

Tender No. : 22000002-HB-11895



Tender Published On : 09-Apr-2022 19:19

Hindustan Petroleum Corporation Limited  
Corporate Identification Number L23201MH1952GOI008858

Basic Information Of Tender		
Title	Revival of Solar System	
Description	This tender has been floated for Revival of existing Solar System at Mangalore Terminal.	
Tender Type	Limited	
Tender Scope	Domestic	
Bid Type	Two Bid	
Evaluation Criteria	Overall L1 for all items	
Tender Due Date & Time	19-Apr-2022 15:00	
Reverse Auction Applicable	No	
Pre Bid Conference Start Date & Time		
Pre Bid Conference End Date & Time		
Queries Start Date & Time	09-Apr-2022 20:00	
Queries End Date & Time	17-Apr-2022 15:00	
Un Priced Bid Open Date & Time	19-Apr-2022 15:00	
Purchase Deptt.	PURCHASE DEPARTMENT - MANGALORE TERMINAL	
TF/EMD Drop Box Address	Online EMD to be submitted through eProcurement Portal.	
Tender Description	This tender has been floated for Revival of existing Solar System at Mangalore Terminal. Bidders are requested to kindly peruse the entire document before quoting the tender. The bidder may verify the site conditions too. The bid rates shall be valid till completion of the contract in total.	
Notice Inviting Tender		
Currency Type	Tender Fee	EMD
INR	0	70000

**Delivery Terms - Free to Destination location unless specified otherwise. Validity of offer - 90 days from the initial or extended Due Date for submission of Tender whichever is later unless specified otherwise. Liquidated Damages/Price Reduction clause accepted unless specified otherwise.**

**In case bidder does not deviate from the standard offer validity in on line deviation form, bids offer validity shall be considered as mentioned above.**

**In case a Revised priced bid is initiated for this tender, at a later date (eg Technical evaluation stage etc), it shall be incumbent upon the bidder to submit revised bids for the specified items/entire tender. In the absence of revised bids from the bidder within specified time period, the original bid submitted by the bidder shall not be considered for evaluation.**

**Organization reserves the right to reveal the contents of the bid documents submitted by the vendor during the witness bid opening process as per prevailing policy of the corporation.**

**Please quote all the taxes, if applicable, only in percentage terms and not in Per unit(Amount) basis. The Per unit option is provided only to quote for extras like Loading charges, packing charges, TPI charges etc. In case, it is found that you have quoted taxes in amount basis, your bid may be liable for rejection.**



Line Details Of Tender							
Srl. No.	Line Description	Ship To Location	UOM	Quantity	HSN Code	Location GSTIN	Mandatory
Tender Lines				Mandatory: Yes			
1	Sup of Solar PV Modules	11895-MANGALORE TERMINAL	Each	150		29AAACH1118B1Z8	Yes
2	SPLY&LYING DC CABLE(1C-6mm2)	11895-MANGALORE TERMINAL	Meters	2000	995423	29AAACH1118B1Z8	Yes
DESCRIPTION => SUPPLY AND LAYING FOLLOWING SIZE PVC INSULATED, SHEATHED, ARMoured CABLE OF HPCL APPROVED MAKE CONFORMING TO IS 1554:PART 1:1988 4C X 6 SQMM ALUMINIUM CABLE							
3	SPLY&LYING EARTHCABLE(1C16MM2)	11895-MANGALORE TERMINAL	Meters	1000	85441920	29AAACH1118B1Z8	Yes
DESCRIPTION => CABLE,ELECTRICAL,NON ARMoured; APPLICATION:EARTHING CABLE; VOLTAGE RATING:3.3 KV; CONSTRUCTION:PVC INSULATED; MATERIAL,CONDUCTOR:COPPER; MATERIAL,INSULATION:POLY VINYL CHLORIDE; COLOUR:GREEN; NUMBER OF CORES:1 CORE; CROSS SECTION,CORES:185 MM2							
4	INSTALLATION AND COMMISSIONING	11895-MANGALORE TERMINAL	Each	1		29AAACH1118B1Z8	Yes
5	CAMC SERVICES-SOLAR SYSTEM	11895-MANGALORE TERMINAL	Each	5	998717	29AAACH1118B1Z8	Yes
DESCRIPTION => MAINTENANCE SERVICE OF SOLAR PROJECT AS PER TERMS AND CONDITIONS ATTACHED.							

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**Tender Document**

Sl.No.	Description	Attached File	Set Value	Supporting Doc. Req'd
1	Kindly go through tender document		-	Allowed
2	Tender Document	Annexure-A-Tender Document.pdf	-	No

# Tender Document

## Contact Person:

Name: Adakne Jayshree  
Designation: Asst. Manager-Operations  
Contact No: Mob: 9981682925/  
0824-2270833/835 Ext 206  
HPCL, Mangalore Terminal

The brief scope of work indicated specific requirements and works applicable to the tender under consideration.

These details are to be read in conjunction with enclosed drawing schedule of quantities and Technical specifications.

## Section-I Introduction and Scope

HPCL Mangalore terminal has 158KW Solar System. Some of the panels of existing system are non-functional and hence terminal has planned to replace the existing faulty panels with new solar panels and also to have an AMC for the Complete Solar System.

## SCOPE

The solar panels which are to be supplied must be compatible to be integrated with existing solar system.

The specifications together with engineering drawings and schedule of quantities covers the scope of work for design, manufacture, assembly, inspection, factory testing, supply of each equipment/system, painting, packaging, delivery at site, installation, testing at site, commissioning, and guarantee of equipment comprising mono/poly crystalline Solar PV modules, GI Mounting structure, Array junction box, laying of associated cables etc. with all required accessories and controls as specified herein rooftop of various building at HPCL Mangalore.

The scope of work shall also include operation and comprehensive maintenance of the solar power plant for five years from the date of integration of new panels with existing Solar System

The scope of work shall also include essential spares necessary for operation, routine maintenance and testing of equipment supplied for 5 years.

The schedule of Quantities as below

S. No	Description	Quantity	UOM
1	Supply of Solar PV Panels	150	EA
2	Installation & Commissioning of Solar PV Panels	1	EA
3	Supply DC cables (single core 6 sq mm multi strand, Cu)	2000	MTR
4	Supply of Earthing cable (16 sq mm, single core, multistrand, Cu)	1000	MTR

5	CAMC SERVICES-SOLAR SYSTEM(5 years)	5	EA
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1. Supply and installation of Solar PV Panels:  
The total job includes supply, installation and commissioning of New Solar panels at roof top and also integrating the panels with Existing Solar System. The job also includes supply and installation of DCDB/ Surge protection Device etc/ Fuses/MCBs/DC Cable connectors etc for connecting panels till one inverter. Therefore, the cost of all these items to be considered in this line item only (Line1-Supp and Installation of Solar PV Panels). No separate charges for will paid for DCDB and other items for connecting panels to inverter. The solar panels to be installed on roof top of fire engine shed/Lube ware house1&2/PCC/Admin Room. The roof supports available in most of the places. Supports to be provided wherever missing.
2. Supply DC cables 6 sq mm: The scope includes the Supply & Laying of DC Cables(1Cx 6 sq mm, multistrand, Cu) where ever required for commissioning of the Panels. Total quantity to be supplied and laying shall be done as instructed by the Officer In-Charge.
3. Supply of Earthing Cable: The scope includes the Supply & Laying of 16 sq mm, single core, multistrand, Cu Earthing Cable where ever required for commissioning of the Panels. Total quantity to be supplied and laying shall be done as instructed by the Officer In-Charge.
4. CAMC Services: CAMC shall start after commissioning of new solar panels. CAMC is for entire Solar system. Vendor has to make quarterly visit and preventive maintenance to be carried out. CAMC bills may be raised after every quarter after completion of AMC visit.

Summary of Scope of job is to Supply, Installation and commissioning of new solar panels. Integration of new panels with existing solar system with required DCDB/ Surge Protection/MCB etc. CAMC of the Solar system is to be started from the date of integration of new solar panels to existing solar system on quarterly basis.

#### Completion Period:

Work completion period is 45 days from the date of giving LOI to the L1 bidder.

#### **PAYMENT TERMS:**

1. For the value mentioned against supply and installation of the solar panels the payment should be released in the following format:
  - a. 70% on Supply & Installation, Commissioning of Solar Panels at site
  - b. 20% on after successful operation of 6 months from the date of commissioning.
  - c. 10% in after 1 year of successful operation of the plant. Party can submit PBG for 10% Retention amount for One Year.

For the value mentioned against the O&M of the installation of the solar plant payments should be released as follows:

#### **Payment for AMC**

Payment for O&M for shall be paid on quarterly basis at the end of every quarter starting from the integration of new panels with existing Solar System. The operator shall submit the original Tax invoices in respect of the quarter ended in Triplicate after the end of each quarter for the payment.

Price of Operation and Maintenance (O & M) of the solar power plant shall be firm and fixed during the entire 5 years of O&M Contract as per price bid and includes arrangement of spares, consumables,

tools, tackles, testing equipment & instruments, manpower, fees/charges, liaison with all government agencies, all administrative work, maintaining records and submissions to all concerned authorities as per foregoing specification on turnkey Basis, etc.

**Bank Guarantee:**

- a. Security deposit: 1% of supply & installation bid till 60 days from date of completion of project
- b. Performance Guarantee for O&M: 5% of supply and installation bid till 36 months from date of completion of Warranty of the project. In case of any issues with O&M, BG is liable to be revoked by HPCL for liable amount

**Section II: ENERGY GENERATION GUARANTEE**

The new panels will be connected to the separate inverter. Vendor has to ensure that the power generation optimum as specified in the tender. The minimum guaranteed power generation has to be met for the first 5 years.

Also vendor has to maintain that the existing solar system in working condition and also to ensure the power generation as per the existing figures or better.

Winning bidder should ensure and guarantee that the solar plant generates energy as per the following table. In case the generation is below the minimum generation, the bidder can be penalized at the grid rate of the units not generated.

Year	Year number	Energy generation guarantee in the year (Kwh per KWp installed)	Installed KWp capacity	yearly guaranteed generation KWH	Avg guaranteed monthly generation KWH
Y1	2022	1131.33	36	40727.88	3393.99
Y2	2023	1097.393	36	39506.15	3292.179
Y3	2024	1064.472	36	38320.99	3193.416
Y4	2025	1032.537	36	37171.33	3097.611
Y5	2026	1001.561	36	36056.2	3004.683

**In case of any generation Issue after 5 Years Party has to suitably advise HPCL for corrective action of maintenance nature and if any defective equipment found to be replaced by Party**

**Section III : BID QUALIFICATION CRITERIA**

S. No	Criteria	Vendor Response (Yes/No)
1	Acceptance of Generation as per ENERGY GENERATION GUARANTEE Sheet for three Locations	

2	Vendor should have experience of Execution of successful completion of Roof Top solar Plants of Minimum total capacity 20KW for the period from 01.04.2016 onwards till tender due date under proprietorship/partnership firm.	
3	Confirmation on Technical particulars Annexure-IV: Technical Particular of Components Technical Particulars of Quoted Solar PV module For Grid-Interactive Solar PV Power System. Duly Filled and signed copy to be uploaded	

The Bidder shall furnish following documentary evidences along with the bid for meeting the Bid Qualification Criteria:

1. Bidder should provide documents as per Technical qualifications criteria.
2. Commercial evaluation: Location wise L1 quote on overall basis including AMC cost. Order will be placed on the lowest bidder for each location separately. Tender is having three Schedules for three Locations. Each location Bid will be evaluated separately for deciding L1 Bidder

#### **Section IV: Bid Rejection Parameter**

The following reasons will lead to outright rejection of bids. However, HPCL has sole authority to reject any bid, after evaluation, in case of not meeting any other techno-commercial requirement of this tender. No correspondence by any bidder shall be entertained till such time decision in the matter is taken unless otherwise specifically asked for by Owner. The bid Rejection criteria shall include but not only limited to;

- a. Bidder not meeting Technical Qualifying Criteria as mentioned in section III- Bid Qualification Criteria of this Tender document shall be rejected.
- b. Non submission of Earnest Money Deposit (EMD) (in original) before the bid submission due date and time.
- c. Any bid submitted after tender due date shall not be opened for evaluation and shall be rejected without assigning any reason.
- d. Non-submission of copies of requisite certificates / documents shall render the bid non-responsive, and shall be liable for rejection.
- e. Conditional bids are liable to rejection.
- f. The prices should be quoted only in the Price bid format online. Prices should not be quoted anywhere else in the un-priced bid part. Non-compliance of same shall result in the rejection of your bid.
- g. Non Submission of any of the Annexures duly filled, stamped and signed and as per the required format as requested in this tender.

## **Section V: Bid Evaluation Methodology**

Evaluation of both un-priced bids and priced bids shall be done separately.

i) Techno-commercial evaluation of the un-priced bids shall be carried out first. This will be done on the basis of Bid Qualification Criteria, documents furnished by the bidder and completeness & conformity of the bids with respect to the instruction to Bidder & Clause given in Section III – Bid Qualification Criteria of this Tender Document.

ii) Price bids of only techno-commercially qualified bidders shall be opened.

Bidder, having qualified on Techno-Commercial Evaluation, will be considered for opening price Bid. Location wise L1 quote on overall basis including AMC cost. Order will be placed on the lowest bidder for each location separately. Tender is having three Schedules for three Locations. Each location Bid will be evaluated separately for deciding L1 Bidder.



## Section VI: Definition

Following terms and expressions shall have the meaning hereby assigned to them unless the context otherwise requires:

- **Applicable Laws** (in INDIA) means any statute, law, regulation, ordinance, rule, judgment, order, decree, restriction, directive, governmental authorizations, requirements of Applicable Permits and any agreements, decisions, acts, instructions, requirements, directions and notifications of the competent authority having jurisdiction over the matter in question, whether in effect as of the date of Contact Agreement/Purchase order or thereafter.
- **Bid and Bid Document** shall mean the proposal submitted by the Bidder in response to this ITB in accordance with the terms and conditions hereof.
- **Bidder** shall mean the Bidding Entity or the Bidding Consortium, which has submitted a proposal/Bid, in response to this ITB to Owner.
- **Bidding Consortium** shall mean a consortium of entities, being firms, companies or Governmental entities, which have submitted the Bid in response to this ITB.
- **Bidding Entity** shall mean a single entity, whether a firm or a company.
- **BIS** shall mean Bureau of Indian Standards.
- **BoS** Shall means the All Other System/Component of Grid-Interactive Solar PV Power System, solar invertors and Module Mounting Structures.
- **CEIG** means Chief Electrical Inspector or designated officer of State Government.
- **Codes/Acts** shall mean, but not limited to the following, including the latest amendments, and/or replacements, if any: -
  - Electricity Act, 2003 with amendments thereto if any.
  - A.I.E.E Test Codes
  - American Society of Testing of Materials (ASTM Codes).
  - Relevant standards of the Bureau of Indian Standards(IS Codes)
  - Arbitration and Conciliation Act, 1996, and Rules made there under.
  - Environment (Protection) Act, 1986 and Rules made there under.
  - Other approved standards and/or Rules and Regulations touching the subject matter of this Contract.

- **Commissioning of Project** shall mean the commissioning of entire Grid-Interactive Solar PV Power System and the issuance of Commissioning Certificate by the concerned state team /officer of Nodal Agency.
- **Commissioning Certificate** shall mean the certificate issued by agency/ representatives referred in Guideline of State Nodal Agencies as the case may be, on successful commissioning of solar power project and its interfacing with the Grid.
- **Commercial Operation Date (COD)** means the date, which is the mentioned on the Commissioning certificate.
- **Company/ Owner / Employer** mean HPCL and its executors, successors, administrators and assignees.
- **Company's Items** means the equipment, materials and services, which are to be provided by Company/Contractor at the expense of Company.
- **Completion Period** shall mean Commissioning of Project within **45 days** from the date of issue of Lol/Purchase Order (whichever is earlier).
- **Contract/Purchase order/PO** means the terms and conditions contained in the document entitled Selection of EPC Contractor for Development of Grid-Interactive Solar PV Power System along with Comprehensive Operation & Maintenance for 5 (Five) Years at HPCL Mangalore Terminal.  
. In the event of any conflict between the text of the contract and the exhibits, the text of the Contract shall have precedence over the exhibits.
- **DISCOM** means 'concerned distribution company of the state'
- **Engineering, Procurement and Construction Contractor (EPCC)/ Contractor/Vendor** shall mean the firm/ company or party on whom the Letter of Intent/ Purchase Order for faithful execution of the work mentioned herein is placed and shall include his/her/their heirs, legal representatives, his successors and permitted assigns
- **First Purchase Order** means the Contract issued to Successful Bidder for Procurement and Supply of the entire component at project site as required for Grid-Interactive Solar PV Power System as per the approved design and offered make and the specification of the tender document. The packaging, loading, transportation to project site, unloading , storing at site till erection, shifting of material from storage to project site are in bidder's scope without any extra cost to HPCL.
- **IEC Codes** means International Electro technical Commission Codes
- **INR** means Indian National Rupees
- **ITB** means Invitation to Bid Document
- **kW/ MW/kWh** means Kilo Watt/ Mega Watt / Kilowatt Hour
- **LSTK** means Lump Sum Turnkey Key
- **MNRE** means 'Ministry of New & Renewable Energy Sources, Government of India'
- **Nodal Agency** means 'Renewable Energy Corporation/Agency of the State'/ MNRE/ Karnataka State regulatory bodies for Net Metering etc
- **Net Metering / Net Metering Scheme** means the Policy laid by Karnataka Government including its latest amendments under which the electricity generated by the Solar rooftop/ground mounted system owned by the consumer and delivered to the Distribution Licensee may be utilized to offset the electricity supplied by the DISCOM to the consumer during the applicable billing period
- **O&M** shall mean Operation & Maintenance of Solar power Plant which inter alia, includes provisions of manpower, spares, special tools or such materials/equipment's that may be required for maintaining the Solar power plant in operation
- **Operating Year** means the Period of 12 Months first counted from the start of O&M period.
- **Project** shall mean the design, engineering, procurement & supply, erection, commissioning of Roof top solar plant having its integration with existing State Grid on Turnkey Basis at HPCL terminals, Karnataka. It also includes obtaining all required Approval / Clearance from relevant Nodal agencies in order to integrate the solar Plant with State grid as per Karnataka Government Net Metering Policy.