

भारतीय विमानपत्तन प्राधिकरण

AIRPORTS AUTHORITY OF INDIA

सं.भाविप्रा/क्षे.मु.-द.क्षेत्र/ईडी-II/एमएसएसआर-एसएस/डब्ल्यूओ-06/2025-26/25
No. AAI/RHQ-SR/ED-II/MSSR-SS/WO-06/2025-26/25

दिनांक:31.10.2025
Date:31.10.2025

सेवा में,
मेसर्स चेन्नई इंजीनियरिंग सर्विसेज,
प्लॉट नंबर 30, दरवाजा नंबर 1-536.
कृष्णा नगर, पहली स्ट्रीट,
मनपक्कम, चेन्नई-600 125.

To
M/s. Chennai Engineering Services,
Plot No.30, Door No.1-536.
Krishna Nagar, 1st Street,
Manapakkam, Chennai-600 125.

कार्य का नाम: क्षेत्रीय मुख्यालय, दक्षिणी क्षेत्र, चेन्नई हवाई अड्डे पर नए एसआर कोलोकेटेड एमएसएसआर के लिए सबस्टेशन और सहायक कार्यों का निर्माण। उपशीर्ष - : सबस्टेशन उपकरणों और संबद्ध कार्यों का एसआईटीसी।

NAME OF WORK: Construction of Sub-Station and Ancillary Works for New ASR Collocated MSSR at RHQ-SR, Chennai Airport. SH: SITC of Substation Equipments and Associated works.

संदर्भ -:1. भा.वि.प्रा. निविदा आई डी :2025_भा.प्रा.वि._246327_1
2. ई - निविदा (मूल्य बोली) : 26.09.2025 को खोला गया।
Ref: 1. AAI Tender ID : 2025_AAI_246327_1
2. e - Tender (Price Bid): Opened on 26.09.2025

प्रिय महोदय,
Dear Sir,

- उपर्युक्त कार्य के लिए आपकी ई-निविदा को भारतीय विमानपत्तन प्राधिकरण के अध्यक्ष की ओर से सक्षम प्राधिकारी द्वारा आपके द्वारा उद्धृत मद दरों पर स्वीकार किया जाता है, जिसकी कुल राशि 3,84,44,300.00 रुपये (तीन करोड़ चौरासी लाख चौवालीस हजार तीन सौ रुपये मात्र) प्लस लागू जीएसटी है, जो कि निविदा में रखी गई अनुमानित लागत 4,90,40,266.00 रुपये प्लस लागू जीएसटी से 21.61% कम है।

Your e-tender for the work mentioned above is hereby accepted by the Competent Authority on behalf of Chairman, Airports Authority of India, at the item rates quoted by you totalling to Rs.3,84,44,300.00 (Rupees Three Crores Eighty Four Lakhs Forty Four Thousand and Three Hundred Only) Plus applicable GST which is 21.61% below the estimated cost put to tender of Rs. 4,90,40,266.00 Plus applicable GST.



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भारतीय विमानपत्तन प्राधिकरण

AIRPORTS AUTHORITY OF INDIA

- 2 -

2. इस कार्य के लिए वरिष्ठ प्रबन्धक (विद्युत-इंजी), ईडी-II, भा.प्रा.वि., नया प्रचालन कार्यालय, क्षेत्रीय मुख्यालय, दक्षिणी क्षेत्र, चेन्नई हवाई अड्डा, चेन्नई-600 016 प्रभारी इंजीनियर होंगे। आपसे अनुरोध है कि अनुबंध समझौते पर हस्ताक्षर करने और उसे पूरा करने के लिए 10.11.2025 तक वरिष्ठ प्रबंधक (इंजी), ईडी -II, भा.प्रा.वि., क्षेत्रीय मुख्यालय, दक्षिणी क्षेत्र, चेन्नई हवाई अड्डा, चेन्नई के कार्यालय में उपस्थित रहे। संविदा करार को रुपये 100.00 मूल्य के एक गैर न्यायिक स्टॉप (केवल एक सौ रूपए) पेपर पर निष्पादित किया जाएगा और स्टॉप पेपर के मूल्य का वहन आपके द्वारा किया जाएगा।

Senior Manager (E-E), ED - II, AAI, New Operational Office, RHQ-Southern Region, Chennai Airport, Chennai - 600016 shall be the Engineer-In-Charge of the work. You are requested to attend to the Office of Senior Manager (Engg-E), ED - II, AAI, RHQ- SR, Chennai Airport, Chennai by 10.11.2025 to sign and complete the Contract 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 the stamp paper shall be borne by you.

3. आपको निर्देश दिया जाता है कि इस पत्र के जारी होने की दिनांक से 10 दिनों के भीतर सुरक्षा जमा के रूप में रु. 38,44,430.00 (अड़तीस लाख चौवालीस हजार चार सौ तीस रुपये मात्र) जमा करना है, जिसमें विफल होने पर अनुबंध की धारा 1-ए के अनुसार आपके चालू बिलों से राशि काट ली जाएगी।

Please deposit Rs. 38,44,430.00 (Rupees Thirty Eight Lakhs Forty Four Thousand Four Hundred and Thirty Only) towards Security Deposit within 10 days from the date of issue of this letter, failing which, the same will be deducted from your running bills as per the Clause of 1-A of Clauses of Contract.

4. स्वीकृति पत्र जारी होने के 30 दिनों के भीतर, आप अनुबंध दस्तावेज के परिशिष्ट-आई में संलग्न प्रोफार्मा पर बैंक गारंटी के रूप में 13,45,560.00 रुपये (केवल तेरह लाख पैंतालीस हजार पांच सौ साठ रुपये) की राशि के लिए शुद्धिपत्र-I के अनुसार एएआई को अतिरिक्त निष्पादन सुरक्षा जमा करेंगे।

Within 30 days of issue of acceptance letter, you shall submit to AAI, Additional Performance Security as per the Corrigendum-I for an amount of Rs. 13,45,560.00 (Rupees Thirteen Lakhs Forty Five Thousand Five Hundred and Sixty only) in the form of Bank Guarantee on the Proforma appended at Appendix - IA of Contract Document.

5. आपसे अनुरोध है कि आप संविदा श्रम (विनियमन एवं उन्मूलन) अधिनियम 1970 तथा संविदा श्रम (विनियमन एवं उन्मूलन) केन्द्रीय नियम 1971, बाल श्रम (निषेध एवं विनियमन) अधिनियम 1986, निर्माण श्रमिक (रोजगार एवं सेवा शर्त विनियमन) अधिनियम 1996, भवन एवं अन्य निर्माण श्रमिक कल्याण उपकर अधिनियम 1996 के प्रावधानों का अनुपालन करें, जैसा कि निविदा की जीसीसी के पृष्ठ संख्या 50 पर खण्ड 19 में निर्दिष्ट है तथा केन्द्रीय एवं राज्य सरकार के नियमों का अनुपालन करें।



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भारतीय विमानपत्तन प्राधिकरण

AIRPORTS AUTHORITY OF INDIA

-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 Child Labour (Prohibition & 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. 50 of GCC of tender and rules of Central and State Government.

6. आपको प्रबंधक (ई-ई), ईडी-II, एएआई, नए परिचालन कार्यालय, आरएचक्यू-दक्षिणी क्षेत्र, चेन्नई हवाई अड्डा, चेन्नई - 600 016 से तुरंत संपर्क करने का निर्देश दिया जाता है, जो आपको साइट सौंपने की व्यवस्था करेंगे।

You are also directed to contact Manager (E-E), ED - II, AAI, New Operational Office, RHQ-Southern Region, Chennai Airport, Chennai - 600 016 immediately who will arrange to hand over the site to you.

7. कृपया ध्यान दें कि एसआईटीसी कार्य के लिए कार्य करने हेतु अनुमत समय 06 (छह) महीने होगा, जिसकी गणना **10.11.2025** से प्रभावी होगी।

Please note that the time allowed for carrying out the work shall be **06 (Six) months** for SITC work which shall be reckoned with effect from **10.11.2025**.

8. अनुबंध के संबंध में कोई भी आगे का पत्राचार सामान्यतः वरिष्ठ प्रबंधक (इंजी-विद्युत), ईडी-II, भा.वि.प्रा., नया प्रचालन कार्यालय, क्षेत्रीय मुख्यालय, दक्षिणी क्षेत्र, चेन्नई हवाई अड्डा, चेन्नई-600 016 को संपर्क किया जाना चाहिए।

Any further correspondence in connection with the contract should normally be addressed to the Senior Manager (E-E), ED - II, AAI, New Operational Office, RHQ-Southern Region, Chennai Airport, Chennai - 600 016.

9. कार्य पूरा होने पर/आरए बिलों के लिए चालान बनाते समय, आपसे अनुरोध है कि आप अपने कर चालान में भा.वि.प्रा. जीएसटी संख्या 33AAACA6412D1ZF स्पष्ट रूप से दर्शाएं।

On completion of work / at the time of raising invoice for RA bills, you are requested to clearly indicate AAI GST No. 33AAACA6412D1ZF in your tax invoice.



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भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

-4-

10. कृपया पावती भेजें एवं इस पत्र के साथ संलग्न इसकी प्रतिलिपि पर हस्ताक्षर करते हुए उसे स्वीकृति के तौर पर अधोहस्ताक्षरी को भेजें ।

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.

धन्यवाद,

Thanking you,

संलग्न : मात्रा के बिल

Encl: Bill of Quantity (BOQ)

भवदीय,

डि. नरसिम्हा प्रसाद
31/10/15

(ए. नरसिम्हा प्रसाद)

(A. Narasimha Prasad)

वरिष्ठ प्रबन्धक (इंजी-विद्युत)

Senior Manager (E-E)

भा.वि.प्रा, क्षे.मु-द.क्षेत्र, चेन्नई हवाई अड्डा

AAI, RHQ-SR, Chennai Airport.

हिन्दी में किए गए अनुवाद पर यदि कोई विसंगति की स्थिति में, अंग्रेजी रूपांतरण को प्रामाणिक माना जाए

In case of any discrepancy in Hindi Translation, the English version will be authentic.

Tender Inviting Authority: SENIOR MANAGER (ENGG-ELECTRICAL), AAI, RHQ-SR, CHENNAI - 600016

Name of Work: Construction of Sub-Station and Ancillary Works for New ASR Collocated MSSR at RHQ-SR, Chennai Airport. SH: SITC of Substation Equipments and Associated works.

Contract No: 2025_AAI_246327_1

Name of the Bidder/ Bidding Firm/ Company :	CHENNAI ENGINEERING SERVICES					
PRICE SCHEDULE (This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevent columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
1	SH-I: Supply of Sub-station Equipments					
1.01	Supply of 11KV HT VCB Panel					
1.02	Supply of Indoor Type OEM Factory Built, floor mounted metal clad, VCB Switch Board Panel with 07 Nos. of VCBs, free standing extensible on both sides, totally enclosed and fully interlocked, truck mounting, horizontal drawout, horizontal isolation type conforming to IS/IEC 62271-1(2017), IS/IEC 62271-100(2021) and IS/IEC 62271-200 (2021) as amended up to date, made out of CRCA sheet steel with thickness not less than 2 mm and shall totally dust and vermin proof, the degree of protection of VCB panel is IP5X Rating and as per the AAI Technical Specifications, having capacities as mentioned below, single break, suitable for use on 11 KV, 3 Phase, 50Hz AC Supply with short circuit fault level of 381 MVA (20 KA) for 3 Sec., complete with self contained, Copper bus bar of size meeting fault level calculation but not less than 100x8mm, Internal Arc Test for AFLR for 25kA for 1Sec, rack in and rack out mechanism, breaker featured with mechanical ON/OFF indicator with hand trip device and all accessories such as shunt trip coil suitable for 24V DC, motorised (230V AC Single Phase Supply) and manually operated spring assisted closing mechanism, emergency trip push button, castle lock, audio visual buzzer connecting all alarms and trip commands, space heaters, earth Copper bus bar of 50x6mm etc., suitable to terminate with heat shrinkable termination kit for XLPE cable of 11KV grade upto 3C x 300 sqmm (Cable entry from top) etc., including supply of One separate earthing truck each for bus earthing and cable earthing designed not to earth a live part, all connections, interconnections, earthing, painting and comprising of following switchgears and accessories etc., complete as required.					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
1.03	Incoming - 2 Nos. of 630 Amp VCB					
1.04	2 Nos. - 11 KV/110 Volts drawout type resin cast PT of Class 1.0 accuracy and 100 VA burden with 1 No. Digital type Voltmeter with inbuilt selector switch and protection fuses / MCBs for HT metering up to 12 KV on incomer.					
1.05	2 Nos. - Set of dual core dual ratio 3 CTs of 200/100/5/5A of 10 VA burden of accuracy class 1.0 for metering and class 5P10 for protection with 2 Nos. of Ammeter digital type of Class 1 with inbuilt selector switch, Digital Meter of Schneider Make, Model EM 6400NG with RS port (or) Equivalent for each incomer and protection fuses / MCBs for HT metering					
1.06	2 Nos. of Microprocessor based numerical relay (Make: Schneider, Model: REL15003D or equivalent) with O/L, E/F and S/C protection and 2 Nos. of Master trip relays.					
1.07	2 Sets of 7 LED Type Indication Lamp for Breaker ON/OFF/TRIP/Service position/ test position/ Trip circuit healthy/ spring charge indications, 7 LED type Phase Indication Lamps and protection fuses /MCBs etc..					
1.08	Outgoings - 2 Nos. of 630 Amp VCB [For Transformers]					
1.09	2 Nos. - Set of dual core dual ratio 3 CTs of 150/75/5/5A of 10 VA burden of accuracy class 1.0 for metering and class 5P10 for protection with 2 Nos. of Ammeter digital type of Class 1 with inbuilt selector switch, Digital Meter of Schneider Make, Model EM 6400NG with RS port (or) Equivalent for each Outgoing and protection fuses / MCBs for HT metering					
1.10	2 Nos. of Microprocessor based numerical relay (Make: Schneider, Model: Model: REL15003D or equivalent) with O/L, E/F and S/C protection, and 2 Nos. of Master trip relays.					
1.11	2 Sets of Auxiliary Relays for Alarm and Trip of Transformers (Transformer Winding temperature alarm/trip, door opening limit switch and off load tap changer door limit switch etc., as per Transformer protection requirements)					
1.12	2 Sets of 7 LED Type Indication Lamp for Breaker ON/OFF/TRIP/Service position/test position/Trip circuit healthy/spring charge indications, 7 LED type Phase Indication Lamps and protection fuses / MCBs etc..					
1.13	Outgoings - 2 Nos. of 630 Amp VCB					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
1.14	2 Nos. - Set of dual core dual ratio 3 CTs of 150/75/5/5A of 10 VA burden of accuracy class 1.0 for metering and class 5P10 for protection with 2 Nos. of Ammeter digital type of Class 1 with inbuilt selector switch, Digital Meter of Schneider Make, Model EM 6400NG with RS port (or) Equivalent for each Outgoing and protection fuses / MCBs for HT metering					
1.15	2 Nos. of Microprocessor based numerical relay (Make: Schneider, Model: Model: REL15003D or equivalent) with O/L, E/F and S/C protection, and 2 Nos. of Master trip relays.					
1.16	2 Sets of 7 LED Type Indication Lamp for Breaker ON/OFF/TRIP/Service position/test position/Trip circuit healthy/spring charge indications, 7 LED type Phase Indication Lamps and protection fuses / MCBs etc..					
1.17	Bus coupler 1 No. of 630 Amp VCB of 11 KV grade with suitable size adaptor box, Electrical and Mechanical interlock, ON/ OFF/spring charge LED Indication Lamps etc., as required.					
1.18	All Items as mentioned above under Sl. No. 1.01 to 1.17	1.00	Job	3500000.00	3500000.00	INR Thirty Five Lakh & Paise Zero Only
2.00	Supply of Dry type Transformer					
2.01	Supply of 400 KVA, 11/0.433 KV, 3 Phase, 50 Hz Step Down, Indoor Type, Delta/ Star connected, Dy11, copper wound core type, Class H Insulated, Cast Resin DRY TYPE, air cooled transformer with OFF LOAD externally hand operated Tap Changer in steps of 2.5% (Tap Range +7.5% to -7.5%) complete with cable end box on HT side suitable for upto 3X300 Sq.mm. 11 KV XLPE cable and suitable for Bus Duct on LT side with neutral brought out separately, provision of Palm Contacts at HT Side, earthing terminals, Winding Temperature Display with required Sensors, Room Temperature Display, Door Safety Lock, lifting lugs etc., with all standard accessories conforming to IS 2026 Part 11/2021 and meeting ECBC Norms 2017 as amended upto date etc., as required.	2.00	Each	1200000.00	2400000.00	INR Twenty Four Lakh & Paise Zero Only

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
3.00	Supply of DG Sets					
3.01	Supply of 320 KVA Prime Duty DG Set complying CPCB-IV+ Emission Norms as amended upto date and comprising of following:					
3.02	01 No. Alternator suitable for generating 256 KW/320 KVA at 415 V, 3 Phase, 50 Hz, 0.8 PF, 1500 RPM, Self Ventilated, Self Regulated and Self Excited with Brushless Type with class H insulation, PMG Exciter Voltage Regulator etc., conforming to IS 15999, IS 8528 and other relevant standards with suitable size termination box for cable/bus duct etc. as specified and as required.					
3.03	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, exhaust piping (with thermal insulation and Aluminium cladding), Automatic Electronic Speed Governing Mechanism, Compact Radiator etc., and conforming to relevant IS with up to date amendments etc. as specified and as required.					
3.04	Integrated Microprocessor based Generator Set Control System providing Digital Voltage Regulation, Engine Protection, Alternator Protection, Isochronous Governing, AMF Function, Battery Monitoring, Operator Interface, Communication Interface etc., as specified and as required.					
3.05	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.					
3.06	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, Support for Silencers, provided with 4 Nos. LED Tube light Fittings of 2 feet and Switches etc. as specified and as required.					
3.07	Exhaust gas piping for above DG of suitable dia. welded black MS, B class pipe conforming 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., upto DG exhaust stack as required meeting CPWD/PCB/AAI Specifications.					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
3.08	G.S.S square/ rectangular duct for dissipation of hot air to outside for above DG set made out of GI sheet thickness as specified in technical specification complete with gaskets, elbows, splitters, vanes, MS angle iron supports with threaded rod hanging arrangement etc. as per specifications to meet site requirement etc. as required.					
3.09	Performing 13 Hrs Load test for the DG set at factory, arranged with suitable load equipment at the time of predelivery inspection along with other routine tests as mentioned in the DG set specifications.					
3.10	All Items as mentioned above under Sl. No. 3.01 to 3.09	2.00	Jobs	2400000.00	4800000.00	INR Forty Eight Lakh & Paise Zero Only
4.00	Non Essential Panel at MSSR Substation - First Floor					
4.01	Fabrication and supply of cubical type TTA LT Panel designed as per IEC 61439-1 and 2 suitable for 415 V, 3 Phase, 4 wire 50 Hz AC supply, made out of 2 mm thick CRCA sheet steel/GI sheet for frame work, doors and covers, 3 mm thick for gland plates, dust tight, vermin proof, totally enclosed, the degree of protection of enclosures of IP42 Rating in accordance with IEC 60529, Form 4b compartmentalised design, floor mounting, free standing, extensible on both sides i/c cleaning and finishing complete with 7 tank process for powder coating in approved shade, having 1000 Amps capacity FP Aluminium bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 50 KA for 1Sec., bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick, entire panel with a common Copper earth bar of size 50 mm x 5 mm with 2 Nos. earth stud at rear, 20% of spare space of outgoing in panel, solid bus link connections from main bus bars to switch gears and from adopter box of busduct to respective Switch gears as applicable with required size of Aluminium bus bars and wiring with 1.5 Sq.mm. FRLSH PVC insulated copper conductor cable for potential sensing and wiring with 2.5 Sq.mm. FRLSH PVC insulated copper conductor cable for current carrying, cable alleys, cable gland plates suitable for indoor operation, complete with all accessories, fabrication done in transportable sections, interconnection, earthing, alignment with the bus ducts etc., as required and comprising of following switch gears as required. (Non Essential LT Panel)					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
4.02	Incoming: Two Nos. 800 A, 50KA (Ics=Icu), Four Pole, EDO type Moulded case design ACB as INCOMER conforming to IEC 60947-2 as amended up-to- date with LCD/LED display, inbuilt Metering, Overcurrent, Short circuit & Earth fault Protection with variable current & time delay setting, Instantaneous protection, current demand & phase to neutral voltage on display, Percentage loading of each phases on LCD/LED display, with Microprocessor Based Releases and provided with separate suitable rated Cast Resin CTs with Digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, shunt trip coil 230 V AC, Auxiliary power unit, LED Phase Indication Lamps along with 2 Amps control MCBs as backup protection, Breaker ON/ OFF/ TRIP/Spring Charge LED indicating lights along with control MCBs as per standard practice, Mechanical and Electrical Interlocking arrangement between the incomers & bus coupler along with interlocking relays, mechanical lock & keys etc., i/c Control MCBs, control terminals & wirings etc., as required. [ACB shall have communication facility via RS485 Port Modbus Protocol providing Status of ACBs & shall also be capable of Monitoring the ACB].					
4.03	Two Nos. of Three Phase 4 Module Surge Protection Device (SPD) Type I + II, having 100KA, 10/350 micro seconds neutral to earth, 50 KA 10/350 micro sec line to neutral, with limiting voltage less than 1.5 KV of modular type at Incomer Side of Incomer ACBs.					
4.04	Two Nos. 630 A, 50KA (Ics=Icu), Four Pole, EDO type moulded case design ACB as Outgoing conforming to IEC 60947-2 as amended up-to- date with LCD/LED display, inbuilt Metering, Overcurrent, Short circuit & Earth fault Protection with variable current & time delay setting, Instantaneous protection, current demand & phase to neutral voltage on display, Percentage loading of each phases on LCD/LED display, with Microprocessor Based Releases and provided with separate suitable rated Cast Resin CTs with Digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, shunt trip coil 220 V AC, Auxiliary power unit, Breaker ON/OFF/TRIP/Spring Charge LED indicating lights along with control MCBs as per standard practice, mechanical castle lock & keys etc., i/c Control MCBs, control terminals & wirings etc., as required. [ACB shall have communication facility via RS485 Port Modbus Protocol providing Status of ACBs & shall also be capable of Monitoring the ACB].					
4.05	Four Nos. 400 A, 50 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and earth fault Protection with microprocessor based release and provided with suitable rating Cast resin CTs with digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, ON/OFF/TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					

42/5/16

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
4.06	Four Nos. 250 A, 50 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and earth fault Protection with microprocessor based release and provided with suitable rating Cast resin CTs with digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, ON/OFF/TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					
4.07	Two Nos. 100 A, 50 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and earth fault Protection with microprocessor based release and provided with suitable rating Cast resin CTs with digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, ON/OFF/TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					
4.08	Bus Coupler: 01 No. 800 Amps Four Pole horizontal draw out EDO type Modular ACB as Bus Coupler of fault breaking capacity 50 KA (Ics=Icu), interlocked door, automatic safety shutter, Mechanical ON/OFF and service/test/isolation position indicators and frame earthing contact, conforming to IEC 60947-2 as amended up-to- date, Breaker ON/OFF/Spring Charge LED indicating lights along with control MCBs as per standard practice including providing and fixing of suitable size Adopter Chamber in the first part to attach with the second part etc., as required.					
4.09	Bus Bar: One Set of FP Aluminium Bus Bars of minimum of 1000 A Capacity with heat shrinkable coloured epoxy sleeves and i/c providing and fixing of DMC/SMC bus bar supports meeting fault level of 50 KA for 1 Sec with adequate size Aluminium busbars for interconnection of incomer and outgoing switchgears etc., as required.					
4.10	Interlocking: Electrical interlocking through advance contacts in ACB's (incommer & Bus coupler) and mechanical interlocking should be to ensure that only one supply is available at a time on each section of bus and to eliminate any possibility of accidently approaching two supply at one bus section.					
4.11	All accessories such as fuses, MCBs, auxiliary contactors, auxiliary switches, ROMs for MCCBs, Phase Barriers, Phase Spreaders etc., as required.					
4.12	All Items as mentioned above under Sl. No. 4.01 to 4.11	1.00	Job	2100000.00	2100000.00	INR Twenty One Lakh & Paise Zero Only

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
5.00	Essential Panel at MSSR Substation - First Floor					
5.01	Fabrication and supply of cubical type TTA LT Panel designed as per IEC 61439-1 and 2 suitable for 415 V, 3 Phase, 4 wire 50 Hz AC supply, made out of 2 mm thick CRCA sheet steel/GI sheet for frame work, doors and covers, 3 mm thick for gland plates, dust tight, vermin proof, totally enclosed, the degree of protection of enclosures of IP42 Rating in accordance with IEC 60529, Form 4b compartmentalised design, floor mounting, free standing, extensible on both sides i/c cleaning and finishing complete with 7 tank process for powder coating in approved shade, having 800 Amps capacity FP Aluminium bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 50 KA for 1Sec., bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick, entire panel with a common Copper earth bar of size 50 mm x 5 mm with 2 Nos. earth stud at rear, 20% of spare space of outgoing in panel, solid bus link connections from main bus bars to switch gears and from adopter box of busduct to respective Switch gears as applicable with required size of Aluminium bus bars and wiring with 1.5 Sq.mm. FRLSH PVC insulated copper conductor cable for potential sensing and wiring with 2.5 Sq.mm. FRLSH PVC insulated copper conductor cable for current carrying, cable alleys, cable gland plates suitable for indoor operation, complete with all accessories, fabrication done in transportable sections, interconnection, earthing, alignment with the bus ducts etc., as required and comprising of following switch gears as required. (Essential LT Panel)					
5.02	Incomer: Two Nos. 630 A, 50KA (Ics=Icu), Four Pole, EDO type Moulded case design ACB as Incoming conforming to IEC 60947-2 as amended up-to- date with LCD/LED display, inbuilt Metering, Overcurrent, Short circuit & Earth fault Protection with variable current & time delay setting, Instantaneous protection, current demand & phase to neutral voltage on display, Percentage loading of each phases on LCD/LED display, with Microprocessor Based Releases and provided with separate suitable rated Cast Resin CTs with Digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, shunt trip coil 220 V AC, Auxiliary power unit, LED Phase Indication Lamps along with 2 Amps control MCBs as backup protection, Breaker ON/ OFF/ TRIP/Spring Charge LED indicating lights along with control MCBs as per standard practice, Mechanical and Electrical Interlocking arrangement between the incomers & bus coupler along with interlocking relays, mechanical lock & keys etc., i/c Control MCBs, control terminals & wirings etc., as required. (ACB shall have communication facility via RS485 Port Modbus Protocol providing Status of ACBs & shall also be capable of Monitoring the ACB).					
5.03	Two Nos. of Three Phase 4 Module Surge Protection Device (SPD) Type I + II, having 100KA, 10/350 micro seconds neutral to earth, 50 KA 10/350 micro sec line to neutral, with limiting voltage less than 1.5 KV of modular type at Incomer Side of Incomer ACBs.					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
5.04	Four Nos. 400 A, 50 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and earth fault Protection with microprocessor based release and provided with suitable rating Cast resin CTs with digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, ON/ OFF/ TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					
5.05	Two Nos. 250 A, 36 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and earth fault Protection with microprocessor based release and provided with suitable rating Cast resin CTs with digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, ON/ OFF/ TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					
5.06	Six Nos. 200 A, 36 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and earth fault Protection with microprocessor based release and provided with suitable rating Cast resin CTs with digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, ON/ OFF/ TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					
5.07	Eight Nos. 100 A, 36 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and earth fault Protection with microprocessor based release and provided with suitable rating Cast resin CTs with digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, ON/ OFF/ TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					
5.08	Bus Coupler: One No. 630 Amps Four Pole horizontal draw out EDO type Modular ACB as Bus Coupler of fault breaking capacity 50 KA (Ics=Icu), interlocked door, automatic safety shutter, Mechanical ON/OFF and service/test/isolation position indicators and frame earthing contact, conforming to IEC 60947-2 as amended up-to- date, Breaker ON/OFF/Spring Charge LED indicating lights along with control MCBs as per standard practice including providing and fixing of suitable size Adopter Chamber in the first part to attach with the second part etc., as required.					
5.09	Bus Bar: One Set of FP Aluminium Bus Bars of minimum of 800 A Capacity with heat shrinkable coloured epoxy sleeves and i/c providing and fixing of DMC/SMC bus bar supports meeting fault level of 50 KA for 1 Sec with adequate size Aluminium busbars for interconnection of incomer and outgoing switchgears etc., as required.					
5.10	Interlocking: Electrical interlocking through advance contacts in ACB's (incomer & Bus coupler) and mechanical interlocking should be to ensure that only one supply is available at a time on each section of bus and to eliminate any possibility of accidentally approaching two supply at one bus section.					
5.11	All accessories such as fuses, MCBs, auxiliary contactors, auxiliary switches, ROMs for MCCBs, Phase Barriers, Phase Spreaders etc., as required.					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
5.12	All Items as mentioned above under Sl. No. 5.01 to 5.11	1.00	Job	2300000.00	2300000.00	INR Twenty Three Lakh & Paise Zero Only
6.00	ASR/MSSR Equipment Cum AC LT Panel - First Floor					
6.01	Fabrication and supply of cubical type TTA LT Panel designed as per IEC 61439-1 and 2 suitable for 415 V, 3 Phase, 4 wire 50 Hz AC supply, made out of 2 mm thick CRCA sheet steel/GI sheet for frame work, doors and covers, 3 mm thick for gland plates, dust tight, vermin proof, totally enclosed, the degree of protection of enclosures of IP42 Rating in accordance with IEC 60529, Form 4b compartmentalised design, floor mounting, free standing, extensible on both sides i/c cleaning and finishing complete with 7 tank process for powder coating in approved shade, having 500 Amps capacity FP Aluminium bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 36 KA for 1Sec., bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick, entire panel with a common Copper earth bar of size 50 mm x 5 mm with 2 Nos. earth stud at rear, 20% of spare space of outgoing in panel, solid bus link connections from main bus bars to switch gears and from adopter box of busduct to respective Switch gears as applicable with required size of Aluminium bus bars and wiring with 1.5 Sq.mm. FRLSH PVC insulated copper conductor cable for potential sensing and wiring with 2.5 Sq.mm. FRLSH PVC insulated copper conductor cable for current carrying, cable alleys, cable gland plates suitable for indoor operation, complete with all accessories, fabrication done in transportable sections, interconnection, earthing, alignment with the bus ducts etc., as required and comprising of following switch gears as required. (ASR/MSSR Equipment Cum AC LT Panel)					
6.02	Incomer: Two Nos. 400 A, 36KA, Four Pole MCCB (Ics=Icu) as Incomer with inbuilt O/L, S/C and earth fault Protection with microprocessor based releases and provided with separate suitable rated three nos.Cast Resin CTs with Digital Multifunction Meter (EM6400NG of Schneider make or equivalent having RS 485 port), LED Phase Indication Lamps along with 2 Amps control MCBs as backup protection, Breaker ON/ OFF/ TRIP LED indicating lights along with control MCBs as per standard practice, Mechanical and Electrical Interlocking arrangement between the incomers & bus coupler along with interlocking relays, mechanical lock & keys etc., i/c Control MCBs, control terminals & wirings etc., as required.					
6.03	Two Nos. 400 A, 4P Off Load Change Over Switch each one for above Incomer MCCBs for Change over arrangement with bus bar/link arrangements and LEDs lamps indicating position of Change Over Switch (INE/ESS/OFF)					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
6.04	Two Nos. LCD Display Power Quality & Network Analyzer with Data Logger with built-in memory for storage of data minimum of 30 days with suitable rating Cast resin CTs, Measures the main Electrical quantities of a single-phase or threephase network and records real-time energy data and quality data of the power supply and recording of specific values such as Interruptions, Flickers, DIPs, SWELLS, Rapid Voltage Changes (RVC) and Slow Voltage Changes (LVC), ensure a real monitoring of the quality of the power supply and suitable for Programmable alarms on all functions with R485 communication module with Modbus link in MSSR Equipment UPS outgoing compartment with necessary connections and interconnections with control MCBs as per Standard practice etc., as required.					
6.05	Four Nos. 250 A, 36 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and earth fault Protection with microprocessor based release and provided with suitable rating Cast resin CTs with digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, ON/ OFF/ TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					
6.06	Ten Nos. 100 A, 36 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and earth fault Protection with microprocessor based release and provided with suitable rating Cast resin CTs with digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, ON/ OFF/ TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					
6.07	Bus Coupler: One No. 400 A, 36KA, Four Pole MCCB (Ics=Icu) as Bus coupler with inbuilt O/L, S/C and earth fault Protection with microprocessor based releases, Breaker ON/OFF/Trip LED indicating lamps along with control MCBs as per standard practice including providing and fixing of suitable size Adopter Chamber in the first part to attach with the second part etc., as required.					
6.08	Bus Bar: One Set of FP Aluminium Bus Bars of minimum of 500 A Capacity with heat shrinkable coloured epoxy sleeves and i/c providing and fixing of DMC/SMC bus bar supports meeting fault level of 36 KA for 1 Sec with adequate size Aluminium busbars for interconnection of incomer and outgoing switchgears etc., as required.					
6.09	Interlocking: Electrical interlocking through advance contacts in ACB's (incommer & Bus coupler) and mechanical interlocking should be to ensure that only one supply is available at a time on each section of bus and to eliminate any possibility of accidentally approaching two supply at one bus section.					
6.10	All accessories such as fuses, MCBs, auxiliary contactors, auxiliary switches, ROMs for MCCBs, Phase Barriers, Phase Spreaders etc., as required.					
6.11	All Items as mentioned above under Sl. No. 6.01 to 6.10	1.00	Job	1500000.00	1500000.00	INR Fifteen Lakh & Paise Zero Only



NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
7.00	Hybrid Harmonic cum PF Control Panel in MSSR Sub-Station - First Floor					
7.01	Design, Fabrication and Supply of HYBRID HARMONIC Cum AUTOMATIC POWER FACTOR CONTROL PANEL (75 A Plus 50 KVAR) to achieve PF > 0.99 Lag and TDDI / THDV Values within IEEE Recommended Limits suitable to operate on 415 V, 3 Phase, 4 wire 50 Hz AC supply, depth not less than 900 mm, made out of 2 mm thick CRCA sheet steel/GI sheet for frame work, doors and covers, 3 mm thick for gland plates, dust tight, vermin proof, totally enclosed with the degree of protection of enclosures of IP42 Rating in accordance with IEC 60529. The system shall be of design as per IS 16636. Compartmentalised design, floor mounting, free standing, i/c cleaning and finishing complete with 7 tank process for powder coating in approved shade, having 400 Amps capacity FP Aluminium bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 36 KA for 1 Sec., bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick, entire panel with a common Copper earth bar of size 50 mm x 5 mm with 2 Nos. earth stud at rear, solid bus link connections from main bus bars to switch gears and from adopter box of busduct to respective Switch gears as applicable with required size of Aluminium bus bars and wiring with 1.5 Sq.mm. FRLSH PVC insulated copper conductor cable for potential sensing and wiring with 2.5 Sq.mm. FRLSH PVC insulated copper conductor Control Cable for current carrying, cable alleys, cable gland plates suitable for indoor operation, complete with all accessories, fabrication done in transportable sections, interconnection, earthing, alignment with the bus ducts etc., as required. DAPFC shall have Auto/Manual selection scheme with selector switch etc. The switching device of the active compensation system shall be IGBT based. The active compensation system should filter harmonics from 2nd to 51th individual harmonic order and shall be selectable for the entire range. The active compensation system should have feature to improve PF correction as well. The Panel is comprising of following switch gears as required .					
7.02	Incomer: One No. 250 A, 36KA, Four Pole MCCB (Ics=Icu) as Incomer with inbuilt O/L, S/C and earth fault Protection with microprocessor based releases and provided with 250/5A, CL-1, 15VA, three nos.Cast Resin CTs with Digital Multifunction Meter (EM6400NG of Schneider make or equivalent having RS 485 port), LED Phase Indication Lamps along with 2 Amps control MCBs as backup protection, Breaker ON/ OFF/ TRIP LED indicating lights along with control MCBs as per standard practice etc., i/c Control MCBs, control terminals & wirings etc., as required.					
7.03	Active Filter Part					
7.04	One No. 125 A, 36 KA, Four Pole MCCB (Ics=Icu) as Outgoing with inbuilt O/L, S/C and Earth fault Protection with microprocessor based releases, provided with One No. 75A AHF Module of IGBT Type, ON/OFF/TRIP LED indication lamp along with control MCBs as per Standard practice etc., as required.					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
7.05	One No. HMI Hybrid PQ Controller capable to integrate/isolate the active and passive Components, provided with 7 Inch LCD Touch Screen to display all Parameters like Currents, Fundamental Current, iTHD, iTDD, Aunb, Voltages, Vthd, kW, kVA, PF, dPF, Filter Current, Filter Loading (%), Stack Temperature, Ambient Temperature, Filter Run time, System Runtime etc., provision of a proper exportable fault log, able to log > 2,00,000 time stamped events and faults in memory, Capable of displaying individual harmonics for currents and voltages upto 51st order, Capable of simultaneously displaying current and voltage waveforms etc., as required.					
7.06	Cooling Fans as per Design and suitable for 230 V, 1 Phase Operation as required.					
7.07	Detuned Capacitor Bank (Passive) Part					
7.08	One No. 8 Steps APFC Relay with three nos. VA Sensors of (600/300/5/5) Amps Dual Core Resin Cast CT at appropriate Transformer's Secondary Circuit i/c supply and laying of 7C X 2.5 Sq.mm. PVC insulated PVC sheathed armoured, copper conductor Control Cabling from LT Panel Incoming / Transformer Secondary to APFC Panel (for length up-to 25 Mtr), including providing Auto/Manual Facility as required.					
7.09	One No. 25 KVAR detuned APFC compartment consist of 63 A, 16 KA, TP MCCB (Ics=Icu) with inbuilt O/L and S/C fault Protection with TM Release, ON/OFF/TRIP LED indication lamp along with control MCBs, 25KVAR @ 415V (33.1KVAR @ 525V), TP, MPP type with Al. Round Enclosure, heavy duty Power Capacitor with suitable rating TP capacitor duty contactor, 25KVAR, 415V, TP, Copper Wound 7% Detuned Reactor, ON/OFF LED indication lamps, Start/Stop push buttons, 25 sqmm Interconnecting PVC Insulated FR Copper Flexi-Wires, control MCBs etc, as required.					
7.10	One No. 10 KVAR detuned APFC compartment consist of 32 A, 16 KA, TP MCCB (Ics=Icu) with inbuilt O/L and S/C fault Protection with TM Release, ON/OFF/TRIP LED indication lamp along with control MCBs, 10KVAR @ 415V (12.65KVAR @ 525V), TP, MPP type with Al. Round Enclosure, heavy duty Power Capacitor with suitable rating TP capacitor duty contactor, 10KVAR, 415V, TP, Copper Wound 7% Detuned Reactor, ON/OFF LED indication lamps, Start/Stop push buttons, 16 sqmm Interconnecting PVC Insulated FR Copper Flexi-Wires, control MCBs etc, as required.					
7.11	Three Nos. 5 KVAR detuned APFC compartment consist of 16 A, 16 KA, TP MCCB (Ics=Icu) with inbuilt O/L and S/C fault Protection with TM Release, ON/OFF/TRIP LED indication lamp along with control MCBs, 5KVAR @ 415V (6.28KVAR @ 525V), TP, MPP type with Al. Round Enclosure, heavy duty Power Capacitor with suitable rating TP capacitor duty contactor, 5KVAR, 415V, TP, Copper Wound 7% Detuned Reactor, ON/OFF LED indication lamps, Start/Stop push buttons, 10 sqmm Interconnecting PVC Insulated FR Copper Flexi-Wires, control MCBs etc, as required.					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
7.12	Bus Bar: One Set of FP Aluminium Bus Bars of minimum of 400 A Capacity with heat shrinkable coloured epoxy sleeves and i/c providing and fixing of DMC/SMC bus bar supports meeting fault level of 36 KA for 1 Sec with adequate size Aluminium busbars for interconnection of incomer and outgoing switchgears etc., as required.					
7.13	Each vertical compartment shall have Illumination Lamp, Door Limit switch, Exhaust Fan & Thermostat.					
7.14	All accessories such as 3 CT sensing APFC Relay, auxiliary contactors, auxiliary switches, Auto/Manual selector swithes, ON/OFF push buttons, Phase and ON, OFF & Trip Indication lamps, control MCBs, rotary handles, phase seperators, spreaders etc., as required.					
7.15	All Items as mentioned above under Sl. No. 7.01 to 7.14	2.00	Jobs	500000.00	1000000.00	INR Ten Lakh & Paise Zero Only
8.00	AMF LT Panel in MSSR Sub-Station - First Floor					
8.01	Fabrication and supply of cubical type TTA LT Panel designed as per IEC 61439-1 and 2 suitable for 415 V, 3 Phase, 4 wire 50 Hz AC supply, made out of 2 mm thick CRCA sheet steel, 3 mm thick for gland plates, dust tight, vermin proof, totally enclosed, the degree of protection of enclosures of IP42 Rating in accordance with IEC 60529, Form 4b compartmentalised design, floor mounting, free standing, extensible on both sides i/c cleaning and finishing complete with 7 tank process for powder coating in approved shade, having 800 Amps capacity FP Aluminium bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 50 KA for 1Sec., bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick, entire panel with a common Copper earth bar of size 50 mm x 5 mm with 2 Nos. earth stud at rear, solid bus link connections from main bus bars to switch gears and from adopter box of busduct to respective Switch gears as applicable with required size of Aluminium bus bars and wiring with 1.5 Sq.mm. FRLSH PVC insulated copper conductor cable for potential sensing and wiring with 2.5 Sq.mm. FRLSH PVC insulated copper conductor cable for current carrying, cable alleys, cable gland plates suitable for indoor operation, complete with all accessories, fabrication done in transportable sections, interconnection, earthing, alignment with the bus ducts etc., as required and comprising of following switch gears etc. as required. (AMF Panel)					

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
8.02	One No. 630 A, 50KA (Ics=Icu), Four Pole, EDO type Moulded case design ACB as EB INCOMER conforming to IEC 60947-2 as amended up-to- date with LCD/LED display, inbuilt Metering, Overcurrent, Short circuit & Earth fault Protection with variable current & time delay setting, Instantaneous protection, current demand & phase to neutral voltage on display, Percentage loading of each phases on LCD/LED display, with Microprocessor Based Releases and provided with separate suitable rated Cast Resin CTs with Digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, shunt trip coil 220 V AC, Auxiliary power unit, LED Phase Indication Lamps along with 2 Amps control MCBs as backup protection, Breaker ON/ OFF/ TRIP/ Spring Charge LED indicating lights along with control MCBs as per standard practice, Electrical Interlocking arrangement between the EB Incomer & DG Incomer, i/c Control MCBs, control terminals & wirings etc., as required. [ACB shall have communication facility via RS485 Port Modbus Protocol providing Status of ACBs & shall also be capable of Monitoring the ACB].					
8.03	One No. 630 A, 50KA (Ics=Icu), Four Pole, EDO type Moulded case design ACB as DG INCOMER conforming to IEC 60947-2 as amended up-to- date with LCD/LED display, inbuilt Metering, Overcurrent, Short circuit & Earth fault Protection with variable current & time delay setting, Instantaneous protection, current demand & phase to neutral voltage on display, Percentage loading of each phases on LCD/LED display, with Microprocessor Based Releases and provided with separate suitable rated Cast Resin CTs with Digital Multifunction Meter (EM6400NG of Schneider make or equivalent) having RS 485 port, shunt trip coil 220 V AC, Auxiliary power unit, LED Phase Indication Lamps along with 2 Amps control MCBs as backup protection, Breaker ON/ OFF/ TRIP/ Spring Charge LED indicating lights along with control MCBs as per standard practice, Electrical Interlocking arrangement between the EB Incomer & DG Incomer, i/c Control MCBs, control terminals & wirings etc., as required. [ACB shall have communication facility via RS485 Port Modbus Protocol providing Status of ACBs & shall also be capable of Monitoring the ACB].					
8.04	Two Nos. 630 A, 4P On Load Change Over Switch each one for above ACBs for Bye-pass arrangement with bus bar/link arrangements and LEDs lamps indicating position of Change Over Switch [AMF/BYEPASS/OFF)					
8.05	24 V Battery Charger consisting of transformer, rectifier, DC Ammeter, DC Volt Meter and charge rate selector switch with position ON/ Trickle/ OFF/ Boost for charging of 24 Volts lead acid battery (2 Nos. each of 12 volts, 25 plates 180 AH in two steps i.e. trickle/boost charging [excluding Batteries]), Rheostat etc. as required.					
8.06	One No. Temperature Display Scanner for BTM and RTD					
8.07	One Set of Selector Switches for Auto/Manual/Test/Off Operation and One Set of Push Button for Start/Stop/Reset etc.					

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Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
8.08	One Set of Timers and Contactors/AMF Relay for Start with condition to take the load with in 15 Sec. in 3 Attempts/Stop/Delay time of DG Set with Selector Switch for Time Delay, Contactors for Auto/Manual/Interlock/Time Delay and Engine protection PCB & accessories etc., as required.					
8.09	PLC System for Operation and Monitoring of 2 Nos. of DG Set including interlinking with DG Controller, Programming, Operation of II Set in case of I Set fails to start and vice versa etc., as required. (One Common PLC will be installed for both AMF Panel)					
8.10	All accessories such as fuses, auxiliary contactors, auxiliary switches, LVMS, multi channel Annunciation with hooter, All Type of required MultiCore Armoured Control Copper Cables from DG Set To AMF Panel etc., as required. [Power Cabling Not Included]					
8.11	All Items as mentioned above under Sl. No. 8.01 to 8.10	2.00	Jobs	840000.00	1680000.00	INR Sixteen Lakh Eighty Thousand & Paise Zero Only
9	Supply of LT Sandwich Bus Duct					
9.01	Fabrication and Supply of 800 Amps, 50 KA for 1 Sec, Indoor IP 55 Sandwich Type Bus Trunking complying to IEC 61439-1 & 6, 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 Main Bus Bars with Class F Insulation, necessary joints, elbow joints & expansion joints and bends, adopter box, with 2 Run of 50 x 6 mm Aluminium external earth, suspenders, angle iron bracket, fasteners, connecting to earthing system etc. as required (Interconnection from HT VCB panel to Dry type Transformer and Dry type Transformer to Non-Essential Panel). Note : All accessories to be included in the straight length cost only. Extra/additional cost towards accessories shall be included in linear length. Accessories to be included is 90 Deg Bends, Flange end, Horizontal Offset, Vertical Offset, Combination Elbow, T Elbow, Phase Transposition unit, Expansion unit and Adapter Box. The bus Trunking shall be measured along the length (centre) of enclosure. The Quantity given is tentative. However the actual quantity requirement will be as per Bustrunking manufacturer design and as per Site Requirements.	50.00	Mtrs.	15000.00	750000.00	INR Seven Lakh Fifty Thousand & Paise Zero Only
9.02	Supply of Copper flexibles (Braided Wire Type) for 800 Amps, 4 Wire Bus duct Termination supplied from Bus Duct Manufacturer as required.	8.00	Sets	25000.00	200000.00	INR Two Lakh & Paise Zero Only

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
9.03	Fabrication and Supply of 630 Amps, 40 KA for 1 Sec, Indoor IP 55 Sandwich Type Bus Trunking complying to IEC 61439-1 & 6, 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 Main Bus Bars with Class F Insulation, necessary joints, elbow joints & expansion joints and bends, adopter box, with 2 Run of 50 x 6 mm Aluminium external earth, suspenders, angle iron bracket, fasteners, connecting to earthing system etc. as required (Interconnection from DG Set to AMF Panel, NE LT Panel to AMF Panel & AMF Panel to Essential LT Panel). Note : All accessories to be included in the straight length cost only. Extra/additional cost towards accessories shall be included in linear length. Accessories to be included is 90 Deg Bends, Flange end, Horizontal Offset, Vertical Offset, Combination Elbow, T Elbow, Phase Transposition unit, Expansion unit and Adapter Box. The bus Trunking shall be measured along the length (centre) of enclosure. The Quantity given is tentative. However the actual quantity requirement will be as per Bustrunking manufacturer design and as per Site Requirements.	50.00	Mtrs.	12000.00	600000.00	INR Six Lakh & Paise Zero Only
9.04	Supply of Copper flexibles (Braided Wire Type) for 630 Amps, 4 Wire Bus duct Termination supplied from Bus Duct Manufacturer as required.	8.00	Sets	20000.00	160000.00	INR One Lakh Sixty Thousand & Paise Zero Only
9.05	Fabrication and Supply of 250 Amps, 18 KA for 1 Sec, Indoor IP 55 Sandwich Type Bus Trunking complying to IEC 61439-1 & 6, 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 Main Bus Bars with Class F Insulation, necessary joints, elbow joints & expansion joints and bends, adopter box, with 2 Run of 50 x 6 mm Aluminium external earth, suspenders, angle iron bracket, fasteners, connecting to earthing system etc. as required (Interconnection from NE LT Panel to Hybrid APFC Panel). Note : All accessories to be included in the straight length cost only. Extra/additional cost towards accessories shall be included in linear length. Accessories to be included is 90 Deg Bends, Flange end, Horizontal Offset, Vertical Offset, Combination Elbow, T Elbow, Phase Transposition unit, Expansion unit and Adapter Box. The bus Trunking shall be measured along the length (centre) of enclosure. The Quantity given is tentative. However the actual quantity requirement will be as per Bustrunking manufacturer design and as per Site Requirements.	20.00	Mtrs.	10000.00	200000.00	INR Two Lakh & Paise Zero Only
9.06	Supply of Copper flexibles (Braided Wire Type) for 250 Amps, 4 Wire Bus duct Termination supplied from Bus Duct Manufacturer as required.	4.00	Sets	18000.00	72000.00	INR Seventy Two Thousand & Paise Zero Only

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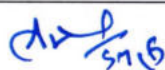
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
10	Supply of HT/LT Cables					
10.01	Supply of compact circular stranded Al conductor provided with conductor screening of semi-conducting compound XLPE insulated provided with insulation screening over individual cores, consisting of extruded semi-conducting compound followed by lapped semi-conducting copper tapes, cores laid together with suitable filters, in the interscribes covered with inner sheath by extrusion, galvanized flat steel strip armoured and overall PVC sheathed cable, suitable for 11 KV (E) System conforming to IS 7098 (Part-II) 2011 as amended upto date and of following Size as required.					
10.02	3 X 185 Sqmm	4500.00	Mtr	1050.00	4725000.00	INR Forty Seven Lakh Twenty Five Thousand & Paise Zero Only
10.03	Supply of XLPE insulated and PVC sheathed aluminum conductor armoured power cable of 1.1 KV grade conforming to IS 7098 (Part-I) 1988 as amended upto date and of following size as required:					
10.04	4 X 16 Sq.mm	500.00	Mtr	125.00	62500.00	INR Sixty Two Thousand Five Hundred & Paise Zero Only
10.05	Supply of 4CX6.0 Sqmm XLPE insulated and PVC sheathed copper conductor armoured power cable of 1.1 KV grade conforming to IS 7098 (Part-I) 1988 as amended upto date as required	200.00	Mtr	300.00	60000.00	INR Sixty Thousand & Paise Zero Only
10.06	Supply of 10C X 2.5 Sq.mm control cable of 1.1KV grade XLPE insulated and PVC sheathed copper conductor armoured standard cable to IS 1554 complete as required.	100.00	Mtr	345.00	34500.00	INR Thirty Four Thousand Five Hundred & Paise Zero Only
11.01	Supply of nominal 2.5 mm thick (Width 1 Mtr) PVC synthetic, electric insulated mats conforming to IS 15652-2006 having Dielectric strength of 45 KV, no adverse effect of mineral oil, high insulation resistance (Minimum 1,00,000 M Ω on wet condition with 5 KV meggar) with yellow coloured bordered reflective Adhesive sticker of width 50mm at borders etc., as required.	40.00	Sqmtr	650.00	26000.00	INR Twenty Six Thousand & Paise Zero Only
11.02	Supply 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) with yellow coloured bordered reflective Adhesive sticker of width 50mm at borders etc., as required.	80.00	Sqmtr	600.00	48000.00	INR Forty Eight Thousand & Paise Zero Only

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Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
12	Supply of Equipment Level Protection (ELP) power filter for surge protection with Earth to Neutral Voltage and Earth Resistance Value including monitoring probe with local disipaly having 480 KA 3 phase Surge protection device against the protection from Noises, ESD, EPR and abnormal electrical characteristics which enter from power and other service lines and ensuring clear bonding potential (earth to Neutral voltage) less than 1.0V to be connected in parallel to the circuit Confirming to CE, tested and certified as per latest certification (IEC-6164 3-1, IEC-61000-4-5, IEC-61000-6-1, IEC61000-6-3 and tested lightning impulse current withstand test with counter record of minimum 35KA 8/20 m sec in Govt lab) in Pre-wired metal enclosure with pulverulent body painting including all accessories as per the specifications. Make: Tercel/ Ground (Model: LM 34-40).	2.00	Job	680000.00	1360000.00	INR Thirteen Lakh Sixty Thousand & Paise Zero Only
13	SH-II: Installation, Testing, Commissioning of Substation Equipment					
13.01	Installation, Testing and Commissioning of 11KV HT VCB Panel mentioned at SH-I/1.01 to 1.17 including laying and termination of 2.5 sqmm multi core copper conductor PVC insulated and PVC sheathed armoured control cables for AC source of VCB Panel and for DC source of Battery charger etc., complete as required.	1.00	Job	150000.00	150000.00	INR One Lakh Fifty Thousand & Paise Zero Only
13.02	Installation, Testing and Commissioning of Dry Type 400 KVA Transformer mentioned at SH-I/2.01 including providing RCC Foundation extending upto 300 mm all around of Transformer and Height of 250 Above Finished Floor Level, provision of MS "C" channel of 100 x 50 x 5 mm supporting rail for full length of foundation on roller moving side for transportation, providing and fixing stopper for rollers, including laying and termination of 2.5 sqmm multi strand copper conductor PVC insulated and PVC sheathed armoured control cable for sensing purpose between relays at HT VCB panel and transformer etc., complete as required. (Location: MSSR Substation - First Floor)	2.00	Job	60000.00	120000.00	INR One Lakh Twenty Thousand & Paise Zero Only
13.03	Installation, Testing and Commissioning of 320 KVA Prime Duty DG Set mentioned at SH-I/Item No. 3.01 to 3.09, including supply and laying of fuel pipe lines, supply & fixing of exhaust piping with required supporting arrangement upto DG exhaust stack, supply & fixing of hot air duct with proper supports as per Technical specifications, suitable RCC platform/as per OEM to accomodate DG set with acoustic enclosure, performing 06 Hrs Load test for the DG set at site with available load, laying and termination of control cables for engine control panel, batteries, alternator Sensor scanner to AMF panel etc. complete as required. (Location: MSSR Substation - First Floor)	2.00	Job	140000.00	280000.00	INR Two Lakh Eighty Thousand & Paise Zero Only

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Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
13.04	Providing & Installation of Lattice type MS support structure with suitable RCC foundation with foundation bolts & Nuts as per template for fixing of DG exhaust fume pipes (200mm dia 'B' Class MS pipe or as recommended by OEM with necessary accessories like flanges, gaskets, bolts, nuts and washers including Supply and fixing of thermal Cladding with Mineral wool Wrapping 50mm Thickness with Chicken Mesh and 24 SWG Aluminium Sheet Including Bends and Supply & Installation of SS expansion bellow 8" dia with matching flanges, gaskets and Bolt nuts) for bottom support along horizontal and vertical runs upto the height supports with required platforms and ladder arrangement for all erection works like Exhaust Piping, Silencers, lattice supports etc., with MS Angles / Channels, Anchor fasteners, etc., including cutting, welding, painting (applying two coats of red oxide and two coats of synthetic enamelled paint of colour and shade as directed by E-I-C/as per CPCB norms) etc., Supply and fixing of lightning protection (LA Earthing will be paid seperately) and obstruction light with connections also included in the scope of work. Design of DG exhaust stack supporting system shall be suitable to the exhaust pipe height as per CPCB norms and duly vetted by OEM/reputed Govt. Institute/Chartered Engineer shall be submitted, also to get the approval from the E-I-C before execution etc. as required. Work include all necessary civil works.	15.00	Mtr	60000.00	900000.00	INR Nine Lakh & Paise Zero Only
13.05	Installation, Testing and Commissioning of 415V, 1000 Amps Bus bar rating, LT Non-Essential Panel mentioned at SH-I/Item No. 4.01 to 4.11 including Assembling of LT panel comparmnts, connections, interconnections, earthing, performing site acceptance test etc. complete as required. (Location: Non-Essential LT Panel at MSSR Substation - First Floor)	1.00	Job	100000.00	100000.00	INR One Lakh & Paise Zero Only
13.06	Installation, Testing and Commissioning of 415V, 800 Amps Bus bar rating, LT Essential Panel mentioned at SH-I/Item No. 5.01 to 5.11 including Assembling of LT panel comparmnts, connections, interconnections, earthing, performing site acceptance test etc. complete as required. (Location: Essential LT Panel at MSSR Substation - First Floor)	1.00	Job	120000.00	120000.00	INR One Lakh Twenty Thousand & Paise Zero Only
13.07	Installation, Testing and Commissioning of 415V, 500 Amps Bus bar rating, LT Panel in MSSR building mentioned at SH-I/Item No. 6.01 to 6.10 including Assembling of LT panel comparmnts, connections, interconnections, earthing, performing site acceptance test etc. complete as required. (Location: LT Panel at MSSR Building - First Floor)	1.00	Job	80000.00	80000.00	INR Eighty Thousand & Paise Zero Only
13.08	Installation, Testing and Commissioning of 415V, 400 Amps Bus bar rating, LT Hybrid APFC Panel mentioned at SH-I/Item No. 7.01 to 7.14 including Assembling of LT panel comparmnts, connection, interconnection, earthing, performing site acceptance test etc. complete as required. (Location: Hybrid APFC Panel at MSSR Substation - First Floor)	2.00	Job	20000.00	40000.00	INR Forty Thousand & Paise Zero Only
13.09	Installation, Testing and Commissioning of 415V, 800 Amps Bus bar rating, LT AMF Panel mentioned at SH-I/Item No. 8.01 to 8.10 including Assembling of LT panel comparmnts, connection, interconnection, earthing, performing site acceptance test etc. complete as required. (Location: AMF LT Panel at MSSR Substation - First Floor)	2.00	Job	40000.00	80000.00	INR Eighty Thousand & Paise Zero Only



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Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
13.1	Installation, Testing and Commissioning of 800 Amps, 50KA, Indoor Sandwich type Bus trunking system consist of straight Run bus duct, End Flange, 90 Degree bend, Offset, T section, phase cross over, Adaptor Box & Copper flexible for End Termination item mentioned at SH-I/Item No. 9.01 to 9.02 including required aluminium interconnection busbars, aluminium external earthing strip including providing suitable size threaded rod & MS angle, nuts & bolts etc. complete as required. (Interconnection from HT VCB Panel to Dry type Transformer and Dry type transformer to Non-Essential Panel at MSSR Substation - First Floor)	50.00	Mtr	1200.00	60000.00	INR Sixty Thousand & Paise Zero Only
13.11	Installation, Testing and Commissioning of 630 Amps, 40KA, Indoor Sandwich type Bus trunking system consist of straight Run bus duct, End Flange, 90 Degree bend, Offset, T section, phase cross over, Adaptor Box & Copper flexible for End Termination items mentioned at SH-I/Item No.9.03 to 9.04 including required aluminium interconnection busbars, aluminium external earthing strip including providing suitable size threaded rod & MS angle, nuts & bolts etc. complete as required. (Interconnection from DG Set to AMF Panel, NE LT Panel to AMF Panel & AMF Panel to Essential LT Panel at MSSR Substation - First Floor)	50.00	Mtr	600.00	30000.00	INR Thirty Thousand & Paise Zero Only
13.12	Installation, Testing and Commissioning of 250 Amps, 18KA, Indoor Sandwich type Bus trunking system consist of straight Run bus duct, End Flange, 90 Degree bend, Offset, T section, phase cross over, Adaptor Box & Copper flexible for End Termination items mentioned at SH-I/Item No. 9.05 to 9.06 including required aluminium interconnection busbars, aluminium external earthing strip including providing suitable size threaded rod & MS angle, nuts & bolts etc. complete as required. (Interconnection from NE LT Panel to Hybrid APFC Panel at MSSR Substation - First Floor)	20.00	Mtr	600.00	12000.00	INR Twelve Thousand & Paise Zero Only
13.13	Installation, Testing and Commissioning of 415V, 480KA Equipment Level Protection (ELP) power filter mentioned at SH-I/Item No. 15 including provision of suitable supporting/mounting/stand arrangement, connection, interconnections, earthing, performing site acceptance test etc. complete as required. (Location: MSSR Sub-station)	2.00	Job	15000.00	30000.00	INR Thirty Thousand & Paise Zero Only
13.14	SITC of 15 Nos. of 2 Volt, 100 AH Exide Batteries (Totalling to 30 Volts) of Model "PLANTE" or Equivalent with Initial Charging including providing and fixing suitable size Stand as per OEM's recommendation or E-I-C direction for positioning of Batteries etc. complete as required.	1.00	Job	220000.00	220000.00	INR Two Lakh Twenty Thousand & Paise Zero Only
13.15	SITC of 30V, 20 Amps, DC Battery Charger with Thyristor Based Rectifier suitable to operate in 230V, 50Hz, single phase AC Power Supply with charging arrangement for Trickle/ Boost including with suitable range Digital Meter for both AC/DC for measuring Current and Voltage, Regulator, Selector Switches, Indication Lamps etc. for operating Batteries associated with 11 KV HT Panel etc., complete as required.	1.00	Job	85000.00	85000.00	INR Eighty Five Thousand & Paise Zero Only

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SL. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
13.16	Fixing of nominal 2.5 mm/2.0 mm (Width 1 Mtr) thick PVC synthetic, electric insulated mats conforming to IS 15652-2006 along with suitable adhensive/chemibond, i/c providing water proofing of floor, (chipping of floor if required) sealing of all joints and edges etc., as required.	120.00	Sqmtr	150.00	18000.00	INR Eighteen Thousand & Paise Zero Only
14	SH-III : Laying of Cables, Sub Station Safety Equipments, Street Lighting and other Miscellaneous items					
14.01	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc., as required.					
14.02	Above 120 Sq. mm and upto 400 Sq. mm	25.00	Mtr	600.00	15000.00	INR Fifteen Thousand & Paise Zero Only
14.03	Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 11KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc., as required.					
14.04	Above 120 Sq. mm and upto 400 Sq. mm	25.00	Mtr	400.00	10000.00	INR Ten Thousand & Paise Zero Only
14.05	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size in the existing RCC/ HUME/ METAL/HDPE pipe as required.					
14.06	Above 120 Sq. mm and upto 400 Sq. mm	3600.00	Mtr	120.00	432000.00	INR Four Lakh Thirty Two Thousand & Paise Zero Only
14.07	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size in the existing masonry open duct as required.					
14.08	Above 120 Sq. mm and upto 400 Sq. mm	30.00	Mtr	150.00	4500.00	INR Four Thousand Five Hundred & Paise Zero Only
14.09	Laying and fixing of one number PVC insulated and PVC sheathed/ XLPE power cable of 11 KV grade of following size on wall surface as required.					
14.10	Above 120 Sq. mm and upto 400 Sq. mm (clamped with 40x3mm MS flat clamp painted)	400.00	Mtr	200.00	80000.00	INR Eighty Thousand & Paise Zero Only
14.11	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size on cable tray as required.					

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Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
14.12	Above 120 Sq. mm and upto 400 Sq. mm (clamped with 40x3mm MS flat clamp painted)	100.00	Mtr	200.00	20000.00	INR Twenty Thousand & Paise Zero Only
14.13	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size XLPE aluminium conductor cable of 11 KV grade as required					
14.14	3 X 185 Sq. mm	10.00	Sets	15000.00	150000.00	INR One Lakh Fifty Thousand & Paise Zero Only
14.15	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size XLPE Aluminium Conductor cable of 11 KV grade as required					
14.16	3 X 185 Sq. mm	6.00	Each	10000.00	60000.00	INR Sixty Thousand & Paise Zero Only
14.17	Supply and applying of transparent fire retardant coatings complying section 3.2 of BIS 12459 for the length of not less than 1 Meter to the cables at termination points in Electrical panels etc., complete as required as per the directions and approval of Engineer-In-Charge.					
14.18	3 X 185 Sq.MM (11KV (E) grade cable)	6.00	Job	800.00	4800.00	INR Four Thousand Eight Hundred & Paise Zero Only
14.19	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.					
14.20	Up to 35 Sq.mm	30.00	Mtr	40.00	1200.00	INR One Thousand Two Hundred & Paise Zero Only
14.21	Above 35 Sq. mm and upto 95 Sq.mm	30.00	Mtr	80.00	2400.00	INR Two Thousand Four Hundred & Paise Zero Only
14.22	Above 185 Sq. mm and upto 400 Sq.mm	50.00	Mtr	200.00	10000.00	INR Ten Thousand & Paise Zero Only
14.23	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.					
14.24	Up to 35 Sq.mm	700.00	Mtr	50.00	35000.00	INR Thirty Five Thousand & Paise Zero Only
14.25	Above 35 Sq. mm and upto 95 Sq.mm	50.00	Mtr	80.00	4000.00	INR Four Thousand & Paise Zero Only
14.26	Above 185 Sq. mm and upto 400 Sq.mm	40.00	Mtr	200.00	8000.00	INR Eight Thousand & Paise Zero Only

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Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
14.27	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/cable tray as required.					
14.28	Up to 35 Sq.mm (clamped with 1 mm thick saddle)	490.00	Mtr	80.00	39200.00	INR Thirty Nine Thousand Two Hundred & Paise Zero Only
14.29	Above 35 Sq. mm and upto 95 Sq.mm(clamped with 25x3 mm MS flat clamp)	50.00	Mtr	150.00	7500.00	INR Seven Thousand Five Hundred & Paise Zero Only
14.30	Above 185 Sq. mm and upto 400 Sq.mm(clamped with 40x3 mm MS flat clamp)	60.00	Mtr	300.00	18000.00	INR Eighteen Thousand & Paise Zero Only
14.31	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3.5/4.0 core, XLPE aluminium conductor cable of 1.1 KV grade as required					
14.32	35 Sq. mm	2.00	Each	4000.00	8000.00	INR Eight Thousand & Paise Zero Only
14.33	300 Sq. mm	2.00	Each	10000.00	20000.00	INR Twenty Thousand & Paise Zero Only
14.34	Supplying and making end termination with brass double compression gland and Aluminium lugs for following size PVC insulated and PVC sheathed / XLPE Aluminium conductor cable of 1.1 KV grade as required.					
14.35	4 X 16 Sq.mm	32.00	Each	800.00	25600.00	INR Twenty Five Thousand Six Hundred & Paise Zero Only
14.36	4 X 25 Sq.mm	12.00	Each	900.00	10800.00	INR Ten Thousand Eight Hundred & Paise Zero Only
14.37	4 X 35 Sq.mm	22.00	Each	1000.00	22000.00	INR Twenty Two Thousand & Paise Zero Only
14.38	3.5 X 300 sq.mm	4.00	Each	4000.00	16000.00	INR Sixteen Thousand & Paise Zero Only

AP
smg

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
15	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray, bends, Tees, cross member, reducer (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling/wall with G.I. suspenders, supporting angles including G.I. bolts & nuts, etc. as required.					
15.01	150 mm (W) X 50 mm (D) X 1.6 mm Thickness	200.00	Mtrs	800.00	160000.00	INR One Lakh Sixty Thousand & Paise Zero Only
15.02	300 mm (W) X 62.5 mm (D) X 2.0 mm Thickness	200.00	Mtrs	1300.00	260000.00	INR Two Lakh Sixty Thousand & Paise Zero Only
15.03	Retrieval of one number PVC/XLPE insulated and PVC sheathed power cable of 11KV grade of size upto 300 Sqmm from ground including excavation and refilling the trench etc., as required.	50.00	Mtr	400.00	20000.00	INR Twenty Thousand & Paise Zero Only
15.04	Retrieval of one number PVC/XLPE insulated and PVC sheathed power cable of 11KV grade of size upto 300 Sqmm from the existing RCC/ HUME/ GI Pipe/ STONEWARE/ METAL/ Duct etc., as required.	100.00	Mtr	250.00	25000.00	INR Twenty Five Thousand & Paise Zero Only
16.00	Supply and Laying of 50 mm dia OD HDPE Pipe of PN 8 PE 80 grade ISI Marked conforming to IS:4984 along with all accessories like sockets, HDPE bends, HDPE coupler etc, complete with fitting, cutting, jointing etc., direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.	700.00	Mtr	230.00	161000.00	INR One Lakh Sixty One Thousand & Paise Zero Only
16.01	Supply and Laying of 110 mm dia OD HDPE Pipe of PN 8 PE 80 grade ISI Marked conforming to IS:4984 along with all accessories like sockets, HDPE bends, HDPE coupler etc, complete with fitting, cutting, jointing etc., direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.	300.00	Mtr	600.00	180000.00	INR One Lakh Eighty Thousand & Paise Zero Only
16.02	Supply and Laying of 110 mm dia PE 100 PN 10 HDPE Pipes by single horizontal directional drilling (HDD) of suitable dia in the operational area with depth range at 2.5 to 3 mtr including opening of manholes/pits on both sides, reaming, drilling, jointing of pipes, providing all required machines (HDD machine, mud mixer, earth mover, cables/pipes tracker etc.) and including identifying the existing cables & pipes falling in the route, specialised manpower, closing of manholes / pits after laying the pipes etc., as required.	3600.00	Mtr	1220.00	4392000.00	INR Forty Three Lakh Ninety Two Thousand & Paise Zero Only

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
16.03	Supplying and laying of "B" Class G.I pipe of 150 mm dia, i/c excavation of bituminous/concrete road/pavement, excavation of trench of required width for laying of hume pipe, depth upto 800 mm, providing and laying cement concrete of 1:4:8 ratio at bottom (100 mm) of pipe, refilling the trench with soil, ramming, watering, consolidation and making the surface to original finish with PCC of 1:2:4 ratio on top (200 mm) and disposal of left out soil away from Airport premises etc., complete as required.	36.00	Mtr	2500.00	90000.00	INR Ninety Thousand & Paise Zero Only
16.04	Supply and Fixing of pre-cast RCC manhole chamber of size 1000 mm X 1000 mm X 600 mm deep with wall thickness of 100 mm along with suitable RCC slab cover having 100 mm thickness with lifting hooks making as per site requirements including providing PCC base of grade 1:3:6 of 100 mm thickness at the bottom, required excavation, refilling, ramming etc., complete as required.	10.00	Job	8000.00	80000.00	INR Eighty Thousand & Paise Zero Only
16.05	Construction of brick masonry manhole with F.P.S. bricks of class design 75 & cement mortar 1:4, RCC top slab with hooks of 1:2:4 mix, foundation concrete 1:4:8 mix, inside plastering 12mm thick with cement mortar 1:3 finished with floating coat of neat cement complete as required. (as per standard design) Inside size 1000 X 1000 mm and 1000 mm deep including RCC concrete cover with multiple slabs covering the manhole of thickness not less than 150mm etc., complete as required.	10.00	Job	10000.00	100000.00	INR One Lakh & Paise Zero Only
16.06	Supplying and making cable route marker with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10 cm including inscription duly engraved as required.	50.00	Each	600.00	30000.00	INR Thirty Thousand & Paise Zero Only
16.07	Supplying and fixing cable route marker with 10 cm x 10 cm x 5 mm thick G.I plate with inscription thereon bolted/welded to 35 mm x 35mm x 6 mm angle iron, 60 cm long and fixing the same in ground as required.	50.00	Each	600.00	30000.00	INR Thirty Thousand & Paise Zero Only
16.08	Supply and Fixing of 10 mm thick SMC chequered plates including provision of 40 x 40 x 5mm thick MS angle in all side and diagonal of SMC plate for strengthening by Aluminium revitting and MS lifting hook etc., complete as required.	15.00	Sqmtr	10000.00	150000.00	INR One Lakh Fifty Thousand & Paise Zero Only
16.09	Supply, fabrication, Transportation and installation of the MS channel/angle/flat for any support as required and as per the instructions of Engineer-In-Charge, including cutting, welding, drilling, fixing, grinding, applying red oxide primer of two coats and two coat of enamel paint of Black colour etc., complete as required.	500.00	Kg	100.00	50000.00	INR Fifty Thousand & Paise Zero Only
17.00	Earthing with Copper earth plate 600 mm x 600 mm x 3 mm thick including accessories and providing masonry enclosure with cover made of RCC of size 450 x 450 x 40 mm and watering pipe of 2.7 meter long etc., with charcoal/coke and salt including excavation & refilling etc., as required.	8.00	Each	15000.00	120000.00	INR One Lakh Twenty Thousand & Paise Zero Only

Amal
SM/6

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
SL. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
17.01	Earthing with G.I. earth plate 600 mm x 600 mm x 6 mm thick including accessories, and providing masonry enclosure with cover made of RCC of size 450 x 450 x 40 mm and watering pipe of 2.7 meter long etc. with charcoal/coke and salt including excavation & refilling etc., as required.	16.00	Each	8000.00	128000.00	INR One Lakh Twenty Eight Thousand & Paise Zero Only
17.02	Providing and fixing 50 mm X 5 mm copper strip in 80 mm dia 'B' Class G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer and brassing i/c excavation Soil to the depth of 450 mm from ground, refilling the Soil after laying Pipe and making good the same to original surface etc., complete as required.	60.00	Mtr	3000.00	180000.00	INR One Lakh Eighty Thousand & Paise Zero Only
17.03	Providing and fixing 50 mm X 5 mm copper strip in 80 mm dia 'B' Class G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer and brassing i/c demolishing concrete/ bituminous/ pavement to the depth of 450 mm from ground, refilling with 1:2:4 concrete on top for 0.15 Mtrs after laying Pipe and making good the same to original surface etc., complete as required.	10.00	Mtr	3000.00	30000.00	INR Thirty Thousand & Paise Zero Only
17.04	Providing and fixing earth bus of 50 mm X 5 mm copper strip on surface/cable tray including connection with brass nut, bolt, spring, washer and brassing for connections etc., as required.	80.00	Mtr	2000.00	160000.00	INR One Lakh Sixty Thousand & Paise Zero Only
17.05	Providing and fixing 50 mm X 5 mm G.I. strip in 80 mm dia 'B' Class G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer and brassing i/c excavation of Soil to the depth of 450 mms from ground, refilling the Soil and with 1:2:4 concrete on top for 20 mm after laying Pipe and making good the same to original surface etc., complete as required.	80.00	Mtr	1000.00	80000.00	INR Eighty Thousand & Paise Zero Only
17.06	Providing and fixing 50 mm X 5 mm G.I. strip in 80 mm dia 'B' Class G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer and brassing i/c demolishing concrete/ bituminous/ pavement to the depth of 450 mm from ground, refilling with 1:2:4 concrete on top for 0.15 Mtrs after laying Pipe and making good the same to original surface etc., complete as required.	10.00	Mtr	1100.00	11000.00	INR Eleven Thousand & Paise Zero Only
17.07	Providing and fixing earth bus of 50 mm X 5 mm G.I. strip on surface/cable tray including connection with brass nut, bolt, spring, washer and brassing for connections etc., as required.	200.00	Mtr	600.00	120000.00	INR One Lakh Twenty Thousand & Paise Zero Only
17.08	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia 'B' Class G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	30.00	Mtr	800.00	24000.00	INR Twenty Four Thousand & Paise Zero Only
17.09	Providing and fixing 25 mm X 5 mm G.I. strip on surface/cable tray or in recess for connections etc. as required.	50.00	Mtr	300.00	15000.00	INR Fifteen Thousand & Paise Zero Only

24/5

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
17.10	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	500.00	Mtr	80.00	40000.00	INR Forty Thousand & Paise Zero Only
18.00	Supply and fixing of Galvanised mild steel Fire Bucket Stand with 4 Nos. of Galvanised mild steel fire buckets of 10 litre nominal capacity filled with dry sand conforming IS 2546 including Fabrication, Supply and installation of Canopy type MS structure above the buckets etc., complete as required.	4.00	Each	3000.00	12000.00	INR Twelve Thousand & Paise Zero Only
18.01	Supplying and fixing shock treatment chart (easily readable and duly framed) in Three (English, Hindi & Tamil) languages and first aid box containing material as prescribed by St. John Ambulance brigade OR Indian Red Cross complete as required and complying the CEA regulations etc., complete as required.	4.00	Job	1500.00	6000.00	INR Six Thousand & Paise Zero Only
18.02	Providing and fixing H.T. danger notice plate of 250 mm X 200 mm, made of MS Sheet, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	3.00	Each	600.00	1800.00	INR One Thousand Eight Hundred & Paise Zero Only
18.03	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of MS Sheet, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	6.00	Each	500.00	3000.00	INR Three Thousand & Paise Zero Only
18.04	Supply of Rubber Gloves suitable for 11KV grade conforming IEC 60903 and IS 13774 etc., complete as required.	2.00	Each	500.00	1000.00	INR One Thousand & Paise Zero Only
18.05	Providing & fixing of Single Line Diagram of substation in A0 Size duly laminated/frame work etc., complete as per actual as required.	3.00	Each	8000.00	24000.00	INR Twenty Four Thousand & Paise Zero Only

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Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
19.00	Supply, Installation, Testing and Commissioning of MV Switch Board Outdoor Type Feeder Pillar made out of 3mm thick CRCA Sheet Steel for outer Shell (width not less than 300 mm) and 2mm thick CRCA Sheet for inner partition, dust tight, vermin proof, totally enclosed, cubicle type, floor mounting, free standing suitable for operation at 433 V, 3 Phase, 4 Wire, 50 Hz AC System complete with all accessories, interconnection, connection, earthing, painting, provided with bottom base channel of 100 mm ISMC and locking arrangements including excavation for foundation, providing foundation, suitable RCC pedestal up to 900 mm (450 mm BGL and 450 mm AGL), fixing of panel etc., complete as required and comprising of the following: Incomer:- a) 1 No. 100A, 36KA FP MCCB having thermal magnetic release with rotary handle with spreader terminas with 40A, 3P contactor and (0-24 hrs) Analog timer. b) Aluminium busbar of 200A rating. c) LED Type Indicating Lamps (ON & OFF) with control MCBs and Digital Multifunction meter, CTs with all accessories - 1 Set. Outgoing:- a) 4 Nos. 40A FP MCB. b) 4 Nos. 32A FP MCB. c) LED Type Indicating Lamps with all accessories - 08 Set.	1.00	Job	100000.00	100000.00	INR One Lakh & Paise Zero Only
19.01	Supply of LED street light of 60W±5% with high pressure die cast Aluminium / standard alloy housing and LEDs of approved make pasted on die cast housing, driver installed on cast aluminium housing and prewired upto the terminal block. It has a luminaire efficacy of not less than 110 lm/W, CCT of 5700 K, suitable for outdoor applications complete as per technical specifications.	30.00	Each	2000.00	60000.00	INR Sixty Thousand & Paise Zero Only
19.02	Supply of 06 mtrs. high GI OCTAGONAL, continuously tapered galvanised street light pole (bottom size 130 mm min. & top size 70 mm min.) with single arm GI bracket (length of bracket shall be based on design) for installation of LED Street light luminaire (60 Watt) suitable for wind velocity as per IS 875 (but not less than 50 m/sec.), fabricated out of 3 mm GI plate in single section, suitable for installation on a precast foundation with supply of minimum 4 nos. of foundation bolt & anchor plate, rigid flange plate (200x200x12mm min.) welded with the base of pole for fixing on foundation bolts complete as reqd. for structural stability as specified, weather proof and vandal resistant door flush with the interior surface containing a terminal plate of 5 mm thick backlite sheet with 32 Amp heavy duty connector for loop in loop out cable terminations suitable for upto two numbers 4 core 25 Sq.mm cables & 2A DP MCB for each fixture connections, earthing bolts for continuous earth connection complete as required & as specified.	30.00	Each	8000.00	240000.00	INR Two Lakh Forty Thousand & Paise Zero Only

Amg

NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
19.03	Erection of 06 Mtr. high GI OCTAGONAL Pole & bracket with all accessories in reinforced cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40mm nominal size) foundation including excavation including positioning of template & foundation bolts (supplied with pole to match with pole base plate) & providing and fixing of DWC/HDPE pipe of size 50 mm dia (2 pieces of min. 0.75 m length) in the foundation for loop-in-loop-out of the cable to the pole complete as required and as specified.	30.00	Job	4000.00	120000.00	INR One Lakh Twenty Thousand & Paise Zero Only
19.04	Installation, testing & commissioning of Street Light fitting on existing 6 mtr Light Pole bracket (01 No. fitting on each pole) along with providing and fixing of suitable clamp, nut, bolts etc. as required including ensuring the proper balance of the bracket with fittings, supplying 4C X 1.5 sq.mm. PVC sheathed FRLS Copper wire including making connection with connector and wires etc. complete as required as per site requirement. (01 Job - Installation of 1 set of fittings on 01 No. 6 mtr Octagonal Pole).	30.00	Job	750.00	22500.00	INR Twenty Two Thousand Five Hundred & Paise Zero Only
20.00	Supply of Hot, Cold and Normal Bottom Loaded Water Dispenser with nominal cooling capacity 2 Ltr./ Hr (min) and nominal Heating capacity 4 Ltr/ Hr (min). suitable for operation on 230 V+/- 10% single phase, 50 Hz AC supply etc., as required.	6.00	Each	9000.00	54000.00	INR Fifty Four Thousand & Paise Zero Only
21	Supply of Suitable Trolley for maintenance of following type of breakers with adjustable heights, pulley arrangement, locking system and 360 degree rotating wheels with all accessories etc., as required.					
21.01	11kV VCBs	1.00	Each	20000.00	20000.00	INR Twenty Thousand & Paise Zero Only
21.02	440 V ACBs	2.00	Each	12000.00	24000.00	INR Twenty Four Thousand & Paise Zero Only
22	Providing Civil Works as required as detailed below:					
22.01	Cement concrete of 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20mm nominal size) including providing shuttering and finishing etc., as required.	4.00	Cum	8000.00	32000.00	INR Thirty Two Thousand & Paise Zero Only
22.02	Cement mortar in 1:6 (1 cement: 6 coarse sand)	2.00	Cum	3000.00	6000.00	INR Six Thousand & Paise Zero Only
22.03	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in with Cement mortar 1:6 (1 cement : 6 coarse sand).	2.00	Cum	5000.00	10000.00	INR Ten Thousand & Paise Zero Only

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NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder Rs. P	TOTAL AMOUNT	TOTAL AMOUNT In Words
1	2	4	5	13	53	55
22.04	Demolishing of hard concrete/ bituminous surface/ floor manually/ by mechanical means using compressor drilling machine including disposal of concrete debris away from Airport premises etc., complete as required.	4.00	Cum	10000.00	40000.00	INR Forty Thousand & Paise Zero Only
23.00	Supply and fixing carbon dioxide fire extinguisher of 4.5 kg each as per IS : 15683:2006 with latest ammendaments and mounting the same on wall by means of suitable hooks complete as required.	10.00	Each	5000.00	50000.00	INR Fifty Thousand & Paise Zero Only
23.01	Supply and fixing Dry chemical fire extinguisher 4 kg as per IS : 15683:2006 with latest ammendaments complete as required.	10.00	Each	2000.00	20000.00	INR Twenty Thousand & Paise Zero Only
23.02	Supply and fixing of 9 ltr chemical foam type fire extinguisher as per IS : 15683:2006 with latest ammendaments complete as required.	10.00	Each	1500.00	15000.00	INR Fifteen Thousand & Paise Zero Only
24.00	Liasoning towards CEA Approval of NEW MSSR Power House consisting of 01 No. 11KV HT VCB Panel (07 Nos. VCBs), 2 Nos. of 400 KVA Transformers, 2 Nos. of 320 kVA DG Sets, various LT Panels, 2 Nos. HPFC filters and other LT installations in Sub-station including Preparation of complete Drawings and other documents required for CEA clearance, submission of the same with CEA, Co-ordination and getting Final CEA Approval etc., complete as required.	1.00	Job	40000.00	40000.00	INR Forty Thousand & Paise Zero Only
Total in Figures					38444300.00	INR Three Crore Eighty Four Lakh Forty Four Thousand Three Hundred & Paise Zero Only
Quoted Rate in Words		INR Three Crore Eighty Four Lakh Forty Four Thousand Three Hundred & Paise Zero Only Plus Applicable GST				

(Signature)

ए. नरसिम्हा प्रसाद
A. NARASIMHA PRASAD
वरिष्ठ प्रबंधक (अभि - विद्युत)
SENIOR MANAGER (ENGG. - ELECT.)

भारतीय विमानपत्तन प्राधिकरण
Airports Authority of India
दक्षिणी क्षेत्र / Southern Region
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