



## **SHRI SAIBABA SANSTHAN TRUST, SHIRDI**



**PROPOSED QUOTATION FOR SUPPLYING, INSTALLATION, COMMISSIONING AND TESTING OF COMPACT SUBSTATION, GENERATOR SET, HT METERING CUBICAL PANEL, MAIN DISTRIBUTION PANEL, CABLES AND ANCILLARY WORK FOR INCREASED LOAD OF SHRI SAINATH HOSPITAL AND DWARAVATI BHAKTANIVAS BUILDING FOR SHRI SAIBABA SANSTHAN TRUST, SHIRDI.**



## **SHRI SAIBABA SANSTHAN TRUST, SHIRDI.**

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**BOQ**

**(ITEM RATE)**

**PROPOSED QUOTATION FOR SUPPLYING,  
INSTALLATION, COMMISSIONING AND TESTING OF  
COMPACT SUBSTATION, GENERATOR SET, HT  
METERING CUBICAL PANEL, MAIN DISTRIBUTION  
PANEL, CABLES AND ANCILLARY WORK FOR  
INCREASED LOAD OF**

**SHRI SAINATH HOSPITAL AND DWARAVATI  
BHAKTANIVAS BUILDING**

**FOR**

**SHRI SAIBABA SANSTHAN TRUST, SHIRDI.**

**PROPOSED QUOTATION FOR SUPPLYING, INSTALLATION, COMMISSIONING AND TESTING OF COMPACT SUBSTATION, GENERATOR SET, HT METERING CUBICAL PANEL, MAIN DISTRIBUTION PANEL, CABLES AND ANCILLARY WORK FOR INCREASED LOAD OF SHRI SAINATH HOSPITAL AND DWARAVATI BHAKTANIVAS BUILDING FOR SHRI SAI BABA SANSTHAN TRUST, SHIRDI.**

**B.O.Q.**

Sr. No.	C.S.R. No.	Description	Qty.	Rate (without GST)
01)	Non CSR	Providing and laying of concrete pipe of 450 mm dia. in proper line, level, slope including neck, collars, excavation, laying, fixing with collars in cement mortar: 1 and refilling the trench complete	01 Mtr.	
02)	Non CSR	Providing and construction (including excavation) brick masonry (9" Brick Work) inspection cable chamber 900mm x 900 mm x 900mm internal side size with RCC chamber cover of size 900 mm x 900 mm x 75 mm thick with lifting arrangement including laying of angle size as 75 x 75 x 6 mm to be fixed / embedded on the top of chamber, filling screened sand and smooth internal plaster etc including watering, streaking joint on exposed faces, rocking at joint on exposed faces and watering complete and clearing the site by removing debris & making the site good.	01 No.	
03)	Non CSR	Supplying, installation, testing and commissioning of Power Panel as per specification and relevant is standard specification:- Incomer:- 630A. MCCB = 01 No. Outgoing:- 01). 250 A. MCCB = 06 Nos. 02). 125 A. MCCB = 10 Nos. KWH Meter = 01 No. ( Electronics ) Voltmeter = 03 Nos. ( 440 volt ) Ammeter = 03 Nos. ( 440 volt )	01 No.	
04)	Non CSR	Supplying, installation, testing and commissioning of Power Panel as per specification and relevant is standard specification:- Incomer:- 400 A. MCCB = 01 No. Outgoing:- 01). 250 A. MCCB = 04 Nos. 02). 125 A. MCCB = 04 Nos. 03). 63 A. MCCB = 06 Nos. KWH Meter = 01 No. ( Electronics ) Voltmeter = 03 Nos. ( 440 volt ) Ammeter = 03 Nos. ( 440 volt )	01 No.	
05)	Non CSR	Supply, installation, testing and commissioning of Main Distribution Panel with ON/OFF indicator with Digital Meter of Voltmeter, Ampere and 03 nos. three phase KW Meter, 03 nos. LED Indicator for Incoming supply, LED Indicator for every main switch for ON passion and four pole Bus Bar as per specification and relevant is standard specification :- A). M. S. E. B. Incomer:- 01). 2000 A. 4 POLE ACB = 01 No. B). From M. S. E. B. to DG1 & DG2 AMF Panel:- 01). 1600 A 4 POLE ACB = 02 Nos. C). For APFC Panel:- 01). 1600 A 4 POLE ACB = 01 No. D). For M. S. E. B. Bypass:- 01). 1600 A 4 POLE ACB = 02 Nos. E). From DG1 & DG2 AMF Panel:- 01). 1600 A 4 POLE ACB = 02 Nos. F). For Bus Coupler:- 01). 1600 A 4 POLE ACB = 01 No. B). Out Going:- 01). 1000 A FOUR POLE ACB = 02 Nos. 02). 800 A. FOUR POLE MCCB = 04 Nos. 03). 400 A. FOUR POLE MCCB = 14 Nos. 04). 250 A. FOUR POLE MCCB = 10 Nos. 05). 125 A. FOUR POLE MCCB = 10 Nos. 05). 100 A. FOUR POLE MCCB = 10 Nos 06). 63 A. FOUR POLE MCCB = 10 Nos 07). 1600 A FOUR POLE ACB = 01 Nos.	01 No.	
06)	Non CSR	Supply, installation, testing and commissioning of change over Panel with ON/OFF indicator with Digital Meter of Voltmeter, Ampere and 03 nos. three phase KW Meter, 03 nos. LED Indicator for Incoming supply, LED Indicator for every main switch for ON passion and four pole Bus Bar as per specification and relevant is standard specification :- A). M. S. E. B. Incomer:-1600 A. 4 POLE ACB = 01 No. B). From Dwaravati Substation Panel:-1600 A 4 POLE ACB = 01 Nos. C). 1600 A change over Switch = 01 Nos. D). Out Going:- 1600 A. 4 POLE ACB = 01 No.	01 No.	
07)	Non CSR	Supplying & erecting four pole ON LOAD change over switch, 415V, 1600A, open execution having staggered termination, phase barrier, shroud termination and terminal cover along with auxiliary contacts and ready to upgrade with fuse protection kit, rotary handle, operational current category AC23A complying to IS/IEC 60947-3 Part-1/3.	01 No.	
08)	Non CSR	Supplying, installing, testing and commissioning air circuit breaker manual drawout type, 650V, 2000A rated at 50° C without deration, 12kV Impulse, 4 pole (100% Neutral Protection) 50 kA, (Ics=Icu=Icw for 1s), with standard accessories with ready to close, individual fault trip, alarm and trip indication, mechanical and electrical anti pumping, soft/hard rating plug (including hard rating plug CT) with Micro-processor based LCD display release with LSIg and temperature rise protection & with 4 C/O contacts for On-Off-Trip indication, min. 5 event and trip history on breaker display on provided iron frame as per specification no. SW-SWR/ACB	01 No.	

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**B.O.Q.**

Sr. No.	C.S.R. No.	Description	Qty.	Rate (without GST)
09)	Non CSR	<p>Supplying and Erecting approved make Compact Substation with 2500 kVA,3 phase, 50 c/s ONAN Type UNIPACK 21KA for 3 Sec. SF6 insulated Non-Extensible Compact switchgear (Type DV-NE) consisting of one No. Direct Cable madule and One No. Fixed Manual Vacuum Circuit Breaker in SF6 insulated stainless steel enclosure, with series trip, self powered microprocessor based numerical over current relay (IDMTL + Inst.) protection.</p> <p>Interconnection between HT switchgear and transformer shall be using 1Cx3x200 sq.mm Al. unarmoured XLPE Cable.Copper wound transformer 2500KVA 11KV/433V DYn11 Oil filled, INDOOR TYPE TRANSFORMER BUSHINGS,hermatically sealed transformer with corrugated wall,without conservator type of design &amp; Top Normal Porcelain Bushings for HT &amp; LT with Off load tap switch of rating +5% to -10% @ 2.5%. Temp Rise - Oil/Winding Energy Efficiency level 2 ) - Max @ 50% Loading : As per IS 1180 and Max @ 100% Loading : As per IS 1180 and Impednace As per IS 1180 with LV PANEL-1600 AMPS</p> <p>ALUMINUM BUSBAR ( 100% for Phase and 50% for Neutral, Current Density - 1amp/sqmm) with Outgoings 1600Amps 433V 4P 50Hz</p> <p>50KA ICOG Fixed Manual Type Air Circuit Breaker (ACB) with Microprocessor based release for Overload , short circuit &amp; earth Fault protection, Multifunctional Meter with Class 1.0Accuracy with RS 485 Port, RYB, ON/OFF Trip Indications, OUTDOOR ENCLOSURE having IP54 degree of protection for HT &amp; LT switchgear compartment &amp; IP23 degree of protection for Transformer compartment, Powder /Colour Caoated Enclouser, with Interconnection Between HT switchgear &amp; Transformer using 1Cx3x200 Sq.mm XLPE AL Single core cable. Interconnection between Transformer &amp; LT switchgear using Al. Busbars. Internal earthing connections by using 50x6 mm GI Strips including Transformer Neutral, Complete as per specification No SSTR/COMP with necessary permission of Electrical Inspector</p>	01 No.	
10)	Non CSR	<p>AMF PANEL:- AMF panel similar make as per the DG set suitable for 1010 KVA, 3 phase, 415 volt, 50 cycles, AC diesel generating set complete of scope as detailed below,</p> <p>01). Power module A pair of Electromechanically interlocked contactors (For mains and generator) overload relay for generator contractor. Neutral contactors for mains and generator, Power sockets for connections.</p> <p>02). Control and metering module: Line voltage monitor, Generator voltage monitor, Ammeter 3 times attempts starts facility, Air circuit breaker of capacity – 1600 Amp, Rating for Auto / manual operation. Auto / manual switch, Emergency stop push button, Manual start push button, Frequency meter, Engine hour meter, Two earthing studs,</p> <p>03). Protection module: The engine shut down in the unlikely event of Low lube oil pressure, High cylinder head temperature, V belt failure,</p> <p>04). Indicator with alarm, Load on generator.</p> <p>05). Indicators: Load on mains, Engine fails to start,Emergency stop, Battery charger.</p>	01 No.	

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**B.O.Q.**

Sr. No.	C.S.R. No.	Description	Qty.	Rate (without GST)
11)	Non CSR	Supplying and erecting Diesel Generating Set 1010 KVA continuous rating, 3 phase, 415 volts, 50 cycles A.C. supply comprising of a totally enclosed water cooled diesel engine with multi-cylinder developing suitable BHP not less than 154 BHP at 1500 RPM with 10% overload for one hour in 24 hours with standard accessories like fly wheel, lubricating oil cooler, "A" class governer, heavy duty fuel and lubricating oil filter, oil bath air filter, lubricating oil pressure guage, end exhaust manifold, standard set of tools with adjustable spanners, screw drivers, feeder guage, cylinder head to cover, joint cylinder head to exhaust, element lube oil filter, techocum hour counter, 12/24 volts electric starting equipment complete with standard battery, dynamo, cutouts, ammeter, necessary wiring, pressure gauge, starter etc. and heavy duty residential type exhaust silencer and vertical hot air duct both logged with asbestos rope, save oil trays, exhaust piping of required length, standard wall/ floor mounted fuel tank with level indicator and piping and drip proof alternator, self excited, self regulated, screen protected, with static excitation system, capable of delivering the rated system output at 415 volts, 3 phase, 0.8 PF, 50 HZ, 4 wire, running at 1500 RPM, conforming to IS-4722-1968 with voltage regulation +/- 5% of rated voltage from no load to full load. Both the engine and alternator fitted on a common fabricated steel base plate with anti vibration mountings and both connected to each other by flexible flange coupling. The alternator and control panel shall be connected with provided suitable capacity armoured cable and complete with Acoustic enclosure ( canopy ) made out of 18 SWG-CRCA Sheet, sound absorbing material used of ROCKWOOL of 64 density and 100 mm thick conforming to IS:8183. The resin bonded ROCKWOOL covered from inside the canopy by perforated sheet with 3/4 mm holes, sound level not more than 75 DB at a distance of 1 mtr, as PVCT norms complete with erecting, commissioning and satisfactory testing as per requirement with first filling of fuel, oil etc. with guarantee of complete system for one year with obtaining all necessary certificate from Electrical Inspector. (Extra separate 1000 Ltr.Diesel Tank)	01 No.	

Seal

Signature of Contractor