



FEDERATION OF GUJARAT INDUSTRIES

ISO 9001:2015 Certified

40.290 kWp Solar Rooftop System BOM, Terms & Conditions Project Inquiry

Contact Person

Premal Dave
Secretary General

Federation of Gujarat Industries (FGI)

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Nr. Sevasi,
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Note: - Please send all quotation as per the below BOM and Terms on above email before 15th Dec 2020 6.00 P.M

Particulars	Project Details
Project Name	Federation of Gujarat Industries
GST No.	24AAATF0543K1ZZ
Address	FGI Business Centre, Gotri Sevasi Road Khanpur Near Sevasi Vadodara-391101
Contact Person	Mr Premal Dave (Secretary General)
Mobile /Phone No,	0265-2372901-02-03
E-mail	secretarygeneral@fgi.co.in
DISCOM	MGVCL
Tariff	LTMD
kWp	81 kWp
Solar Installed Capacity as per GoG Solar Rooftop Policy 2015	40.50 kWp
Solar Rooftop Quote	40.290 kWp
Rooftop Area	10279 sq. ft Total Rooftop area
Rooftop Area	4614 Sq. ft (Shadow Free South Facing Installation Space)
Longitude & Latitude	22.31983831264132, 73.11476737502946
Bidder needs to quote along with all Government Charges and taxes	

Pre-Qualification Criteria of Installer

Sr. No	Particulars
1	GEDA Empanelled – With Login Credential Valid as on date
2	Electrical Contractor – Same as Bidder
3	ISO 9001:2015 – Quality Management System – Valid upto 31/03/2021
4	OHSAS 18001:2007 – Health & Safety Management System – Valid upto 31/03/2021
5	All COVID -19 Safety Protocol to be followed during Visit and Installation
6	Minimum Average Turnover 2.5 Cr of last three-year (2016-17,2017-18,2018-2019) Provisional 2019-2020 can be consider. On letterhead of CA with Sign
7	Single Order of 40 kWp must have completed within last 1 year by bidder, Successful completion certificate from Client letterhead required. Total EPC Experience will be of more than 500 kWp (GEDA Portal Screenshot required)
8	Electrical Supervisor on Bidder payroll – Copy needs to submit before billing

Billing of Material with Brand Name

ITEM	Technical	Brand	Quantity	Type
Billing of Material with Brand Name	Billing of Material with Brand Name	Billing of Material with Brand Name	Billing of Material with Brand Name	Billing of Material with Brand Name
Billing of Material with Brand Name	Billing of Material with Brand Name	Billing of Material with Brand Name	Billing of Material with Brand Name	Billing of Material with Brand Name
Billing of Material with Brand Name	Billing of Material with Brand Name	Billing of Material with Brand Name	Billing of Material with Brand Name	Billing of Material with Brand Name
Copper Earthing with Chemical Bag	Pipe Thickness 3 mm Pipe Diameter 48 mm Pipe Length 3 meter	ETP Max	6	Nos.
Earthing Strip	25 mm * 6mm	Local Made HDGI	250	KG
Lighting Arrestor	150 Mtr protection diameter High quality anticorrosive, ESE Type	Bakiral	1	Nos.
DC Cable(mtr)	4 sq.mm 1 core copper (Red/Black) EN 50618	Havells/Leoni/Lapp	250	km.
DCDB & ACDB	Mix Brand LT panel will be made to synchronized all 2 inverters on AC side	Havells/Schneider	3	Set
AC Cable(mtr)	16 sq.mm 4core Copper Flexible Inverter to ACDB 2 Inverter X 10 Mtr. = 20 Mtr.	Havells	20	Mtr.
AC Cable(mtr)	11 Kva 3.5 Al Armoud ACDB to LT Panel Incomer	Havells	As per actual	Mtr.
Earthing Cable	4 sq.mm 1core Cp Armour Panel to Panel earthing	Havells	As per actual	Mtr.

Standard Structure	Height of the structure considering cleaning of module not more than 2-meter height of front leg is permissible	80X40X2.5 MM HDGI Box Pipe for Leg and Rafter 40X40X2.5 MM HDGI Box Pipe for Purlin	As per actual	set
Civil Work	Fastener and With Chemical and PCC Block (PCC Block design as per Staad.Pro Report	HILTI, DeWalt Dr. Fixit & Ultratech Cement	1	set
Saddle, Pipe, Elbow, Tee	FRP UPvc Thermal resistant from -5°C to +60°C Corrosion free, Fire Retardant	Precision/Polycab	1	set
Ring Type Lugs, Pin Type Lugs	Copper / Aluminium	Dwells	1	Set
MC4 Connector	Upto 1500 VDC DC Power for more safety	Elmex	As per Actual	Nos.
Cable Tie & Flexible Socket	FRP	Local Made	1	Set
Nut, Bolt, Washer, J hook, Screw, Grip, Silicon gel	SS 304 As per requirement	Local Made	1	Set
Water Piping/Installation with sprinkler	Water Pipe and Pump Sprinkler only FRP UPvc Thermal resistant	Varuna/Finolex/Prince	1	Set
RS 485 & CAT6	As per specified by IoT Device OEM	Havells	Ac Per actual	Set

Solar Project Quotation: Project Terms and Details need to be submitted

- **Panel Brand: Waaree**
- **Inverter: Hitachi/Havells**
- Specify Exact Manufacturer specified Model Number of Solar Panels. Do not specify [or] or equivalent. Attach authorized Dealer certificate from Panel and Inverter manufacturer
- Specify Exact Manufacturer specified Model Number of Inverter, list all Inverters to be installed. Do not specify [or] or equivalent
- Structure: Specify make, gauge, and weight of the raw material to be used in manufacturing Structure The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759. Mention warranty period and conditions
- Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.
- Submit detailed drawing of Structure, with wind sustain capacity

- Submit detailed drawing of Panel layout and Cable Run
- Provide Pvsyst Expected Generation Report along with quotation
- The J. Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminum /cast Aluminum alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.
- Termination Panel for Net metering shall be in scope of supplier and shall be included in project cost.
- Specify Earthing Brand, method and part number Do not specify [or] or equivalent.
Each array structure of the PV yard should be grounded/ earthed properly as per IS:3043-1987. In addition, the lightning arrester/masts should also be earthed inside the array field. Earth Resistance shall be tested in presence of the representative of Engineer-In-Charge as and when required after earthing by calibrated earth tester. Inverter, ACDB and DCDB should also be earthed properly.
- LIGHTNING PROTECTION: Power plants shall be provided with lightning & overvoltage protection.
- Specify Solar Panel Monitoring system and data logger, and how of many days of data would be stored (power generation data), we required facility to monitor Panel health. There shall not be any monthly or yearly cost associated with the monitoring system. System shall monitor and log GEB incomer and Solar Generation for comprehensive report
- Preformation Ratio Guarantee: 10% of the Project cost would be on hold and shall be released after 1 year of installation on archiving committed performance ratio. 75% PR must be achieved by the installer (If PBG is given we will release the payment).
- After commissioning, submitting quarterly preformation ratio (in comparison with irradiation) shall be in scope of EPC vendor.
- After commissioning, quarterly physical health inspection and report submission shall be in scope of EPC vendor
- DRAWINGS & MANUALS TO BE SUBMITTED BY BIDDER AFTER COMPLETION OF WORK: Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Supplier shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes with basic design of the power plant and power evacuation, synchronization along with protection equipment.
- Liaison with all approval authorities shall be in scope of EPC vendor
- Complaints shall be attended within 1-2 days and shall be resolved in 5 days. No visit charge shall be applicable.

- Client Satisfaction Certificate from your Top 5 clients of last 18 months
- Electrical ROI with Electricity Saving in % to be submitted.

Payment Terms

10% - Against purchase order & All Technical Documents as per inquiry

50% - Before arrival of Materials on the installation.

30% - After complete installation of PV system.

10% - Net meter installed (PBG will be given of same amount).

Defect Liability Period

The Contractor warrants that the Works/Facility or any part thereof shall be free from defects in the design, engineering, materials and workmanship for a period of 1 (one) year from date of successful Commissioning, unless specified otherwise in the Contract.

PV System from used at Site shall be warranted for linear performance as per table given below:

Item	Year	Warranty for Product
Solar Pv Modules	1-10 90 % of Power Output & 11-25 80% of the power output	10 Year Workmanship and total 25 years life cycle.
Solar Grid Tie Inverter	10 Year	On Site Replacement as per std Warranty Terms by OEM
Online Monitoring	25 Years	Free
ACDB & DCDB	5 Years	On Site Replacement as per std Warranty Terms by OEM
Structure, Walk Way and Cable TRAY	5 Years	As Per OEM Terms

MOULDED CASE CIRCUIT BREAKERS: HAVELLS/SIEMENS / SCHNEIDER

SMU / String Combiner Box: Respective inverter Manufacturer / Weidmuller / Robotina / Trinity Touch

/Skytron / Hensel / iPLON

Scope of Contractor

Scope will include supply and handling of SPV modules, grid tie solar inverters, cables, structures, civil work and electrical balance of system on turnkey basis on extra cost will be paid after PO.

- **Phase 1: Feasibility Study.**
- **Phase 2: Application to GEDA & concern department of Govt. of Gujarat**
- **Phase 3: Electrical drawing & civil drawing for approval of Chief Electrical Inspector**
- **Phase 4: Procurement & Execution of the Project.**
- **Phase 5: Quality Assurance Management**
- **Phase 6: Liasoning & Bi-Directional Net-Meter Installation with Discom.**
- **Total Project time 80 to 90 Days**
- **All Risk Cover Policy of Contractor and Worker till Commissioning of Project once Plant is handed over liabilities of Projects goods transfer to FGI.**