PURCHASE SPECIFICATION FOR SOLAR COMPACT STATION

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The design and installation shall be in compliance with MS 63 or equivalent. Drawings including location, type and number of lighting to be used (schedule of lighting) shall be submitted for BHEL's approval. The illumination levels for the SCS (Containerised facilities) shall be 300 lux.

The Design shall consider the following to minimise energy consumption:

- a) Use of LED light fittings complete with LED Driver.
- b) Required Illuminance Level at 750mm above floor level.
- c) All Luminaries shall be rated $230V\pm6\%$ and 50Hz.

Each compartment of the solar station container shall be equipped with a functional 230 Vac lighting, including of emergency lighting for the duration of 3 hours.

Emergency lighting shall be powered from self-contained battery sources and shall comply with BS 5266 and designed and manufactured as per BS EN 60598-2-22. Self-Contained Emergency luminaries shall be carefully designed to achieve a 4-year battery design life.

4.5.4 Fire alarm System:

SCS shall employ a microprocessor-based analogue addressable Fire Alarm Control Panel (FAP). Manual call points, heat detectors and smoke detectors shall be sited in accordance with the minimum distances specified in BS 5839 to provide a full and effective system. Fire alarm system should comply with BS EN 54 and the applicable requirements of NEC standards. The control panel shall be designed and manufactured according to NFPA and European Standards. Vendor shall Submit manufacturer's technical product data, including specifications and installation instructions, for each type of fire alarm system equipment.

Vendor shall submit the fire alarm system of SCS for BHEL during detailed engineering. Vendor shall submit shop drawings for function and operation for BHEL's approval.

Solar compact stations shall have complete and failsafe thermal management systems. All associated equipment, shall have complete and failsafe fire detection/extinguishing system. The Fire Protection system design and associated alarms shall take into account that the plant will be unattended. All Fire Alarm signals shall be sent to the SCADA system in the local control room and shall be recorded.

4.6 Cabling scope:

Connections within SCS container including supply of cables, cable accessories, hardware etc., between inverter, inverter transformer, MV switchgear, auxiliary transformer, ACDB Panel, UPS, UPSDB, AC-DC converter and DCDB shall be in Vendor's scope. Suitable provision (conduit/cable trays) for doing SCADA cabling from the SCS equipment to SCADA panel shall be in vendor scope.

4.7 Provisions for SCADA interface

| Bļļ | ई एल | PURCHA SOLAI | SE SP R COM | ECIFICATION FOR IPACT STATION | PS 439-1372 REV. No. 00 PAGE 28 OF 33 | |
|-------------------------|---------------|---|----------------------------------|---|---|--|
| a) | S | CADA int equirement | erface | Solar PV power plant will SCADA, which is within BHE the SCS equipment parameter above clauses will be integra systems such as solar array strin monitoring, pooling breakers mo | have an integrated L scope, whereby all rs as detailed in the ated with other data g monitoring, weather ponitoring etc. | |
| b) | C a | Communication protocol for all SCS equipment | | r All parameters of SCS equipment should be accessible and configurable through an industry standard communication link and displayed on the local SCADA in the Control Room. | | |
| | | | | Specifically dedicated MODBU Interface shall be provided for in with SCADA. | S TCP/IP on Ethernet nverter for networking | |
| c) Parameters for SCADA | | | Ą | Inverter: All DC and AC parameter frequency, phase, power factor, etc), grid data, temperature, far date/time logs, DC disconnector each inverter will be required at inverter shall provide for this red | rs (current, voltage, power, export energy alts, other event logs, on/off status etc from SCADA control desk. quirement. | |
| | | | | Parameters for all other SCS equipment shall be referred at the respective specification above. | | |
| d) | R c | Remote monitoring control features | and | SCS equipment shall have above facilitate remote monitoring and | ve detailed features to control. | |
| 4.8 | SCS | S container related | d para | ameters | | |
| | a) | Weight & & dimensions | Over indic | all Width x Depth x Height in ated in the offer along with indivi | mm of SCS shall be dual equipment. | |
| | | | At le shoul SCA site in | east 800 mm (L) x800 mm (W) Id be available in each SCS for p DA panel. SCADA panel shall be n this space. | x2200 mm (H) space lacing BHEL supplied mounted by BHEL at | |
| | b) | Ingress Protection of Container | IP 54 | or higher (Outdoor duty). | | |
| c) | | AirFlowTo beRequirementHVA(m3/hr)detail | | be indicated by vendor for each equipment. AC calculations shall be provided by vendor during ailed engg., including necessary analysis for ventilation. | | |

| BĤII | SOLAR COMPACT STATION | REV. No. 00 PAGE 29 OF 33 | | | | |
|--------------------------------|--|---|--|--|--|--|
| Routine shall be | tests, as per relevant standards (IEC etc.,) shall be carried out witnessed by BHEL/Customer & Customer authorized third pa | on SCS equipment an rty inspection agency. | | | | |
| a) | Routine tests shall be carried out by vendor on all the invapproved MQP & relevant standards. Following are the conducted but not limited to: | verters as per custom minimum tests to | | | | |
| | (a) HV/IR test on 100% inverters. | | | | | |
| | The inverter shall withstand a high voltage test of 2000 input or the output terminals and the cabinet (chassis). | Vrms, between either t | | | | |
| | (b) Functional tests and Protection tests (by direct method of | or simulation method) | | | | |
| | on 100% inverters | | | | | |
| | (c) Load testing of inverter on 1No. inverter: | | | | | |
| | Verification of inverter performance in its stand-with a defined power (up to 100% rated full load voltage (up to max value). All parameters: DC voltavoltage / current of R,Y,B lines, line frequency, ac energy, power factor, line current, efficiency, THD, 25%, 50%, 75% and 100% of the rated nominal powspecified acceptance norms. | alone operational mo l power) and DC inp age, current, power, gr output power, ac outp etc. to be measured wer and checked agair | | | | |
| | (d) Temperature rise Test at rated full load on 1 no. inverte | r | | | | |
| | Test reports shall be submitted prior to dispatch of the system t | o the site. | | | | |
| b) | Routine testing for the switchgear shall be carried out in accorda Clause 7. Partial discharge tests in accordance with IEC 6227 included in the routine testing. | nce with IEC 62271-2 1-200 Clause 7 shall | | | | |
| c) | Routine tests shall be carried out by vendor on all the M customer approved MQP and IEC 60076. | IV transformers as p | | | | |
| | Temperature rise test at rated load shall be done on one transfo | rmer. | | | | |
| d) | Testing on the SCS Container as per the approved MQP | | | | | |
| FAT sha eport sl copy of | Ill be carried out by vendors for all other auxiliary equipment on all be submitted by vendor for dispatch clearance. In particula 4 sets of test results in duplicate of the fire alarm system. | f SCS and internal tes r, Vendor shall submi | | | | |
| 6.0 D | ocuments to be submitted after receipt of purchase order | | | | | |
| | | | | | | |

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|--|---|---|--|--|--|
| | | | PAGE 30 OF 33 | | |
| COPY RIGHT AND CONFIDENTIAL The information on this document is the property of Bharat Heavy Electricals Limited. It must not be used directly or indirectly in anyway detrimental to the interest of the company. | a) Fo a) Fo 1. 2. 3. 4. 4. 5. 6. 7. 7. 8. 9. Ve Ve up 7.0 Doce a) Fol tran a. 7 b. 7 gui gui sett det c. 0 dat pro d. H H | SOLAR COMPACT STATION SOLAR COMPACT STATION SOLAR COMPACT STATION SOLAR COMPACT STATION SOLAR COMPACT STATION SOLAR COMPACT STATION SUBJECT COMPACT STATION SUBJECT COMPACT STATION SUBJECT COMPACT STATION GTP/Datasheet and drawings of inverters, RMU, inverter transformer and other auxiliary equipment, lighting, HV system etc., General Arrangement of inverters, RMU, inverter transform and other auxiliary equipment, lighting, HVAC details, fire a BOM along with makes for all major components of Combiner Panels, RMU, inverter transformer, auxiliary tra- system, lighting, HVAC details, and fire alarm system etc., Cable schedule for control and power circuits wiring with in Type test reports of inverters and transformers. Evidence of type testing together with copies of test certific independent short-circuit testing station covering the switc submitted. The type-test evidence shall show that the circuit- bin their cubicles and that all current carrying parts of these cut connections, current and voltage transformers, cable terminati been included for all tests required by IEC 62271-200 Clause 6 Spares List Civil Foundation drawings for containers outdoor installatio Manufacturing Quality Plan (MQP) of inverters, RMU, inver- transformer and other auxiliary equipment endor shall proceed with Manufacturing only after written yon approval of the documents. uments to be submitted along with consignment Ilowing documents shall be submitted at the time of consformers, RMU and other auxiliary equipment: Fest reports on individual equipment Technical manual with system specifications, installation guid idelines, schematic drawings, circuit board overlays, system tings, hardware settings, cable schedule, general arrange ails. Operation and Maintenance manual including final as Built a tasheet, test reports, catalogs of individual components, sc ovided (segregated section wise) in both hard copy and soft co PC/laptop interfacing software | PS 439-1372 REV. No. 00 PAGE 30 OF 33 even days from date of er transformer, auxiliary AC details, fire alarm her, auxiliary transformer alarm system etc., inverter, AC and DC ansformer, ACDB, UPS the SCS cates from a recognized chgear offered shall be reakers have been tested bicles (busbars, isolating ion chambers, etc.) have b and IEC 60694 Clause. In on pedestals. rter transformer, auxiliary clearance from BHEL, delines, commissioning set points, calibration ment drawings, panel ind tested drawings and hematic drgs shall be py. | | |



PURCHASE SPECIFICATION FOR SOLAR COMPACT STATION

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Annexure – 1 1. GUARANTEE OPERATING CHARACTERISTICS OF PV FARM

1.1 General

The Employer has identified a number of guaranteed operating characteristic for the PV Farm. However, the vendor shall provide any additional operating characteristic, deemed necessary, for the proper operation of the farm.

1.2 Fault Ride through Requirements

The PV Farm shall remain connected to the distribution system for system voltage dips on any or all phases, where the system voltage of the CEB network remains above 0.15 pu in the voltage duration profile of the Figure 11.1 below.



Figure 11.1: Fault Ride Through Requirement

In addition to remaining connected to the distribution System, the PV Farm shall have the technical capability to provide the following:

During the transmission system voltage dip, the PV Farm shall provide active power in proportion to retained voltage and maximise reactive current to the distribution system, within the technological and design limitations of the PV Farm facility and without exceeding its design limits. The maximisation of reactive current shall continue for at least 3 seconds or until the distribution System Voltage recovers to within the normal operational range of the distribution System whichever is the sooner.

Due to the dynamic nature of the transmission network, higher or lower fault clearance time and the LVRT voltage curve for the Solar Farm may be required, which shall then be discussed with the CEB.

The above LVRT curve shall be coordinated with the under-voltage protection settings to ensure grid support during fault conditions.

1.3 Frequency Response

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In case of frequency deviations in the CEB network, the PV Farm shall be designed to be capable to provide power-frequency response in order to contribute to the stabilization of the grid frequency. Under normal system frequency ranges, the PV Farm should operate with an active power output as set in Figure 11.2 below



Figure 11.2: Frequency Response Requirements

The PV Farm shall have to reduce the power output about a system frequency above 50.5Hz. The power has to be reduced with a gradient of 40% per Hz of the instantaneously available power. The output power is only allowed to increase again as soon as the frequency is only 50.05Hz. Above 52Hz and below 47Hz the plant has to disconnect from the grid.

1.4 Reactive Power Capability

The PV Farm shall be equipped with reactive power control functions capable of controlling the reactive power supplied by the PV Farm at the point of delivery (POD, Henrietta Substation) with CEB's network. The reactive power control functions shall be mutually exclusive, which means that only one of the two functions mentioned below can be activated at a time:

□ Power Factor Control

- □ Reactive Power Control
- □ Voltage Control

If previously agreed with the CEB on a case-by-case basis, a Voltage Control mode may also be required.

The actual operating modes, as listed above, as well as the operating point shall be determined by the CEB. The functional mode and set-point of the PV Farm shall not be changed unless instructed by CEB.

The PV farm shall supply rated power (MW) for power factors ranging between 0.95 lagging and 0.95 leading, available from 20% of rated power measured.

1.5 Power Quality

The PV Farm and equipment shall not cause excessive voltage excursions nor cause the voltage to drop below or rise above the range maintained by CEB. The PV Farm and equipment shall not introduce excessive distortion to the sinusoidal voltage or current waves.

1.6 Limitation of voltage flicker induced by the MSDG

The installation shall not cause abnormal flicker beyond the limits defined in IEEE 519.



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1.7 Harmonics

The total harmonic distortion will depend on the injected harmonic current and the system impedance seen from the POD.

The PV Farm output should have low current-distortion levels to ensure that no adverse effects are caused to other equipment connected to the utility system. The PV system electrical output at the POD should comply with IEEE Std. 519 and should be used to define the acceptable distortion levels for PV systems connected to a utility.

1.8 Voltage step change

The process of starting the PV Farm can sometimes cause step changes in voltage levels in the distribution network. These step changes are caused by inrush currents, which may occur when transformers or induction generators are energised from the network. Step voltage changes will also occur whenever a loaded generator is suddenly disconnected from the network due to faults or other occurrences.

Step voltage changes caused by the connection and disconnection of generating plants at the transmission level should not exceed +/-3% for infrequent planned switching events or outages and +/-6% of the nominal voltage of 22 kV for unplanned outages such as faults.

1.9 Voltage Unbalance

The contribution to the level of unbalance of the voltage at the POD of any installation with generation should be less than or equal to 1.3%.

1.10 Ramp Rate Limits

The ramp up in normal conditions, positive ramp rate only during start-up and negative ramp rate during shut down of the PV Farm shall be settable from the SCADA system. The following ramp rate is being proposed:

□ 10-minute maximum ramp rate: PV installed capacity (MW) divided by 1.5; and □ 1-minute maximum ramp rate: PV installed capacity (MW) divided by 5.

The ramp rate averaged over one minute should not exceed 3 times the average ramp rate over 10 minutes.

The ramp rate settings provided in the SCADA, shall be approved by CEB prior to testing and commissioning of the system on the network.

1.11 Active Power Constraints / Curtailment

For system security reasons, it may be necessary for CEB System Control Centre (SCC) to issue Curtail Instruction to the Solar Facility for the curtailment of active power output at the Point of Delivery.

The Solar Facility shall be capable of:

□ Operating at a reduced level if a Curtail Instruction has been issued by the SCC.

• Commencing the reduction of the output power within 2 seconds of receiving the curtailment signal and complete the reduction not later than 30 seconds.

The accuracy of the set-point shall not deviate by more than $\pm 2\%$ of the set point value.



| Vendor Bid Form | |
|---------------------|---|
| RFQ/NIT/Enquiry no. | RAJBOS0075 |
| Description | Supply and Commissioning Support of Solar Compact Station (SCS) for 8 MWac Solar PV Farm at Tamarind Falls, Henrietta, Mauritius |

| Sr. No. | DESCRIPTION | (VENDOR TO FILL THE DETAILS) |
|---------|--|------------------------------|
| 51. NO | DESCRIPTION | RESPONSE |
| 1 | VENDOR NAME | |
| 2 | OFFICE ADDRESS | |
| 3 | WORKS ADDRESS (1,2 etc if any) | |
| 4 | Order to be Placed on, Details | |
| 5 | CONTACT PERSON | |
| 6 | TELE, MOBILE NO | |
| 7 | FIRM MAIL IDs | |
| | GST NO, scanned copy (mandatory document). To be attached | |
| 8 | under "Commercial documents, certificates and forms" packet | |
| | cover | |
| | PAN NO, scanned copy(mandatory document).To be attached | |
| 9 | under "Commercial documents, certificates and forms" packet | |
| | cover | |
| 10 | BANK AND BRANCH NAME | |
| 11 | BANK ACCOUNT NO | |
| 12 | MSE VENDOR / NON MSE VENDOR | |
| | | |
| | Vendor to submit the MSE documents as per ITB/GCC/SCC along | |
| | with UAM no/Udyam Registration . In case of non-submission, | |
| 13 | vendor will be treated at par with non-MSE vendors (Mandatory | |
| | document).To be attached under "Commercial | |
| | documents,certificates and forms" packet cover | |
| 14 | ORIGIN OF DISPATCH | |
| 15 | QUOTATION REFERENCE | |
| 16 | QUOTATION DATE | |
| | Preference to make in India order2017 dated 16.09.2020.Submit | |
| 47 | certificate as per Self Declaration for Local content .To be attached | |
| 1/ | under "Commercial documents, certificates and forms" packet | |
| | cover | |
| | Declaration required under Rule 144(xi) of General FinancialRules, | |
| | 2017 amendment dt 23.07.2020 issued by Ministry of Finance, Govt. | |
| | of India.Refer Annexure-X for Restrictions under Rule 144(Xi) of | |
| | General Financial Rules, 2017 amendment dt: 23.07.2020. | |
| 18 | The Bidder shall mandatorily submit Declaration as per format | |
| | enclosed as part of tender. | |
| | To be attached under "Commercial documents,certificates and | |
| | forms" packet cover | |
| | | |
| | The bidder shall mandatorily submit Integrity Pact | |
| 10 | (Company seal on each page and authorized signatures) | |
| 15 | To be attached under "Commercial documents, certificates and | |
| | forms" packet cover | |
| | The bidder declares that they will not enter into any illegal or | |
| | undisclosed agreement or understanding, whether formal or | |
| | informal with other bidder(s). This applies in particular to | |
| | prices, specifications, certifications, subsidiary contracts, submission | |
| | or non-submission of bids or any other actions to restrict | |
| | competitiveness or to introduce cartelization in the bidding process. | |
| 20 | In case, the Bidder is found having indulged in above activities, | |
| | suitable action shall be taken by BHEL as per extant | |
| | policies/guidelines. | |
| | | |
| | | |
| | | |
| | | |

UNPRICED BID

•

| RFQ/NIT/Enqui | ry No. | | | RAJBOS0075 | | | | |
|---------------|---|-----|------|---|-----------------|---|----------|----------|
| Description | Supply and Commissioning Support of Solar Compact Station (SCS) for 8 MWac Solar PV Farm at Tamarind Falls, Henrietta, Mauritius | | | | | | | |
| SI. No | Description | Qty | Unit | WHETHER QUOTED OR NOT [YES/NO] | HSN/SAC CODE | GST INDICATED [IGST or (CGST+SGST)] | GST % | CURRENCY |
| 1 | Supply of Solar Compact Station (SCS) + Freight | 4 | ST | | | | | INR |
| 2 | Supply of Spares for Solar Compact Station + Freight | 1 | ST | | | | | INR |
| 3 | Commissioning Support for Solar Compact Station | 1 | AU | | | | | INR |

| REO/NIT/Enquiry | | | | |
|-----------------|----------------------------|---|------------------|---------------------|
| no. | : | RAJBOS0075 | | |
| Description | : | Supply and Commissioning Support of Solar Compact Station (SCS) for 8 MWac Solar PV Farm at Tamarind Falls, Henrietta, Mauritius | | |
| TECHNO COMME | RCIAL TERMS | | | |
| a | DESCRIPTION (| | RESPONSE | |
| Sr. No | DESCRIPTION | Details | (AGREE/DISAGREE) | Remarks if disagree |
| 1 | TENDER TYPE | THIS TENDER IS NOT A GLOBAL TENDER. THE TENDER IS INDIGENEOUS OPEN TENDER . PLEASE REFER TENDER DOCUMENTS FOR DETAILED TERMS AND CONDITIONS APPLICABLE FOR THE TENDER. | | |
| 2 | Price Basis | Firm i.e., from the date of PO to completion of supply if I&C/Commissioning Support is not applicable. If I&C is in supplier's scope, then the prices shall remain Firm till commissioning & handing-over of the complete system. (PVC clause not acceptable). | | |
| 3 | Terms of Delivery | Free on Road (FOR) Basis to JNPT Port, Mumbai / BHEL ROD-Mumbai Warehouse | | |
| 4 | Delivery Period | Supply: 12 weeks from drawing approval I&C: 3 weeks from intimation by BHEL. Drawing/Quality plan submission: 1 week from PO | | |
| 5 | Payment Term | a. 80% of basic supply value+100% taxes and freight charges will be pad with 45 days credit from the receipt of material at site or 15 days credit from the date of submission of complete set of documentation whichever is later. b. 10% of basic supply value will be paid on completion of I&C against submission of supplementary invoice with proof of completion of I&C along with I&C charges (if Any) c. Balance 10% (retention money) against submission of supplementary invoice along with PBG valid for Warranty Period+ 3 months clam period from BHEL Consortium Bank d. I&C/Supervision/Support: 100% on completion of I&C/Supervision and certification line tem wise on prorata basis with 15 days credit from the date of submission of complete set of documentation | | |
| c | D | (b) For any deviation in payment term, the offer will be liable for loading as per Clause G of | | |
| 0 | Payment Term | ITB. If loading not acceptable, offer will be outrightly rejected. | | |
| 7 | Evalution of L1 vendor | Evaluation to be done on package wise, L1 for Supply on FOR destination basis will only be considered. L1 vendor (lowest Bidder) will be decided based on 'Cost to BHEL' value after considering the applicable loading factors and other costs including packing & forwarding, applicable duties, taxes, transportation until the site, transit insurance etc. | | |
| 8 | Warranty | For Supply: 123 months from date of commissioning or 129 months from date of supply whichever is earlier for inverter. 27 months from date of commissioning or 33 months from date of supply whichever is earlier for Solar Compact Station. | | |
| 9 | Pre Shipment Inspection | (a) Pre-shipment inspection at vendor's works will be carried out by BHEL / BHEL's customer/ Third party agency for which test reports shall be sent atleast one week in advance. Required assistance for testing will have to be provided by the vendor at the time of pre-shipment inspection, without any additional cost implication to BHEL. On successful completion of pre-shipment inspection/ inspection waiver, BHEL will issue material dispatch clearance certificate (MDCC) after which the vendor can proceed to the material dispatch. In case BHEL/ customer are unable to come for physical inspection at vendor works, BHEL/ customer may engage third party inspection agency. Hence all charges for | | |
| 10 | Pre Shipment Inspection | (b) Pre Shipment Inspection at vehicle works to be borne by vehicle. (b) Pre Shipment Inspection charges , if any, shall be considered while evaluating your offer to arive at "Total Cost to BHEL". The charges for the same shall be informed to you before price bid Opening. | | |
| 11 | Penalty | (a) Supply: Penalty of 0.5% per week at the basic price of the good for undelivered quantity of supply portion, subject to a maximum of 10%. For Supply, Pre Shipment Inspection Call Letter Date (Receipt of test report) will be treated as delivery for purpose of penalty. In case PSI call given without test report, then actual date of inspection only will be considered as date of delivery for purpose of penalty calculation. | | |
| 12 | Penalty | (b) For any deviation in penalty term, the offer will be liable for loading as per ITB. | | |
| 13 | E-way bill | E-way bill if applicable will be given by BHEL before Dispatch of ordered Items.However, vendor shall give request for road permit 24 hours in advance. | | |
| 14 | Performance Bank Guarantee | PBG to be funished for 10% of the basic value of PO (Supply Portion). PBG Validity Period is Warranty Period + 3 Months Claim Period. | | |
| 15 | Despatch Documents | Complete set of despatch documents in 3 sets shall be forwarded to BHEL directly. Despatch documents include 1.Invoice 2 copies in original 2.Packing List 3.Delivery challan 4.Original receipted LR 5.Copy of Inspection call letter issued by vendor to BHEL along with internal test reports/certificates. 6.Warranty Certificate as per PO 7.Dispatch clearance certificate issued by BHEL to vendor 8.Material Receipt Certificate (Original Receipted LR) . 9.Copy of manufacturing clearance or document approval e-mail issued by BHEL. 10.Inspection MOM with test reports/test certificate 11.Subvendor packing list/Invoice (If applicable) 12.copy of way bill generated 13.Sank guarantee 14.Copy of order acknowledgement for having received PO. 15.Copy of Insurance intimation fax/e- mail/letter 16.NIII.short-shimment certificate | | |
| 16 | | BHEL shall be resorting to Reverse auction(RA) for this tender. RA shall be conducted | | |
| 10 | | among all the techno commercially qualified vendors as per BHEL RA guidelines | | |
| 17 | Other terms & conditions | For detailed Terms and Conditions, kindly refer to the following: A: ITB B: GCC . Any Deviations from or additions to the "General Conditions of Contract" or "Special Conditions of Contract" require BHEL's express written consent. The General Terms of Business or Sale of the Bidder shall not apply to this tender. | | |
| 18 | Validity | Quotation should remain valid for a period of 90 days from the due date of the tender | | |
| 19 | Shipment | Kindly indicate the state from where the shipment will take place. | | |
| 20 | Consignment Details | Weight and Dimension of consignment with packing. | | |
| 21 | Insurance | Insurance up to port of Mumbai / BHEL-ROD-Mumbai is in Vendor's scope | | |

| 22 | Pre Qualification Criteria Documents Submitted | Vendor shall be an Original Equipment Manufacturer (OEM) of inverter or inverter transformer or MV switchgear. Vendor shall submit the product catalogue as an evidence. 2. SCS Country of origin shall be India. Vendor shall submit a declaration that the manufacturing works of the container (where the proposed inverter, inverter transformer and MV switchgear along with the associated LT Panels and other auxiliary equipment shall be assembled) shall be in India. 3. Vendor should have supplied and commissioned similar containerized or skid or outdoor integrated solution including PCU of minimum 500 kW rating, inverter transformer and MV switchgear of 6.5 kV & above rating to any Solar PV project. PO & Commissioning certificate of the integrated solution from customer or EPC company shall be submitted as evidence. | |
|----|--|--|--|
| 23 | Changes in tender condition | Any changes in the specification, terms & conditions etc or in splitting ratio based on the MSE act /Make in India policy or due to any other reason, intimation will be given only to the vendors who have participated in this tender, hence it is mandatory that vendors should participate in the tender. | |
| 24 | INTEGRITY PACT | The bidder shall sign an "INTEGRITY PACT" in the formats enclosed. Unloading at Mumbai Port / ROD-Warehouse is under BHEL scope. | |
| 26 | ADDITIONAL CONDITIONS | Any vendor who has been banned or under interim Suspension/suspended by BHEL or against whom action due to non performance has been initiated by BHEL are not eligible for participation. Such offers will not be considered for evaluation and will be rejected. | |
| 27 | Special Conditions of Contract (SCC) | In addition to the ITB and GCC stipulated in the tender document, the terms and conditions indicated under techno commercial form shall be treated as "Special Conditions of Contract (SCC). In case of Conflict between General Conditions of Contract (GCC) available in Tender document and Special Conditions of Contract (SCC) stipulated under bidding forms, SCC will prevail over GCC. Supply Scope of vendor is up to Mumbai port or BHEL-ROD-Mumbai Warehouse (will be intimated later). Since this is an export contract, the vendor needs to adhere to following conditions (wherever applicable) with reference to Standards of Seaworthy/Export packing, Handling et : 1) Proper handling instructions to be nasted on the narkages 2) to case of | |
| | | rejection of packages during physical inspection, it is the vendor's responsibility to set the packaging right by making visits to the Warehouse 3) Sea Worthy Packing 4) Fumigation Certificate to be produced 5) Inspection Window 6) Sealing and Certification that only items mentioned in the packing list are packed 7) Warranty visits if any are in vendor's scope 8) Any conveyances/travel/visa etc are in vendor's scope | |
| 28 | Declaration required under Kule 144(X) of General FinancialRules, 2017 amendment dt 23.07.2020 issued by Ministry of Finance, Govt. of India.Refer Annexure–X for Restrictions under Rule 144(Xi) of General Financial Rules,2017 amendment dt:23.07.2020. | The Bidder shall mandatorily submit Declaration as per format enclosed as part of tender(ANNEXURE-A) | |
| 29 | MSE status(Applicable for MSE vendors only) | Documents to be submitted for claiming MSE status: Udyam Registration certificate. Latest MSE guidelines and circulars with subsequent amendments or clarifications (if any) will be applicable for this tender.Please refer NIT for MSE guidelines. | |
| 30 | Tax regime and introduction of Sec206C(1H) on sale of goods | Please note that with the recent changes in Tax regime and introduction of Sec206C(1H) on sale of goods witheffect from 01.10.2020 the vendors in line with the provisions of the said section are to collect TCS @0.075%from 01.10.2020 upto 31.03.2021 and 0.1% from there on Invoice value. (a).Vendor should raise /levy TCS in the Tax Invoice itself. No separate debit note will be accepted. (b).Vendor should indicate his Pan# and Tan # in the Tax invoice. In the Purchase order, Pan# of BHEL shall appear. (c).Vendor should remit the TCS so collected from BHEL and provide TCS certificates with invoice no., invoicedate, Amount etc. breakup details (d).If by any chance vendor is not remitting /not able to submit TCS certificates to BHEL on time then the TCSamount with penalty if any applicable will be recovered from vendor in his available bills. (e) No TCS is to be levied if TDS is applicable for the invoice transaction.(e.g. 0&M cases, Service bills). (f) No TCS in case of Export/Import transactions. (g) TCS is applicable only for invoices dated 01.10.2020 and afterwards only. | |
| 31 | NIL Deviation to the Technocommerical terms | This form to be signed with Name and seal on all the pages and to be uploaded as acceptance to technocommercial conditions. Acceptance and submission of signed technocommercial form is treated as confirmation on "NIL DEVIATION ON TECHNO-COMMERCIAL TERMS" indicated in the techno commercial form.Technical or Commercial Deviation if any shall be separately uploaded under Techno-Commercial Bid. Deviations indicated in any other place shall not be considered by BHEL and the same are not valid. | |
| 32 | General Terms & Non-Peforming / Banned Vendors | The General Terms of Business or Sale of the Bidder shall not apply to this tender. No commercial terms to be attached, if attached it will be considered null and void. Any vendor who has been banned by BHEL or against whom action due to non- performance has been initiated by BHEL are not eligible for participation. Such offers will not be considered for evaluation and will be rejected | |

| 33 | Corrigendums | All corrigendums will be published in this e-procurement system (https://eprocurebhel.co.in/nicgep/app) and www.bhel.com . Vendors to keep themselves updated regularly and submit offers as required. In case of changes in scope of the tender and/ or technical specifications and commercial terms & conditions by BHEL during techno commercial evaluation, the same will be communicated only to the bidders who are participated in the tender. The techno-commercially qualified bidders will be asked for submitting impact price bid, if any is applicable as per BHEL purchase policy and guidelines. | |
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| 34 | Declaration under Cartel formation | The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/ guidelines. | |
| 35 | Preference to make in India order2017 dated 16.09.2020 | Government circular for Preference to make in India order2017 dated 16.09.2020 and subsequent amendments(if any) shall be applicable for this tender. | |
| 36 | Mandatory GeM registration ID for vendor | Government E-Marketplace(GeM) registration ID of vendor is mandatory for placement of purchase order. Vendor has to register in GeM portal and inform GeM registration ID before placement of purchase order. If GeM registration ID is not provided by vendor before PO placement, vendor is not eligible for placement of purchase order. | |
| 37 | Evaluation currency | Evaluation currency for this tender shall be INR. | |
| 38 | Local Content Qualification | The local content to categorize a supplier as a Class-I local supplier/ Class-II local supplier Non-local supplier and purchase preference to Class-I local supplier, is as defined in Public procurement (Preference to Make in India), Order 2017 dated 04.06.2020 issued by DPIIT. In case of subsequent Orders issued by the Nodal Ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of price bid/s against this NIT. Any Indian Bidder intending to avail the benefits shall submit the requisite documents as per the aforesaid orders. | |
| 39 | Changes in Statutory Levies | If any rate of Tax are increased or decreased, a new tax is introduced, an existing tax is abolished or any change in interpretation or application of any tax occurs in the course of execution of the contract within the contractual delivery period, which was or will be assessed on the bidder in connection with performance of the contract, an equitable adjustment of the contract price or deduction there from, as the case may be. However, these adjustments would be restricted to direct transactions between BHEL and the bidder/ agent of foreign bidder (if applicable). These adjustments shall not be applicable on procurement of raw materials, intermediary components, etc. by the bidder/ agent. | |
| 40 | Make in India Preference | For this procurement, Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017, 11.12.2018, 29.05.2019, 04.06.2020 & 16.09.2020, and subsequent Orders issued by the respective nodal ministry shall be applicable even if issued after issue of this NIT but before finalization of contract/PO /WO against this this NIT. In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and/ or local content in respective of this procurement, same shall be applicable. | |
| 41 | E-Invoice | E-invoicing under GST is being implemented w.e.f. 1st October 2020 for all the taxable person having turnover more than Rs. 500 Crore. It has been specified by the Govt that it is mandatory to mention a valid unique Invoice reference number (IRN) and QR code as generated from Govt. portal on a Tax invoice. Based on such information, GST ITC as claimed by BHEL in GST Returns shall be matched with the corresponding details uploaded by supplied in E-invoicing system. 2. In case the vendor delays or fails to provide all the documents as per the Purchase order at the time of submitting Tax invoice to BHEL, any subsequent financial loss to BHEL on account of vendor shall be to vendorမs account. BHEL has further right to take necessary steps to protect its interest at the time of release of payment | |

F.No.6/18/2019-PPD Ministry of Finance Department of Expenditure Public Procurement Division

> 161, North Block, New Delhi 23rd July, 2020

Office Memorandum

Subject: Insertion of Rule 144 (xi) in the General Financial Rules (GFRs), 2017

Rule 144 of the General Financial Rules 2017 entitled 'Fundamental principles of public buying', has been amended by inserting sub-rule (xi) as under:

Notwithstanding anything contained in these Rules, Department of Expenditure may, by order in writing, impose restrictions, including prior registration and/or screening, on procurement from bidders from a country or countries, or a class of countries, on grounds of defence of India, or matters directly or indirectly related thereto including national security; no procurement shall be made in violation of such restrictions.

(Sanjay Prasad) Joint Secretary (PPD) Email ID: <u>js.pfc2.doe@gov,in</u> Telephone: 011-23093882

Τo,

- (1) Secretaries of All Ministries/ Departments of Government of India
- (2) Chief Secretaries/ Administrators of Union Territories/ National Capital Territory of Delhi

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