भाविप्रा, नई दिल्ली

/ Encl: 1. शिड्यूल ऑफ क्वान्टिटीज / Schedule of quantities.

Copy to:-

NOO. (External) :

1. Labour Commissioner (Central), Kendriya Shram Sadan, Plot no. N-7/6 & 7, IRC Village, Behind ISCON Temple, Nayapalli, Bhubaneswar - 15, Odisha.
2. Regional Provident Fund Commissioner, Vabisyaniidhi Bhawan, Janpath, Unit IX, Bhubaneswar, Odisha.
3. The Regional Commissioner, Employee State Insurance Corporation, Panchadeep Bhawan, Janpath, Unit IX, Bhubaneswar, Odisha.



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विद्युत अभियांत्रिकी अनुभाग
ELECTRICAL ENGINEERING WING

आंतरिक / Internal :

1. विमानपत्तन निदेशक, भा.वि.प्रा., बी.प.अ. हवाईअड्डा, भुवनेश्वर।
The Airport Director, AAI, B.P. International Airport, Bhubaneswar.
2. सहायक महाप्रबंधक (वित्त व लेखा), भा.वि.प्रा., बी.प.अ. हवाईअड्डा, भुवनेश्वर।
The Asst. General Manager (F&A), AAI, B.P. International Airport, Bhubaneswar
3. सहायक महाप्रबंधक (अभि. - विद्युत) भा.वि.प्रा., बी.प.अ. हवाई अड्डा, भुवनेश्वर।
The Asst. General Manager (Engg. - Elect), AAI, B.P. International Airport, Bhubaneswar
4. अनुबंध फाइल / Agreement Copy.
5. कार्य फाइल / The Works File.

Signature
16.05.24

उप महाप्रबंधक (अभि. - विद्युत)/Dy.GM. Engg. (Elect.)

भा.वि.प्रा., बी.प.अ. हवाईअड्डा, भुवनेश्वर / AAI, B.P. I. Airport, Bhubaneswar
कृते अध्यक्ष, भाविप्रा, नई दिल्ली

verified

Signature
Bhubaneswar

AIRPORTS AUTHORITY OF INDIA
B.P.I. INTERNATIONAL AIRPORT BHUBANESWAR-751020

Schedule of Quantity

Name of Work:-SITC of 250KVA UPS with Outgoing LT Panel and Commercial LT Panel at T-1 Terminal at B.P.I. Airport, Bhubaneswar.

Sl. No.	Description of Items	Unit	Qty	Rate	Amount
1	2	3	4	5	6
1	Design, Supply, Installation, Testing & Commissioning of 250KVA Nominal capacity UPS unit, 3-phase-4 wire, suitable for operating condition 415±15%, 3ph, 50Hz ± 10% ,IGBT rectifier and PWM Controlled IGBT inverter based online double conversion(>=96% efficiency at 50-100% Load) type DSP controlled UPS, True Sinewave (with Electrical Neutral on Output side), 100% unbalanced load and working on necessary static bypass system & maintenance bypass outside of UPS with suitable isolator confirming to the specification attached along with identical isolation transformer at output suitable for the system. UPS should be dust and vermin proof duly painted and with ventilation ducts, floor mounted, forced air cooling suitable for 15 minutes backup time for UPS on full load and capable of giving desired output of 3 phase 415 V 50 Hz with Modbus/SNMP,RS485 communication facility and surge protection system conforming to standards IEC 62040-1,2,3 , IS: 16242-1 and necessary upto date amendments etc. as required as per tender condition including preventative maintenance and checks during 02 years warranty as per site requirements.	Job	1	2158050.00	2158050.00
2	Design & SITC (Supply, Installation, Testing & Commissioning) of VRLA battery bank mounted in suitable rack (as per recommendation of battery manufacturer) consisting of 12 V VRLA battery capable of providing backup for at least 15 mins at full rated load of above mentioned UPS (as per item no.1) along with necessary intercell connectors, interconnection of UPS and Battery bank using suitable rated fire resistance Nyvin copper cables (as recommended by battery manufacturer) including preventative maintenance and checks during 02 year warranty.	Set	1	1245694.00	1245694.00
3	Supply, Installation, Testing and Commissioning of TTA type indoor cubicle LT panel as per IEC 61439, IP42, suitable for 415V±10%, 3 Phase, 4 wire 50 Hz AC supply system, fabricated in compartmentalized modular design from CRCA sheet steel of 2 mm thick for frame work and covers, 3 mm thick for gland plates i/c cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN Aluminium alloy bus bars with 100% size neutral bus as that of phase bus, supported with SMC bus bar supports, with short circuit withstand capacity as per design subject to minimum 35 kA for 1 sec, bottom base channel of MS section not less than 75 mm x 40 mm, fabrication shall be done in transportable sections, entire panel shall have a common Copper earth bus bar of size as per IS 3043 subject to minimum 32 mm x 5 mm at the rear with 2 Nos. earth stud, solid/ flexible copper connections from main earth bus bar to switchgears with required size of Cooper conductors/ bus bars and control wiring with 2.5 sqmm FRLS PVC insulated copper conductor cable, cable alleys, cable gland plates in two halves, including control providing following switchgears/ accessories as per specifications.				

Sl. No.	Description of Items	Unit	Qty	Rate	Amount
1	2	3	4	5	6
3.1	Incomer 1 Nos. 400A, 4P MCCB, Microprocessor based release (Ics = Icu = 35kA) with inbuilt O/L, S/C & E/F protection as per specification and incomer shall be provided with following accessories. 1 Set of phase indicating LED lamps with 2 amp back up MCB. 1 No. 96 x 96 sqmm Digital MFM meter and 3 nos. Cast resin CTs of ratio 400/5A, Class 0.5 accuracy and 10 VA burden, suitable to measure voltage, Ampere, Frequency, Power Factor, KVA, KW, KVAH, KWH, MDI & Individual Odd Harmonics for voltage and current including THD upto 31st Order with RS 485 port. 1 Set of ON/OFF/TRIP Indicating LED Lamps With 2 Amp MCB Busbars 4P aluminium bus bars of 600A capacity with heat shrinkable coloured sleeves including SMC bus bars supports at required intervals complete for cross section, size supports & their spacing etc. for withstanding fault level of 35 KA for 1 sec. The electrical panel shall be fully ventilated to maintain internal body temp. < 40 deg 'C' when room amb. temp. is equal of less than 35 deg 'C'. Required ventilation fans shall be provided and tested. Outgoings 2 Nos.125A 4P MCCB with built in thermal magnetic release with adjustable setting (Ics = Icu =25 KA), 1 Sets - ON,OFF,Trip LED lamps ,Digital Ammeter etc. 10 Nos. 63A 4P MCCB with built in thermal magnetic release with adjustable setting (Ics = Icu =25 KA), 1 Sets - ON,OFF,Trip LED lamps ,Digital Ammeter Ammeter. For busbar section-1 Set Surge protection device Type 2 (Class C), 4 Module, MOV type suitable for 8/ 20µs surge, Voltage Protection level Up < 1.5kV, Operating Temperature -40 deg 'c' - +80 deg 'C', Connected Between 3Nos. phase to neutral and 1Nos. neutral to earth with discharge Current I_{max} ≥ 40KA Per module & I_n ≥ 20kA per Module. SPD shall be with built in fuse and plugable type. For connecting SPD minimum 10sqmm copper wire must be used & length of connecting leads shall not be more than 500mm per mode connection including all necessary accessories. The SPD shall be compliant and tested from KEMA KEUR / VDE / NABL for UPS input tested as per IEC 61643-11 / UL	Job	1	558420.00	558420.00
4	Supply and installation of 400A, 4P MCCB, Microprocessor based release (Ics = Icu = 35kA) with inbuilt O/L, S/C & E/F protection as per specification for installation in existing LT panel vacant space with supply of busbar, connection material accessories etc.	Nos.	3	44649.00	133947.00
5	Design, fabrication, Supply, Installation, testing & commissioning of TTA type bothside extendable, floor mounted type, fully compartmentalised, front operated, back openable, LT cubicle panel suitable for incoming and out going cable entry from bottom designed verified as per IEC 61439-1 & 2 and international recognized test house/CPRI/ERDA tested. Bus Bars: 1250A, 3phase with 100% Neutral Aluminium busbar- 1 set. Incomers 1 Nos Incomer - 800 Amp 415V, 35KA (Icu @415V=Ics=low for 1 sec) 4Pole EDO (Electrically operated Draw-out) type microprocessor controlled Modular ACB with LSIG release (zone: O/L, S/C, Instantaneous & ground fault) comprising of atleast 5 current settings in LSIG and 5 time settings in LSG, IDMTL settings for proper co-ordination with upstream relay protection system, thermal memory in O/L, alarms & protection options for current imbalance, maximum demand, voltage unbalance, overvoltage, undervoltage, reverse power & phase sequence, capability of load shedding and reconnection, in-built metering through CT and LCD display of V, I, W, VAR, VA, Wh, VARh, VAh, Pf, percentage loading bar graph,				

Sl. No.	Description of Items	Unit	Qty	Rate	Amount
1	2	3	4	5	6
4	10 trip history date & time stamped, interrupted current value upto short circuit level and percentage wear indication; separate microprocessor shall be used for protection and measurement. Continuous display to be ensured through 24 Volt DC from SMPS in panel battery module. Neutral protection shall be settable at 50% and 100%. ACB shall be capable of communicating data on Ethernet protocol and on-line parameterization capable. One number Digital MFM meter with CTs, CI-0.5 accuracy suitable to measure V, I, W, VAR, VA, KWh, KVARh, VAh, Pf 1 Sets - ON, OFF, Trip, Spring Charged, ready to close indication LED lamps with back-up MCB 1 Sets - R, Y, B Phase indication LED lamp with back up MCB Outgoings: 2 Nos. 200 A 4P MCCB with built in thermal magnetic release with adjustable setting (Ics = Icu = 25 KA) , 1 Sets - ON, OFF, Trip LED lamps , KWH Meter. 2 Nos. 160A 4P MCCB with built in thermal magnetic release with adjustable setting (Ics = Icu = 25 KA) , 1 Sets - ON, OFF, Trip LED lamps , KWH meter etc. 4 Nos. 125 A 4P MCCB with built in thermal magnetic release with adjustable setting (Ics = Icu = 25 KA) , 1 Sets - ON, OFF, Trip LED lamps , KWH meter etc. 6 Nos. 63 A 4P MCCB with built in thermal magnetic release with adjustable setting (Ics = Icu = 25 KA) , 1 Sets - ON, OFF, Trip LED lamps , KWH meter etc.	Job	1	785568.00	785568.00
6	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 and watering pipe of 2.7 meter long etc. with charcoal / coke and salt as required.	Set	2	19677.00	39354.00
7	Earthing with GI earth plate 600 mm x 600 mm x 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 meter long etc. with charcoal / coke and salt as required.	Set	6	11136.00	66816.00
8	Providing and fixing 50 mm x 6 mm copper strip in 80 mm dia G.I pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filing etc. as required.	Meter	30	3856.00	115680.00
9	Providing and fixing 50 mm x 6 mm GI strip in 80 mm dia G.I pipe from earth electrode including connection with GI nut, bolt, spring, washer excavation and re-filing etc. as required.	Meter	180	1348.00	242640.00
10	Providing and fixing 50 mm x 6 mm copper strip on surface or in recess for connections etc. as required.	Meter	20	2809.00	56180.00
11	Supplying and installing following size of Hot dip Galvanised perforated type cable trays of following sections along with connectors, necessary wall support made of RS Angle including bolts & nuts etc. and painting as required.				
11.1	a) 450 mm wide X 62.5 mm X 1.6 mm thick	Meter	250	1030.00	257500.00
11.2	b) 150 mm wide X 50 mm X 2mm thick	Meter	50	478.00	23900.00
12	Supply of following size power cables of 1.1 KV grade, XLPE Insulated PVC Sheathed aluminium conductor cable, armoured, and PVC sheathed conforming to IS 7098 Part-I with up to date amendments.				
12.1	(a) 3.5Cx 50sq mm	Meter	500	218.00	109000.00
12.2	(b) 3.5Cx 70 Sq mm	Meter	500	294.00	147000.00
12.3	(c) 3.5Cx 120 Sq mm	Meter	1000	451.00	451000.00
12.4	(d) 3.5Cx 150 sq mm	Meter	500	530.00	265000.00
12.5	(e) 3.5C X 240Sq. mm	Meter	1000	861.00	861000.00
12.6	(f) 3.5C X 400Sq. mm	Meter	900	1346.00	1211400.00
13	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/HUME/METAL/HDPE pipe as required.				
13.1	(a) Above 35 sq. mm and upto 95 sq. mm Aluminium	Meter	250	21.00	5250.00

Sl. No.	Description of Items	Unit	Qty	Rate	Amount
1	2	3	4	5	6
13.2	(b) Above 95 sq. mm and upto 185 sq. mm Aluminium	Meter	200	27.00	5400.00
13.3	(c) Above 185 sq. mm and upto 400 sq. mm Aluminium	Meter	200	43.00	8600.00
14	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing masonry open duct as required.				
14.1	(a) Above 35 sq. mm and upto 95 sq. mm Aluminium	Meter	200	11.00	2200.00
14.2	(b) Above 95 sq. mm and upto 185 sq. mm Aluminium	Meter	300	16.00	4800.00
14.3	(c) Above 185 sq. mm and upto 400 sq. mm Aluminium	Meter	1050	16.00	16800.00
15	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.				
15.1	(a) Above 35 sq. mm and upto 95 sq. mm (clamped with 25 X 3 mm MS flat clamp) Aluminium	Meter	350	32.00	11200.00
15.2	(b) Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40 X 3 mm MS flat clamp) Aluminium	Meter	200	43.00	8600.00
15.3	(c) Above 185 sq. mm and upto 400 sq. mm (clamped with 40 X 3 mm MS flat clamp) Aluminium	Meter	280	54.00	15120.00
16	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.				
16.1	(a) Above 35 sq. mm and upto 95 sq. mm (clamped with 25 X 3 mm MS flat clamp) Aluminium	Meter	580	54.00	31320.00
16.2	(b) Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40 X 3 mm MS flat clamp) Aluminium	Meter	600	75.00	45000.00
16.3	(c) Above 185 sq. mm and upto 400 sq. mm (clamped with 40 X 3 mm MS flat clamp) Aluminium	Meter	300	86.00	25800.00
17	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.				
17.1	(a) 3.5Cx 50sq mm	Each	8	914.00	7312.00
17.2	(b) 3.5Cx 70 Sq mm	Each	8	1299.00	10392.00
17.3	(c) 3.5Cx 120 Sq mm	Each	8	1969.00	15752.00
17.4	(d) 3.5Cx 150 sq mm	Each	6	2215.00	13290.00
17.5	(e) 3.5C X 240Sq. mm	Each	6	3708.00	22248.00
17.6	(f) 3.5C X 400Sq. mm	Each	4	4807.00	19228.00

Total Rs. 8994461.00

Say Rs. 8994461.00

Note

1 GST Extra Applicable.

2 AAI GSTIN:-21AAACA6412D1ZK.

(Rupees Eighty Nine Lakhs Ninety Four Thousand Four Hundred and Sixty One Only)

Dy.General Manager Engg(E)
AAI, B.P.I. Airport Bhubaneswar

Signature
Date:
Local