

	SOLAR BUSINESS DIVISION	NOTICE INVITING TENDER (NIT)	Supply, Installation including civil works and commissioning of 8MWac Solar PV Farm except supply of PV modules at Henrietta (Phase-II), Tamarind Falls, Mauritius through Mini EPC Tender
TENDER REFERENCE: RAJBOS0083 dtd 18-12-2021			

Subject: Tender for “Supply, Installation including civil works and commissioning of 8MWac Solar PV Farm except supply of PV modules at Henrietta (Phase-II), Tamarind Falls, Mauritius through Mini EPC Tender”.

BHEL invites offers from reputed Vendors {Refer Pre-qualifying (PQR) requirements and other requirements given in tender enquiry letter uploaded on our websites) **Supply, Installation including civil works and commissioning of 8MWac Solar PV Farm except supply of PV modules at Henrietta (Phase-II), Tamarind Falls, Mauritius through Mini EPC Tender as per Tender Ref: RAJBOS0083”.**

Your offer shall be submitted in two parts strictly as per “Instructions to Bidders” of GCC, Rev R0 in sealed covers.

Your best quotation / offer for the above requirement, in line with our terms and conditions, should either be delivered in person or sent by COURIER/REGISTERED POST, to the following address only:

BHEL- EPD/SBD Tender box (Reception of SBD)

C/o. **AGM/MM**
M/s BHARAT HEAVY ELECTRICALS LTD. (SOLAR BUSINESS DIVISION (SBD),
Prof CNR Rao Circle, IISc Post, Malleswaram, Bangalore- 560 012
Ph. No. +91-080-22182430, 080-22182269, +91-080-22182286.

Offer can also be submitted thru email to email ids specified below only:-

PART-A (I) BID i.e. TECHNICAL BID on technicalbid-epd@bhel.in

PART-B (II) BID i.e. PRICE BID on pricebid-epd@bhel.in

NOTE:-

1. Tender reference & due date to be mentioned in subject of mail.
2. Bidders may adopt this mode at their own risk. The Purchaser does not own any responsibility /liability for delays in receipt / loss of secrecy of such offers.

It shall be the responsibility of the bidder to ensure that the tender is delivered on or before the due date by **02:00 P.M on 28/12/2021. The offer has to be deposited in tender box only.**

Part-I bids shall be opened at **02:30 P.M.** on the due date in the presence of authorized representatives of the bidders, who may like to be present.

The bidder is required to clearly mention

1. Tender Ref., RFQ/Tender Due Date & Name of the item in BOLD LETTERS on the top of each envelope submitted.
2. Name and contact details (including mobile no. and email address) of minimum one contact person along with date of submission of offer in a cover letter.

ENQUIRY TERMS AND CONDITIONS

The prices offered shall be firm till the completion of project.

1. Tender Ref No., due date etc. must be legibly super scribed on the sealed envelopes as per clause no. 2.0 of "Instructions to Bidders of GCC, Rev. R0".
2. Offers should be submitted in two parts in two separate sealed covers as follows:

Part-I: **TECHNO-COMMERCIAL BID** Part-II: **PRICE BID.**

For detailed instructions. Please see “Instructions to Bidders of GCC Rev. R0”.

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3. Bidders shall submit their offers meeting the requirements of the following tender documents (enclosed) included in this Enquiry Letter :

General Conditions of Contract (GCC) Rev R0 comprising of: Instructions to Bidders and General Commercial Terms & Conditions. Technical Specification, Price format & Special Conditions of Contract (SCC).

4. Tenders shall be submitted strictly in accordance with the requirements of the above tender documents. In case of deviations (Technical/ Commercial), the same shall be highlighted separately giving clause references along with the **Cost of withdrawal of Deviations as per Annexure-II to GCC Rev. R0 of "DEVIATION SHEET (COST OF WITHDRAWAL)"** along with reasons for taking such deviations.

Cost of withdrawal for the deviations, for which, the "Cost of withdrawal" is not specified, shall be taken as NIL. ***Bidder to note all the points mentioned in "Notes" of Annexure-II to GCC Rev.R0.***

5. All the above Tender Documents shall automatically become a part of the Order / Contract after its finalisation.

6. Bidder has to submit "NO DEVIATION CERTIFICATE FOR COMMERCIAL TERMS AND CONDITIONS as per General Conditions of Contracts (GCC, Rev.R0), Special Conditions of Contracts and Notice Inviting Tender (NIT)" **in case of no deviations.**

7. Purchaser shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any/all tender(s) in part or full without assigning any reason whatsoever.

8. Late tenders are liable to be rejected.

9. All correspondence thereof, shall be addressed to the undersigned by name & designation and sent at the following address:

<u>Commercial</u> S Rajesh – Sr.Engineer-MM BHEL-SBD, Prof CNR Rao Circle, IISc Post, Malleswaram, Bangalore- 560 012 E-MAIL: s.rajesh@bhel.in Ph. No. +91-080-22182141, 9845634534	<u>Technical</u> Ravi Kishore –Dy. Manager BHEL-SBD, Prof CNR Rao Circle, IISc Post, Malleswaram, Bangalore- 560 012 E-MAIL: ravikishore@bhel.in ; Ph. No.+91 7676492191
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10. Bidders, who are not registered with BHEL-SBD, are requested to get registered through online supplier registration portal available on <https://supplier.bhel.in/>

11. BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on (www.bhel.com)) for this tender. RA shall be conducted among the techno commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered for RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking."

Bidders are required to submit their acceptance to the terms/ conditions/ modalities before participating in the Reverse Auction in the process compliance form as enclosed. Without this, the bidder will not be eligible to participate in the event.

12. The evaluation of the offer shall be done on the basis of delivered cost (i.e. Total F.O.R. BHEL SBD stores, Bangalore price for supply with necessary loadings as applicable) as per GCC Rev. R0.

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13. Please note that detailed offers are to be submitted including the following documents duly stamped & signed on each page:
14. Acceptance of GCC, Rev.R0.
15. Acceptance of Special Conditions of Contract (SCC).
16. Pre-qualifying Requirements (PQRs) documents including Technical Bid Format with supporting documents.
17. Technical Deviations and commercial deviations, if any as per format enclosed at Annexure-II of GCC, Rev.R0.
18. Annexure – I, III, VII, XIII, XIV, XVIII & XIX of GCC Rev R0.
19. Along with your offer, please submit a copy of this letter duly signed & stamped on each page as token of acceptance of all terms & instructions conveyed.
20. Un-Priced price schedules (format) duly filled in 'Quoted' or 'Q' in each column/row.
21. Separate sealed price-bid envelope mentioning Tender/Enquiry No., RFQ due date & Name of the item in BOLD LETTERS on the top of envelope.

Note: Bidder must submit UN-PRICED Price format duly filled mentioning the word "QUOTED" in place of actual price. The actual price is to be filled in separately and submitted in sealed price bid.

22. Bidders to keep visiting BHEL website i.e www.bhel.com for any Amendments/Clarifications/Corrigenda/Errata etc issued in respect of the tender documents by BHEL. Same shall be uploaded on above BHEL website.
23. Order of Precedence.

In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below:

1. Amendments/Clarifications/Corrigenda/Errata etc. issued in respect of the tender documents by BHEL.
2. Notice Inviting Tender (NIT)
3. Price Breakup
4. Special Conditions of Contract (SCC)
5. CEB's Employer Requirements
6. Technical specification & scope of work
7. General Conditions of Contract (GCC)


Thanking You.
Yours faithfully,

For and on behalf of BHEL

(S Rajesh)
Sr.Engineer-MM

Enclosures:

1. Enquiry Letter with Terms & Conditions (This letter)
RFQ, PQR, QAP's & Technical Specifications No. **PS-439-1380**
2. Special Conditions of Contracts (SCC)
3. Price formats/schedules (Prices should be quoted strictly in this format only)

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4. General Conditions of Contracts (GCC Rev R0)
5. Conciliation Scheme
6. Integrity Pact

Pre-Qualification Criteria (PQC):

1) Bidder shall be an established EPC or Electrical BOS supply and I&C Contractor who has completed Supply, Installation and Commissioning including electrical equipment Package AC and DC Balance of system and associated civil works at Solar PV power Plant(s) of cumulatively at least 10MW (AC) capacity with individual plant capacity of 1 MW (AC) and above.

1.1 Above mentioned work should have been completed during the last 5 year from the date of NIT.

1.2 Out of the above, at least one of the completed works shall be pertaining to Minimum 5 MW (AC) capacity.

Completion certificate mentioning above scope of supply and services from Customer shall be basis of consideration of having met this Pre- Qualification.

2) Bidder shall be currently working as an EPC or Electrical BOS supply and I&C Contractor in a solar PV project. As evidence to this, Bidder shall submit copies of purchase orders/LOA for works during the last3 years from the date of NIT.

3) Bidder should have achieved minimum annual average financial turnover of Rs. 25 Crores in the any three financial years from FY 2017-18 to FY 2020-21. As evidence to this, Bidder shall submit the audited balance sheets for all the 3 years.



**PURCHASE SPECIFICATION FOR SUPPLY,
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company.**

TECHNICAL SPECIFICATION

FOR

SUPPLY, INSTALLATION INCLUDING CIVIL WORKS & COMMISSIONING


OF

8MWAC SOLAR PV FARM

AT


TAMARIND FALLS, HENRIETTA (PHASE II), MAURITIUS

Revision details: 01	Prepared	Approved	Date: 18/12/2021
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	PURCHASE SPECIFICATION FOR SUPPLY, INSTALLATION INCLUDING CIVIL WORKS & COMMISSIONING OF 8MWAC SOLAR PV FARM AT TAMARIND FALLS, HENRIETTA (PHASE II), MAURITIUS	PS-439-1380
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1. Part A: Electrical specifications
2. Part B: Mechanical specifications
3. Part C: Civil Specifications
4. Part D: Site services Specifications

	PURCHASE SPECIFICATION FOR SUPPLY, INSTALLATION INCLUDING CIVIL WORKS & COMMISSIONING OF 8MWAC SOLAR PV FARM AT TAMARIND FALLS, HENRIETTA (PHASE II), MAURITIUS	PS-439-1380
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Part A: Electrical specifications

Introduction

1.1 Overall outline of 8MWac Solar PV Farm at Tamarind Falls

Bharat Heavy Electricals Limited (BHEL) - Solar Business Division (SBD), Bangalore is setting up 8MW (AC) Phase-2 Solar Photovoltaic (SPV) power plant for CEB at Tamarind Falls, Henrietta (Phase II), Mauritius.

Solar PV modules installed at the plant generate DC electricity that in turn shall be inverted to AC by using inverters. These inverters are part of Solar Compact Station (SCS) which also houses inverter transformer and MV switchgear. Output of each solar block with independent SCS shall be stepped up to 22kV. Solar plant comprises of SCS with associated PV array. Output of Solar Compact Station is combined at 22kV level in the 8 MW pooling switchgear at the main control room (MCR). Module Mounting Structures (MMS) are fixed type.

The plant is envisaged to have several other infrastructural support systems such as module cleaning system for SPV modules, plant illumination system, fire alarm system, boundary fencing, approach roads, pathways, drainage system etc.

1.2 Scope of this tender specification

Vendor scope includes supply of all equipment/items with respect to electrical works installation, testing and commissioning of solar photovoltaic power plant, as detailed in CEB tender specification including clarifications and amendments along with this specification, except for supply of PV modules.

This scope includes all activities but not limited to obtaining approval from BHEL/CEB for the datasheets/ drawings/ MQP, manufacture/ testing/ inspection at manufacturer's works, packing, supply, transportation, delivery, unloading, storage, installation and commissioning of all AC and DC side activities of power plant except supply of PV modules.

Note: The above is only a broad outline of vendor scope to give the gist of introduction. The detailed vendor scope is as elaborated under various other sections of the specifications.

1.3 Enclosures to this tender specification

1	CEB Tender specifications and drawings (Total 875 pages)
2	Indicative PV Syst Simulation Report (Tender purpose only)

1.4 Special Instructions to vendor:

It is highly recommended that the vendor shall visit the site to assess all the technical and operational requirements and familiarize with the site conditions before submission of the bid.

Vendor shall provide "Nil Deviation Letter" along with the bid as a confirmation to BHEL specification. Further, if there are any clarifications on this technical specification, the same shall be requested through mail, at least 7 days before the tender submission due date.

2.0 Location/ address of power plant:

8 MWac Solar PV Farm
CEB (Green Energy) Co Ltd,
Tamarind Falls Site,
Mauritius.

3.0 Vendor scope of supply, Installation and Commissioning




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S. No.	Item Description	Qty	Unit
1	Supply of DC Solar Cable from PV module to SMB	8	ST
2	Supply of DC power cable from SMB to inverter	8	ST
3	Supply of inverter stations	8	ST
4	Supply of CSS consisting of inverter transformers, 22kV switchgear panels and other auxiliary equipment as per specification.	8	ST
5	Supply of String Monitoring Boxes (SMB)	8	ST
6	Supply of 22kV MV Switchgear panels	8	ST
7	Supply of 22kV power cable, Cu, XLPE, armoured (for all 22kV connections within solar plant including transformer MV side)	1	ST
8	Supply of OFC cables along with termination kits.	1	ST
9	Supply of SCADA system including PLC panels, computers, software systems and related peripherals & accessories	1	ST
10	Supply of DC side miscellaneous equipment viz., MC4 connectors, cable ties, HDPE pipes etc.,	1	ST
11	Supply of LT, Control / Instrumentation cables	1	ST
12	Supply of UPS, AC-DC converter, ACDB, UPS DB etc.	1	ST
13	Supply of earthing items	1	ST
14	Supply of lightning arrestors	1	ST
15	Supply of items for plant lighting	1	ST
16	Supply of miscellaneous items	1	ST
17	Supply of CCTV System	1	ST
18	Supply of safety related items	1	ST
19	Supply of spare items	1	ST
20	Supply of electrical utility items	1	ST
21	Supply of recommended spares	1	ST
22	Supply of optional tools & equipment	1	ST
23	I&C: Interconnection of SPV modules,	8	AU
24	I&C: Interconnection of SPV modules,	8	AU
25	I&C: DC cable from SCB to PCU	8	AU
26	I&C: Equipment in MCR	8	AU
27	I&C: AC cables from PCU to TRF	8	AU
28	I&C: 22kV MV cables	1	AU
29	I&C: SCADA, Weather monitoring, CCTV, Fire Alarm, Lightning Arrestors	8	AU
30	I&C: Earthing	8	AU
31	I&C: All other Miscellaneous items	8	AU
32	I&C: Peripheral lighting system	8	AU
33	I&C: Protection Philosophy, grading study and calculation for the PV Farm including the 22kV interconnection facility certified by a licensed engineer.	1	AU
34	I&C: Pre-commissioning tests and Commissioning	8	AU

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35	I&C: Operation and maintenance of the plant till successful completion of the 30 days reliability testing and taking over of the plant by CEB.	1	AU
36	I&C: Scheduling & Forecasting for 2 years from the plant acceptance date	1	AU

Note: Above list is only indicative break-up. Vendor shall refer to the CEB specifications along with clarifications for detailed requirements of equipment and works. **All required supplies and services required as per the CEB specifications except for supply of PV modules shall be in the scope of vendor.**

4.0 BHEL scope of supplies and works

For clarity to the vendor, other items and activities within BHEL scope of solar PV plant end of the project are listed below:

1	Supply of PV Modules	~9.3 MWp
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PV modules inputs shall be made available to vendor within 1 month after the PO placement. BHEL shall ensure PV modules at site 30 days prior to the commissioning date.

5.0 Technical specification for supply, installation and commissioning

#	BHEL specification
5.01	<ol style="list-style-type: none"> PV Array Capacity: 9.3 MWp PV Module Wattage: 425 Wp to 545 Wp Following are the functional guarantees required from the respective equipment: Minimum Inverter efficiency (%) at full load: 98.6% Maximum MV dry type transformer losses (%): 1.1% (88kW) Vendor shall ensure AC, DC losses shall be same or better than that of the values in the PV Syst report in the proposed design except for PV modules. Cumulative rating of the solar inverters being supplied shall be at least 8 MW at 50° C Following clause in the CEB tender specification stands deleted: “Each Solar Compact Substation shall be designed in such a way that the loss of 30% of the inverter modules in a given Solar Compact Substation shall not affect the guaranteed delivered powered at the POD i.e. 8MWac, without overloading any of the healthy inverter modules.” Vendor shall submit detailed activity schedule in line with the delivery dates for BHEL approval. Operation and maintenance of the PV power plant till the completion of reliability test and handing over of the plant shall be in vendor scope. Vendor shall carry out all necessary maintenance works including module cleaning as required for successful completion of the reliability test. Evacuation cable termination details: Cable termination in PV farm SS switchgear required is for reception of one run of 3-core 240 mm² Al XLPE underground cable. Cable supports and Meranti wooden cleat shall be provided as per tender drawings by the vendor.



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	10. Recommended spare parts as per the below clause 5.03 and Optional Tools and Equipment as per clause no. 2.37.2.3. of CEB tender document shall be quoted by the vendor in the offer. These are optional line items that may be supplied only if required by BHEL.																																																																
5.02	Display boards and sign boards: Following are in the vendor scope of supply:																																																																
	<table><tr><th>Sl. No</th><th>Description</th><th>Quantity for each Solar Compact Station</th><th>Quantity for Control room</th></tr><tr><td>1</td><td>Board displaying instruction chart for restoration from Electric Shock</td><td>1 No</td><td>1 No</td></tr><tr><td>2</td><td>Board displaying instruction chart for artificial respiration</td><td>1 No</td><td>1 No</td></tr><tr><td>3</td><td>Board displaying dos and don'ts.</td><td>1 No</td><td>1 No</td></tr><tr><td>4</td><td>Board displaying fire extinguishers details and operations</td><td>1 No</td><td>1 No</td></tr><tr><td>5</td><td>"No smoking" board</td><td>2 Nos</td><td>5 Nos</td></tr><tr><td>6</td><td>Danger boards: 22000V with danger symbol in Mauritian local language & English</td><td>As required</td><td>As required</td></tr><tr><td>7</td><td>Identification boards, of suitable sizes, within and outside such as Solar Compact Station, Main control room, Executive lounge, Store room, Gents toilet, Ladies toilet, SCADA room, Battery room, Pantry room etc. BHEL will provide list.</td><td>1 set</td><td>As required</td></tr></table>	Sl. No	Description	Quantity for each Solar Compact Station	Quantity for Control room	1	Board displaying instruction chart for restoration from Electric Shock	1 No	1 No	2	Board displaying instruction chart for artificial respiration	1 No	1 No	3	Board displaying dos and don'ts.	1 No	1 No	4	Board displaying fire extinguishers details and operations	1 No	1 No	5	"No smoking" board	2 Nos	5 Nos	6	Danger boards: 22000V with danger symbol in Mauritian local language & English	As required	As required	7	Identification boards, of suitable sizes, within and outside such as Solar Compact Station, Main control room, Executive lounge, Store room, Gents toilet, Ladies toilet, SCADA room, Battery room, Pantry room etc. BHEL will provide list.	1 set	As required																																
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(a) 5mm thick sun board with LG make vinyl sticker (computerized cutting and pasting) shall be used for Sl Nos 5, 6 and 7.																																																																	
(b) For others, flex banner with design & printing shall be used.																																																																	
5.03	Recommended Spare parts list:																																																																
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	16	AC to DC power converter unit as specified in section 7.6	1	Nos.
	17	DC to DC power converter unit as specified in section 7.7 as applicable	1	Nos.
	18	Relay and Relay bases of each type	5	Nos.
	19	HRC fuses	6	Nos.
	20	Numerical Protection Relay for SS8 Switchgear	1	Nos.
	21	Numerical Protection Relay for SS3 Switchgear	1	Nos.
Vendor shall provide unit price for individual item along with the offer. BHEL may order individual items based on requirement at a later stage.				

6.0 General conditions applicable during supply, installation, commissioning and reliability testing of the PV power plant:

6.1	Vendor shall ensure all items being supplied should be of reputed make subjected to BHEL's approval.
6.2	Vendor shall submit design calculations, installation methodologies, layouts, routing drawings, termination arrangements at respective equipment, identification methodology along the route & at the equipment for BHEL's approval of all equipment prior to implementation at site.
6.3	Vendor shall organize power supply on their own. Accordingly, DG sets of suitable capacity shall be deployed by the vendor for construction works. Similarly, water required for construction works shall be organized by vendor (tankers etc.).
6.4	All machinery such as cranes, hydra, JCBs, forklifts, transport trucks, trolleys etc. necessary for movement and installation of materials / panels / equipment etc. shall be organized by the vendor.
6.5	All necessary tools and tackles such as crimping tool (including heavy duty tools for crimping copper cables up to 630 sq-mm), screw driver set, power screw drivers, cutting pliers, nose pliers, spanner sets, adjustable spanners, hole-saw cutter set, bending tools, torque wrenches, hack saw blades, pipe wrenches, flat / round files, HV termination tools, drilling machines, welding machines, concrete mixers, steel bar bending tools / templates/ shuttering materials for RCC works, spade, shovel, hammer etc. shall be organized by the vendor.
6.6	All necessary measuring instruments such as digital multi-meters, measuring tapes, Vernier calipers, electrical testers, digital meggers (1kV, 2.5kV, 5kV), earth resistance meters, clamp meters, relay testing kit (secondary injection), primary injection kit, infrared thermal imaging handheld temperature meter etc. All these instruments shall possess valid calibration certificate issued from approved NABL or equivalent Mauritian laboratory.
6.7	Vendor shall make their own arrangements for necessary food, drinking water and accommodation for their labour and employees posted at the site. Similarly, food and drinking water required at the site, during the construction operations, shall also be in scope of vendor.
6.8	Vendor shall organize all necessary steps to meet all statutory requirements as applicable in Mauritius such as labour license, PF, ESI etc. and also ensure compliance with relevant acts such as minimum wages act, income tax act, employee insurance act etc. for their labour deployed at site.
6.9	Vendor shall maintain updated labour register, with name, age, qualification, salary, attendance details etc. at the site.
6.10	Vendor shall adhere to all necessary safety norms such as use of helmet, goggles, hand gloves, gumboots, aprons etc. It is the ultimate responsibility of the vendor in all respect to prevent accidents at the site and safeguard their labour from accidents.
6.11	Vendor shall use danger boards, wherever required, to ensure safety of the persons during the work at site.
6.12	Vendor shall, at the completion of every work, clear off the debris, which resulted out of the work. In case of excavation work such as cable trench etc., vendor shall finish the land neatly with necessary leveling, rolling etc.

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6.13	Any damages on the building, structures etc. attributable to the acts of labour/ employees of vendor shall be rectified and made good by the vendor at their own cost.
6.14	No child labour shall be employed for execution of the present contract.
6.15	Any miscellaneous materials, which are found essential for technical completion of the contract but not mentioned explicitly in this specification, shall be deemed to be included in the specification. Accordingly, such materials shall be included by the vendor as part of the offer.
6.16	Special instruction for earthing: All non-current carrying metal parts shall be earthed with two separate and distinct earth continuity conductors to an efficient earth electrode. Accordingly, all cases such as cable support structures, cable ladders, cable trays (control room) etc. shall be earthed.
6.17	Technical deviations, if any, shall be discussed with BHEL site engineers and implementation shall be taken up only after approval from BHEL.
6.18	Vendor shall submit periodic status report, on daily as well as weekly consolidated basis, to BHEL on the progress of the contract.
6.19	Vendor shall, as and when required by BHEL, participate in the review meetings conducted by BHEL/CEB at project site, BHEL-SBD (Bangalore), BHEL-Corporate office (New Delhi), CEB office etc.
6.20	General Guidelines <ol style="list-style-type: none"> Any electrical work which is not mentioned or included in the tender document but necessary for functional requirements of the plant shall be carried out by vendor. Vendor shall prepare all designs / drawings based on the specifications given in the tender and in light of relevant international standard. BHEL reserves right to modify the design at any stage to meet local site conditions / project requirements. All work shall be carried out in accordance with the latest edition of the Mauritius grid connectivity guidelines and rules formed thereunder and as amended from time to time.


7.0 Documents to be submitted for BHEL approval during detailed engineering

Vendor shall submit following documents for BHEL/CEB approval, which shall be submitted to BHEL in phased manner based on priority sequence of activities during detailed engineering (after receipt of purchase order from BHEL)

7.1	Name of vendor/ make, model number/ part number, specification/ sizes/ dimensions/ drawings/ datasheets shall be submitted for all the vendor supplied items.
7.2	Design calculations/ general arrangement drawings/ single line diagrams/ GTP particulars/ datasheets/ schemes/ layouts/ bill of materials, type test reports etc., as applicable shall be submitted for all the vendor supplied items..
7.3	Manufacturing Quality Plans for all the vendor supplied items
7.4	Field quality plan for the field work: civil works, electrical works
7.5	Detailed activity-time chart for project implementation
7.6	Detailed manpower deployment schedule

8.0 Warranty

During the warranty period, whenever a technical problem is encountered with equipment supplied by vendor, BHEL/ end customer shall report the same to the vendor. Vendor must ensure that the problem is attended either by replacement or repair of the defective part(s)/ equipment free of cost. Charges incurred by the vendor towards repair/replacement, travel, lodging, boarding, material transportation, service and any other contingency expenditure shall be deemed to be included in the cost of equipment.

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No additional payment will be made by BHEL/ end customer. Vendor shall inform the escalation matrix of the service team.

9.0 Inspection


Vendor shall submit Manufacturing Quality Plan(s) (MQP) and detailed Test Procedure along with drawings for BHEL's approval of all the equipment.

For the items bought out from dealers, test certificates, as per relevant IS / IEC standards, as issued by manufacturer shall be submitted to BHEL. However, prior approval shall be obtained from BHEL for procurement of the item from dealers and inspection requirement.

Vendor shall accordingly provide inspection call to BHEL. Routine/ acceptance/ type tests, as per the approved MQP and relevant standards (IEC etc.) shall be carried out on the equipment at manufacturer works and shall be witnessed by BHEL/Customer & Customer authorized third party inspection agency.

10.0 Documents to be submitted along with consignment

1)	<p>Following documents shall be submitted at the time of dispatch of all the equipment</p> <ul style="list-style-type: none"> a. Test reports on individual equipment b. Technical manual with system specifications, installation guidelines, commissioning guidelines, schematic drawings, circuit board overlays, system set points, calibration settings, hardware settings, cable schedule, general arrangement drawings, panel details (as applicable). c. Operation and Maintenance manual including final as Built and tested drawings and datasheet, test reports, catalogs of individual components, schematic drgs shall be provided segregated section wise in both hard copy and soft copy.
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Part B: Mechanical Specifications

1. Scope of vendor under this Part

Under this scope, vendor has to design, Supply and Erect Module Mounting Structures (MMS) and Install PV Modules on MMS.

2. Enclosures to Tender Specification

- PV Module Drawing (Tentative)
- Installation Manual (Tentative)

3. Design/Engineering of MMS

Successful Bidder has to submit the MMS design for a fixed tilt angle of **14 degrees with a minimum inter row gap of 6 m**. Also, Modules to be faced in Northern direction considering that site is located below the equator. All structures and foundation designs must include suitable evidence to show that their design is commensurate with a minimum of 25-year life. The calculations and design shall be submitted to BHEL for approval prior to implementation.

The Successful Bidder shall design the PV arrays' mounting systems, foundations, and piers. The design shall be based upon standard industry practice, including the requirements of applicable codes, standards, and permits, as well as the information/specifications provided by the module manufacturer. In addition, given the weather conditions at site and the close proximity of a river, a very strong anchoring system is required. The supporting structures shall be able to withstand gusts of at least 280 km/hr. Design and construct the module supporting structure and its foundation so as to sustain the required wind load and other applicable loadings. The geotechnical investigation report and any other geotechnical investigations carried out by the successful bidder shall be taken into consideration. All design calculations and drawings shall be submitted.

Structural material shall be corrosion resistant and electrolytic ally compatible with the materials used in the module frame, its fasteners, nuts and bolts. The material for the supporting structures of the PV panels shall be hot dipped galvanized steel and should resist corrosion. Galvanizing should meet ASTM A-123 hot dipped galvanizing or equivalent which provides at least spraying thickness of 70 microns on steel as per BS EN ISO 1461:1999, if steel frame is used. Aluminum frame structures with adequate strength and in accordance with relevant BS/international standards can also be used. Bolts, nuts and washers shall be stainless steel grade 316. As per figure below, the minimum ground clearance of the PV Mounting Structure shall be 600 mm. Successful bidder has to submit calculations and drawings for the structural design, signed by a professional registered Engineer (Civil). The structure shall resist wind speeds of 280 km/h and the structure shall be designed as frame structure. All designs should be complied with latest Euro Codes or British Codes, whichever applicable. Genuine copies of Specified codes, relevant to design, should be submitted. 3D Model of As Built Plant has to be made in globally reputed software and has to be submitted.

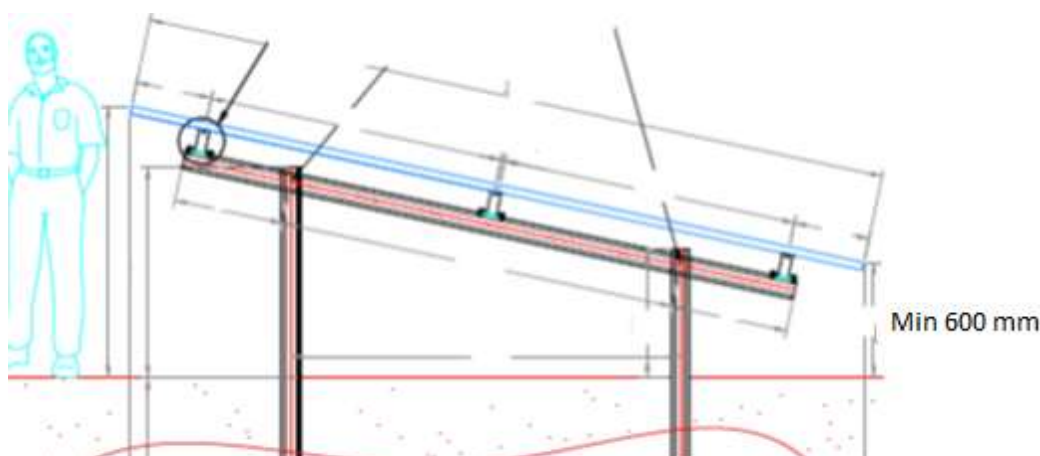


Figure 1. Minimum Ground Clearance for PV Mounting Structure

The Contractor shall specify installation details of the PV modules and the support structures with appropriate diagrams and drawings. Such details shall include, but not limited to, the following:


- ☐ Determination of true north at the site;
- ☐ Array tilt angle to the horizontal;
- ☐ Details with drawings for fixing the modules;
- ☐ Structure installation details and drawings;
- ☐ Electrical cabling and grounding (Earthing);
- ☐ Inter-panel/Inter-row distances with allowed tolerances
- ☐ Safety precautions to be taken.
- ☐ Ground cover ratio (GCR) i.e. Module area compared to area of land required.

The Successful bidder is required to fill the Technical Schedules in the Schedule List of MMS and submit the terms for product warranty. Successful bidder has to submit Manufacturing Quality Plan for Approval

All drawings and installation details shall be approved by the BHEL prior to installation.

3. Supply of MMS


Successful bidder has to offer for inspection of MMS and associated fasteners as per approved drawings and MQP. Third Party Inspection/BHEL/CEB will witness the inspection and will issue dispatch clearance. Successful bidder has to offer for a minimum lot of 100 MT of MMS to reduce the number of inspection except for MMS Columns. Columns has to be the first item to be offered among MMS.

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Part C: Civil specifications

Tentative Vendor scope of engineer and construction works:

S. No.	Item Description	Qty	Unit
1	Topo Survey & geotechnical investigation as per spec all complete	1	AU
2	Preparation & Approval of Architectural drawings by a professional registered Architect, Design & Approval of design calculations and drawings for the structural design, signed by a professional registered Engineer & Billing certification by one local registered Engineer (Civil/Mech) (min. 10yrs experience) as per spec. all complete	1	AU
3	Jungle Clearance & tree cutting (including statutory clearances)	1	AU
4	Conducting pile test as per BS standard for MMS foundation and submit the report to BHEL & customer for approval all complete	1	AU
5	Land levelling and grading including erosion prevention as per spec & as required all complete	1	AU
6	Construction of Chain link fencing & Gates for Boundary as per drg & specification all complete	1	AU
9	Solar facility building (RCC) Ground floor with Cable trench in equipment area (HT Panel, partitioning, SCADA Room with cable trench, Store room, first Floor Conference Hall, pantry and wash rooms -2 storey building as per drg & specification incl all civil & electrical works all complete	1	AU
10	Construction of Gate post building (RCC): Security room with wash room as per drg & specification all complete	1	AU
11	Construction of Compact sub-station base/foundation all complete	1	AU
12	Construction of RCC Retaining wall (as and where required) all complete	1	AU
13	Construction of River cross-over culvert as and where required all complete	1	AU
14	Construction of road and kerb wall as per drg & spec. all complete	1	AU
15	Construction of parking area 420 sqm as per drg & spec. all complete	1	AU
16	Construction of masonry drains as per drg & spec all complete	1	AU
17	Construction/supply of septic tank and absorption pit as per drg & specification all complete	1	AU
18	Construction/supply of underground (4000L) & overhead tank (1200L) as per drg & specification all complete	1	AU

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Any other items which are not mentioned above but required as per CEB's specification will be done under this contract without any financial implication.

The defects liability in building and civil works shall not be less than 10 years.

All reports, statements, returns, diagrams or drawings, etc., which the Contractor is required to submit to the BHEL/CEB (Green Energy) co. Ltd during the progress of the Works are, unless otherwise directed, to be furnished in duplicate.

Documents required for approval:

Civil work layouts, plans and elevations inclusive of dimensions:

- Fencing and gate details
- Layout drawings showing the row spacing and location of site infrastructures
- Layout of all buildings, rooms and sanitary wares
- Detailed structural and building works drawings and calculations.
- Detailed building services drawings and calculations.
- Civil works required for cable trenches, ducts etc.
- Access roads, draining system and parking facilities inclusive of the detailed design
- Painting Procedure
- Quality Assurance Manual


Civil Engineering Report

A Civil Engineering Report shall be submitted to the Employer for approval within four weeks of the Award of Contract. Information to be provided shall include but not be limited to the following:

- 1) Details of personnel employed for the design of civil works including positions held and curriculum vitae.
- 2) Details of key personnel to be employed on site during the construction period. These shall include the site management team and quality control engineers.
- 3) Information on types of foundations and structures selected for the works.
- 4) List of codes of practice to be used for the designs.
- 5) Details of all loadings, both actual and assumed, incorporated into the designs. Where interpretation of codes of practice is required (e.g. for wind loading) the results shall be clearly stated.
- 6) Details of any computer programs to be used for the design.

The civil engineering works shall include the design and construction, among others, of the following:

- ☐ Fencing of the site
- ☐ Retaining walls as and where required
- ☐ Leveling of ground at the site;
- ☐ Develop access roads within the enclosed plots and to connect the two plots (Compaction tests shall be carried out at every (Max) 300 mm thick layer, where there would be vehicular traffic);
- ☐ Arrange for proper water drainage system;
- ☐ Foundations for Module Supporting Structures

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- ☐ Cable Trenches/ducts (Compaction tests shall be carried out at every (Max) 300 mm thick layer
- ☐ Container bases (compact stations)
- ☐ Provision of the Architectural Design for a two-storey concrete building of an approximate surface area of at least 430 m² to include as per tentative tender drawing.

Tentative scope under Topo Survey & geotechnical investigation

SL. NO.	DESCRIPTION	UNIT	Approx. QTY
1	Topographical survey shall have to be done of the proposed site at suitable grid interval(10M×10M) by total station equipment	Acres	40
2(a)	Location and making 150mm nominal diameter bore hole at various location up to required depth as per site condition maximum of 10 meter below ground level in all type of the soil including laterite/weathered soft rock using suitable approved method of boring including chiseling, cleaning, providing casing pipes as required or as directed; performing standard penetration test at every 1.5m interval down to required depth below ground level and at change of strata and at the depth however undisturbed soil samples could not be collected;	m	30
2(b)	Performing standard penetration test and collecting of disturbed samples at every 1.5m interval down to 10 meter/as required depth below ground level and at change of strata at depths wherever undisturbed soil samples could not be collected; and back filling of bore holes with sand on completion of the same etc., all complete as per specification.	No's	25
2©	Core drilling (N× size) in rock up to a required depth of maximum of 6 meter to required depth below ground level using hydraulic feed rotary drill and double tube core barrel with diamond bit including collection of core samples.	m	25
2(d)	performing SPT at locations where core recovery is less than 20%, maintaining continuous record of core recovery and RQD, keeping the cores in wooden core boxes, transporting the cores to laboratory. Location shall be identified and shown by BHEL prior to commencement.	Each	25
3(a)	Collection of undisturbed samples from bore holes are required	Each	25
3(b)	Collection of disturbed samples from bore holes are required	Each	25
4	Conducting electrical Resistivity Test(ERT) at various locations complete as per specification, drawings and as directed by the engineer- In-charge.	Each	10
5	Conducting Laboratory test on soil samples at an approved laboratory including preparation of soil samples to determine the following properties etc. all complete as per specification.		
a	Atterberg limits	Each	40
b	Dry and Bulk Density	Each	40
c	Moisture Content	Each	40



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d	Sieve analysis	Each	40
e	Specific Gravity and Void ratio	Each	40
f	Direct Shear Test or Tri-axial Test as applicable	Each	40
g	CBR Test & consolidation	Each	40
h	Shrinkage Limit Test	Each	40
i	Swell pressure test	Each	40
j	Unconfined Compressive strength	Each	40
6	Conducting Laboratory test on rock samples (if rock encountered including preparation of samples to determine the following properties etc. All complete as per specification.		40
a	Determination of RQD / Slake durability test	Each	40
b	UCC test (in-situ & saturated)	Each	40
c	Specific gravity test & Hardness	Each	40
d	Water absorption test & Unit Weight	Each	40
7	Preparation and submission of draft report in two copies and final report in five hard copies and two soft copies in CD's after the approval of draft report including all field records, laboratory test results, graphs, analysis of test results and suitable recommendation regarding type of foundation etc. all complete as per specification etc.	LS	1
8	Chemical analysis of water as per BS standard-Scope to cover organic, Inorganic, sulphates, Chlorides, PH values, suspended matter, acids, alkalis etc. to be done for two samples (one for ground water & another one for river water) in the area as decided with BHEL site engineer	LS	2
9	Chemical Analysis -Soil as per relevant standard. Scope to cover content of sulphates, chlorides and PH value to be done for two samples in the area as decided with BHEL site engineer	LS	2



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Part D: Site establishment specifications

SPECIAL CONDITIONS OF CONTRACT

The contractor will be required to provide as per following Scope of works and special terms & conditions for site establishment works including security services:

SCOPE OF SITE ESTABLISHMENT WORKS			
S. No.	Item Description	Qty	Unit
1	Providing and supplying container office of B-Type (container as per attached drawing) size 20x10 feet bunk house including office Furniture, including 1.5 Ton A/c installation, services, complete in all respects on rental basis w.r.t. BHEL drawing on rental basis for a period of 8 months	1	sets
2	Providing and supplying container office of C-Type (container as per attached drawing) size 20x10 feet bunk house including Furniture, including 1.5Ton A/c installation, services, complete in all respects on rental basis w.r.t. BHEL drawing for a period of 8 months	1	sets
3	Providing & fixing readymade western style toilet with cleaning facilities of size 3x4x8 feet cubical type with hard surface flooring with all accessories, fittings and fixtures with Septic tank etc. Complete for 8 Months	1	sets
4(a)	Providing and installing water tank -1000Liters capacity x 2 nos., including plumbing, motor etc. complete.	1	sets
4(b)	Supply of utility water in water tank @ approx. 2000Lts per day or as per requirement on daily basis.	200	Nos (in days)
5	Supply and installation of Latest version of Desktop computer/ Laptop (17 inch monitor-Samsung/Dell/Acer/HP/Asus/Lenovo, 8th Gen Core i3-6006U/RAM-8GB/Hard disk capacity-1TB) with valid licensed version of antivirus and with software viz. MSOffice, PDF Converter and writer, Auto-Cad for electrical and civil with other standard software and also with 800 VA UPS including repair and maintenance for 8 months	1	Sets
6	Supply and installation of Latest version of Desktop Computer/ Laptop (17 inch monitor-Samsung/Dell/LG/Acer/HP/Asus/Lenovo, 8th Gen Core i3-6006U/RAM-8GB/Hard disk capacity-1TB) with valid licensed version of antivirus and with software viz. MSOffice, PDF Converter and writer, and also with 800 VA UPS including repair and maintenance for 8 months	1	Sets
7	Providing internet connection of high speed capacity-4G dongle/Broadband 20Mbps speed with 50GB/month including monthly data charges for 8 months	1	Nos.
8	Supply and installation of A4 Printer (Black and white) with scanner and Xerox facility (Brand - HP, Canon laser jet or equivalent) including cartridge refilling and maintenance for 8 Months.	1	Sets




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9	Supply and installation of A3 Printer (Black and white) with scanner and Xerox facility (Brand - HP, Canon laser jet or equivalent) including cartridge refilling and maintenance for 8 months.	1	sets
10	Pantry , crockery set, Hot plate or equivalent to serve 10 people for 8 Months	1	Sets
11	Drinking water in 18.9L bottles,95L(5 cans) per day minimum - will be Local arrangement	900	Nos. (20L Bottle)
12	Providing Tea / coffee and snacks at site on daily basis (two times a day) -for 10 persons	8	Months
13	Unloading of solar module boxes from vehicle, stacking at levelled ground as per manufacturer's specification within 12 hours of receipt at site.	8	MW _{AC}
14	1 No. DG set (New reputed brand, silent version) cabling to the load to be included. 15KVA -Capacity.	8	Months
15	Supplying Diesel - @ 12 hours' operation per day including transportation of diesel. Payment will be on market rate. Estimated @ 750 liters per month approximately.	6000	Ltrs.
16	Providing pantry services requirements and also file maintenance and cleaning of containers and miscellaneous office services and providing 1 no. office boy for these services.	8	Man months
17	Leasing of 1 no. fully furnished 2BHK house with minimum 600-800 sqft plinth area for site in-charge family accommodation purpose inclusive of local tax, water charges for utility and potable & electricity charge for 300 units/month. Furniture/facilities shall be provided as per attached specification.	8	Months
18	Leasing of 1 no fully furnished 3BHK house with minimum 1000-1200 sqft plinth area for BHEL guest house/bachelor accommodation purpose inclusive of local tax, water charges for utility and potable, 1 domestic helper, 1 cook & electricity charge for 500 units/month. (excl LPG & kitchen consumables). Furniture/facilities shall be provided as per attached specification.	8	Months
19	Hiring of a 4-wheel drive SUV vehicle (6-8 seat) with local registration with compliance of all local Mauritius statutory requirement for commercial vehicle with valid registration, license, pollution, fitness and other documents. Vehicle will be furnished whenever required as per site incharge's instruction.	60000	Per KM
20	Hiring of a sedan vehicle (4+1 seat) with local registration with compliance of all local Mauritius statutory requirement for commercial vehicle with valid registration, license, pollution, fitness and other documents. Vehicle will be furnished whenever required as per site incharge's instruction.	60000	Per KM
21	Overtime charges including possible overnight stay for drivers of SUV/Sedan vehicle. Payment shall be made as per actual extra hour stay more than 12 hours as per certification of site in-charge.	660	Hours
22	Deputation of 2 nos. Site Civil Engineers (Diploma) stationed at site Rolls, responsibilities and duty of work shall be as per direction of site in-charge. Payment will be made as per certification of site in-charge.	12	Man months

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23	Deputation of 2 nos. Site Electrical Engineers (Diploma) stationed at site. Rolls, responsibilities and duty of work shall be as per direction of site in-charge. Payment will be made as per certification of site in-charge.	15	Man months
24	Deputation of 2 nos. Site Mechanical Engineers (Diploma) stationed at site. Rolls, responsibilities and duty of work shall be as per direction of site in-charge. Payment will be made as per certification of site in-charge.	12	Man months
25	Providing the services of 1 no. Certified Site Safety engineer (Diploma) stationed at site. Rolls, responsibilities and duty of work shall be as per direction of site in-charge. Payment will be made as per certification of site in-charge.	6	Man months

- 1) BOQ sl no. 1 to 10,14 are to be hired on rental lease/temporary based, hence rates to be considered for leasing the items on monthly/contract periods for BOQ line items on rental basis as specified in Units.
- 2) For Sl. No. 11 and 25 actual quantities will be paid. In case of availability of power supply from customer (CEB), item sl no. 14 & 15 will not be operated
- 3) BHEL is having rights to operate/not to operate any of the above items depending on the requirement at site and payment will be made accordingly. Regarding date of commencement of each items/activities, separate intimation shall be given to vendor as per site requirement. The contractor shall pay wages to his workmen such as office boy, clerks, unskilled works at the rates as applicable under section 94 of the Employment Relations Act (Remuneration) (Amendment) Regulations 2017 and for security guard at the rates as applicable under section 93 of the Employment Relations Act under the Private Security Services Employees (Remuneration) Regulations 2019 as applicable in Mauritius. The contractor shall comply with the provisions of the Mauritius National Minimum Wage (Amendment) Regulations 2021, Private Security Services Employees (Remuneration) Regulations 2019, The Workers' Rights 2019 – Act No. 20 of 2019 and other statutory law relating thereto and made there under from time to time.
- 4) The rates of wages for manpower deputed by the contractor should be lump sum inclusive of Basic, CSG, NPF, PRGF gratuity if applicable, bonus, night, armed allowances etc. as applicable in Mauritius.
- 5) Demurrage charge due to delay in unloading of solar modules will be borne by contractor.
- 6) Damage during unloading of solar module is solely responsibility of contractor. Any damage during transport to be intimated to BHEL immediately.
- 7) After unloading the solar modules at site, all the solar modules will be handed over to the contractor. Hence contractor is responsible for preservation, safety, security of the solar modules/ plant till handing over of the plant.
- 8) Security deployment (with/without arms and skilled/semi-skilled) and provision of CCTV camera shall be made available as per instruction of Site In-charge. Necessary tools, tackles and PVS/MS portable cabins at various places of security personals deployment shall be responsibility of contractor as per satisfaction of site In-Charge.

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- 9) Complaint register will be kept at site and the recorded complaint to be resolved within 24 hours to be duly signed by site in charge. Any delay in the service may attract deduction in service bill on pro rata basis.
- 10) Before start of work, during construction and after completion of all works at site, drone video of total plant area to be captured at free of cost as per site in-charge's requirement (3-4 times as per requirement). All approval for drone survey shall be responsibility of contractor.
- 11) If customer provides water & Electricity for site office, then the cost of accessories, connection, plumbing & wiring with the satisfaction of site in-charge to be included in total package value, which will be not paid separately.
- 12) Contractor is responsible liaisoning for local registrations, legal matters, embassy matters, BHEL & BHEL officials bank account opening formalities and other statutory requirement to be fulfilled on behalf of BHEL. All statutory charges will be reimbursed actuals to the contractor on receipt of payment proof.

2.1 Common scope of works for site establishment works, security services & labour works

1. The contractor will have to take all measures for providing services at the premises of 8MWac Solar PV FARM at TAMARIND FALLS, HENRIETTA (PHASE II), MURITIUS project site as directed by site administration round the clock including all property within its premises for which personnel engaged on duty will have to remain extremely vigilant and alert.
2. In case of loss of any item by theft or pilferage, contractor would have to take necessary action and comply with the formalities required under the Law and lodge FIR with the Police. The personnel of the contractor performing duty shall be responsible for safe guarding items entrusted to them.
3. The contractor shall contact local police/administration, if required.
4. Contractor shall maintain liaison with Police/Fire/Civil Authorities and Red Cross Authorities if applicable.
5. The contractor's employees engaged on duty shall be responsible for searching the person and their belongings/materials on a random basis as well as in suspicious cases both during entry and exit and inform the designated Officer in case the person is found to be unauthorized carrying any property of the Company.
6. Contractor's employees on duty shall take all preventive measures to avoid fire or accident taking place. However, in case of such an eventuality, suitable action to be taken immediately for firefighting and informing the designated officer of BHEL immediately.
7. Contractor's employees on duty shall keep a record of entry and exit of all visitors and vehicle and carry out search of both while entry and exit.
8. Contractor's employees on duty shall maintain proper records/documents as per requirement of the company in connection with above services. Such records/ documents would be in the entry/exit register of men and material, records of intimations given to designated officers with regard to aforesaid incidents.
9. Contractor's employees on duty shall ensure that lights/fans are not in use beyond office hours and are switched off and water taps are turned off.
10. Contractor's employees on duty shall watch habitual offenders and mischief makers and inform the designated officer of BHEL if anything unusual is noticed.
11. Contractor's employees on duty shall provide protection in case of assault/ apprehension of assault to any employee of BHEL.
12. Contractor's employees on duty shall seize goods suspected to be stolen and hand them over the designated officer of BHEL without delay.




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13. Contractor's employees on duty shall bring to the notice of designated officer of BHEL any untoward occurrence/incidents in the Company premises.
14. It will be open to BHEL to ask for replacement of any or all of contractor's employees if he/they will not fully meet BHEL's contract requirement. Alternatively, the contractor may withdraw their employees for administrative reasons but they should be suitably replaced. If the employee(s) on duty are in disciplined or sleeping during duty hours he/they will be suspended/replaced by the contractor immediately.
15. The contractor will also comply with all other statutory provisions as applicable, including any applicable Act and relevant rules framed there under.
16. The contractor shall pay wages to his workmen such as office boy, clerks, unskilled workers and labours at the rates as applicable under section 94 of the Employment Relations Act (Remuneration) (Amendment) Regulations 2017 and for security guard at the rates as applicable under section 93 of the Employment Relations Act under the Private Security Services Employees (Remuneration) Regulations 2019 as applicable in Mauritius. Security Guards are also eligible for other allowances such as attendance bonus, travelling allowance, washing allowance etc. and the contractor shall be responsible for payment of the same. The contractor shall disburse the wages in the presence of the company's representatives and obtain their signature in the payment register on or before 7th of every month, if it falls on Sunday payment shall be made on previous day.
17. The rates of wages should be quoted lump sum inclusive of **Basic, CSG, NPF, PRGF gratuity if applicable, bonus, night, armed allowances** etc. as applicable in Mauritius. Exact amount of wages remitted to CSG, NPF & PRGF authorities in respect of workmen engaged for the above & the details of amounts remitted towards their CSG, NPF & PRGF if applicable for each month to be enclosed.
18. The contractor shall comply with the provisions of the Mauritius National Minimum Wage (Amendment) Regulations 2021, Private Security Services Employees (Remuneration) Regulations 2019, The Workers' Rights 2019 – Act No. 20 of 2019 and other statutory law relating thereto and made there under from time to time.
19. The contractor must be registered under the Mauritius Companies Act and should have all applicable/appropriate licenses in their own name, that may be applicable to him. He shall be liable to pay all such sum, or sums that may become payable as contribution, compensation, penalty, fine or otherwise, which the provision of the said acts, to or on behalf of any workmen employed by the contractor by an authority empowered under the relevant Act. Any cost incurred by the Management of BHEL in connection with any claim or proceedings under the said Acts or in respect of loss, injury or improper performance of this contract by the contractor, is workmen, servant and any money which may become payable to the management of BHEL as aforesaid shall be deemed to be deducted by the management of BHEL from any money due or accruing to the contractor by the management of BHEL or may be recovered by the management of BHEL from the contractor in the other manner.
20. CSG, NPF, PRGF gratuity if applicable, the contractor shall obtain necessary declaration forms from his employees & obtain individual insurance and NPF number & shall furnish to the company necessary proofs for having made remittance of insurance, CSG, NPF, PRGF contributions in respect of all contract laborers engaged by him if applicable.
21. The contractor has to Arrange for Statutory inspections if required as under Factory Inspector, Labour Commissioner, PF Commissioner and other authority connected to this project work.
22. All the workers shall be insured with the insurance policy. This will be done at the Companies' cost.
23. The BHEL General Conditions of contract shall also apply to this work except to the extent modified in these conditions. BHEL-SBD General Conditions of Contract is enclosed with this NIT. The contractor shall scrutinize the same and acquaint himself with provisions thereof to the satisfaction.
24. In view of the necessity to complete the works as per the schedule and for stringent quality control it is required that works awarded to contractor shall not be sublet by the contractor to any other agency in partial or full. All works shall be carried out under the supervision of contractor by placing their regular employees at site.

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25. **TOOLS AND PLANTS:** The contractor shall arrange, at his own cost, trained operators, fuel and other consumables for Drones, CCTV cameras, DG Set, Hydra cranes, fork lift. T&Ps in defective / damaged condition shall be rectified promptly to the full satisfaction of BHEL engineer. Contractor shall maintain records for maintenance of major T&Ps. These shall be made available for Inspection whenever required. In case of any lapses on the part of the contractor, BHEL at its own discretion shall get the servicing / repair of equipment done at the risk and cost of the contractor along with BHEL overheads. Further, if there are breakdowns / damages due to negligence of the contractor, the complete service / repair charges and cost of all the spares damaged with BHEL overheads shall be recovered from contractor's bills.
26. It is the responsibility of the contractor to arrange gate pass for all his employees for entering the project premises. Necessary coordination with customer officials is the responsibility of the contractor. Contractor to follow all the procedures laid down by the customer for making gate passes. Where permitted, by customer / BHEL, to work beyond normal working hours, the contractor shall arrange necessary work permits for working beyond normal working hours.
27. The actual deployment will of Labour and Engineer/supervision staff shall be so as to satisfy the erection and commissioning targets set by BHEL. If at any time, it is found that the contractor is not in a position to deploy the required engineers/supervisors/workmen due to any reason, BHEL shall have the option to make alternate arrangements at the contractor's risk and cost. The expenditure incurred along with BHEL overheads thereon shall be recovered from the contractor.
28. Contractor shall not deploy women labour/workers at night.

2.2 Scope of works for site establishment works:

Providing and maintaining site office set up items/materials as required by BHEL for setting up site office as per annexure I proposed at 8MWac solar PV Farm at Tamarind falls, Henrietta (Phase II), Mauritius Solar PV Project. The contractor will maintain these facilities till the contract period completion.

- Each Line items of BOQ shall be operated/not to be operated depending on the requirement at site as per instructions of site in-charge and payment will be made accordingly on pro-rata basis during contract period.
- Contractor has to do supply, erection and commissioning of the chemical toilet with septic tank as per the annexure requirement of BHEL.
- The cabling from Diesel Generator/CEB Substation to the container will be carried out by the contractor using appropriate cable size for the load with a reputed make electric meter.
- Contractor should have the capacity of Loading/Unloading of Materials, stacking as per site I/C instructions by Mobile cranes/Hydra cranes of sufficient capacity with Fuel, drivers, supervisor inclusive.
- All the materials under this contract shall be loaded/unloaded from the trucks/lorry, project stores, sheds / storage yards and transported to erection site and stored in the storage spaces in a manner so that they are easily retrievable till the contractor erects them.
- All the equipment shall be handled very carefully to prevent any damage or loss. No untested wire ropes / slings etc. shall be used for unloading / handling.
- Approach road conditions from the stores / yards to the erection site may not be equipped and ideal for smooth transportation of the materials. Contractor may have to be adequately prepared to transport the materials under the above circumstances without any extra cost. The contractor may familiar himself with soil conditions at site.
- Items stored in temporary fencing area shall be stacked up at least six inches (6") off the ground. Items should not be stored in a low lying area where water logging is a possibility.
- Stores clerk to ensure for acknowledging stores receipt and Stores issue of materials, maintaining stock balance records, filing and maintaining records in Computer and files.
- Contractor has to provide and supply container office of B & C-Type size 10x20 feet bunk house including Furnitures, A/c installation complete in all respects as per the enclosed porta cabin drawing.
- Chemical toilet with Septic tank shall be as per Mauritian Standard or British standard code.




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12. PVC Water storage tank and plumbing materials should be of reputed company and good quality Plumbing line by ISI PVC pipe manufacturer. Motor for pumping the water from a sump to be considered including construction of a sump of suitable capacity for long term storage.
13. Suitable pantry arrangement for preparation of light refreshment /snacks/tea etc. in lieu of hotplate or any electrically operated equipment such as induction heater etc.
14. Covered store shed / Warehouse with raised platform of 300 mm height with GI Sheet roofing and side wall cladding to ensure water proofing. 1 no. shed of 1000 sqm with 4.5 m height with gate and lock facility. Storage shed shall be provided with 2 flood lights each on outside and inside connected to DG Set. Covered shed should be water tight and 300mm height concrete platform since electrical items will be stored in that shed. The covered shed installation shall be done within 15 days from the date of instruction of site engineer.
15. Motors, electrical equipment, control equipment and instruments, and special or precision items requiring special care, etc shall be stored in covered shed.
16. Construction and Providing Temporary fencing 2 meters above ground for an area of 25000Sq.m. (60% for PV Modules at one place and 40% for other Equipment at other place) with locally available wooden / Metal poles / angles and barbed wire with one metal gate for each storage area of 5-meter width at each place. To be dismantled after 1 year or as per instructions of site in-charge. Both Storage facility shall each be provided with 4 flood lights connected to DG Set. Construction of fencing shall be done within 15 days from the date of instruction of site engineer.
17. Portable Security MS/PVC cabin of minimum size 4x4 feet for seating of security personnel at different locations of site to be provided.
18. All other electrical items cable, meter etc. should be of reputed ISI, Mauritius standard or British standard or Code of practice Marked manufacturers.
19. The Contractor shall deploy only qualified and experienced Engineers/supervisors. They shall have professional approach in executing the work.
20. Site Civil Engineers will be qualified with Engineers/Diploma course with valid certificate and minimum 1-2 years works experience. Civil Engineer to supervise the civil engineering works during the construction works.
21. Site Mechanical Engineers will be qualified with Engineers/Diploma course with valid certificate and minimum 1-2 years works experience. Engineer shall be involved in supervising all mechanical related works at project site.
22. Site Electrical Engineers will be qualified with Engineers/Diploma course with valid certificate and minimum 1-2 years works experience. Engineer shall be involved in supervising all Electrical related works at project site.
23. **Site Safety Officer**
24. Site Safety Officer will be qualified with valid certificate and minimum 1-2 years works experience.
25. The Site Safety Officer shall be a competent person experienced in safety and welfare matters, and shall be fluent in the English language.
26. Site Safety Officer shall be employed by the Contractor and will be responsible for all aspects of safety and implementation of environmental impact requirements, including instruction, warning, signs, documentation, and first aid and ensuring that good housekeeping is maintained at site. Safety officer to ensure Occupational Safety, Health & Welfare Act of 2005.
27. The Site Safety Officer shall remain responsible for ensuring that operations at the Site are at all times carried out in a safe manner and in accordance with the requirements of all legislation appropriate to the work in hand.
28. Safety officer shall ensure safety of all the workmen, material and equipment either belonging to him or to others working at site. He shall observe safety rules and codes applied by BHEL without exception (ISO 14001 & OHSAS 18001).
29. Safety officer to ensure site personnel with safety helmets complying with BS EN 397 and to ensure that all operations are carried out in accordance with the applicable safety recommendations of BS 8004 and BS 8008.
30. Safety officer to ensure that all times during site erection approved hard hats and safety boots must be worn by the site personnel.
31. Safety officer to ensure that any erection or mobile cranes used during construction shall in no way interfere with the existing 66 kV, 22kV and LV overhead lines and equipment.
32. Safety meetings shall be held as part of the weekly site meetings.

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33. Non-conformity of safety rules and safety appliances will be viewed seriously and bhel has right to impose fines on the contractor as under for every instance of violation noticed.

2.3 Scope of works for site security services:


1. The Contractor shall ensure that access by unauthorized persons to 8MWac Solar PV FARM At TAMARIND FALLS, HENRIETTA (PHASE II), MURITIUS area is prevented at all time during the contract period.
2. The Contractor to ensure safeguard the materials, stores and any installations on the sites. The use of unsupervised guard dogs shall not be permitted.
3. 8MWac Solar PV FARM At TAMARIND FALLS, HENRIETTA (PHASE II), MURITIUS have three plots with separate fencing for each site. The Security Guards should possess the training in basic security duties such as access control and antisabotage checks of persons, baggage and vehicles. Armed guards should be thoroughly proficient and trained in handling of arms and other security equipment's they are supposed to carry or use.
4. The contractor shall man all entry points for 24X7 duty, regulate and check the flow of men/ material and ensure that every entry/exit is as per the valid documents and a record of the same be maintained regularly. To guard the premises in such a manner that no property is taken away by any one unauthorized.
5. One Security Supervisor should supervise all security guards for daily activities.
6. Deployment of security persons without arms (watchmen), 7 Days/ week, 2 shifts per day (8Hrs working per shift), (5 for 1st shift, 5 for 2nd shift) total 10 numbers
7. Deployment of security persons without arms (watchmen), 7 Days/ week, Night shift (8Hrs working - for night shift) total 5 numbers.
8. Deployment of security persons with arms (Security Officer), 7 Days/ week, 1 shift per day, (3 nos. for night shift).
9. Contractor's employees on duty shall patrol and check movement of man and materials during day and night and ensure that no theft, pilferage, trespass, accident, nuisance, disturbance of peace and disorderliness etc. take place in the area.

2.4 Security Guards (SG) Eligibility Criteria

The bidder must be registered under the Mauritius Companies Act and should have all applicable/appropriate licenses for security agency in their own name or tie up with registered security agency.

All the workers shall be insured with the insurance policy. This will be done at the Contractors' cost.

1. SGs should not be more than 50 years of age.
2. SGs should be physically and mentally fit and should be not suffering from any apparent disability. Medical fitness certificate from authorized medical practitioner should be provided in case of each employer.
3. Service provider would be required to provide verified record, character and antecedents of each Guards vetted by Local Government Security Department(s).
4. SGs should have training in basic security duties such as access control and anti-sabotage checks (of persons, baggage and vehicles) including use of basic security tools. Further, he should possess knowledge of potential threats to any miscreant activities in general terms and also knowledge of what is "suspicious" in terms of men and material in the given local context.
5. SGs should have a minimum qualification of 10th standard or matriculation equivalent.
6. SGs should be proficient in the local language and have working knowledge of English to communicate with BHEL personnel.
7. SGs appearance should be neat and clean and performs duties in proper uniform.

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8. SGs should be thoroughly proficient and trained in handling of arms and other security equipments he supposed to carry or use during the duty period.
9. Service provider should equip the security guards with necessary security devices such as radio equipment (for communication), arms etc., as per requirements.
10. Service provider should have a routine check of functioning of SGs to ensure that the supplied LSGs are discharging their duties efficiently and as per BHEL's requirements. Service provider should occasionally do the surprise checks/visits to monitor workings of supplied Guards.

2.5 Quality Parameters for Service Provider Companies:

Service provider is also requested to provide following information along with supporting documents:

1. List of other clients/range of security the Company is serving in terms of supply of SGs in Mauritius and other countries.
2. Past experiences, service history, achievements of the company as Security Service Provider.
3. Registration Documents of the company under the relevant statutory regulations such as labor laws applicable in Mauritius.
4. Size of reserve pool of men and logistics such as response teams, patrol vehicles/security equipments/control room facilities/communications equipments under use etc.
5. Whether the service provider has its own training facility to its personnel or availing facilities being given to its security guards.
6. Details/documentary proof of pay and allowances, gratuity and leave facilities being given to its security guards.
7. Industry certification obtained by the company for its quality of service i.e. certificates issued by ISO or other specialized security certification bodies.
8. Scope and limit of liability of the company as well as take home pay and allowances of the security guards.


The duration of the contract period with a clause to renew the contract for an equivalent period subject to satisfactory performance.

2.6 Tentative number of Security Personnel to be Posted at Site/Timings of Work

- i. Total Manpower- 19 (Eighteen)
- ii. 1 Security supervisor, 15 Security guards (SG), 3 armed security guards
- iii. Working Days- Monday to Sunday (24x7).
- iv. No Public holidays.

2.7 General Requirements

1. The contractor shall have to provide two sets of uniform including shoes at least once in two years to their manpower at their own cost.
2. The contractor shall have to train all the manpower engaged by him in operating all firefighting equipment located in the office complex.
3. Necessary deduction of Tax at source as per rules will be made from the contractor's bill and a certificate will be issued to this effect.
4. The contractor shall be responsible for resolving all disputes between their employees and themselves and shall ensure proper performance of duty by their manpower.
5. The contractor shall take appropriate Insurance coverage for the requisite amount in respect of manpower and Supervisor, as applicable. Insurance Cover shall be obtained by the contractor at his own


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cost within a fortnight from the commencement of the contract and copy of Insurance cover shall be sent to the BHEL project site immediately.

6. The liability of any compensation for injury to personnel or others arising as a result of duties by their manpower shall be that of the contractor.
7. Delayed, non-payment or short payment of wages to his employees by the contractor shall be taken seriously by BHEL and contract may be terminated if no valid reason is found.
8. It is reiterated that there is no employer-employee relationship either with the contractor or with contractor's employees or with the contractor's organization. This is a contract and BHEL have no connection directly or indirectly or even remotely with contractor employees or with contractor's organization. This is only a business transaction.
9. Security personnel should be in uniform and with adequate facilities for night duty with necessary Tools and tackles will comprise of Torches, flash light, batons, lathes, whistles etc. Suitable lighting arrangement for night lighting and any shelter for the watch point at the site area may be considered in the overall quote.
10. Any Accommodation and medical facilities shall not be provided by BHEL for the Security personnel engaged by the Contractor.
11. Any theft or missing of material after unloading at site is the sole responsibility of the contractor throughout the contract period.

31. List of Annexures Attached:

Annexure No.	Description of Annexure
A	Certification of Work safety by Contractor
B	Certificate Of Declaration Confirming the Knowledge of Site Condition
C	Undertaking by the tenderer(s) on payments of wages
D	Declaration for deduction on account of loss of materials due to theft or pilferage
E	Certificate Of Declaration Confirming the Mauritius local Laws
F	Undertaking for compliance of Mauritius and International standards

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ANNEXURE A

(To be made on Bidder's letter head)


SAFETY DECLARATION

Subject: Certification of Work safety during “Site establishment works including security Services for 8MWac Solar PV farm at Tamarind falls, Henrietta (Phase II), Mauritius”.

This is to certify that, during the execution of the work for “Site establishment works including security Services for 8MWac Solar PV farm at Tamarind falls, Henrietta (Phase II), Mauritius”, undertaken by us, we shall be solely responsible for the Safety and health of our team consisting of Security guards, site engineers, HSE personnel and labour working at the site. Required statutory provisions governing Workmen safety and protection and accident compensation shall be our sole responsibility and entirely covered by us during the course of mobilization and execution of works. All statutory norms and guidelines issued by government and/or any statutory authority for COVID-19 (or) any pandemic situation will be taken care by us.

For and on behalf of

M/s

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ANNEXURE B

CERTIFICATE OF DECLARATION CONFIRMING THE KNOWLEDGE OF SITE CONDITION

I/We_____ hereby declare and confirm that we have acquired full knowledge and information about the site conditions, wage structure, industrial climate and total quantum of work involved. We further confirm that the above information is true and correct and we will not raise any claim of any nature due to lack of knowledge of site condition.

For and on behalf of

M/s

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ANNEXURE C

(To be submitted in the bidder's letter head)

UNDERTAKING BY THE TENDERER(S) ON PAYMENTS OF WAGES

We _____ (Name of the Tenderer) hereby declare that we have fully read and thoroughly understood the tender requirements and accept all terms and conditions of the tender. Our offer is in confirmation to all the terms and conditions of the tender.


We also confirm that if once work is awarded to us, we are responsible for making the due payment of wage/salary to all our Labourers/staff along with all statutory payments in timely manner. In case of any default from our side in making payment as mentioned above, BHEL may make the salary/wage/ lumpsum payment directly to our labourers/staff deployed by us and is authorized to recover the expenditure so incurred with processing charges from our Security Deposit/Bank Guarantee/ Running Bills. We further confirm that, we will be responsible for all statutory obligations (like Minimum wages, CSG / NPF, NSF, PRGF and Bonus etc.) towards our deployed manpower.

We also hereby agree that, at the end of every wage month, we will submit the wage details due to the manpower deployed by us to BHEL before 7th of next month.

Date:

Thanking you.

Yours faithfully,
(Signature, date & seal of
authorized Representative
of the contractor)

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ANNEXURE D


(To be submitted in the bidder's letter head)

**DECLARATION FOR DEDUCTION ON ACCOUNT OF LOSS OF MATERIALS DUE TO THEFT
OR PILFERAGE**

We declare that as per tender conditions we are undertaking for any deduction on account of loss of material due to theft or pilferage during contract period. It is also declared that, in case of loss of any item by theft or pilferage we would have to take necessary action and comply with the formalities required under the law and order.

Date:

Thanking you.
Yours faithfully,
(Signature, date & seal of
authorized Representative
of the contractor)

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ANNEXURE E


(To be made on Bidder's letter head)

CERTIFICATE OF DECLARATION CONFIRMING THE COMPLIANCE OF MAURITIUS LOCAL LAWS

It is hereby agreed by me/us that I/We shall abide by the Mauritius local laws as may applicable for execution of contract. Any dispute arises on the same either in my/our name or on BHEL shall be settled by me/us.

For and on behalf of

M/s



	PURCHASE SPECIFICATION FOR SUPPLY, INSTALLATION INCLUDING CIVIL WORKS & COMMISSIONING OF 8MWAC SOLAR PV FARM AT TAMARIND FALLS, HENRIETTA (PHASE II), MAURITIUS	PS-439-1380
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ANNEXURE F

UNDERTAKING FOR COMPLIANCE OF MAURITIUS STANDARD AND DEPLOYMENT OF MAURITIUS PROFESSIONAL REGISTERED SECURITY GUARDS, ENGINEER & HSE PERSONNEL

I/We hereby declare and confirm that we will deploy the Mauritius Professional Registered Security Agency, Engineers & HSE Personnel registered with “The Council of Registered Professional Engineers of Mauritius (CRPE)”, as per BHEL instruction. Mauritius Professional Registered Security Agency, Engineers (Diploma) & HSE Personnel (Diploma) should have 0-2 years of experience. The related details may be furnished to BHEL for verification.

For and on behalf of
M/s

 		PVSYST V6.88	BHEL SBD Bengaluru (India)		08/12/21	Page 1/5
Grid-Connected System: Simulation parameters						
Project :		Henrietta-Mauritius				
Geographical Site		Henrietta-Mauritius		Country	Mauritius	
Situation		Latitude	-20.34° S	Longitude	57.47° E	
Time defined as		Legal Time	Time zone UT+4	Altitude	524 m	
		Albedo	0.20			
Meteo data:		Henrietta-Mauritius	Meteonorm 7.1 (1954-1993), Sat=100% - Synthetic			
Simulation variant :		9.3MWp_F14				
		Simulation date	08/12/21 13h57			
Simulation parameters		System type	Unlimited sheds			
Collector Plane Orientation		Tilt	14°	Azimuth	0°	
Sheds configuration		Nb. of sheds	500	Unlimited sheds		
		Sheds spacing	6.00 m	Collector width	4.00 m	
Inactive band		Top	0.02 m	Bottom	0.02 m	
Shading limit angle		Limit profile angle	24.9°	Ground cov. Ratio (GCR)	66.7 %	
Shadings electrical effect		Cell size	15.6 cm	Strings in width	2	
Models used		Transposition	Perez	Diffuse	Perez, Meteonorm	
Horizon		Free Horizon				
Near Shadings		Mutual shadings of sheds	Electrical effect			
User's needs :		Unlimited load (grid)				
PV Array Characteristics						
PV module		Si-mono	Model	PE-425HM		
Custom parameters definition		Manufacturer	Premier Energies Photovoltaic Pvt Ltd			
Number of PV modules		In series	18 modules	In parallel	1216 strings	
Total number of PV modules		Nb. modules	21888	Unit Nom. Power	425 Wp	
Array global power		Nominal (STC)	9302 kWp	At operating cond.	8492 kWp (50°C)	
Array operating characteristics (50°C)		U mpp	678 V	I mpp	12523 A	
Total area		Module area	47621 m²	Cell area	43433 m²	
Inverter		Model	DeICEN1000			
Custom parameters definition		Manufacturer	Delta Power Solutions			
Characteristics		Operating Voltage	610-930 V	Unit Nom. Power	1000 kWac	
				Max. power (=>40°C)	1100 kWac	
Inverter pack		Nb. of inverters	8 units	Total Power	8000 kWac	
				Pnom ratio	1.16	
PV Array loss factors						
Array Soiling Losses				Loss Fraction	2.0 %	
Thermal Loss factor		Uc (const)	29.0 W/m²K	Uv (wind)	0.0 W/m²K / m/s	
Wiring Ohmic Loss		Global array res.	1.2 mOhm	Loss Fraction	2.0 % at STC	
LID - Light Induced Degradation				Loss Fraction	2.0 %	
Module Quality Loss				Loss Fraction	-0.3 %	
Module Mismatch Losses				Loss Fraction	1.0 % at MPP	
Strings Mismatch loss				Loss Fraction	0.10 %	
Incidence effect, ASHRAE parametrization		IAM =	1 - bo (1/cos i - 1)	bo Param.	0.05	

Grid-Connected System: Simulation parameters

System loss factors

AC loss, transfo to injection	Grid Voltage	22 kV	
	Wires: 3x120.0 mm ²	5060 m	Loss Fraction 1.5 % at STC
External transformer	Iron loss (24H connexion)	9141 W	Loss Fraction 0.1 % at STC
	Resistive/Inductive losses	529.5 mOhm	Loss Fraction 1.0 % at STC

Auxiliaries loss

Proportionnal to Power 12.0 W/kW ... from Power thresh. 0.0 kW

Grid-Connected System: Main results

Project : Henrietta-Mauritius

Simulation variant : 9.3MWp_F14

Main system parameters

PV Field Orientation

PV modules

PV Array

Inverter

Inverter pack

User's needs

System type

Sheds disposition, tilt

Model

Nb. of modules

Model

Nb. of units

Unlimited load (grid)

Unlimited sheds

14°

azimuth 0°

Pnom 425 Wp

Pnom total **9302 kWp**

Pnom 1000 kW ac

Pnom total **8000 kW ac**

Main simulation results

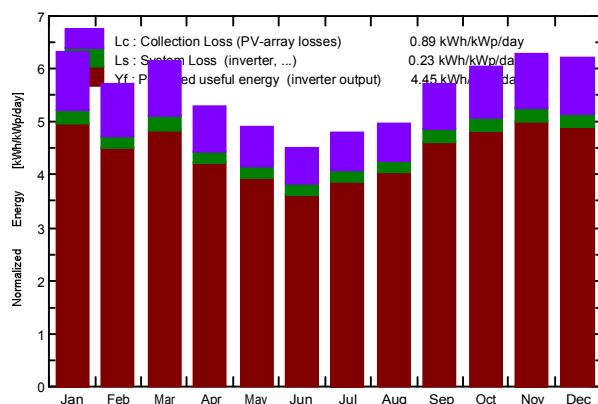
System Production

Produced Energy 15094 MWh/year

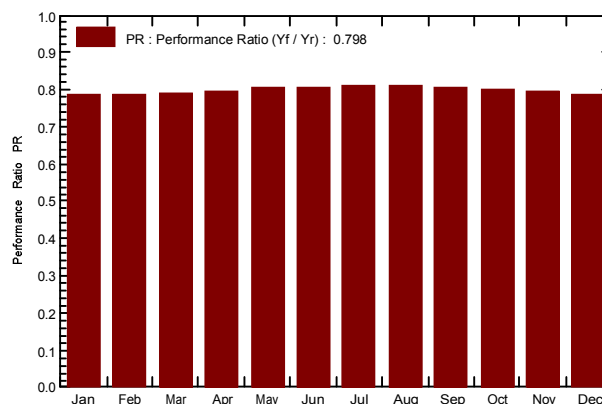
Specific prod. 1623 kWh/kWp/year

Performance Ratio PR 79.79 %

Normalized productions (per installed kWp): Nominal power 9302 kWp



Performance Ratio PR



9.3MWp_F14

Balances and main results

	GlobHor	DiffHor	T_Amb	GlobInc	GlobEff	EArray	E_Grid	PR
	kWh/m ²	kWh/m ²	°C	kWh/m ²	kWh/m ²	MWh	MWh	
January	205.3	81.81	24.58	195.8	183.2	1506	1431	0.786
February	160.7	79.10	24.42	159.7	149.4	1232	1170	0.787
March	181.3	61.63	24.01	189.8	179.0	1470	1395	0.790
April	144.2	54.12	22.94	158.8	149.5	1240	1176	0.796
May	130.2	46.78	21.52	151.8	142.9	1194	1134	0.803
June	113.6	44.26	19.17	135.4	126.8	1068	1016	0.806
July	126.2	45.05	18.73	148.9	139.9	1181	1121	0.809
August	138.3	56.81	18.72	154.5	145.4	1231	1169	0.813
September	161.3	64.03	19.13	171.1	160.8	1354	1285	0.807
October	185.2	81.35	20.41	187.0	174.9	1465	1393	0.801
November	195.2	83.46	21.91	188.6	176.4	1468	1396	0.795
December	203.4	78.62	23.82	192.3	180.1	1484	1409	0.788
Year	1944.8	777.03	21.60	2033.6	1908.4	15892	15094	0.798

Legends: GlobHor Horizontal global irradiation
DiffHor Horizontal diffuse irradiation
T_Amb T amb.
GlobInc Global incident in coll. plane
GlobEff Effective Global, corr. for IAM and shadings
EArray Effective energy at the output of the array
E_Grid Energy injected into grid
PR Performance Ratio

Grid-Connected System: Special graphs

Project : Henrietta-Mauritius

Simulation variant : 9.3MWp_F14

Main system parameters

PV Field Orientation

PV modules

PV Array

Inverter

Inverter pack

User's needs

System type

Sheds disposition, tilt

Model

Nb. of modules

Model

Nb. of units

Unlimited load (grid)

Unlimited sheds

14°

PE-425HM

21888

DeICEN1000

8.0

azimuth 0°

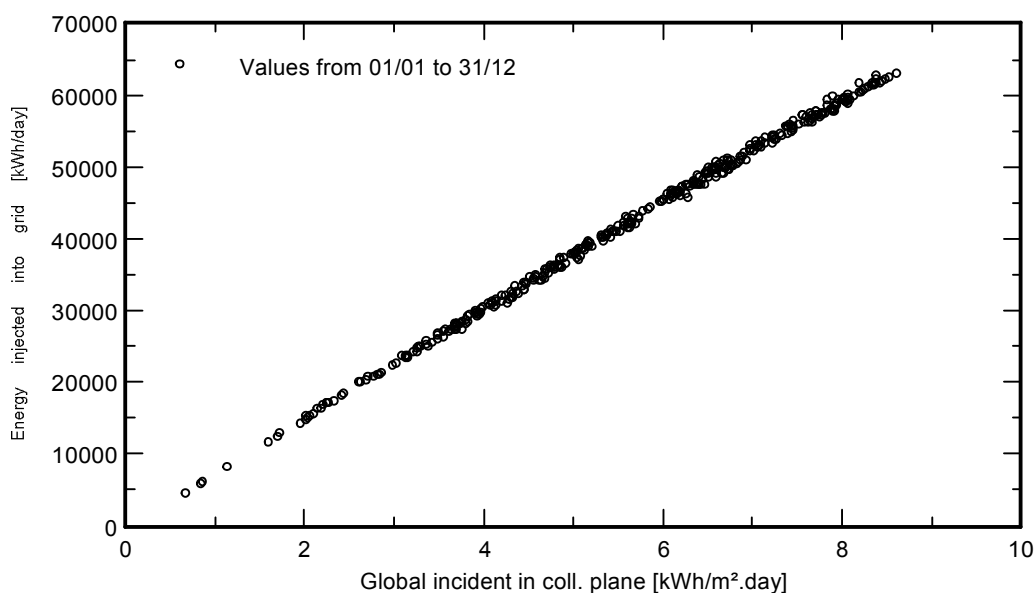
Pnom 425 Wp

Pnom total **9302 kWp**

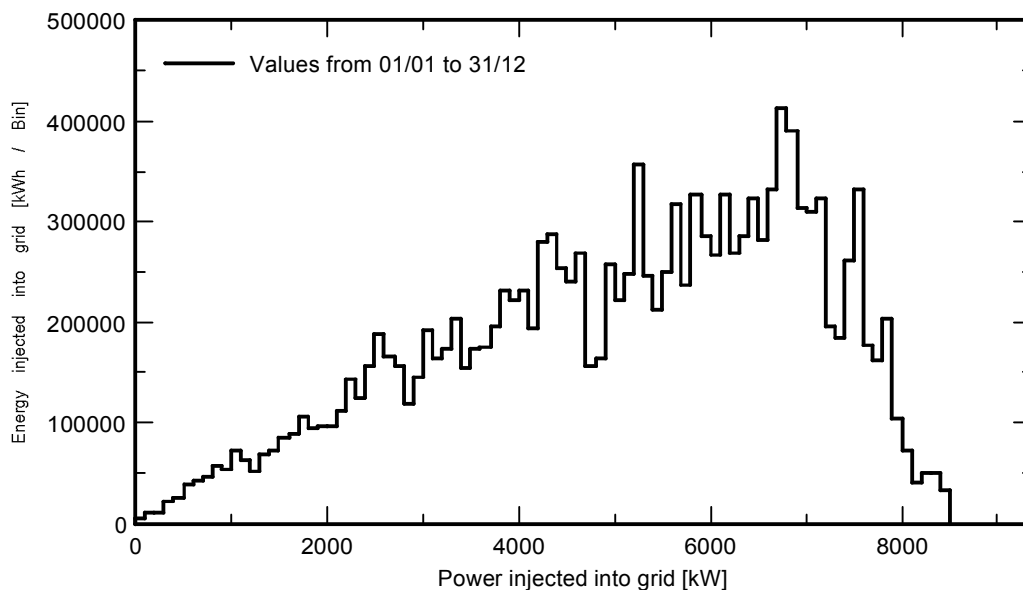
Pnom 1000 kW ac

Pnom total **8000 kW ac**

Daily Input/Output diagram



System Output Power Distribution



Grid-Connected System: Loss diagram

Project : Henrietta-Mauritius

Simulation variant : 9.3MWp_F14

Main system parameters

PV Field Orientation

PV modules

PV Array

Inverter

Inverter pack

User's needs

System type

Sheds disposition, tilt

Model

Nb. of modules

Model

Nb. of units

Unlimited load (grid)

Unlimited sheds

14°

PE-425HM

21888

DeICEN1000

8.0

azimuth 0°

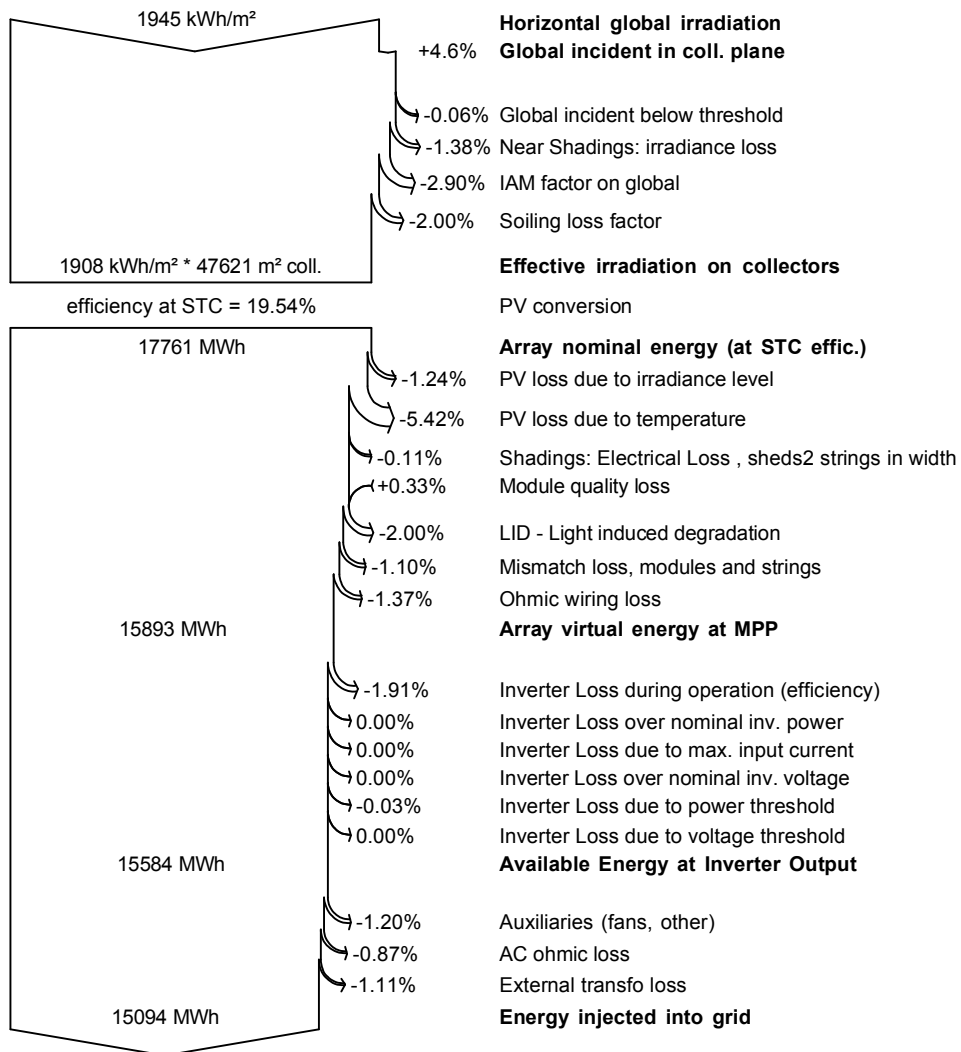
Pnom 425 Wp

Pnom total **9302 kWp**

Pnom 1000 kW ac

Pnom total **8000 kW ac**

Loss diagram over the whole year



Vendor Bid Form (This document should be filled and signed document along with other documents called for in this form are to be uploaded under Techno commercial Bid form,Unpriced Bid form, Vendor Bid Form packet of the NIT.		
RFQ/NIT/Enquiry no.	RAJBOS0083	
Description	Supply, Installation including civil works and commissioning of 8MWac Solar PV Farm except supply of PV modules at Henrietta (Phase-II), Tamarind Falls, Mauritius through Mini EPC Tender	
Sr. No	DESCRIPTION	VENDOR TO FILL THE DETAILS
		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	
8	GST NO, scanned copy (mandatory document). To be attached under Techno commercial Bid form,Unpriced Bid form, Vendor Bid Form	
9	PAN NO, scanned copy(mandatory document). To be attached under under Techno commercial Bid form,Unpriced Bid form, Vendor Bid Form	
10	BANK AND BRANCH NAME	
11	BANK ACCOUNT NO	
12	MSE VENDOR / NON MSE VENDOR	
13	Vendor to submit the MSE documents as per ITB/GCC/SCC along with UAM no/Udyam Registration . In case of non-submission, vendor will be treated at par with non-MSE vendors (Mandatory document). To be attached under Techno commercial Bid form,Unpriced Bid form, Vendor Bid Form	
14	ORIGIN OF DISPATCH	
15	QUOTATION REFERENCE	
16	QUOTATION DATE	
17	Preference to make in India order2017 dated 16.09.2020.Submit Local content certificate as per ANNEXURE-B . To be attached under Techno commercial Bid form,Unpriced Bid form, Vendor Bid Form packet	
18	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. The Bidder shall mandatorily submit Declaration as per format enclosed as part of tender(ANNEXURE-A). To be attached under Techno commercial Bid form,Unpriced Bid form, Vendor Bid Form packet	

BHEL SBD - RFQ No: RAJBOS0083 dtd 18-12-2021						
Project : 8MWac Solar PV Farm at Tamarind Falls, Mauritius						
Supply, Installation including civil works and commissioning of 8MWac Solar PV Farm except supply of PV modules at Henrietta (Phase-II), Tamarind Falls, Mauritius through Mini EPC Tender						
UnPriced Bid (FOR Site Price)						
Bidders to quote the Total FOR value at Sl.No.F and G.						
Break up of prices shall be calculated based on the % allocation as per BBU Sheet						
Part-A : Electrical Package						
S. No	Material Code	Description	Qty	Unit	Vendor to inform Quoted or Not (FOR price)	Vendor to inform Quoted or Not Total Price (FOR)
1	PS0679091648	Supply of electrical equipment	1	Set		
2	PS0679091659	Installation and Commissioning (I&C) of	1	AU		
Total for Supply and I&C						-
Part- B; Mechanical						
S. No	Material Code	Description	Qty	Unit	Vendor to inform Quoted or Not (FOR price)	Vendor to inform Quoted or Not Total Price (FOR)
1	PS0679091668	Design and Supply of Mechanical Items	1	AU		
2	PS0679091679	Instalation of Mechanical Items including PV Modules	1	AU		-
Total for Supply and I&C						-
Part-C; Civil						
S. No	Material Code	Description	Qty	Unit	Vendor to inform Quoted or Not (FOR price)	Vendor to inform Quoted or Not Total Price (FOR)
1	PS0679091688	Engineering, Construction and Civil Allied	1	AU		
Part-D; SITE ESTABLISHMENT WORKS						
S. No	Material Code	Description	Qty	Unit	Vendor to inform Quoted or Not (FOR price)	Vendor to inform Quoted or Not Total Price (FOR)
1	PS0679091699	Site Establishment and Enabling works	1	AU		
F	F = A+B+C+D				Total	Vendor to inform Quoted or Not Total Price
G	Lumpsum Cost of Custom clearance, port handling, port charges and inland transportation of BHEL supplied 8MW PV Modules upto site (INR)					Vendor to inform Quoted or Not Total Price
H	Total Price For the purpose of evaluation of bid (F + G)					Vendor to inform Quoted or Not Total Price


BHEL SBD - RFQ No: RAJBOS0083 dtd 18-12-2021																			
Project : 8MWac Solar PV Farm at Tamarind Falls, Mauritius																			
Supply, Installation including civil works and commissioning of 8MWac Solar PV Farm except supply of PV modules at Henrietta (Phase-II), Tamarind Falls, Mauritius through Mini UnPriced Bid (FOR Site Price)																			
				FOB Price		Freight, Insurance, Customs Clearacne & Port Handling Charges			FOR/DDP/CPT Price		8 digit HSN Code								
S. No.	Item Descpription	Qty	Unit	UNIT F.O.B. PRICE (INCLUDING SEAWORTHY PACKING; FORWARDING, HANDLING AND TRANSPORTATION UP TO THE PORT OF EXPORT)	TOTAL F.O.B. PRICE (INCLUDING SEAWORTHY PACKING; FORWARDING, HANDLING AND TRANSPORTATION UP TO THE PORT OF EXPORT)	Marine/ Ocean Freight and Other Charges up to Port of Import (Bangladesh)	MARINE CUM ERECTION INSURANCE	Customs Clearacne & Port Handling @ Mauritius Port and Inland Freight from port to project site	Total FOR Site / DDP Price	Allocation									
				(Rs.)	Vendor to inform Quoted or	Vendor to				(Rs.)	(Rs.)	(%)							
Part-A : Electrical Package																			
1	Supply of DC Solar Cable from PV module to SMB	8MW	ST	To be calculated from the price bid based on % allocation								0.73							
2	Supply of DC power cable from SMB to inverter	8MW	ST									3.66							
3	Supply of inverter stations	8MW	ST									5.88							
4	Supply of CSS consisting of inverter transformers, 22kV switchgear panels and other auxiliary equipment as per specification.	8MW	ST									11.87							
5	Supply of String Monitoring Boxes (SMB)	8MW	ST									1.57							
6	Supply of 22kV MV Switchgear panels	8MW	ST									1.96							
7	Supply of 22kV power cable, Cu, XLPE, armoured (for all 22kV connections within solar plant including transformer MV side)	1	ST									4.57							
8	Supply of OFC cables along with termination kits.	1	ST									0.06							
9	Supply of SCADA system including PLC panels, computers, software systems and related peripherals & accessories	1	ST									0.61							
10	Supply of DC side miscellaneous equipment viz., MC4 connectors, cable ties, HDPE pipes etc	1	ST									0.29							
11	Supply of LT, Control / Instrumentation cables	1	ST									0.37							
12	Supply of UPS, AC-DC converter, ACDB, UPS DB etc.	1	ST									0.29							
13	Supply of earthing items	1	ST									0.88							
14	Supply of lightning arrestors	1	ST									0.37							
15	Supply of items for plant lighting	1	ST									0.66							
16	Supply of miscellaneous items	1	ST									0.37							
17	Supply of CCTV System	1	ST									0.66							
18	Supply of safety related items	1	ST									0.29							
19	Supply of spare items	1	ST									3.68							
20	Supply of electrical utility items	1	ST									0.22							
21	Supply of special tools & equipment	1	ST									0.37							
22	Supply of recommended spares	1	ST									2.64							
23	I&C: Interconnection of SPV modules,	8	AU									0.42							
24	I&C: DC cable from SCB to PCU	8	AU									0.47							
25	I&C: Equipment in MCR	8	AU									0.57							
26	I&C: AC cables from PCU to TRF	8	AU									0.24							
27	I&C: 22kV MV cables	8	AU									0.76							
28	I&C: SCADA,Weather monitoring, CCTV, Fire Alarm, Lightning Arrestors	1	AU									0.59							
29	I&C: Earthing	8	AU									0.48							
30	I&C: All other Miscellinious items	8	AU									0.38							
31	I&C: Peripheral lighting system	8	AU									0.57							
32	I&C: SCS	8	AU									0.38							
33	I&C: Protection Philosophy, grading study and calculation for the PV Farm including the 22kV interconnection facility certified by a licensed engineer.	1	AU									1.18							
34	I&C: Precommissioning tests & Commissioning	8	AU									0.57							
35	I&C: Operation and maintenance of the plant till successful completion of the 30 days reliability testing and taking over of the plant by CEB.	1	AU									0.35							
36	I&C: Scheduling & Forecasting for 2 years from the plant acceptance date	1	AU	1.04															
Part- B; Mechanical																			
S. No.	Item Descpription	Qty	Unit	To be calculated from the price bid based on % allocation															
1	Design of Module mounting structure with vetting by Registered Engineer.	1	AU									0.24							
2	Supply of MMS Colums to erect Modules of Nos	17240	No									2.92							
3	Supply of MMS Superstructure to erect Modules of Nos	17240	No									6.46							
4	Design of Module Cleaning Systm & pumping station	1	AU									0.12							
5	Supply of Module Cleaning System with pumping station	1	AU									0.26							
6	Erection of MMS Columns to erect Modules of Nos	17240	No									2.25							
7	Erection of MMS Superstructure to erect Modules of Nos	17240	No									0.75							
8	Installation of PV Modules	17240	No									0.75							
9	Installation of Module Cleaning System with pumping station	1	AU									0.25							
Part-C; Civil																			
S. No.	Item Descpription	Qty	Unit	To be calculated from the price bid based on % allocation															
1	Topo Survey & geotechnical investigation as per spec all complete	1	AU									0.49							
2	Preparation & Approval of Architectural drawings by a professional registered Architect, Design & Approval of design calculations and drawings for the structural design, signed by a professional registered Engineer & Billing certification by one local registered Engineer (Civil/Mech) (min. 10yrs experience) as per spec. all complete	1	AU									1.22							
3	Jungle Clearance & tree cutting (including statutory clearances)	1	AU									0.49							
4	Conducting pile test as per BS standard for MMS foundation and submit the report to BHEL & customer for approval all complete	1	AU									0.61							
5	Land levelling and grading including erosion prevention as per spec & as required all complete	1	AU									0.61							
6	Construction of Chain link fencing & Gates for Boundary as per drg & specification all complete	1	AU									3.67							
9	Solar facility building (RCC) Ground floor with Cable trench in equipment area (HT Panel, partitioning, SCADA Room with cable trench, Store room, first Floor Conference Hall, pantry and wash rooms -2 storey building as per drg & specification incl all civil & electrical works all complete	1	AU									2.93							
10	Construction of Gate post building (RCC): Security room with wash room as per drg & specification all complete	1	AU									1.22							
11	Construction of Compact sub-station base/foundation all complete	1	AU									1.47							
12	Construction of RCC Retaining wall (as and where required) all complete	1	AU									1.47							
13	Construction of River cross-over culvert as and where required all complete	1	AU									0.98							
14	Construction of road and kerb wall as per drg & spec. all complete	1	AU									11							
15	Construction of parking area 420 sqm as per drg&spec. all complete	1	AU									2.08							
16	Construction of masonry drains as per drg & spec all complete	1	AU									3.67							
17	Construction/supply of septic tank and absorption pit as per drg & specification all complete	1	AU									0.49							
18	Construction/supply of underground (4000L) & overhead tank (1200L) as per drg & specification all complete	1	AU									0.1							
Part-D; SITE ESTABLISHMENT WORKS																			
S. No.	Item Description	Qty	Unit																

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BHEL SBD - RFQ No: RAJBOS0083 dtd 18-12-2021						
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Supply, Installation including civil works and commissioning of 8MWac Solar PV Farm except supply of PV modules at Henrietta (Phase-II), Tamarind Falls, Mauritius through Mini EPC Tender						
Price Bid (FOR Site Price)						
Bidders to quote the Total FOR value at Sl.No.F and G.						
Break up of prices shall be calculated based on the % allocation as per BBU Sheet						
Part-A : Electrical Package						
S. No	Material Code	Description	Qty	Unit	price (FOR)	Total Price (FOR)
1	PS0679091648	Supply of electrical equipment	1	Set	-	-
2	PS0679091659	Installation and Commissioning (I&C) of	1	AU	-	-
Total for Supply and I&C						-
Part- B; Mechanical						
S. No	Material Code	Description	Qty	Unit	price (FOR)	Total Price (FOR)
1	PS0679091668	Design and Supply of Mechanical Items	1	AU	-	-
2	PS0679091679	Instalation of Mechanical Items including PV Modules	1	AU	-	-
Total for Supply and I&C						-
Part-C; Civil						
S. No	Material Code	Description	Qty	Unit	price (FOR)	Total Price (FOR)
1	PS0679091688	Engineering, Construction and Civil Allied	1	AU	-	-
Part-D; SITE ESTABLISHMENT WORKS						
S. No	Material Code	Description	Qty	Unit	price (FOR)	Total Price (FOR)
1	PS0679091699	Site Establishment and Enabling works	1	AU	-	-
F	F = A+B+C+D				Total	
G	Lumpsum Cost of Custom clearance, port handling, port charges and inland transportation of BHEL supplied 8MW PV Modules upto site (INR)					
H	Total Price For the purpose of evaluation of bid (F + G)					-


BHEL SBD - RFQ No: RAJBOS0083 dtd 18-12-2021												
Project : 8MWac Solar PV Farm at Tamarind Falls, Mauritius												
Supply, Installation including civil works and commissioning of 8MWac Solar PV Farm except supply of PV modules at Henrietta (Phase-II), Tamarind Falls, Mauritius through Mini Price Breakup												
				FOB Price		Freight, Insurance, Customs Clearacne & Port Handling Charges			FOR/DDP/CPT Price		8 digit HSN Code	
S. No.	Item Descpription	Qty	Unit	UNIT F.O.B. PRICE (INCLUDING SEAWORTHY PACKING; FORWARDING, HANDLING AND TRANSPORTATION UP TO THE PORT OF EXPORT)	TOTAL F.O.B. PRICE (INCLUDING SEAWORTHY PACKING; FORWARDING, HANDLING AND TRANSPORTATION UP TO THE PORT OF EXPORT)	Marine/ Ocean Freight and Other Charges up to Port of Import (Bangladesh)	MARINE CUM ERECTION INSURANCE	Customs Clearacne & Port Handling @ Mauritius Port and Inland Freight from port to project site	Total FOR Site / DDP Price	Allocation		
				(Rs.)	(Rs.)	(Rs.)		(Rs.)	(Rs.)	(%)		
Part-A ; Electrical Package												
1	Supply of DC Solar Cable from PV module to SMB	8MW	ST						0	0.73		
2	Supply of DC power cable from SMB to inverter	8MW	ST						0	3.66		
3	Supply of inverter stations	8MW	ST						0	5.88		
4	Supply of CSS consisting of inverter transformers, 22kV switchgear panels and other auxiliary equipment as per specification.	8MW	ST						0	11.87		
5	Supply of String Monitoring Boxes (SMB)	8MW	ST						0	1.57		
6	Supply of 22kV MV Switchgear panels	8MW	ST						0	1.96		
7	Supply of 22kV power cable, Cu, XLPE, armoured (for all 22kV connections within solar plant including transformer MV side)	1	ST						0	4.57		
8	Supply of OFC cables along with termination kits.	1	ST						0	0.06		
9	Supply of SCADA system including PLC panels, computers, software systems and related peripherals & accessories	1	ST						0	0.61		
10	Supply of DC side miscellaneous equipment viz., MC4 connectors, cable ties, HDPE pipes etc	1	ST						0	0.29		
11	Supply of LT, Control / Instrumentation cables	1	ST						0	0.37		
12	Supply of UPS, AC-DC converter, ACDB, UPS DB etc.	1	ST						0	0.29		
13	Supply of earthing items	1	ST						0	0.88		
14	Supply of lightning arrestors	1	ST						0	0.37		
15	Supply of items for plant lighting	1	ST						0	0.66		
16	Supply of miscellaneous items	1	ST						0	0.37		
17	Supply of CCTV System	1	ST						0	0.66		
18	Supply of safety related items	1	ST						0	0.29		
19	Supply of spare items	1	ST						0	3.68		
20	Supply of electrical utility items	1	ST						0	0.22		
21	Supply of special tools & equipment	1	ST						0	0.37		
22	Supply of recommended spares	1	ST						0	2.64		
23	I&C: Interconnection of SPV modules,	8	AU						0	0.42		
24	I&C: DC cable from SCB to PCU	8	AU						0	0.47		
25	I&C: Equipment in MCR	8	AU						0	0.57		
26	I&C: AC cables from PCU to TRF	8	AU						0	0.24		
27	I&C: 22kV MV cables	8	AU						0	0.76		
28	I&C: SCADA, Weather monitoring, CCTV, Fire Alarm, Lightning Arrestors	1	AU						0	0.59		
29	I&C: Earthing	8	AU						0	0.48		
30	I&C: All other Miscellinious items	8	AU						0	0.38		
31	I&C: Peripheral lighting system	8	AU						0	0.57		
32	I&C: SCS	8	AU						0	0.38		
33	I&C: Protection Philosophy, grading study and calculation for the PV Farm including the 22kV interconnection facility certified by a licensed engineer.	1	AU						0	1.18		
34	I&C: Precommissioning tests & Commissioning	8	AU						0	0.57		
35	I&C: Operation and maintenance of the plant till successful completion of the 30 days reliability testing and taking over of the plant by CEB.	1	AU						0	0.35		
36	I&C: Scheduling & Forecasting for 2 years from the plant acceptance date	1	AU						0	1.04		
Part- B; Mechanical												
S. No.	Item Descpription	Qty	Unit									
1	Design of Module mounting structure with vetting by Registered Engineer.	1	AU						0	0.24		
2	Supply of MMS COLUMNS to erect Modules of Nos	17240	No						0	2.92		
3	Supply of MMS Superstructure to erect Modules of Nos	17240	No						0	6.46		
4	Design of Module Cleaning Systm & pumping station	1	AU						0	0.12		
5	Supply of Module Cleaning System with pumping station	1	AU						0	0.26		
									0			
6	Erection of MMS Columns to erect Modules of Nos	17240	No						0	2.25		
7	Erection of MMS Superstructure to erect Modules of Nos	17240	No						0	0.75		
8	Installation of PV Modules	17240	No						0	0.75		
9	Installation of Module Cleaning System with pumping station	1	AU						0	0.25		
Part-C; Civil												
S. No.	Item Descpription	Qty	Unit									
1	Topo Survey & geotechnical investigation as per spec all complete	1	AU						0	0.49		
2	Preparation & Approval of Architectural drawings by a professional registered Architect, Design & Approval of design calculations and drawings for the structural design, signed by a professional registered Engineer & Billing certification by one local registered Engineer (Civil/Mech) (min. 10yrs experience) as per spec. all complete	1	AU						0	1.22		
3	Jungle Clearance & tree cutting (including statutory clearances)	1	AU						0	0.49		
4	Conducting pile test as per BS standard for MMS foundation and submit the report to BHEL & customer for approval all complete	1	AU						0	0.61		
5	Land levelling and grading including erosion prevention as per spec & as required all complete	1	AU						0	0.61		
6	Construction of Chain link fencing & Gates for Boundary as per drg & specification all complete	1	AU						0	3.67		
9	Solar facility building (RCC) Ground floor with Cable trench in equipment area (HT Panel, partitioning, SCADA Room with cable trench, Store room, first Floor Conference Hall, pantry and wash rooms -2 storey building as per drg & specification incl all civil & electrical works all complete	1	AU						0	2.93		
10	Construction of Gate post building (RCC): Security room with wash room as per drg & specification all complete	1	AU						0	1.22		
11	Construction of Compact sub-station base/foundation all complete	1	AU						0	1.47		
12	Construction of RCC Retaining wall (as and where required) all complete	1	AU						0	1.47		
13	Construction of River cross-over culvert as and where required all complete	1	AU						0	0.98		
14	Construction of road and kerb wall as per drg & spec. all complete	1	AU						0	11		
15	Construction of parking area 420 sqm as per drg&spec. all complete	1	AU						0	2.08		
16	Construction of masonry drains as per drg & spec all complete	1	AU						0	3.67		
17	Construction/supply of septic tank and absorption pit as per drg & specification all complete	1	AU						0	0.49		
18	Construction/supply of underground (4000L) & overhead tank (1200L) as per drg & specification all complete	1	AU						0	0.1		
Part-D; SITE ESTABLISHMENT WORKS												
S. No.	Item Descpription	Qty	Unit									

BHEL Scope


	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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These Conditions shall be read in conjunction with General Condition of Contract (GCC) enclosed along with the tender enquiry. In case of any conflict or inconsistency, the requirement of SCC shall prevail over the GCC.


PROJECT INFORMATION		
1.	INTRODUCTION	<p>Project name : 8MWac Solar PV Farm at Tamarind Falls, Mauritius</p> <p>Name of the Owner : CEB (Green Energy) Co Ltd</p> <p>Capacity : 8 MWac</p> <p>The project is located in the region of Tamarind Falls at Henrietta (Phase II), Mauritius where CEB owns 1000 acres of land. The project site is divided into 3 parcels of land divided by a river stream.</p> <p>Nearest Sea Port : Port Louis (20 Km)</p> <p>Nearest Town : Curepipe (9 Km)</p> <p>Nearest commercial airport : Sir Seewoosagur Ramgoolam International Airport (34 Km)</p> <p>It is essential that the Bidder visits the site and acquaints with the conditions prevailing at site before submission of the bid. The information given herein is for general guidance and shall not be contractually binding on BHEL.</p> 

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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2.	APPROACH TO SITE	The nearest town is Curepipe located at a distance of 9km from Henrietta. Nearest Airport is Sir Seewoosagur Ramgoolam International Airport located at a distance of 34 km from site.
3.	Site visit	The contractor should visit project site and acquire full knowledge and information about site conditions prevailing at site and in and around the plant premises, together with all the statutory, obligatory, mandatory requirements of various authorities in Mauritius before submission of the bid.
4.	Scope of Work	<p>The Contract covers the design, engineering, supply, construction, manufacture, testing, insurance, Packaging for export, shipping, customs handling at Indian as well as Mauritian ports, transport, delivery to site, unloading at site, equipment erection/installation, commissioning and putting in normal operation, performance testing on completion, training and instruction to Customer's personnel and making good of any defects and warranting the whole installation up to the end of the defect liability period.</p> <p>The detailed Scope is mentioned in the Technical specification No. PS-439-1380.</p>
5.	Supply	<p>Vendor scope includes supply of all equipment/items with respect to electrical works installation, testing and commissioning of solar photovoltaic power plant, as detailed in CEB tender specification including clarifications and amendments along with this specification, except for supply of PV modules. This scope includes all activities but not limited to obtaining approval from BHEL/CEB for the datasheets/drawings/ MQP, manufacture/ testing/ inspection at manufacturer's works, sea worthy packing, supply, transportation, delivery, unloading, storage, installation and commissioning of all AC and DC side activities of power plant except supply of PV modules. PV modules shall be supplied by BHEL free of cost up to Mauritian port at least 45 days prior to commissioning date. Engineering inputs pertaining to PV modules shall be given within 1 month after PO placement. It is the responsibility of the vendor to perform custom clearance, port handling, port charges and inland transportation of BHEL supplied PV Modules to the site in a timely fashion and to avoid any delays which may incur demurrages. Any demurrages incurred shall be to vendor account.</p> <p>All supplies to be sourced from India. The vendor list for all items to be submitted along with the offer for BHEL's approval. The list approved by BHEL shall be final.</p>
6.	Installation including civil works & commissioning	<p><u>To be read in conjunction with tender specification:</u></p> <p>As part of the overall project management activity, the successful bidder shall be responsible for proper co-ordination of installation including civil works and commissioning activities during various phases of execution of the contract. The successful bidder shall identify a person designated as construction manager, with whom BHEL shall interact on matters related to execution of the contract. The construction manager shall be the single point contact person on behalf of the successful bidder. BHEL shall interact with the construction manager only on all matters on co-ordination between BHEL and the successful bidder.</p> <p>The successful bidder shall confine all field operations to those works which can be reformed without subjecting the equipment and materials to adverse effects, during inclement weather conditions, like monsoon, storms, etc and during other unfavorable construction conditions. No field activities shall be performed by the successful bidder under conditions which might adversely affect quality & efficiency thereof, unless special precautions or measures are taken by the successful bidder in proper and satisfactory manner in the performance of such works and with the concurrence of the engineer. Such unfavorable construction conditions in no way relieve the successful bidder of their responsibility to perform the works as per the schedule.</p> <p>The successful bidder shall supply all skilled workmen like welders, gas cutters, electricians, riggers, sarangs, erectors, fitters, instrument machines etc, in addition to other skilled, semi-skilled and</p>

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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		<p>unskilled workmen required for all the works of handling and transportation from site store to erection site, erection, testing and commissioning contemplated under this specification. Only fully trained and competent men with previous experience on the job shall be employed. They shall hold valid certificates wherever necessary. BHEL reserves the right to decide on the suitability of the workers and the other personnel who will be employed by the successful bidder. BHEL reserves the right to insist on removal of any employee of the successful bidder at any time, if they find him unsuitable and the successful bidder shall forthwith remove him.</p> <p>The supervisory staff employed by the successful bidder shall be technically qualified and experienced in the area of work. They shall ensure proper out turn of work and discipline on the part of labour put on the job by the successful bidder and in general see that the works are carried out in a safe and proper manner and in coordination with other labour and staff employed directly by BHEL or other agencies' of BHEL and BHEL's client/ consultant.</p> <p>The successful bidder shall also furnish daily labour report showing by classification the number of employees engaged in various categories of work a progress report of work as required by BHEL engineer.</p> <p>The work shall be executed under the usual conditions affecting major power plant construction and in conjunction with numerous other operations at site. The successful bidder and his personnel shall co-operate with other personnel, and other successful bidders, coordinating his work with others and proceed in a manner that shall not delay or hinder the progress of work as a whole.</p> <p>The successful bidder's supervisory staff shall execute the work in the most substantial & workman like manner within stipulated time. Accuracy of work and aesthetic finish are essential part of this contract. The successful bidder shall be responsible to ensure that assembly & workmanship conform to the dimensions & tolerance given in the drawing/ instruction given by BHEL engineer from time to time.</p> <p>It is the responsibility of the successful bidder to engage his workman in shifts or on overtime basis for achieving the target set by BHEL during erection, commissioning and testing period. Bidder's quoted rate shall include all these contingencies.</p> <p>For rendering commissioning assistance during running of the unit till handing over of the set, dedicated gang along with an exclusive supervisor need to be deployed by the successful bidder to attend the incidental works of commissioning as per the instruction of BHEL commissioning engineer. They shall be equipped with all necessary hand-tools to attend all the incidental works during commissioning.</p>
7.	Sub-contracting	<p>If the successful bidder is not registered in Mauritius with business licensing/ revenue authority in Mauritius, they can associate their sister concern / dealer/ any other agency, who is registered in Mauritius, to carry out work of service portion for successful completion of the package. However, the entire work is to be executed under the supervision of the successful bidder.</p> <p>The successful bidder shall propose such agency along with evidence/documents showing the business relationship for acceptance of BHEL before start of work. He shall associate mandatorily his sister concern / dealer, in case any one of the two is available in Mauritius.</p>

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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		<p>The entire responsibility of execution along with warranty / guaranty for the entire scope of work shall be with the successful bidder. In case of failure of his agency to execute the work as per project requirement and schedule, the successful bidder shall take necessary action to complete the work on time, else the provisions as per LD clause shall be applicable.</p> <p>Performance guarantee shall be furnished by the successful bidder. Further, any document with regard to contract such as BG, time extension, any other official communication shall be in the name of successful bidder.</p> <p>All other tender terms and conditions along with any other statutory obligation in Mauritius, required to execute the work, shall be binding on such agency associated by the successful bidder.</p>
8.	General information	<p>Vendor shall ensure all items being supplied should be of reputed make subjected to BHEL's approval</p> <p>Vendor shall submit design calculations, installation methodologies, layouts, routing drawings, Termination arrangements at respective equipment, identification methodology along the route & at the equipment for BHEL's approval of all equipment prior to implementation at site.</p> <p>Vendor shall organize power supply on their own. Accordingly, DG sets of suitable capacity shall be Deployed by the vendor for construction works. Similarly, water required for construction works shall be organized by vendor (tankers etc.)</p> <p>All machinery such as cranes, hydra, JCBs, forklifts, transport trucks, trolleys etc. necessary for movement and installation of materials / panels / equipment etc. shall be organized by the vendor</p> <p>All necessary tools and tackles such as crimping tool (including heavy duty tools for crimping copper cables up to 630 sq-mm), screw driver set, power screw drivers, cutting pliers, nose pliers, spanner sets, adjustable spanners, hole-saw cutter set, bending tools, torque wrenches, hack saw blades, pipe wrenches, flat / round files, HV termination tools, drilling machines, welding machines, concrete mixers, steel bar bending tools / templates/ shuttering materials for RCC works, spade, shovel, hammer etc. shall be organized by the vendor.</p> <p>All necessary measuring instruments such as digital multi-meters, measuring tapes, Vernier calipers, electrical testers, digital meggers (1kV, 2.5kV, 5kV), earth resistance meters, clamp meters, relay testing kit (secondary injection), primary injection kit, infrared thermal imaging handheld temperature meter etc. All these instruments shall possess valid calibration certificate issued from approved NABL or equivalent Mauritian laboratory.</p> <p>Vendor shall make their own arrangements for necessary food, drinking water and accommodation for their labour and employees posted at the site. Similarly, food and drinking water required at the site, during the construction operations, shall also be in scope of vendor.</p> <p>Vendor shall organize all necessary steps to meet all statutory requirements as applicable in Mauritius such as labour license, PF, ESI etc. and also ensure compliance with relevant acts such as minimum wages act, income tax act, employee insurance act etc. for their labour deployed at site</p> <p>Vendor shall maintain updated labour register, with name, age, qualification, salary, attendance details etc. at the site.</p> <p>Vendor shall adhere to all necessary safety norms such as use of helmet, goggles, hand gloves, gumboots, aprons etc. It is the ultimate responsibility of the vendor in all respect to prevent accidents at the site and safeguard their labour from accidents</p> <p>Vendor shall use danger boards, wherever required, to ensure safety of the persons during the work at site.</p> <p>Vendor shall, at the completion of every work, clear off the debris, which resulted out of the work. In case of excavation work such as cable trench etc., vendor shall finish the land neatly with necessary leveling, rolling etc. Any miscellaneous materials, which are found essential for technical completion of the contract but not mentioned explicitly in this specification, shall be deemed to be included in the specification. Accordingly, such materials shall be included by the vendor as part of the offer.</p>

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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		Any damages on the building, structures etc. attributable to the acts of labour/ employees of vendor shall. No child labour shall be employed for execution of the present contract.
9.	Dewatering	Contractor shall ensure at all times that his work area and approach / access roads are free from accumulation of water, so that the materials are safe and the erection/ progress schedule are not affected. No separate claim in this regards shall be admitted.
10.	Progress Review	<p>A Design Review meeting shall be held at the Vendor premises at a suitable time during the design work in order to expedite agreement and approval of the design. Five (5) members of the Customer' technical staffs shall attend the design review meeting for at least one week. The Vendor shall bear the costs associated with the travel from Mauritius and for accommodation and subsistence costs. The Customer shall provide detailed design Review Meeting Schedule, associated costs and make necessary arrangements for accommodation of the technical staff of the above.</p> <p>The vendor shall continuously monitor the progress of all activities specified in the contract and shall submit a detailed progress report periodically to the BHEL on a daily and weekly basis. If the progress of an activity is delayed relative to the dates planned, the progress report shall explain this and state the corrective actions being taken to remedy the delay. In such case the Contractor shall not get any extension of time or Additional cost reimbursement.</p> <p>Vendor shall, as and when required by BHEL, participate in the review meetings conducted by BHEL/CEB at project site, MAURITIUS (Bangalore), BHEL-Corporate office (New Delhi), CEB office etc.</p>
11.	Quality assurance programme / Occupational Health, safety & environment management	<p>Solar Business Division (SBD) is ISO-9001 certified company. Quality of work to customer's satisfaction and system requirements are the essence of ISO-9001 certification. BHEL, SBD has also obtained HSE certification (ISO-14001 & OHSAS-18001). Contractor will organize/ plan/ perform all their activities to meet with these standards.</p> <p>The contractor's engineers & supervisors shall be adequately qualified (as per technical specification) and also inclined to do a quality job. The quality assurance engineer shall co-ordinate all aspects of quality control, inspection, implementation of quality assurance procedures laid down in Quality Plan and technical specification by BHEL. He shall fill up quality assurance log sheets/ formats and submit to BHEL for joint inspection and acceptance. The contractor shall fill up, maintain & preserve the quality records in computerized media. BHEL's authorized representative shall be given free access at all time to such quality related records etc for inspection, review etc.</p> <p>The contractor shall adopt suitable quality assurance program to control activities as necessary. Such program shall be outlined by the contractor and shall be finally accepted by the BHEL/ owner. A quality assurance program of the contractor shall generally cover the following.</p> <p>His Organization structure and qualification data of key personnel for the management and implementation of the proposed quality assurance program.</p> <p>System for site erection control including process controls and fabrication and assembly controls.</p> <p>Control of non-conforming items and system for corrective actions.</p> <p>Inspection and test procedure for all site related works.</p> <p>Calibration and testing of measuring and testing equipment (IMTEs) at appropriate intervals.</p> <p>System for quality audit.</p> <p>System for indication and appraisal of inspection status.</p>

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		<p>System for maintenance of records.</p> <p>Contractor will comply with HSE (Health, safety & environment) requirements of BHEL. All applicable OCPs (Operational control procedures) will be followed by contractor as per BHEL instructions. This will be done as part of normal scope of work. Contractor will follow applicable OCPs, within quoted rates. Suitable measures will be taken by contractor for waste management and environment related laws/ legislation as a part of normal construction activities.</p> <p>Successful Bidder shall refer to BHEL HSE Manual as per GCC or customer's safety manual, available at site, and comply with its directives/ stipulations during execution of the job. In case of any recovery made by customer CEB due to lapses on the part of the contractor during execution, the same shall be recovered on back to back basis from the successful Bidder without prejudice to any other rights of the BHEL.</p> <p>Successful Bidders shall ensure that all their staff/ employees are exposed to periodical training programmes conducted by qualified agencies/ personnel on ISO 9001 Standards.</p> <p>Successful Bidder shall ensure that the quality is maintained in all the works connected with this contract at all stages of the requirement of BHEL.</p>
12.	Additional health, safety & environment management clauses	<p>In addition to existing clause of HSE of tender, following points will also be added to HSE clause to which the seller / contractor shall comply with in order to get the payment as enumerated above.</p> <p>The seller / contractor will follow HSE policy of BHEL/ ISG and work as per the safety guidelines which is in line with ISO:14001 and OHSAS:18001 standards. A list of the guidelines which should be strictly followed by the seller / contractor is as follows. The scope of seller / contractor shall not be limited to the followings (1.0 to 40.0) only but shall be guided by the HSE related policies/ guidelines of BHEL as revised to suit the requirement of the standards and statutory requirements.</p> <ol style="list-style-type: none"> 1.0 Nominate a safety officer who will supervise all the HSE aspects. 2.0 The safety officer will participate in all safety meeting conducted by BHEL. Submit site safety plan indicating safety measures to be taken, firefighting equipment & PPE to be deployed. 3.0 Report every near miss incident to BHEL. 4.0 Report accident report immediately after the occurrence. 5.0 Obtain operation control procedures (OCPs) from BHEL for the work to be executed 6.0 Follow factory act. 7.0 Every worker should use PPE as per his trade. All PPE should conform to IS. 8.0 Conduct tool box meeting with workers every day before start of work instructing about the use of PPE. The outcome of the meeting to be recorded in a register. 9.0 Check fitness of the PPE and lifting tackles weekly and record in a register which will be verified by BHEL. 10.0 No person below 18 years will be employed. 11.0 Deploy fire-fighting equipments and refill before expiry. 12.0 Keep fire extinguishers of adequate type near the hot job and near the electrical Machines. 13.0 Copy of valid Test certificates of all T&Ps should be given to BHEL as soon as the item enters the project, without which the T&P cannot be allowed to be used. 14.0 Nobody will be allowed to work above 2 meters without safety belt/ harness with lifeline secured to a fixed member.

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		<p>15.0 Good housekeeping has to be maintained. All debris shall be removed from workplace within shortest possible time.</p> <p>16.0 Approach roads should not be blocked with cables, materials or debris.</p> <p>17.0 First aid boxes have to be kept and maintained with all requisite materials as per Factory act.</p> <p>18.0 Trained person has to be kept for giving first aid.</p> <p>19.0 Adequate illumination shall be provided where working.</p> <p>20.0 All vehicles should have backlight, reverse horn and reversing light.</p> <p>21.0 Crane operator shall have proper license.'</p> <p>22.0 Crane should have reverse horn.</p> <p>23.0 Only skilled person maintain and operate electrical items.</p> <p>24.0 ELCB has to be used. No temporary connection shall be allowed.</p> <p>25.0 All fuses shall have standard rating and capacity.</p> <p>26.0 All power supply cables should be laid above 3 meter level or underground.</p> <p>27.0 Deleted</p> <p>28.0 Water-logging of working area shall be removed.</p> <p>29.0 For operating portable machines 3 pin plugs shall be used.</p> <p>30.0 Oxygen and DA cylinders shall be separated labeling full or empty. Full cylinders shall be kept upright.</p> <p>31.0 Cylinders are not transported by rolling.</p> <p>32.0 All oil drums shall be kept horizontal.</p> <p>33.0 Excavated area shall be barricaded off with red-& white tape.</p> <p>34.0 Proper slope of excavation shall be maintained.</p> <p>35.0 Proper sign board and illumination shall be maintained at excavated area.</p> <p>36.0 Wherever possible safety net shall be provided.</p> <p>37.0 Proper platform and hand rail has to be provided at the work place.</p> <p>38.0 All electrical equipment shall be earthed at two points.</p> <p>39.0 Temporary platform should be strong enough, have proper approach and hand rails.</p> <p>The above clauses are indicative only and not exhaustive. The other activities to maintain strong HSE conditions at site which may be beyond the above list of guidelines shall have to be done by the seller / contractor.</p>
13.	Type of Contract	Lumpsum, Turnkey
14.	Customer (CEB) Order Ref No.	NOA No.: OAB/CGE/005-LOA_BHEL dtd 11.09.2020
15.	Customer (CEB) TIN / VAT No.	27470844
16.	Consignee / Delivery Address	Consignee: Central Electricity Board (CEB), Rue Du Savoir, Cybercity, Ebene, Mauritius Delivery: Site In-charge, Mauritius 8MWac PV Solar Farm, Tamarind Falls, Henrietta (Phase-II), Mauritius. Tel: (230) 404 2000 (Details Will be as per dispatch instructions, to be submitted with the purchase order / LOI)
17.	BHEL SBD GST No.	29AAACB4146P1ZB
18.	BHEL SBD PAN No.	AAACB4146P

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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19.	BHEL's VAT regn. No. in Mauritius	To be intimated later.
20.	BHEL's income tax regn. No. in Mauritius	To be intimated later.
21.	Mode of Dispatch	By Sea / Road / Air / Rail Note : It is Seller / contractor's responsibility to ensure availability of Vessels / trucks / Airplanes/Train (for shipment to Mauritius) well in advance for dispatch of material to meet contractual delivery requirement
22.	Price basis	<p>LUMPSUM contract. Turnkey, FIRM till the completion of the contract.</p> <p>Supplies shall be FOR site / DDP Port Louis Mauritius (INCO terms) /CPT SSRI Airport basis, inclusive of seaworthy packing & forwarding charges, Taxes & Duties and Freight to be paid in line with GCC & SCC.</p> <p>All the other applicable taxes including Income Taxes (TDS) as per Indian law shall be deducted from the payables & paid to Government by BHEL.</p> <p>All taxes and duties applicable for this project (VAT, Import/Custom duties etc) in Mauritius are exempted as per GOI-LOC guidelines. Necessary documents for the same shall be provided by BHEL.</p> <p>In the Bill of Lading, the main exporter shall be mentioned as "BHEL International Operations Division"</p> <p>Total price for Supply and E&C together will be considered for evaluation and awarding.</p> <p>Billing break-up of the final price shall be as per BHEL proposed break-up only. BHEL may not order line items of Optional tools & equipment and recommended spares in the break-up, if not required</p>
23.	Paying authority	Paying authority shall be: For supply & services: BHEL – SBD, Bangalore Clause 9.2.4 of GCC is appended as follows: Certification for Service Bills can also be submitted digitally signed by BHEL as well as the supplier.
24.	Payment Terms	<p>(A) Indian Bidders: Payment through NEFT / RTGS</p> <p>1. For main supplies (including spares):</p> <p>(i) Five Percent (5%) of total FOR site/DDP/CPT price against submission & approval of design drawings / documents on prorata basis and against bill duly certified by concerned BHEL executive. This payment will be considered as a stage payment and will be released only against advance bank guarantee of equivalent value, to be kept valid till the completion of supplies. However permission for prorata reduction in BG value on completion of part supplies, can be allowed against specific request from seller / contractors.</p> <p>(ii) Sixty-eight Percent (68%) of FOR site/DDP/CPT of materials supplied, as per PO up along with of Tax (GST) as applicable, shall be paid pro rata against dispatch of goods from Indian port to Mauritius. Payment shall be made within 45 days from receipt of clear bills along with all supporting documents as per PO.</p> <p>Two (2%) of basic value shall be deducted from payment as TDS & TDS Certificate shall be issued by BHEL, as per amendment in GST Law. GOI has amended GST Law - Section 51 of the CGST Act 2017 wherein Government Agencies (PSU) has to deduct 2% GST TDS w.e.f. 01.10.2018. Kindly go thru the latest amendment in GST Law.</p> <p>(III) Ten (10%) of FOR site/DDP/CPT of materials supplied shall be paid pro rata as per approved billing break-up within 45 days from the receipt of seller / contractor's clear bill along with Material Receipt Certificate (MRC) issued by project site engineer of Owner/ Purchaser and confirmation for receipt of all final documents as per PO / Technical Specification, duly certified by concerned engineering department of purchaser. Digitally signed MRC shall be accepted.</p>

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		<p>(iii) Fifteen (15%) of total FOB price against completion of installation & commissioning and Taking over certificate issued by CEB, provided that the vendor extends the validity of the performance security 60 days beyond the end of the Defect Liability Period.</p> <p>2. For Services in Mauritius:</p> <p>(i) Seventy-three (73%) of services (covered under Part C & Part D of technical specification) shall be paid pro rata against submission of invoice and duly certified Work Completion Certificate jointly signed by Supplier and BHEL site Incharge. Payment shall be made within 45 days from receipt of BHEL – SBD’s site Incharge certified clear bills along with all supporting documents as per PO. Digitally signed Work Completion Certificate shall be accepted. Two (2%) of basic value shall be deducted from payment as TDS & TDS Certificate shall be issued by BHEL, as per amendment in GST Law. GOI has amended GST Law - Section 51 of the CGST Act 2017 wherein Government Agencies (PSU) has to deduct 2% GST TDS w.e.f. 01.10.2018. Kindly go thru the latest amendment in GST Law.</p> <p>(ii) Fifteen (15%) of total service value shall be paid against submission of invoice duly certified by authorized BHEL-SBD site Incharge/CEB, upon successful completion of testing & commissioning of the system. Payment shall be made within 45 days from receipt of BHEL – SBD’s site office certification and clear bills along with all supporting documents as per PO</p> <p>(iii) Five (5%) of total service value shall be paid against Final Taking Over Certificate (TOC) issued by CEB.</p> <p>(iv) Five (5%) of total service value shall be paid against submission of complete documentation.</p> <p>Co-ordination for collection of Material Receipt Certificate from Site/ Owner and its submission for claiming the payment shall be the responsibility of the Seller/Contractor.</p> <p>3. For Customs handling, clearance and transportation to site for BHEL supplied PV Modules</p> <p>Hundred (100%) after successful completion of the activity. Payment shall be made within 45 days from receipt of BHEL – SBD’s site office certification and clear bills along with site certification.</p> <p>The documents to be submitted for claiming payments shall be:</p> <p>1. For supply:</p> <p>(i) Invoice: Original + 3 copies (ii) Airway bill / Bill of lading and LR (Original + 3 copies). (iii) Packing List - clearly showing number of packages, gross weight and net weight, HSN code etc. - original+3 copies (iv) MDCC from BHEL/Customer – as per SCC – 4 copies e. (v) Guarantee Certificate – Original + 3 copies (vi) E-way bill (for supplies from India only) (vii) Insurance Intimation Letter / Email</p> <p>2. Against Material Receipt Certificate (MRC):</p> <p>(i) Invoice: Original + 3 copies (ii) MRC issued by BHEL – SBD site office / customer (Digitally signed) – 3 copies</p> <p>3. For services rendered in Mauritius:</p> <p>(i) Invoice – Original + 1 copy (If applicable) (ii) Work Completion Certificate (Digitally signed) duly certified & signed by BHEL – SBD site Incharge.</p>
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	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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		Note: (i) The requirement of any more documents, if needed for release of seller / contractor's payment shall be informed later to the successful Bidder at the time of placement of PO / LOI.
25.	Mobilisation Advance	No site mobilization advance will be paid to the contractor.
26.	Price variation clause / overrun compensation	<u>Not Applicable</u>
27.	Freight	<p>Freight from the port of country of origin to the Mauritius Port and from the Mauritius port to Project site is included in the seller / contractor's scope. Hence total freight include all these shipments / transshipments. 100% freight charges shall be paid along with MRC payment on prorata basis.</p> <p>However Bidders if desire, may use the services of our CHA (being appointed by BHEL) at Indian ports and at Mauritius ports for custom clearance and further shipment, on chargeable basis as per norms. However, support to our CHA for documentation etc. will be the responsibility of seller / contractors.</p> <p>Note:</p> <p>1. All export / import formalities are to be taken care by the respective packages seller / contractors. Only the supporting documents required for such clearance will provided by BHEL / CEB.</p>
28.	Taxes & Duties	<p><u>For supply portion:</u></p> <p>This being a physical Export Project, as per Govt. of India's prevailing export policy, custom duty is exempted. However, as per the present GST act, exemption / refund of GST is available only to the exporter. In this case BHEL being the principle exporter, the GST as applicable, paid by our seller / contractors' / sub-vendor / sub-contractors' in India will be paid extra by BHEL against evidence, therefore should not be included in the basic equipment price. However seller / contractors to support BHEL with requisite documents for BHEL to take credit / refund of such GST. As credit / refund is applicable to BHEL for the GST paid, same is not a cost, to BHEL, therefore will not be accounted for price evaluation.</p> <p>Bidder, however, must ensure that the reduced/ concessional rate of GST as applicable for penultimate exporter vide Notification No. 41/2017-Integrated Tax (Rate) dtd. 23-10-2017, Notification No. 40/2017-Central Tax (Rate) dtd. 23-10-2017 or similar Notification issued by any State / Union Territory GST Authority is levied along with all the necessary compliances. The documents/ undertaking required for availing concessional rate of GST shall be made available by BHEL to the bidder before, during or after export of goods from India.</p> <p>The bidder shall also issue suitable instruction to their C&F agent to comply with relevant conditions for compliance of Notification as issued by the tax authorities from time to time.</p> <p>The statutory changes in Taxes/Duties and levies, if any imposed by state/ Central Govt. during the contract delivery period is to BHEL's account and any upward increase in tax implication beyond the contractual delivery period (on account of the delay attributable to seller / contractor) is to respective seller / contractor's account.</p>

	<p align="center">SOLAR BUSINESS DIVISION</p>	<p align="center">SPECIAL CONDITIONS OF CONTRACT (SCC)</p> <p>Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.</p>	<p align="center">8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius</p>
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		<p>Benefits on abolition / change / introduction of new tax system in lieu of any existing taxes during the execution of contract, must be passed on to BHEL .</p> <p>BHEL intends to claim rewards under ‘Merchandise Exports from India Scheme (MEIS)’ also intends to claim Duty Drawback under the Customs Act, 1962. The supplier should instruct their C&F agent to ensure availability of these benefits to BHEL.</p> <p>The successful bidder shall instruct C&F agent engaged by them to ensure mentioning of GSTN of the Bidder in the “Shipping Bill” to be filed by them. Bharat Heavy Electricals Ltd is registered with “Engineering Export Promotion Council of India (EEPC India). The copy of valid Registration Cum Membership Certificate shall be provided to the successful bidder.</p> <p>The C&F Agent engaged by the successful bidder shall be suitably instructed by the bidder to send a copy of the “ Shipping Bill (which shall contain the GSTN of Bidder and Invoice No. of Bidder) and Export General Manifest(EGM)</p> <p>2 For all the supplies / services for the execution of the contract, rendered directly from outside India to the country of project site, the applicable taxes, duties Charges, Royalties, etc. in the country of origin shall be borne by seller / contractor/ contractor and should be included in the basic price. Same shall not be payable extra by BHEL</p> <p>3. The Bidder shall be responsible for import of all items to be incorporated in the project, including freight, forwarding, custom clearance, port handling, port charges and C & F commission etc. Their offer price should consider Demurrage, Landing fee and additional border charges etc., imposed by Customs authority, Port Authority or any other authorities in the country of origin and in Mauritius. No extra payment will be made by BHEL in this regard..</p> <p>4. Bidder may please note that Customs Documents for any Imported items shall be in the name of Employer / Owner of the Plant / Project (CEB) and such import other than Office and Household Equipment shall be exempted from payment of Customs Duty in the country of Mauritius. Successful Bidder is requested to furnish Exhaustive Item-wise List of Imported Materials (8 Digit HS Code wise) for the instant jobs/ works sufficiently in advance immediately after getting the Purchase/ Work Order but before dispatch of the materials to facilitate BHEL to arrange the requisite papers, if any, from our Employer / Owner. BHEL / CEB will provide necessary certificate / document for availing the custom duty exemption. In case BHEL / CEB is not in a position to provide such documents for no lapses of seller / contractor, reimbursement of customs duty will be done by BHEL as applicable. However any taxes on C & F commission shall be paid by seller / contractor.</p> <p>5. The seller / contractor shall obtain All import permits / license required for custom clearance for any part of the work, in reasonable time having regard to the time for delivery of the work & time for completion.</p> <p>6. Temporarily imported erection materials, machineries & spare parts during the construction period of project may be exempted from payment of custom duty & VAT in Mauritius. Such items shall be taken back within six months from the commercial operation date. However it is the responsibility of the seller / contractors to check get confirmed on availability of such benefits before the submission of bid.</p>
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	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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		<p>7. Hence successful Bidder is requested to furnish EXHAUSTIVE ITEM –WISE LIST OF IMPORTED MATERIALS well in advance for the instant jobs/ works to facilitate us to arrange the requisite papers for exemption purposes.</p> <p><u>For Service portion:</u></p> <ol style="list-style-type: none"> Bidder should have valid VAT Registration Number and 12 digit TIN number in Mauritius prior to start of work. Bidder must issue VAT INVOICE as per said law. VAT (service tax, if applicable), will be reimbursed by BHEL at actual. No other tax other than Mauritius service tax (VAT) is payable on services rendered in Mauritius. However if VAT is exempted during execution of this contract, same will be suitably accommodated. A.I.T (Advance income tax) under Income Tax Act of Mauritius, shall be deducted at prevailing rates on Gross Invoice Value from the bills unless Exemption Certificate, under Income Tax Laws of Mauritius, from the appropriate authority/ authorities is/ are furnished by the contractor. Bidder should have valid 12-digit TIN number in Mauritius prior to start of work. The Bidder is responsible for their Income Tax Liability, if any and BHEL will not bear any such liability. New tax & duties, or variation in the existing rate of VAT in the country of Mauritius if imposed subsequent to latest due date of offer submission, as per NIT as applicable, by statutory authority after due date of submission of latest price offer and within the contract period including extension, if any (provided reason for extension is not attributable to seller / contractor), shall be reimbursed by BHEL at actual on production of relevant supporting document to the satisfaction of BHEL. However, the seller / contractor shall obtain prior approval from BHEL before depositing new taxes & duties. <p>Note:</p> <ol style="list-style-type: none"> The contractor shall carry out their own tax diligence to get acquainted with the relevant rules & regulations of Mauritius pertaining to the aforesaid exemption.
29.	Insurance	<p>Project MCE Coverage in BHEL’s scope.</p> <p>BHEL shall arrange insurance cover for all the equipment being supplied by the seller / contractor under this contract, under transit and storage-cum-erection policy covering liabilities against damages/ losses etc till the completion of Installation and commissioning of entire system. All other terms and condition shall be as per GCC.</p> <p>Risk coverage will be as per latest Inco-terms.</p> <p>In case of damage / loss / theft of goods, the seller / contractors will support Purchaser (BHEL) for lodging claim with insurance company. Registering FIR with police department (as applicable).FIR / Insurance claims are to be lodged by the seller / contractor within 15 days of the notice of such incidence Responsibility of completing all formalities with Police department & Insurance surveyor will be with seller / contractor. In case the claim is not honored by the insurance company for the</p>

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		<p>lapses of seller / contractor, seller / contractor to arrange for repair / replacement of such items without any cost implication to BHEL.</p> <p>Seller / contractors shall make good of the damages / losses of goods supplied by them against separate order from purchaser and necessary documents are to be furnished to BHEL for making payment.</p> <p>Insurance details shall be informed later.</p> <p>Prior to Dispatch, intimation shall be issued to Insurance agency by the supplier about the value of consignment, dispatch details, along with one set of documents consisting of LR /BL copy, Packing List, Challan indicating the items dispatched (with their weights), with a copy to BHEL.</p>
30.	Warranty	<p>24 months (except cables, MMS, HDPE pipe, furniture, MC4 connectors and ACDB) from the date of handing over / TAC whichever is earlier, provided that the Contractor shall extend the provisions of this warranty to cover all repaired and replacement parts furnished under the warranty obligations hereunder, subject to the Warranty Period for the same being for a period of twenty four (24) months from the date on which replacement or renewal work is completed.</p> <p>Contractor warrants that all Work performed by Contractor and Subcontractors, including inspections performed by Contractor and Subcontractors under this Contract, shall be executed with due care and diligence and shall be adequate, fit and sufficient for the purposes intended, in conformity with the terms of this Contract and free from Defect.</p> <p>Provided further that in any event the warranty in respect of the Unit or Power Plant (as the case may be) shall not exceed a period of five (5) Years more than the initial warranty period of 24 (twenty four) months for the relevant Unit or Power Plant (as the case may be).</p> <p>Warranty for Inverter shall be 120 months from taking over by CEB.</p>
31.	Split order condition	Not applicable
32.	Industrial relations & labour laws	<p>Contractor shall implement local labour laws, maintain necessary records and co-ordinate with the local labour authorities on all aspects of labour and industrial relations.</p> <p>The contractor shall comply with the applicable law, rules and regulations of Mauritius etc; with regard to employment of labour. He shall obtain labour license and any other license, as may be required in Mauritius.</p>
33.	Watch & Ward	<p>The contractor shall be responsible for Security of all equipment in his custody issued by BHEL/brought by him against pilferage, damage, etc. The contractor shall also be custodian of the items installed, operated and maintained by him. Refer technical specification for detailed scope and responsibilities.</p>
34.	Performance bank guarantee	<p>PBG, in line with clause no 11 of general commercial terms & conditions of GCC, is to be submitted within 10 days from the date of Letter of Intent (LOI)/ Purchase Order (PO) (Refer Annexure PBG for PBG format).</p> <p>Validity of the Bank Guarantee shall be for the entire Guarantee period +3 months claim period.</p> <p>The BG has to be issued in hard copy and not through SFMS.</p> <p>In case of delay in submission of Contract Performance Bank Guarantee, enhanced Contract Performance Bank Guarantee which would include interest (SBI rate+6%) for the delayed period, shall be submitted by the bidder. Further, if Contract Performance Bank Guarantee is not submitted till such time the first bill becomes due, the amount of Contract Performance Bank Guarantee due shall be recovered as per terms defined in NIT/contract, from the bills along with due interest</p>
35.	Delivery	<p>Submission of Drawings, L2 Schedule and Quality Plan – 1 Week from the date of PO</p> <p>Supplies to be completed within 24 weeks from Drawing Approval</p> <p>Installation and Commissioning within 28 weeks from PO date. PV modules shall be supplied by BHEL free of cost up to Mauritian port at least 45 days prior to commissioning date. Engineering inputs pertaining to PV modules shall be given within 1 month after PO placement. It is the responsibility of</p>

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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		the vendor to perform custom clearance, port handling, port charges and inland transportation of BHEL supplied PV Modules to the site in a timely fashion and to avoid any delays which may incur demurrages. Any demurrages incurred shall be to vendor account.
36.	Drawing submission and approval	As per respective Technical Enquiry Specifications
37.	Final Drawings / Documents submission	As per respective Technical Enquiry Specifications
38.	Inspection Agency	<p>Inspection shall be carried out by agency as per below Inspection category of packages: Seller / contractor shall give inspection call in line with approved QAP/Customer/Owner Hold Points to MAURITIUS/Third Party Inspection Agency (as informed by SBD) for arranging Customer / Owner / Consultant / Third Party participation (wherever applicable), with an advance notice of 15 working days (from Indian seller / contractors) on the proposed date. The MDCC shall be issued by Customer/Owner/consultant based on the BHEL-SBD report OR Joint inspection report of BHEL SBD & Customer/Owner /Consultant (Wherever applicable).</p> <p>During the inspection if the equipment are not found to be ready, all expenses incurred by BHEL / CEB / Consultant / Authorized person, on such visit will be recovered from seller / contractor. For the visits made within the country, will be charged @ INR. 40, 000/- (INR Forty thousand only) per person per visit. Therefore seller / contractors to ensure readiness of equipment in all respect before the visit.</p> <p>No item / equipment's shall be dispatched without obtaining Material Dispatch clearance certificate from BHEL-SBD Material Management Department irrespective of inspection categories.</p>
39.	Dispatch Documents Required (to be furnished by Seller / contractor)	<p>A) The supplier shall provide the following documents in 5 sets, immediately after dispatch and 1 set through e-mail to the concerned purchase & commercial executive of BHEL - SBD :</p> <ol style="list-style-type: none"> 1) Copy of Seller / contractor Invoice. 2) Copy of Packing List indicating Quantity/ Gross weight, Net weight, HSN code and BHEL approved BBU item no. wherever applicable against each item dispatched. 3) BL / AWB / LR 4) Inspection Certificate 5) Other docs as per contract <p>B) Further the documents as per Cl. No. 25 (payment terms) of SCC are to be submitted along with seller / contractor bills for claiming payment from purchaser.</p> <p>In addition to the above, seller / contractor may furnish mfg clearance/drawing/documents approval date for the purpose of determining contractual delivery for expeditious processing of invoices.</p>
40.	Quantity Variation	Since Enquiry is called for total package on turnkey basis, any quantity variation within the scope specified in the technical specification for completion of the package shall be supplied by the Bidder without any additional cost to BHEL.
41.	Despatch & billing instructions	To be issued in due course of time to the successful Bidder
42.	Approval of Sub-vendors	The supplier shall supply the materials from BHEL/CEB approved vendors only. Wherever sub-vendors are not identified in the technical specification, seller / contractor to approach for sub-vendor approval within one month of PO.

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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43.	Liquidated Damages (LD)	GCC Clause 16.2 may be read as : Purchaser reserves the right to recover from seller/contractor the liquidated damages / penalty @ 0.5% of the total contract value (Basic, excluding freight, taxes) per day for delay in obtaining the completion / handing over certificate for the scope covered under this contract, subject to a maximum of 10% of the total contract value (Basic, excluding freight, taxes), if the seller/ contractor fails to deliver the system within the period stipulated in the Order/ Contract.
44.	Risk Purchase	For Supply: In case of default/ late delivery, purchaser reserves his right to make alternate arrangement / procurement at supplier's risk and cost. The actual cost incurred for such purchases along with the departmental charges @5% will be recovered from the Bidder. Risk & Cost for Services: In case of default/ delay in assigned work completion, BHEL reserves the right to make alternate arrangement at Contractor's risk and cost to get the work completed through other agencies. The actual cost incurred along with the departmental charges @5% will be recovered from the Bidder.
45.	Consequential Losses	Either parties shall not be responsible for loss of profit, loss of production, loss of opportunity business, or trade.
46.	Suspension at Suppliers Convenience:	Any such eventuality may be mutually discussed and settled. If not conclusive, may be addressed through contract provisions.
47.	Termination of Contract at Suppliers Convenience	Force majeure situation to be mutually discussed and settled.
48.	MODEL CONCILIATION CLAUSE	As per annexure: Model Conciliation Clause for Conducting Conciliation Proceedings under the BHEL Conciliation Scheme, 2018.
49.	New Clauses of GCC	<p>9.7 Other clauses:</p> <ol style="list-style-type: none"> 1. Seller/Contractor will intimate & upload the Tax invoice along with LR/RR (as applicable) on web portal & intimate BHEL immediately on removal of goods from Seller/Contractor works. In case of Services, Seller/Contractor is required to upload the Tax invoice on Web Portal immediately after raising the invoice. BHEL will issue the delivery order/instruction to dispatch the material to the customer as indicated in SCC. 2. All payments against Tax Invoice to the Seller/Contractor shall be released only after: <ol style="list-style-type: none"> a) Seller/Contractor declaring such invoice in GSTR-1 within the prescribed timeline as per the relevant Act. b) The tax component charged by the Seller/Contractor in the invoice should be matched with the details uploaded by Seller/Contractor in GSTR-1. c) Confirmation of payment of GST thereon by Seller/Contractor on GSTN portal 3. In case, any GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry to timeline prescribed in the relevant Act for availing such ITC, or any other reasons not attributable to BHEL, tax amount shall be recoverable from the Seller/Contractor along with interest levied/leviable on BHEL. <p>Wherein GST liability arises on BHEL under reverse charge, any interest levied/leviable due to any reasons not attributable to BHEL shall be recovered from the Seller/Contractor.</p>
50.	New Clauses of GCC	a) In case of discrepancy in CGST/SGST/UTGST/IGST rate corresponding to HSN; code and quotes rates, the evaluation shall be done on quoted price and correct CGST/SGST/UTGST/IGST rate shall be considered for ordering (limited to quoted FOR Site Price)

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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		<p>b) The bidder should have been registered with the appropriate authority under relevant GST laws.</p> <p>c) The bidder to specify in their offer (part 1 bid) the category of registration under GST i.e. registered dealer and composite dealer</p> <p>d) No CGST/SGST/UTGST/IGST will be reimbursed to composite dealer. In the event of any GST quoted by composite dealer, the same shall be considered for evaluation purpose. However, the ordering will be done without considering the tax.</p> <p>In the event of any change in the status of Seller/Contractor from composite to regular dealer after the submission of the bid but before the supply, no reimbursement of CGST/SGST/UTGST/IGST will be made. However, the Seller/Contractor has to raise the invoice strictly, as per the law, by adjusting their ex-works price.</p>
51.	New Clauses of GCC	<p>Delivery Challans & Invoices /Service Entry Sheet in the format as specified under GST laws mentioning your GSTIN No, item HSN/SAC No should accompany supply.</p> <ol style="list-style-type: none"> 1. GST portion of invoice shall be released only upon Seller/Contractor declaring such invoice in his GSTR-1 return and receipt of goods/services and tax and confirmation of payment of GST thereon by Seller/Contractor on GSTN Portal. 2. Bank Guarantee of appropriate value may be obtained from Seller/Contractor which shall be valid at least one month after the confirmation of payment date by Seller/Contractor on GST portal and receipt of Tax invoice and receipt of goods, whichever is later. [if (a) above could not be complied]. 3. In case GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount shall be recoverable from Seller/Contractor along with interest levied/BG of appropriate value may be obtained from Seller/Contractor alternatively payment covering GST portion including interest thereon shall be release to Seller/Contractor only upon completion of these requirements. <p>In case Seller/Contractor delays declaring such invoice in his return & GST credit by BHEL is denied or reversed subsequently as per GST law, GST amount paid by BHEL towards such ITC reversal as per GST Law shall be recoverable from the Seller/Contractor along with interest levied/leviable to be obtained from Seller/Contractor alternatively payment covering GST portion including interest thereon shall be released to Seller/Contractor only upon completion of these requirements</p>
52.	E-Invoicing under GST	<p>-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 Government that it is mandatory to mention a valid unique Invoice Reference Number (IRN) and QR code as generated from Government 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.</p> <p>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 vendor's account. BHEL has further right to take necessary steps to protect its interest at the time of release of payment.</p>
53.	Tax Collected at Source (TCS)	<p>W.E.F. 01.07.2021 BHEL IS LIABLE TO DEDUCT TAX AT SOURCE U/S 194Q OF THE INCOME TAX ACT AT THE APPLICABLE RATE AND PRESCRIBED VALUE OF GOODS. HEREAFTER SELLER/VENDOR NEED NOT LEVY TAX COLLECTED A SOURCE (TCS) AS REQUIRED U/S 206C(1H) OF THE INCOME TAX ACT.</p> <p>BHEL would be making use of the functionality introduced by CBDT: Compliance Check for Sections 206AB and 206CCA and accordingly using the applicable rate of TDS. Vendors to make sure the information is available in the functionality against their PAN Nos.</p> <p>Vendors to note the applicable rate of TDS as per 206AB and 206 CCA will be at higher rate of 5% (as against 0.1%) in case of specified persons (non-filers).</p>

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		<p>Specified persons means:</p> <ol style="list-style-type: none"> 1. Who has not filed Income Tax returns for last two assessment years relevant to the applicable Two Previous Years 2. Aggregate of TDS/TCS is Rs. Fifty Thousand and more in each of the two previous years
54.	Preference to Make in India	<p>This Tender is governed by Circular No. P-45021/2/2017-B.E.-II dated 15.06.2017, 28.05.2018, 29.05.2019 & 04.06.2020 issued by Govt. of India.</p> <p>'For this procurement, Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017, 28.05.2018, 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/ POI WO against this NIT. In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and/ or local content in respect of this procurement, same shall be applicable."</p> <p>Preference to Make in India including counter offering will be as per the Public Procurement (Preference to Make in India), Order 2017 available in the following links:</p> <p>https://dipp.gov.in/sites/default/files/publicProcurement_MakeinIndia_15June2017.pdf https://dipp.gov.in/sites/default/files/Revised-PPP-MII-Order-2017_28052018.pdf https://dipp.gov.in/sites/default/files/PPP-MII%20Order%20dt%2029th%20May%2019_0.pdf https://dipp.gov.in/sites/default/files/PPP%20MII%20Order%20dated%204th%20June%202020.pdf https://dipp.gov.in/sites/default/files/PPP%20MII%20Order%20dated%2016%2009%202020.pdf</p> <p>Certification (as applicable) giving the percentage of local content, in line with PPP-MII order, to be submitted as per attached Annexure-1(A) for procurement value from Rs. 5.00 Lac to Rs. 10.00 Crore or Annexure-1(B) for procurement value more than Rs. 10.00 Crore.</p>
55.	Provisions Applicable for MSE (Micro and Small Enterprises) Vendors	<p>PROVISIONS APPLICABLE FOR MSE VENDORS (MICRO AND SMALL ENTERPRISES)</p> <p>Benefits/facilities as applicable for Micro and Small Enterprises (MSEs) shall be available to MSE vendors registered with Government Designated Authorities as per the Purchase & Price Preference Policy of the Government subject to them becoming eligible otherwise.</p> <p>Vendors who qualify as MSE vendors are requested to submit applicable certificates (as specified by the Ministry of Micro, Small and Medium Enterprises) at the time of vendor registration.</p> <p>Vendors have to submit the Udyog Aadhaar Memorandum (UAM)/UDYAM Registration Certificate along with attested copy of a CA certificate [Annexure-2(A) / Annexure-2(B)] applicable for the relevant financial year (latest audited) along with the tender documents in the Part-I Bid to avail the applicable benefits.</p> <p>Date to be reckoned for determining the deemed validity will be the date of bid opening (Part-I in case of two-part bid and three-part bid).</p> <p>Documents have to be notarized/attested by a Gazetted officer and must be valid as on the date of Part-I Bid opening for the vendors to be eligible for the benefits applicable for MSE vendors. Please note that no benefit shall be applicable if any deficiency in the above required documents are not submitted before the Price Bid Opening / Reverse Auction.</p> <p>If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal.</p> <p>Bidders to however note the documents that shall be furnished in order to establish credentials as MSE vendor should be as per the extant statutory requirements specified by the Ministry of Micro, Small and Medium Enterprises (MSME).</p>

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		<p>PURCHASE PREFERENCE FOR MSE VENDORS:</p> <p>(For Items which are divisible in nature) MSE vendors quoting within a price band of L1 + 15% shall be allowed to supply up to 25% of the requirement against this tender provided:</p> <ol style="list-style-type: none"> 1. The MSE vendor matches the L1 price. 2. L1 price is from a non MSE vendor. 3. L1 price will be offered to the vendor nearest to L1 in terms of price ranking (L2 – nearest to L1). In case of non-acceptance by the MSE vendor (L2), next ranking MSE vendor will be offered who is within the L1 + 15% band (if L3 is also within 15% band). 4. 3% of the 25% will be earmarked for women owned MSEs. 5. 25% of the 25% (i.e., 6.25% of the total enquired quantity) will be earmarked for SC/ST owned MSE firms provided conditions as mentioned in (1) & (2) are fulfilled. 6. In case where no SC/ST category firms are meeting the conditions mentioned in (1) and (2) or have not participated in the tender, the 6.25% of earmarked quantity for SC/ST owned MSE firms will be distributed among the other eligible MSE vendors who have participated in the tender. <p>(For Items which are not divisible in nature) MSE vendors quoting within a price band of L1 + 15% shall be allowed to supply up to 100% of the requirement against this tender provided:</p> <ol style="list-style-type: none"> 1. The MSE vendor matches the L1 price. 2. L1 price is from a non MSE vendor. 3. L1 price will be offered to the vendor nearest to L1 in terms of price ranking (L2 – nearest to L1). In case of non-acceptance by the MSE vendor (L2), next ranking MSE vendor will be offered who is within the L1 + 15% band (if L3 is also within 15% band). 4. No distribution shall be done specifically to women owned MSEs or SC/ST owned MSEs in such cases. <p>Documents to be submitted for claiming MSE status and intended benefits: Option 1 (valid till 31.03.2021): Submission of Udyog Aadhar Memorandum along with CA certificate as per Annexure-2(A). Option 2: Submission of Udyam Registration Certificate along with CA certificate as per Annexure-2(B).</p>
56.	Purchase from SEZ in India	Purchase from SEZ in India shall be considered as Indigenous purchase for the purpose of Purchase Preference to Make in India Policy, Price Basis, Payment term & delivery terms. However, additional taxes, duties including Safe Guard Duty if any shall be considered while evaluating the bid.
57.	Relaxation in Public Procurement Norms for Startups	<p>For all public procurement, the criteria of prior turnover and prior experience for all Startups is relaxed subject to their meeting of quality and technical specifications.</p> <p>DPIIT (Department for Promotion of Industry and Internal Trade) Certificate of Recognition for Startups to be submitted for availing benefits.</p>
58.	Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144	<ol style="list-style-type: none"> I. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. II. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not failing in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process. III. "Bidder from a country which shares a land border with India" for the purpose of this Order means: <ol style="list-style-type: none"> 1. An entity Incorporated, established or registered in such a country; or 2. A subsidiary of an entity Incorporated, established or registered in such a country; or

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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	(XI) of the General Financial Rules (GFRs), 2017	<ol style="list-style-type: none"> 3. An entity substantially controlled through entitles incorporated, established or registered in such a country; or 4. An entity whose beneficial owner is situated in such a country, or 5. An Indian (or other) agent of such an entity; or 6. A natural person who is a citizen of such a country; or 7. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above <p>IV. The beneficial <i>owner</i> for the purpose of (iii) above will be as under:</p> <ol style="list-style-type: none"> 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means. Explanation- <ol style="list-style-type: none"> a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company; b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholder's agreements or voting agreements; 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership; 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of Individuals; 4. Where no natural person is Identified under (1) or (2) or (3) above the beneficial owner is the relevant natural person who holds the position of senior managing official; 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership. <p>V. An Agent is a person employed to do any act for another or to represent another in dealings with third person.</p> <p>VI. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.</p> <p>* The above clause is not applicable to the bidders from those countries (even if sharing a land border with India) to which the GoI has extended lines of credit or in which the GoI is engaged in development projects.</p> <p>* List of countries to which lines of credit have been extended or in which development projects are undertaken are available on the Ministry of External affairs website (https://www.mea.gov.in/)</p> <p>Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017 to be submitted on the bidder's letterhead as per Annexure-3(A) or Annexure-3(B) – as applicable.</p>
59.	Declaration by bidder regarding protection of commercial	<p>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.</p>

	SOLAR BUSINESS DIVISION	SPECIAL CONDITIONS OF CONTRACT (SCC) Item: Supply, Installation including civil works and commissioning of Solar PV power plant works except supply of PV modules for through Mini EPC Tender.	8MWac Solar PV Farm at Henrietta (Phase-II), Tamarind Falls, Mauritius
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	interests of BHEL	
60.	Organization Chart	The bidder shall submit the overall organization chart along with contact details/mobile no. of officials dealing with this contract package for Engineering, Quality, Supply, etc. immediately after receipt of Purchase Order.
61.	Note	1. In place of EPD, Bangalore, it may be read as SBD Bangalore. 2. 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. 3. Bidders shall confirm acceptance of technical specification which is part of the tender document (If Applicable). Any deviation from technical specification can be rejected at BHEL's discretion. Not applicable to this tender.
62.	Reverse Auction	Reverse Auction as per BHEL guidelines shall be conducted
63.	Integrity Pact	To be submitted in the format given by BHEL

Monofacial PV Modules MBB P-Type PERC Half-cut

ASM-M10-144-AAA (AAA=520-545) | 144 Cells | 520-545 Wp

Highlights



MBB cell technology - excellent anti-microcracking performance with more balanced interior stress; grid pattern current path, lower cost



High module conversion efficiency



Characterised for 1000 W/m² & 200 W/m² on the front and rear side respectively



Excellent low light performance



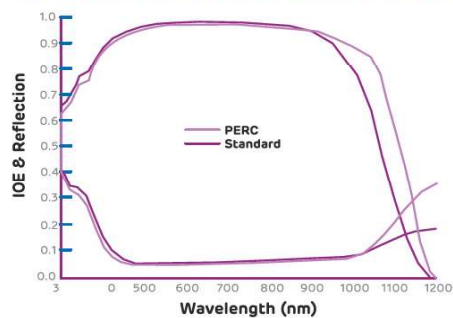
Least Degradation for LID & LeTID with Ga Doped wafer technology



Excellent PID Resistance

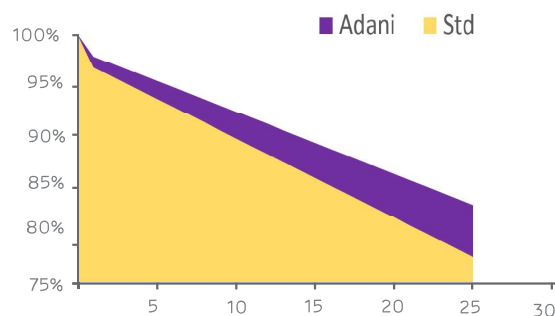


Significant benefit of PERC technology



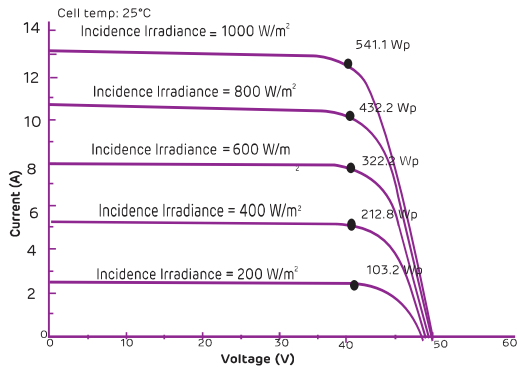
PERC technology enables better light capturing abilities at longer wavelength, weak and diffused light and in cloudy conditions.

Superior Warranty

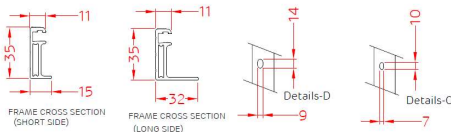
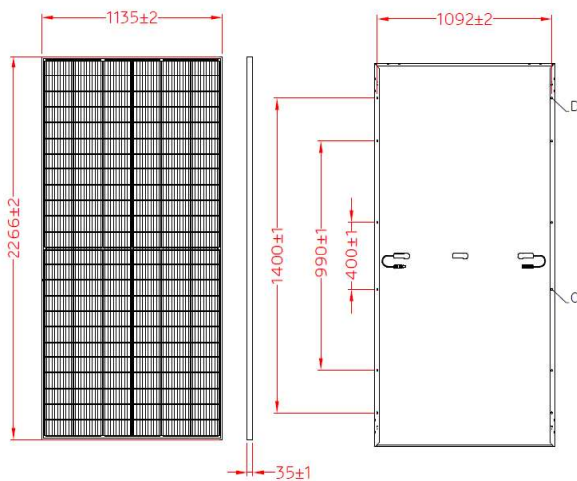


Technical Data

Multi irradiance curve for ASB-M10-144-AAA



Dimensions in mm



Warranty and certifications

Product warranty**

12 years of product warranty

Performance guarantee**

Power degradation < 2.0 % in first year
< 0.55 % / year in 2-30 years

Approvals and certificates* : IEC 61215 Ed2, IEC 61730, IEC 61701, UL 61730, MCS, JET, CEC, CEC-Aus, IEC 62716, IEC 62782, IEC 60068-2-68, IEC 61853, BIS

*All certifications are under process



Electrical data – All data measured to STC*

Electrical Specification	Only front (STC)					
Peak power, (0 ~+ 4.99 Wp) Pmax(Wp)	520	525	530	535	540	545
Maximum voltage, Vmpp (V)	41.19	41.34	41.49	41.64	41.80	41.94
Maximum current, Imp (A)	12.64	12.71	12.78	12.85	12.91	13.01
Open circuit voltage, Voc (V)	48.18	48.36	48.57	48.72	48.92	49.07
Short circuit current, Isc (A)	13.54	13.62	13.70	13.74	13.84	13.92
Module efficiency (%)	20.22	20.41	20.61	20.80	21.00	21.19

*STC: Irradiance 1000 W/m², cell temperature 25°C, Air Mass AM 1.5 according to EN 60904-3
. Average efficiency reduction of 4.5 % at 200 W/m² according to EN 60904-1. Except Pmp, all other parameters have a tolerance of +/-3 %, measurement uncertainty < 3 %

Electrical Characteristics at NOCT

Pmax(Wp)-NOCT	382	386	389	393	397	401
Maximum voltage, Vmpp (V)	38.30	38.45	38.60	38.74	38.93	39.05
Maximum current, Imp (A)	9.99	10.04	10.09	10.15	10.22	10.28
Open circuit voltage, Voc (V)	45.45	45.60	45.75	48.96	46.14	46.28
Short circuit current, Isc (A)	10.90	10.97	11.00	11.06	11.12	11.19

**NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec.

Temperature co-efficients (Tc) and permissible operating conditions

T _c of open circuit voltage (β)	-0.29 % /°C
T _c of short circuit current (α)	0.045 % /°C
T _c of power (γ)	-0.35 % /°C
Maximum system voltage	1500 V (IEC & UL)
NOCT	44°C ± 2°C
Temperature range	-40°C to + 85°C

Mechanical data

Length	2266 mm
Width	1135 mm
Height	35 mm
Weight	28.8 kg
Junction box	IP68; Junction box, MC4 compatible
Cable and connectors	300 mm length cable, MC4 & Amphenol compatible connectors
Application class	Class A (Safety class II)
Superstrate	High transmittance ARC glass-3.2 mm
Cells	144 Half-cut mono-crystalline P-type PERC monofacial solar cells; MBB bus bars
Encapsulation	High volume resistivity and low MVTR
Substrate	White Backsheet
Frame	Anodized Frame
Mechanical load test as per IEC & UL	5400 Pa-front; 2400 Pa-back
Maximum series fuse rating	25 A

Packaging Configuration

Container	40'HC
Pallets / Container	19
Pieces / Container	589

Note:

- The specifications included in this datasheet are subject to change without notice.
- The electrical data given here is for reference purpose only.
- Please confirm your exact requirements with the sales representative while placing your order.

** Warranty:

Please read Adani solar warranty documents thoroughly.

*Caution:

Please read safety and installation instructions before using the product.

PV MODULE INSTALLATION

MANUAL IEC & UL VERSION

MUNDRA SOLAR PV LIMITED

Adani House,
Near Mithakhali Circle,
Navrangpura, Ahmedabad – 380009,
Gujarat, India
Tel : +91 79 2656 5555 Fax: +91 79 2555 55.

Applies to the below PV Module

ASP-7-AAA	ASM-6-PERC-AAA
ASP-6-AAA	ASM-6-B-PERC-AAA
ASP-6-B-AAA	ASM-6-AB-PERC-AAA
ASP-6-AB-AAA	ASP-14-AAA
ASM-7-PERC-AAA	ASM-14-PERC-AAA

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1. DISCLAIMER OF LIABILITY

- This Installation Manual is applicable for Mundra Solar PV Ltd.'s (MSPVL) PV Modules. MSPVL is referred as Adani / Adani Solar in the Installation Manual as MSPVL is part of Adani Group.
- This manual is for authorized & trained users only. ADANI is not responsible for any type of mishandling or failure to follow instruction manual. Any type of Loss, Damage, Hazard, Injury or Expense because of improper installation, Handling, Usage & Maintenance is not in scope of ADANI.
- Adani Solar assumes no responsibility for the infringement of intellectual property rights or other rights of third parties that may result from use of the module. No license is granted in this regard, either expressly or implicitly, or under any patent rights.
- Information contains in this instruction manual is based on ADANI Information and expertise. This manual and specification can be changed by the company without giving any prior information. Adani has rights to amend this document any time including PV module specification without prior notification.
- The Installation manual is applicable for both 1500V & 1000V series modules. It is recommended to check & get a confirmation from the manufacturer on the rated system voltage of the product before using the panels.

2. SAFETY MEASURES

- On direct exposure to sun light PV module produces electricity, which can result in electric shock or while working with module exposed under direct sunlight, it is advised to use installation tools and for precaution, wear hand gloves to protect from electrical hazards. Also it is advised to keep away from any metallic contact touching the human body.
- Standing on module is strictly prohibited as it can impact the module's performance and is not applicable to warranty claims if it is discovered that people have stood on PV modules, no one should stand on the module rare and front surface. Uneven pressure develop during standing on it can damage solar cell.
- Module front surface is made of tempered glass and has an ARC coating, so it needs special care in handling. If glass breaks due to any reason, it is advised to keep human contact away. At ambient wet condition any human contact with the broken glass surface may lead to electrical shocks. Once module glass breaks it has to be scraped or disposed after removing it from String after String is disconnected from the load.
- Any loose connection in connectors of PV module can cause electrical arcing and can lead to fire hazard. It is recommended to not keep any gap in connectors. Also ensure all the connectors should be corrosion free and protected against corrosion and soiling. It is strictly prohibited to remove or cut any connector of PV Module for installation easiness by the installer / customer and the module is deemed out of warranty.
- Do not install or handle any PV Modules in unfavourable environmental condition like high flow winds and wet snowy roof surfaces for personal safety. Modules should always be dry while installing.
- Please Ensure the polarity of the modules or strings is not reversed in relation to the other.
- Any artificial sunlight focusing on PV module is not recommended as it can reduce its performance and life cycle.
- Adani PV modules are certified to operate in Class A condition installed below a specified voltage level (1500V / 1000V dc). Consider this voltage range while designing the power plant. This value should be taken into consideration when designing the power plant, as per the temperature ranges present at the site. The mixing of power classes in one string is not allowed and can be harmful. Damage to modules due to such mixing can lead to the invalidity of product warranties.
- At different environmental conditions, PV module can produce high current and voltage than the measured in STC condition. Snow and water causes reflection which can increase the sunlight intensity which can increase the flow of current and Power output. The Isc value should be multiplied by 1.25 when determining the conductor current ratings, fuse sizes, and the size of controls connected to SPV output. Refer to Section 690.8 of the National Electric Code (for modules under UL spec) to check when an additional multiplying factor of 1.25 may be applicable.

2.1 Fire Safety

Consult your local authorities for guidance and requirements for installation or building fire safety.

- The top structure and installation may affect the building fire safety; improper installation may lead to fire hazards. As required by the local authorities, use such devices as ground fault cut-outs and fuses.
- Please do not operate the panel in the environment vulnerable to combustible gases or near any equipment.
- MSPVL PV Modules (for modules under UL spec) have a Type 1 fire resistance rating in accordance with UL 1703 certification. The fire rating of this PV module is valid only when mounted in the manner specified in the mechanical mounting instructions. When PV modules are mounted on rooftops, the roof must have a fire resistant covering suitable for this application. PV modules are electrical generating devices that may affect the fire safety of a building.
- In the event of a fire, PV modules may continue to produce a dangerous voltage, even if they have been disconnected from the inverter, have been partly or entirely destroyed, or the system wiring has been compromised or destroyed. In the event of a fire, inform the fire crew about the particular hazards from the PV system, and stay away from all elements of the PV system during and after a fire until the necessary steps have been taken to make the PV system safe.

3. PV MODULE UNPACKING AND STORAGE

- After receiving the PV Modules, Customers are requested to match the product specification as it had been ordered. All the module serial number and other details are present on the box of the PV modules.
- Do not stack packing boxes (pallets) more than 2 boxes high. If pallets are temporarily stored outside, an external protective cover should be placed over them and the stack height should not be more than 1 pallet high.
- During unpacking there should be two people to unpack from vertical side as shown in figure below. Also keep attention during unpacking that one module should not fall on other module inside the box.
- Improper handling of PV module may cause scratches and damage to module. It is not recommended to apply adhesive or paints on the surface and frame of the module.
- Do not short the -Ve & + Ve terminal of the Junction box of the PV Module at any time.
- Always use cutting pliers to cut the cable tie of the PV module. Do not use any knife as it can damage the PV Module.
- It is not recommended to place modules directly on another module.

3.1 Module Identification

Every module has a unique serial number, which is laminated behind the glass. Please do not tamper with the serial number of the module and always record all serial numbers in an installation for your future records.

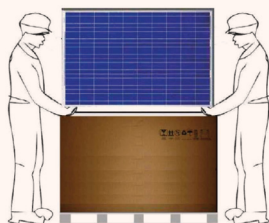


Fig 1: Method of module unpacking

4. ENVIRONMENTAL CONSIDERATIONS

4.1 Climate Conditions

All Adani Solar modules are tested for IEC 61215, IEC 61730-I & II, UL 1703, IEC 61701, IEC 62716, IEC 62804. The modules are qualified for application Class A. Modules qualified for safety through IEC 61730 within this application class is considered to meet the requirements of Safety Class II. ADANI PV modules meet the requirement of European standards as they are also tested for the Ammonia fumes that may be present in Barns sheltering Cattle, Pigs, as well as sustainability for Installation in Humid (Coastal) Areas of high Sand Storms. Adani module Passed in testing of Salt mist IEC 61701 Salt mist corrosion test (Severity VI) with a salt concentration of 5% by weight, galvanic corrosion can occur between the aluminium frame and mounting or ground materials if such materials are made of dissimilar metals. Stainless steel and aluminium metal's direct contact is not recommended for seaside installations to avoid metal corrosion.

Environmental Condition

Ambient temperature: -40°C to +50°C.
Operating temperature: -40°C to +85°C.
Storage temperature: -20°C to +50°C.
Humidity: ≤85 RH%

Design Load: 800Pa and 1800 Pa

Safety Factor: 3

Mechanical Load Pressure:

5400Pa (112.8lb/ft²) from front and 2400 from the rear (50.12lb/ft²).

Stability of structure

Structure matching the mounting hole pitch of different types of modules is used to survive the load required and fatigue of the outdoor application. The structure should be coated to survive in external environment till lifecycle of PV module of 25 Years. Please consult the Mundra Solar technical support department for more information on the use of modules in special climates, such as an altitude greater than 2000 m.

Important instruction for Mounting

- Always avoid loop formation during designing, to minimize the risk during indirect light striking.
- Confirm mounting system must withstand the Loads of wind & snow should not cross the maximum rated load bearing capacity of PV module that is 2400 Pa for wind and 5400 Pa for snow. Adani advises the customer to choose the modules carefully considering the environmental conditions.
- Modules are evaluated by third party lab for max. positive loading of 5400 Pa.
- Module installation in projects must face north while being installed in the southern hemisphere and the modules should be south facing while being installed in the northern hemisphere. Electricity generation reduces when the module installed at site facing west or east. Failure to follow this instruction will lead to lesser power generation.
- When the modules are connected in series, the angle at which it is installed should be the same for all the modules. If modules in series connected system are installed at different angles, the radiation of sun becomes uneven which will result in different

fluctuating current across the string and will lead to loss in Power Output.

- PV module facing directly to sun produces more power. When solar modules are installed on permanent structure it is recommended to tilt the PV modules for optimum performance during winter season. Measurement of tilt angle done between the solar module and the ground. Recommended Tilt Angle for a fixed system is listed below.
- PV modules should not be installed under shade or shadow under any conditions as it may lead to current mismatch across the solar cells leading to damage of the solar module. Shadow on the solar module is only acceptable if the irradiation is lesser than 200 W/m².
- Never disconnect module cables when it is connected with load.

- The mechanical load bearing capacity depends upon the installer's mounting methods and failure to follow the instructions in this manual may result in different capabilities to withstand snow and wind loads. The system installer should ensure that the installation methods used meet these requirements as well as any local codes and regulations.
- In installations not under the requirements of the NEC, the values of ISC and VOC marked on this module should be multiplied by a factor of 1.25 when determining component voltage ratings, conductor capacities. Installation shall be in accordance with CSA C22.1, Safety Standard for Electrical Installations, Canadian Electrical Code, Part 1, overcurrent device ratings, and size of controls connected to the PV output if the modules are being used in Canada.
- MSPVL sending modules always in packed condition. The qty. details is always indicating outside box on sticker. If customer received any lose module / open box condition at the time of receipt of consignment, Receiver is advised to hold unloading and inform MSPVL - Logistics team on mobile no-91 9099003579 and start unloading as per his advice.
- Customer need to compare receipt no of Pallets qty. against mentioned qty. on transporter's LR / MSPVL packing list at the time of receiving of consignment, For any difference in QTY of no of pallets, recipient is advised to mentioned discrepancy clearly on LR and obtain signature of vehicle driver and also obtain driving License copy of driver.
- For any "physically damage of pallets on vehicle" Customers are requested to intimate us along with support photographs of damaged pallets-on vehicle for insurance claim purpose on same day of receipt of container and same need to inform MSPVL-Logistics team on mobile no-91 9099003579 and start unloading as per his advice.
- It is necessary to mentioned discrepancy remark clearly on transporter LR duly signed and stamped. It is also necessary to obtain signature of driver on LR / POD. The discrepancy remarks should be agreed by Vehicle driver
- All LR (POD) shall be stamped and sealed duly signature by customer mentioning number of pallets received.
- For the detail Procedure for transit damage insurance claim please refer to document no. MSPVL/MDL/PQA/SOP/15

5. SITE SELECTION

- PV modules should be installed in a place where no shading occurs throughout the year. Shading can be minimized by ensuring that the distance between an obstruction and the solar array is more than three times the height of the obstruction.
- PV module can be installed in portrait or landscape orientation, impact of dirt shading can be minimized by orienting the PV modules in portrait. The module facing should be south in northern hemisphere and north in southern hemisphere.
- Sufficient row to row gap has to be chosen and PV modules should be spaced between two rows appropriately such that no shadows appear on the PV module at any part of the day during 365 days due to inter row spacing.
- For optimum energy production, solar modules should normally be mounted facing the equator at an angle to the horizontal plane equivalent to the latitude of the installation. If the PV module is placed at a different angle or orientation, this could have a direct impact on the power output.
- To maintain the fire class rating any slope of 1: 2.4 is required.
- Do not use mounting methods where drainage holes are blocked.
- At any condition PV module should not be installed by immersing the module under water.
- PV module should not be installed on moving objects like vehicle or vessel.
- ADANI solar module is fire rated with Type 1 for Class C.

6. MOUNTING INSTRUCTION

3.1 Module Identification

PV modules can be installed or fixed by Bolts method or by clamp method. For bolts type fixing corrosion resistive M6 bolts to be used, Mounting methods should ensure following things:-

- Minimum clearance required between module frame and surface of the roof or wall is 200 mm.
- Minimum distance between each Solar PV Module should be 10.50 mm.
- Drainage holes should be kept open and no blockage is allowed in the drainage hole.

PV modules are not to be subjected to wind or snow loads exceeding the maximum permissible loads and should not be subjected to excessive forces due to the thermal expansion of support structures, careful consideration has to be shown during system design and installation such that thermal expansion of support structures do not cause any breakage of PV modules which will not be part of Adani Solar's Warranty Document. When modules are ground mounted, select the height of the mounting system in such a way as to prevent the lowest edge of the module from being covered by snow for a long time in winter in areas that experience severe snow fall. If snow settles on the PV modules, the regular clearing of snow and other foreign particles and dust and dirt is highly recommended to ensure the long-term reliability of the PV modules. Failure to comply may result in damage to the module and lead to deformation or drop in power output which will not be covered under warranty.

* "The module is considered to be in compliance with UL 1703 only when the module is mounted in the manner specified by the mounting instructions below."

**Any module without a frame (laminate) shall not be considered to comply with the requirements of UL 1703 unless the module is mounted with hardware that has been tested and evaluated with the module under this standard or by a field Inspection certifying that the installed module complies with the requirements of UL 1703",

A. Bolt Type Fixing

Every module frame contains 8 mounting holes of 9 mm X 14mm. It is recommended from ADANI to use corrosion resistance stainless steel fixing. The module fixed with the support of M8 bolt, washer and nut. For reference please see the below image. The assembly of M8 bolt, nut, washer and the PV module should be tightened to a minimum torque of 16-25 Nm.

Mechanical Drawings of PV Module "ASM-7-PERC-AAA & ASP-7-AAA".

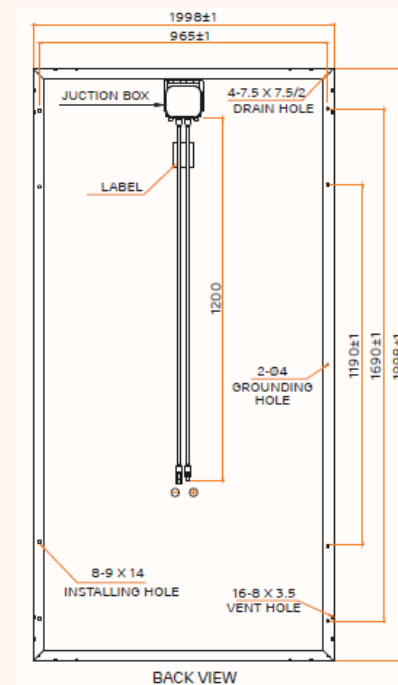


Fig 2: 72 Cell Module Drawing of
ASM-7-PERC-AAA & ASP-7-AAA

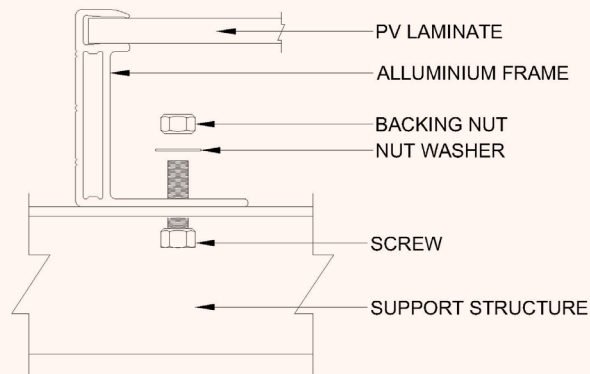


Fig 3: PV Modules Installed with screw fitting method

B. Clamp Type Fixing

ADANI Solar has done number of tests on clamps and on the basis of that test results, it is recommended to use clamps with EPDM or with insulating type washer only.

- Total 4 numbers of clamps are required to fix the PV module on structure or mounting rail.
- To avoid any kind of breakage of glass, clamps should not touch the glass and the shadow of clamp should not come on the module front surface.
- No modification or changes in the structure of module frame is permissible.

When modules fixed with clamp type fixing method, 4 clamps are required to fix the module, 2 clamps on each long side frame and 2 clamps on each short type frame side. ADANI solar modules are certified for bearing 2400 Pa wind load and 5400 Pa snow load on the front side of the PV module. To bear this load more number of clamps can be used to fix the module.

Fringe Module Installation

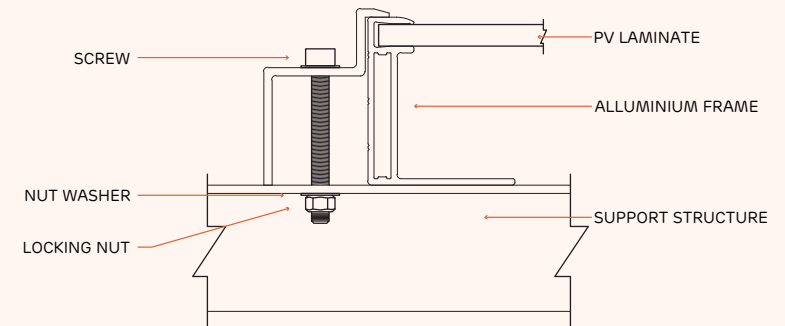


Fig 4: PV Modules Installed with Fringe Clamping Method

Middle Modules Installation

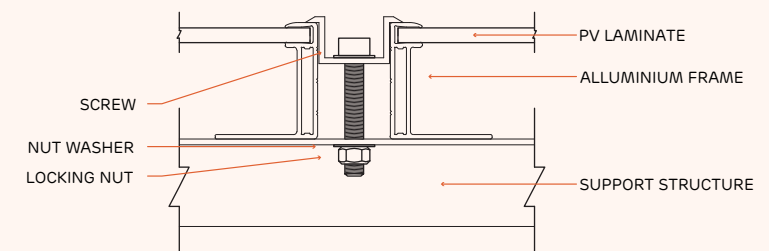
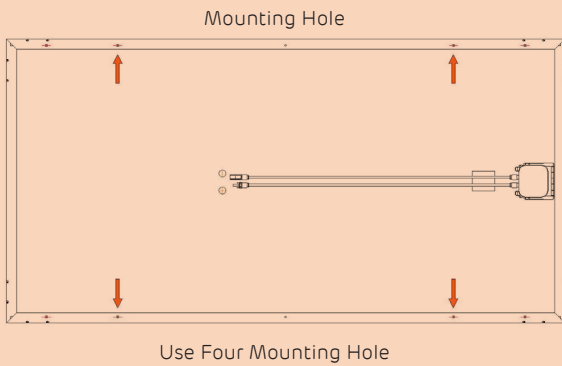
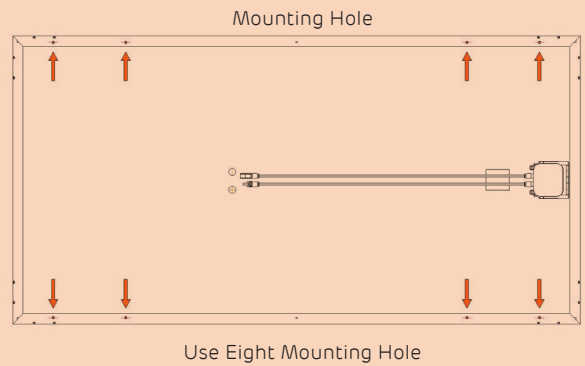
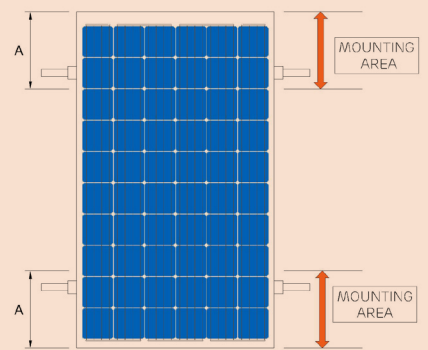
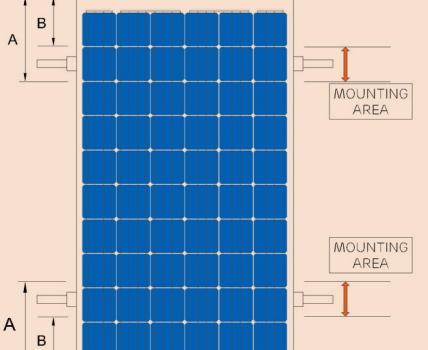
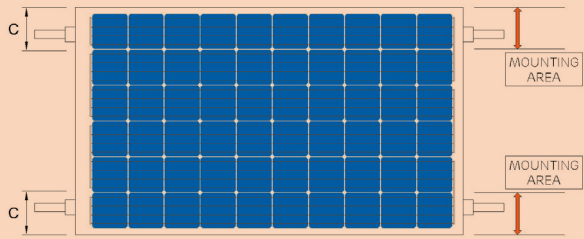
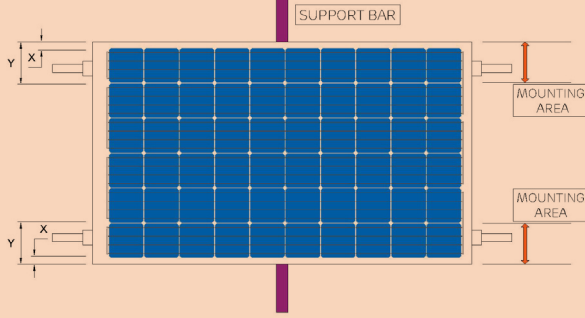


Fig 5: Middle Modules Installed with Clamping Method

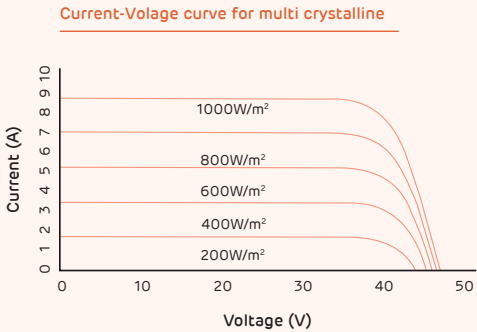
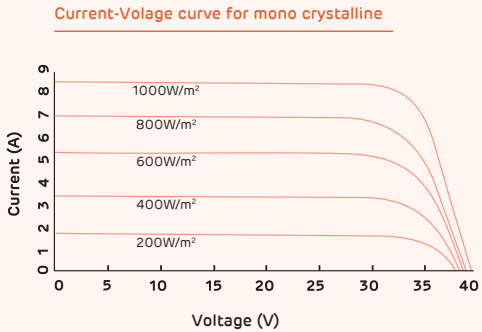
Mounting Methods	At 2400 Pa load condition	At 5400 Pa load condition
Bolt type Fixing		
Long Side Clamping		
Short Side Clamping		

• Figures to represent mounting methods and applies to all 144, 72, & 60 Cell PV Modules.

Different Mounting Configurations can be tried as per Installer's calculations, but however failure to comply with the above suggestions may result in a lowering of load handling capabilities and may lead to failure of any overload situation which may not be covered under product warranty.

Dimensions depending on Module type in (mm)

Model Name	ASP-7-AAA; ASM-7-PERC- AAA	ASP-6-AAA ; ASM-6-PERC- AAA; ASM-6-B- PERC- AAA ; ASM-6-AB- PERC-AAA	ASP-14-AAA ASM-14-PERC- AAA
Length	1998	1660	1996
Breadth wise mounting hole pitch	965	947	947
X	48.31	47.45	47.45
Y	202	198.4	198.4
A	499.5	415	499
B	249.75	207.5	249.5
C	241.25	236.75	236.75



2. Typical specification of ASP-7-AAA series modules

1	Temp coefficient of Current	0.069 %/°C
2	Temp coefficient for voltage	-0.31 %/°C
3	Temp coefficient of Power	-0.40 %/°C
4	System Voltage	1000V/1500V (IEC & UL)*
5	NOMT	45±2 °C
6	Series Fuse Rating	15
7	Junction Box	IP67 with MC4 compatible connectors.
8	Aluminium Frame	Anodized aluminium frame with twin wall profile
9	Solar Glass	High Transmittance ARC Glass
10	Weight	23.5 Kgs
11	Product Certifications	IEC 61215 , IEC 61730 , IEC 62804 , IEC 62716 , IEC 61701
12	Output cable	1200 mm length cable, MC4 & Amphenol compatible connectors
13	Bypass diode	3 DIODES

For more specification please refer product datasheet.

6.2 PV Module Grounding

- As per National Electrical code (NEC Guidelines) all the PV Module (modules under UL spec) frames and mounting structures must be properly grounded for safety of people on the site. The module frame must be properly grounded (refer to NEC clause 250).
- Appropriate grounding is done by bonding the module frames and all the metallic structure together with the help of a grounding conductor made of copper, copper alloy or other material as per the electrical conductor perspective of respective national standards. The grounding connector should be connected to earth with the help of earth ground electrode.
- In case of metallic support, the surface of the frame must be electroplated.
- First, carefully strip 16mm of the insulating jacket from the end of grounding wire to avoid nicking or cutting conductors, insert the wire into the slot of the lug (see picture), and screw down the slotted screw.
- To fulfil the grounding & bonding requirements, please refer to the regional and national safety and electrical standards. Always use recommended type of connectors or similar for grounding.
- If grounding is required, the grounding wire must be properly fastened to the module frame to ensure
- Screw must be tightening with torque of 2.3 to 2.8 Nm [20 and 25 in. - lbs.]. The head of the screw must be flushed with the base and base must be flush with the frame.

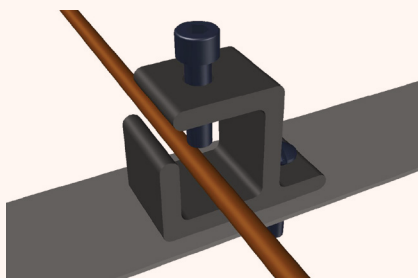
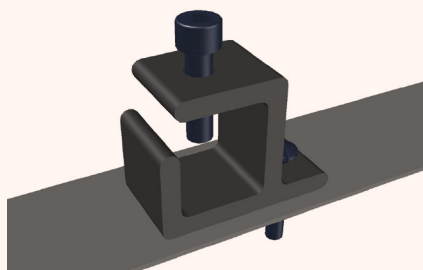
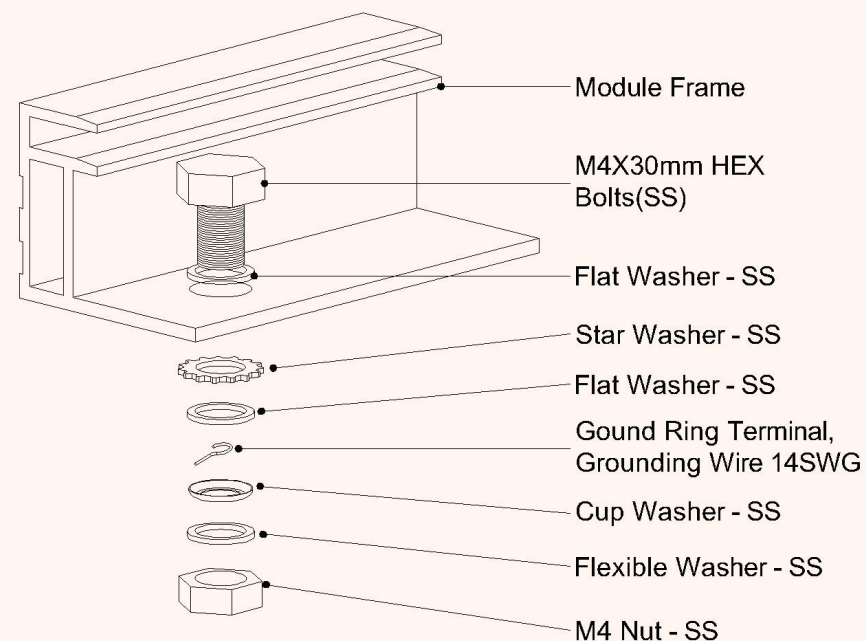


Fig: Grounding assembly of PV module

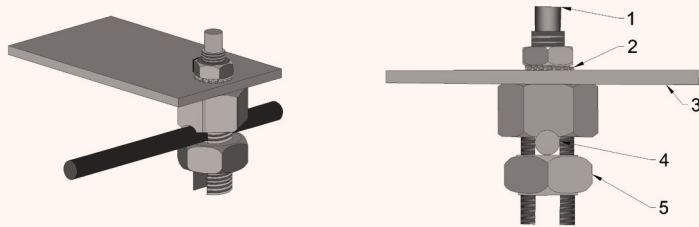
Please refer below figure



- Appropriate grounding is done by bonding the module frames and all the metallic structure together with the help of a grounding conductor made of copper, copper alloy or other material as per the electrical conductor perspective of National Electrical Codes. The grounding connector should be connected to earth with the help of earth ground electrode.
- ADANI solar modules can be installed by using any third party listed grounding devices to connecting grounding terminals. As per instruction manual of grounding device manufacturer, the grounding device should be installed. It is recommended to ground every module at the provided grounding holes (4 mm or 5/32 inch diameter marked with ground symbol).
- For grounding hole location and its size please refer to the product catalogue.
- Adani recommends following grounding procedures for the proper groundings.

"A module with exposed conductive parts is considered to be in compliance with UL 1703 only when it is electrically grounded in accordance with the instructions presented below and the requirements of the National Electrical Code.

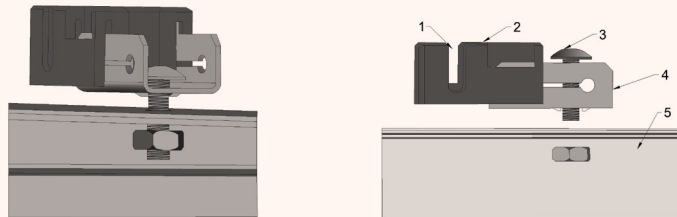
Procedure 1:- Grounding by bolts: 2058729-1



1) Wire bolt and slot 2) Mounting wash hex nut 3) Aluminium frame
4) 4 to 16mm2 cable 5) HEX nut

- Tyco made grounding hardware comes with grounding bolt, mounting and grounding hex nut inside the package.
- Electrical contact developed by penetration of anodized coating of the aluminium frame and tightening the mounting.
- Grounding wire dimension should be considered of 6 to 12 AWG solid bar copper and installed under the wire binding bolt.
- Tightening of wire binding bolt must be done at proper torque level 45 in lb.

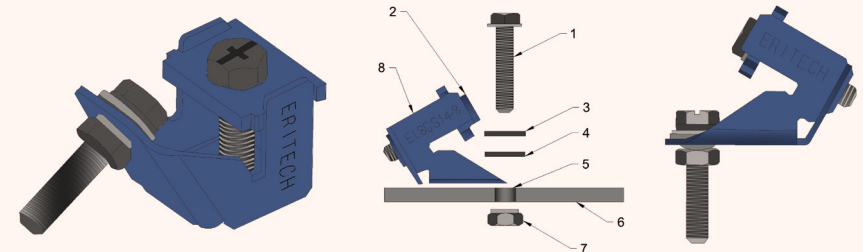
Procedure 2:- Grounding by bolts: # 2058729-1



1) Wire slot (available for 4-6 mm2 cable) 2) Slider 3) Bolt 4) Base 5) Nut

- Tyco made grounding hardware comes with grounding bolt, mounting and grounding hex nut inside the package.
- Electrical contact developed by penetration of anodized coating of the aluminium frame and tightening the mounting hex nut by applying proper torque of 25 in lb. Hex nut comes with a star washer.
- Grounding wire dimension should be considered of 6 to 12 AWG solid bar copper and installed under the wire binding bolt.
- Tightening of wire binding bolt must be done at proper torque level 45 in lb.
- Tyco grounding bolt is only recommended to use with 6 to 12 AWG solid copper wire.

Procedure 3: ERICO grounding bolt EL6CS14-6

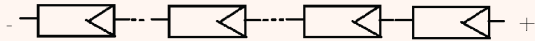


1) Machine bolt A 2) Machine bolt B 3) Belleville washer 4) Flat washer 5) Clearance hole for 10[M5] machine bolt 6) Aluminium frame 7) Machine bolt hex nut with lock washer 8) Grounding bolt

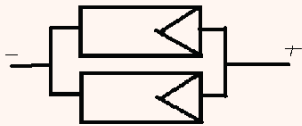
It is recommended that lug should be installed on a surface that is larger than the bottom surface of the lug.

- Lug should be fixed on the grounding hole present on the PV module.
- To secure grounding bolt to the module frame machine bolt A should be torqued to 35 in lb,
- Grounding bolt can be used with only 6-12 AWG bare copper wire.
- Machine bolt must be torqued up to 35 in lb for the proper wire binding.
- "Where common grounding hardware (nuts, bolts, star washers, split-ring lock washers, flat washers and the like) is used to attach a listed grounding/bonding device, the attachment must be made in conformance with the grounding device manufacturer's instructions."
- "Common hardware items such as nuts, bolts, star washers, lock washers and the like have not been evaluated for electrical conductivity or for use as grounding devices and should be used only for maintaining mechanical connections and holding electrical grounding devices in the proper position for electrical conductivity. Such devices, where supplied with the module and evaluated through the requirements in UL 1703, may be used for grounding connections in accordance with the instructions provided with the module."

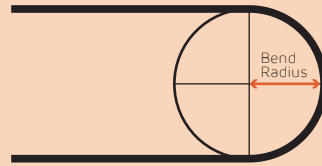
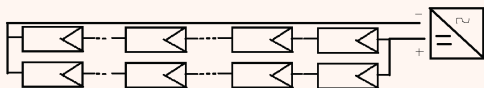
1. SERIES WIRING



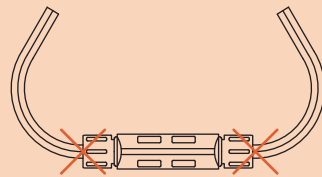
2. PARALLEL WIRING



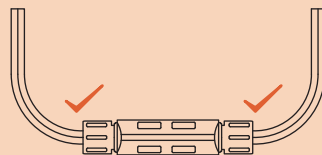
3. SERIES PARALLEL WIRING



Bending radius of junction box should be minimum 42 mm



Incorrect routing



Correct routing

- All wiring should be performed by well-trained installers as per the local codes and regulations.
- It is recommended to connect only such number of modules in series such that the system voltage should not exceed the rated value at any time of the year. The EPC to choose the appropriate design based on the Inverter MPPT ratings and operating voltage conditions and the environmental conditions considering the lowest temperature at the site.
- To increase the operating voltage, PV module have to connect in series and for connecting modules in series, positive connector of one module is connected to the negative terminal of another module. During series connections, please ensure the sound of click should come. Click sound shows the proper connectivity between the two terminals. Adani recommends a maximum of 2 strings to be connected in parallel with appropriate string fuse for circuit protection.
- If any module/array/string is connected in reverse polarity, in that case product can be damaged permanently and repair is not possible and Warranty will not rendered to those modules. Before making parallel connection always verify voltage level and polarity of the string. If during

measurement any reverse polarity or a voltage difference of 10 V found between the strings then check the strings circuit or string configuration before making connection. All the wiring should be performed by well trained and qualified technicians only.

- It is highly recommended and advised for the EPC to use Blocking diodes of appropriate specifications in String Combiner boxes to prevent any reverse current arising out of parallel strings due to voltage mismatch across Strings in Grid Scale utility power plants or from Storage devices if used with Storage solutions.
- ADANI Solar modules contains copper cables with 4mm² cross-sectional area with voltage rating 1000V/1500V (IEC&UL) for maximum system voltage, 90° C and are also UV Resistant. Do not expose cable in water logged place. When additional connectors and cables are used then check that connectors should be compatible with MC4 and cables are 12AWG.
- Maximum system voltage should be less than the rated system voltage or the maximum input voltage of the inverter. $V_{oc} \alpha (1/T)$ so the open Circuit Voltage require to calculated at the lowest Ambient temperature for the location Power generation unit.

For this below formula can be used:

System voltage =

$X * V_{oc} * [1 + ((T_a - V_{oc} (\%) \times (25 - T_{min})))]$ Where;

X - No: modules which are connected in series.

V_{oc} - Open circuit voltage of each module (Refer to the Data Sheet)

$T_a - v_{oc}$ - Thermal coefficient of open circuit voltage for the module in Percentage

T_{min} - Minimum ambient temperature of the location of the plant

- Outer cable diameter maximum is 7 mm and minimum is 5 mm.
- In field application it is recommended to use 4 mm² cables insulated for minimum of 90°C and designated as PV wire.
- Bending radius of junction box cable is minimum 42 mm.

6.4 Connectors

- Protect unplugged connectors against moisture, dust and any environmental pollution. Only clean and dry plugged connectors fulfil their ingress protection (IP) class. Ensure that connector caps are hand tight before connecting the modules. Do not attempt making an electrical connection with wet, soiled, or otherwise faulty connectors. Avoid sunlight exposure and water immersion of the connectors. Avoid connectors resting on the ground or roof surface.
- Faulty connections can result in arcs and electrical shock. Check that all electrical connections are securely fastened. Make sure that all locking connectors are fully engaged and locked.
- The junction boxes used with MSPVL PV modules contain bypass diodes wired in parallel with the PV cell strings. In the case of partial shading, the diodes bypass the current generated by the non-shaded cells, thereby limiting module heating and performance losses. Bypass diodes are not overcurrent protection devices.

* Modules equipped with PV wiring connectors that comply with the Standard for Connectors for Use in Photovoltaic Systems, UL 6703, shall have the specific allowable mating connector manufacturer(s) and model number(s) listed, as well as contact information and/or website of the PV connector manufacturer. If a specific module product is available with multiple PV wiring connectors from various manufacturers, then the following shall be included:

- 1) Means to identify each distinct PV connector manufacturer's product - such as a picture or illustration, unique physical features, markings, company logos, etc,
- 2) Allowable mating connector manufacturer and model number(s) listed for each distinct cable connector manufacturer's product(s), as well as contact information and/or website of the PV connector manufacturer

6.5 Bypass Diodes

- Bypass diodes divert current from the cell strings in the event of partial shading.
- Diode replacement of potting type Junction is not possible in case of any type of failure. If any bypass diode stops working then the only way to correct the problem is to replace the complete Junction box with new one. To replace Junction Box MSPVL recommends contacting the supplier.

6.6 Cables and Wiring

- Adani PV modules are provided with two (2) stranded, sunlight resistant output cables that are terminated with PV connectors (MC4 & Amphenol compatible) ready for most installations. The positive (+) terminal has a female connector while the negative (-) terminal has a male connector. The module wiring is intended for series connections (i.e. female (+) to male (-) interconnections), but can also be used to connect suitable third-party electrical devices that may have alternative wiring configurations so long as the manufacturer's instructions are followed.
- Use field wiring with suitable cross-sectional areas that are approved for use at the maximum short-circuit current of the PV module. Adani recommends installers to use only sunlight resistant cables qualified for direct current (DC) wiring in PV systems. The minimum wire size should be 12 AWG. The temperature range of the cables is -40°C to +90°C.
- Cables should be fixed to the mounting structure in such a way that mechanical damage to the cable and/or the module is avoided. Maintain a minimum cable bending radius greater or equal than five times the cable diameter. Route the cable in a way that the tensile stress on the conductor or connections is prevented. For fixing, use appropriate means, such as sunlight resistant cable ties and/or wire management clips specifically designed to attach to the PV module frame. While the cables are sunlight resistant and waterproof, where possible, avoid direct sunlight exposure and water immersion of the cables.

7. ELECTRICAL & MECHANICAL PARAMETERS

Type name or model number	ASP-7-AAA	ASP-6-AAA ASP-6-B-AAA ASP-6-AB-AAA	ASM-7-PERC-AAA	ASM-6-PERC-AAA ASM-6-B-PERC-AAA ASM-6-AB-PERC-AAA
Rated maximum power range [W]	285-350	285-350	305-375	255-315
Module technology	Multicrystalline	Multicrystalline	Monocrystalline	Monocrystalline
Number of cells	72	60	72	60
Rated short circuit current range [A]	8.20-9.50	8.20-9.50	8.7-9.6	8.7-9.6
Rated open circuit voltage range [V]	43.5-46.5	36-38.4	43-47	37-39
Maximum system voltage [VDC]	1500/1000	1500/1000	1500/1000	1500/1000
Over-current protection rating [A]	15	15	15	15
Dimensions (l × w × h) [mm]	1998x1010x35/40	1660x992x35/40	1998x1010x35/40	1660x992x35/40
Maximum Series Fuse, (A)	15	15	15	15
Fire Class Rating	Class C, Type 1	Class C, Type 1	Class C, Type 1	Class C, Type 1
Weight	23.5 Kg (35 mm frame variant) 28Kg(40 mm frame variant)	17.5 Kg (35 mm frame variant) 18.8 Kg(40 mm frame variant)	23.5 Kg (35 mm frame variant) 28 Kg(40 mm frame variant)	17.5 Kg (35 mm frame variant) 18.8 Kg(40 mm frame variant))

Type name or model number	ASP-14-AAA	ASM-14-PERC-AAA
Rated maximum power range [W]	295-365	315-390
Module technology	Multicrystalline	Monocrystalline
Number of cells	144	144
Rated short circuit current range [A]	8.20-9.50	8.5-11
Rated open circuit voltage range [V]	42.5-46.5	43-48
Maximum system voltage [VDC]	1500/1000	1500/1000
Over-current protection rating [A]	15	15
Dimensions (l × w × h) [mm]	1996x992x35/40	1996x992x35/40
Maximum Series Fuse, (A)	15	15
Fire Class Rating	Class C, Type 1	Class C, Type 1
Weight	23 Kg (35 mm frame variant) 27.5 Kg(40 mm frame variant)	23 Kg (35 mm frame variant) 27.5 Kg(40 mm frame variant)

All electrical data mentioned above shall be shown as relative to standard test conditions (1000 W/m², 25 °C, AM 1.5 according to IEC TS 61836).

8. ELECTRICAL CONFIGURATION

- A solar array generates DC electricity when sunlight falls on the modules and the inverter is in active mode. Once the minimum voltage and current requirements are met, this is converted into AC power accordingly.
- Adani's ASP & ASM series modules are made with 144, 66, 72 or 60 crystalline silicon cells of high efficiency. Cell circuit is laminated with the help of encapsulant sheet and front surface is of tempered glass with plastic polymer sheet on its back side to provide electrical insulation and environmental protection. Then the laminates are inserted into anodized aluminium frame. IP67 rating terminal box made of plastic material which is resistant to high temperature contains connection terminals and bypass diodes. In aluminium frames there is number of holes to attach the modules with structure in field.

The products can be used in Grid Connected Utility & standalone system in houses, rooftop, PV stations, Communication stations, Petrol, Ocean, metrological, traffic and solar building etc. The maximum power of ASP-7-AAA Multi Crystalline Silicon 72 series modules is in range of 300 Wp to 335 Wp with tolerance of $\pm 3\%$. So the EPC / Customer is advised to not to mismatch any modules & strings with different currents and different voltages which can lead to adverse effects of performance generation of the entire PV Power Plant.

Caution

The modules are rated to operate at potentially dangerous voltage level of just under a specified system voltage; coming in contact of this high voltage may cause electrical hazards, Arcing and Fire hazards. It is recommended that all the solar Module, Module array and the DC combiner box should be handled by only trained person. Adani is not responsible for any hazards on the site and to the trained manpower in event of any safety hazard or causality.

Electrical hazard

While disconnecting the array from the circuit, use rated Isolator or DC switch. DC power after disconnection may be active for some time and hence it is recommended only trained person should operate or handle upon Panels, string Combiner Box etc. ADANI solar is not responsible for any type of accident occurring in Power plant using ADANI panels.

- There is always a risk of Lightning to PV Power plants and PV modules and Adani Solar requests the EPC Installer and the customer to analyse the risk of lightning as per IEC 62305-2 and install Lightning arrestors and SPD's such that no part of PV system and PV Module is affected by Lightning or any other high voltage surges. To ensure effective protection for entire power plant along with PV modules, a lightning protection system with optimally coordinated elements with air-termination system, earth-termination system, lightning equipotential bonding, surge protective devices for any DC input/output devices as per IEC 61643-11. Consistent lightning and surge protection for all systems allows to considerably increasing the performance ratio of Solar PV power

8.1. FUSE RATING

Connect Fuse in non-grounded pole of solar array. Maximum fuse rating connected in series is 15 A. Actual fuse rating is mentioned in PV module specification sheet and on the PV Module's back label. Fuse rating value also indicates the maximum current reverse current that can flow from the module. It is recommended to use 15 A fuses per string.

8.2 Selection of Inverter and compatibility

Only connect the quantity of modules that corresponds to the voltage specifications of the inverters used in the system. When installed as per the IEC standards and regulations, Adani Solar modules do not normally need to be electrically connected to earth and can operate with either galvanically isolated (with transformer) or transformerless inverters. If galvanically isolated inverters with transformers are used, the negative pole of the array must be connected to earth. If a transformer less inverter is used, the installer should ensure that the right active negative earthing / grounding or PID Controller kit is installed by consulting with the inverter supplier and taking approval from the inverter supplier. Both methods are required in order to prevent the modules from potential induced degradation in the field.

9. PV MODULE MAINTENANCE AND CARE

For better performance and reliability of the system, a minimum of maintenance is required in well-designed PV plants.

- It is recommended to do yearly plant maintenance by trained professionals. Complete everyday tracking of PV Module's performance through SCADA or through string performance should be noted and tracked and analysed and if any discrepancy from normal behaviour, it should be immediately notified to Adani Solar.
- Check the mounting structure status and

ensure any all the modules should be tightly fitted on the structure and should be as per the mounting instruction provided above.

- Check for any shading on PV module, area of module on which light is falling should not be shaded by any trees, objects and leaves. All these obstructing objects should be removed immediately. Early morning / Late Evening shadowing where irradiance is lesser than 200 W/m² is acceptable.
- Ensure all cable assemblies are tightly fitted and no part of the cable is immersed or exposed to water logging.
- Check all the strings fuses of each non-earthed pole are working properly and in operation.
- To clean the module always use soft module cleaning kit or do cleaning with soft cloth and slight detergent as an alternate solution. Cleaning can be performed by Wet Cleaning, Soft Cleaning, Compressed Air cleaning, rotating brush, Dry Brush cleaning. Cleaning should be performed in a way that no stress on PV modules is caused and no cracks on solar cells to be caused out of cleaning. Water used for cleaning should be of same temperature as of module, and water should be regularly checked for TDS, it is immediately recommended to install RO at the site if the TDS of the water is deviating from appropriate standards and acceptable limit of less than 500mg/l. Water used for cleaning should be of the same temperature as of the module and if not used, temperature difference can create thermal shocks by which PV module can be damaged and will not be a part of the Warranty. During cleaning, always ensure at all condition module should not be damaged from micro crack and other type of defects. Climbing of personal on the PV modules is strictly prohibited as it can cause irreversible damage to the solar cells of the PV modules. The PV Modules are advised to be cleaned regularly ensuring dust/dirt free and devoid of any bird droppings. Failing to clean the same can cause damage to the solar cells of the PV modules.
- For maximum power output and generation and best reliability, it is recommended to keep modules clean and tidy.
- The rare surface of the module does not require cleaning unless any objects or dirt stuck on the backsheet. Avoid cleaning by sharp edges objects which can damage the material of backsheet and can cause a cut and impact the performance of the PV module and the plant due to cascading effect.

9. PV MODULE MAINTENANCE AND CARE

Product should be recycled in useful renewable method after end of its life cycle. Please contact Adani Solar after the end of product life cycle for recycling procedure.

11. WARNING

While performing any type of electrical maintenance, all the system should be isolated / shutdown and maintenance should be performed by well trained professionals only. Any failure to follow instruction may results in lethal electric shocks, burns, other injuries and some time may death also. ADANI solar is not responsible for any type of accident occurring in Power plant using ADANI panels.

12. Contact Details

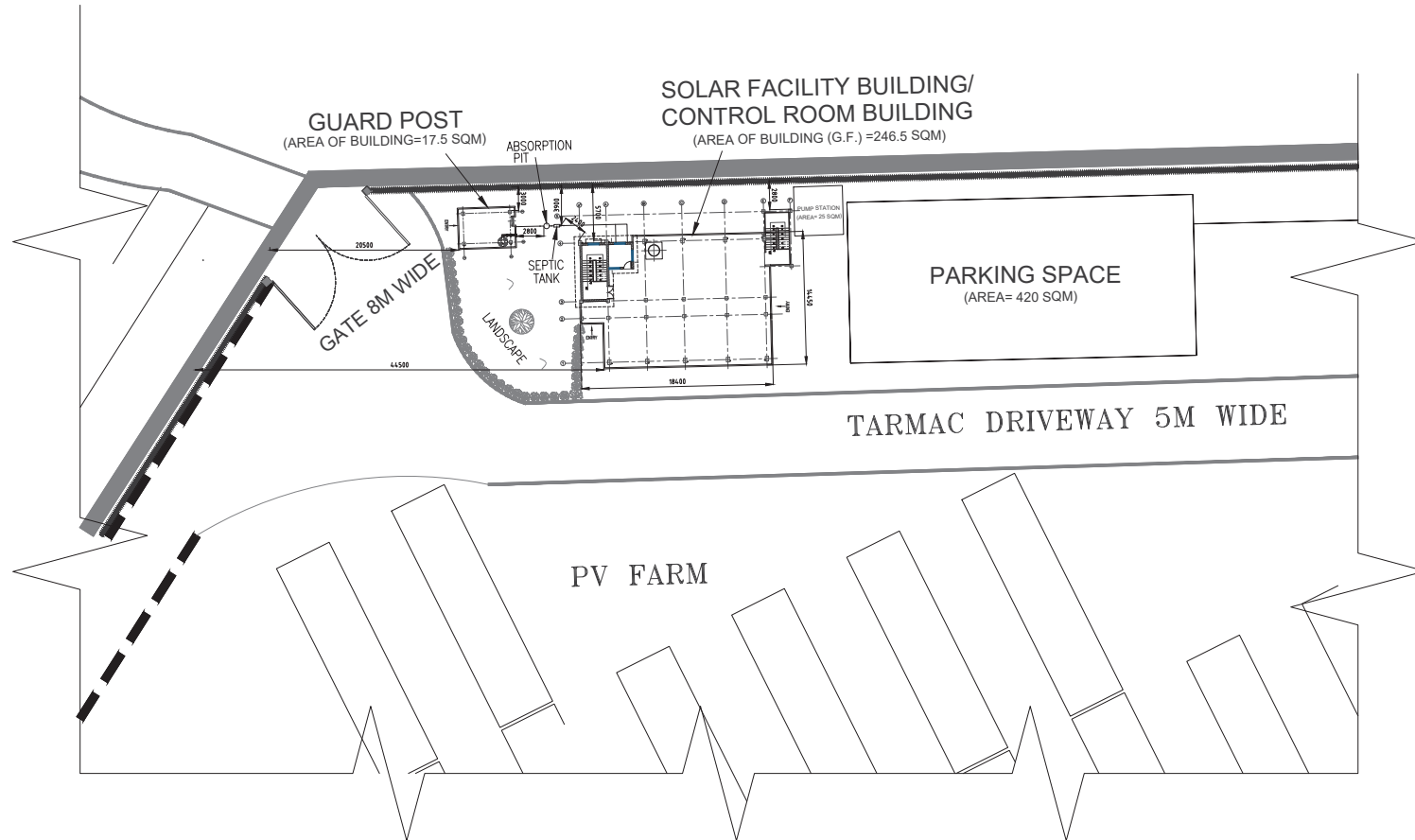
PV modules do not contain any serviceable parts. If customer has any doubts that installation is not working properly, please contact your installer / EPC / O&M. Immediately and immediately please leave a note to the Adani's Customer Service Team.

1. Contact ADANI Solar sales and service team at cs@adani.com
2. Email customer feedback at cs@adani.com



NORTH

OUTSIDE PLANT BOUNDARY



NOTES:-

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITION SPECIFICATION AND SCHEDULE OF ITEMS.
2. ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METRES, UNO.
3. RETAINING WALL FOR EDGE PROTECTION MAY BE PROVIDED AS AND WHERE REQUIRED AS PER SITE CONDITION.
4. STREAM CROSSING CONCRETE STRUCTURE MAY BE PROVIDED AT STREAM LOCATED BETWEEN THE FIRST AND THE SECOND LOT.
5. SEPTIC TANK AND ABSORPTION PIT SHALL BE LOCATED AT LEAST 2M AWAY FROM ANY BUILDING AND SITE BOUNDARY AS PER SITE CONDITION.
6. SEPTIC TANK SHALL HAVE A CAPACITY OF 3 CU. M. AND ABSORPTION PIT SHALL HAVE A WALL SURFACE AREA OF 20 SQ. M.


LEGEND:

- CSS - COMPACT SUBSTATION
TYP - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE
CL - CENTER LINE

FOR TENDER PURPOSE ONLY

PROJECT: 8MWac SOLAR PV FARM AT TAMARIND FALLS, HENRIETTA (PHASE-II), MAURITIUS

OWNER:  CEB (GREEN ENERGY) Co. Ltd.

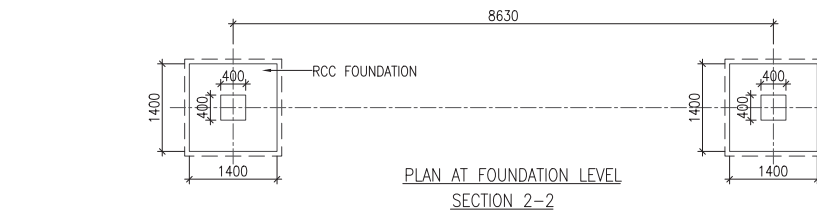
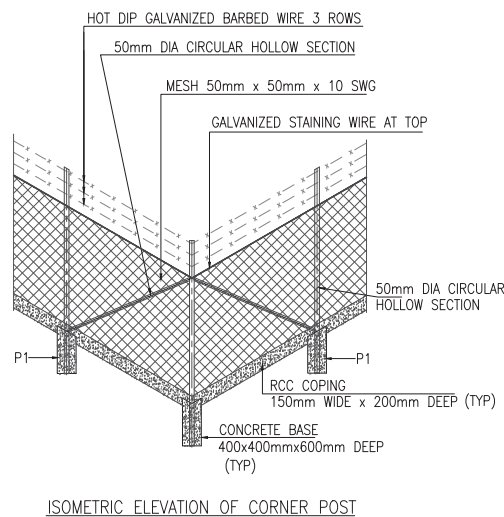
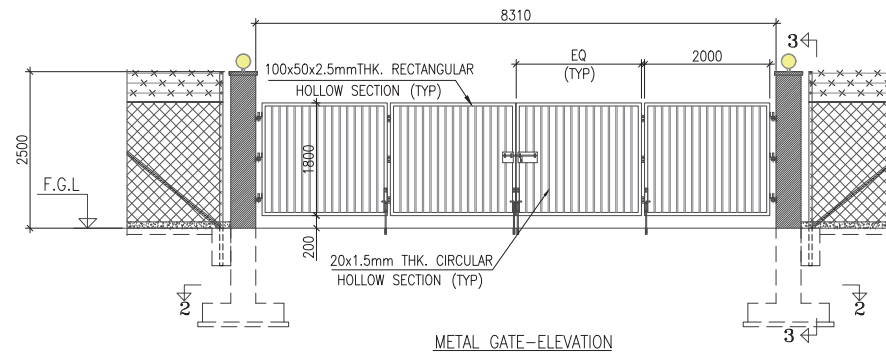
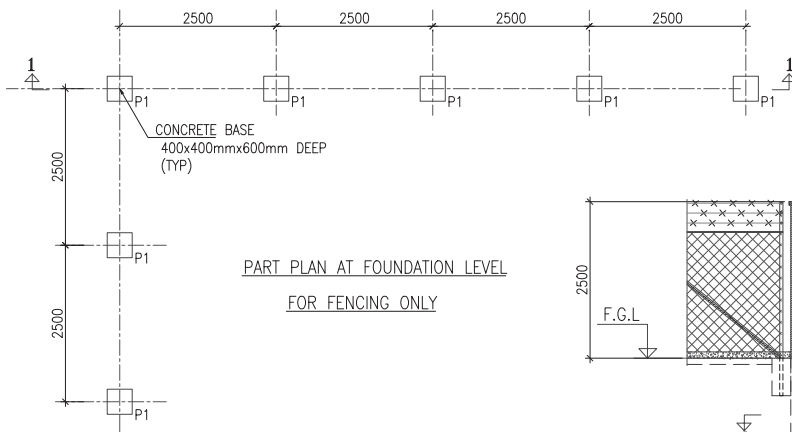
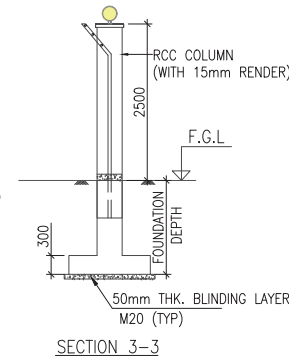
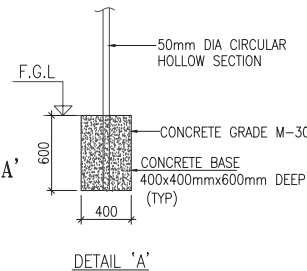
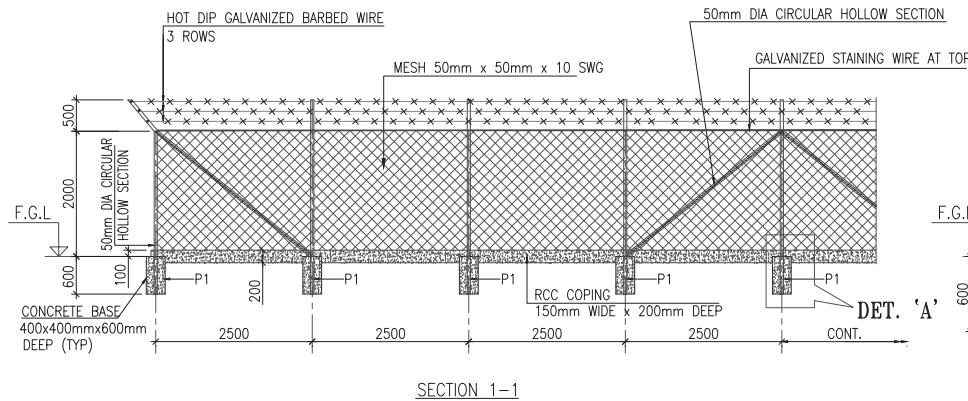
DEPT. SC&PV
STATUS CONTRACT
DISTRIBUTION
EPC CONTRACTOR:  BHARAT HEAVY ELECTRICALS LTD
ELECTRONICS DIVISION, BANGALORE, INDIA

TITLE PART DRAWING OF SITE PLAN

REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD

SCALE 1:100 DRAWING NO.

SHEET 1 OF 1 REV. 00



REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD

NOTES:-

- ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METRES.
- FIGURED DIMENSIONS ONLY SHALL BE FOLLOWED.
- ALL CONCRETE SHALL BE GRADE M-30 (EXCEPT BLINDING LAYER).
- 50mm THICK BLINDING LAYER (GRADE M20) SHALL BE PROVIDED BELOW GATE COLUMN FOUNDATION.
- CONCRETE COPING SHALL BE PAINTED (AFTER CLEANING) WITH AT LEAST 3 COATS OF ANTIFUNGUS PAINT.
- ALL STRUCTURAL MEMBERS SHALL BE GALVANIZED AS PER SPECIFICATION.
- NON-GALVANIZED METAL SURFACE/METAL SUPPORT SHALL BE PAINTED WITH ONE COAT OF TWO-PACK PRIMER, ONE COAT OF UNDERCOAT AND PAINT WITH HARD GLOSS ENAMEL PAINT.
- BARBED WIRE SHALL BE HOT DIPPED GALVANIZED.
- GATE SHALL BE FIXED WITH 3NO.'S HEAVY DUTY HINGES.
- IN CASE OF DIFFERENCE IN TOPOGRAPHY, ADDITIONAL METAL BRACKET SHALL BE SUITABLY PROVIDED TO MAINTAIN THE LEVEL.
- CONCRETE COPING SHALL BE PAINTED WITH AT LEAST 3 COATS OF ANTI-FUNGUS PAINT OF APPROVED BRAND AND COLOUR.
- METAL GATE COLUMN SHALL BE PAINTED WITH AT LEAST 3 COATS OF ANTI-FUNGUS PAINT OF APPROVED BRAND AND COLOUR.

LEGEND:

F.G.L. - FINISHED GROUND LEVEL
F.F.L. - FINISHED FLOOR LEVEL
T.O.C. - TOP OF CONCRETE
THK. - THICKNESS
TYP. - TYPICAL
U.N.O. - UNLESS NOTED OTHERWISE
CL - CENTER LINE

FOR TENDER PURPOSE ONLY

PROJECT: 8MWac SOLAR PV FARM AT TAMARIND FALLS, HENRIETTA (PHASE-II), MAURITIUS

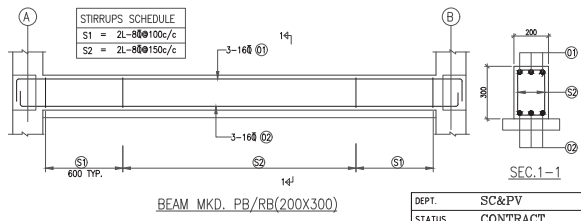
OWNER: CEB (GREEN ENERGY) Co. Ltd.

EPC CONTRACTOR: BHARAT HEAVY ELECTRICALS LTD
ELECTRONICS DIVISION, BANGALORE, INDIA

TITLE: CHAIN LINK FENCING AND METAL GATE
GENERAL ARRANGEMENT & DETAILS

SCALE 1:75 DRAWING NO.



SHEET 1 OF 1 REV. 00









- NOTES:-**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITION SPECIFICATION AND SCHEDULE OF ITEMS.
 2. ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METRES, UNO.
 3. FINISHED FLOOR LEVEL CORRESPONDS TO EL(+0.000M, WHICH IS AT 450MM ABOVE FGL/NGL.
 4. ALL CONCRETE SHALL BE GRADE M-30.
 5. ALL REINFORCEMENT SHALL BE HIGH YIELD DEFORMED BARS COMPLYING WITH MS10 (2002).
 6. CLEAR COVER TO REINF. INCLUDING LINKS
FOR R.C.C MEMBERS
SHALL BE AS UNDER:- BEAM= 35mm, SLAB = 25mm.
FOOTING= 50mm, COLUMN = 35mm.
 7. STANDARD 'L' HOOKS SHALL BE PROVIDED AT THE ENDS OF ALL BARS.
 8. EXTERNAL WALL THICKNESS SHALL BE 200MM.

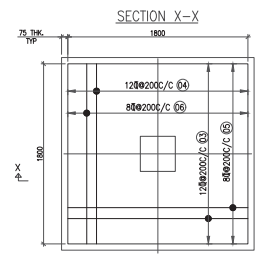
LEGEND:

F.G.L. – FINISHED GROUND LEVEL
F.F.L. – FINISHED FLOOR LEVEL
T.O.C. – TOP OF CONCRETE
THK. – THICKNESS
TYP. – TYPICAL
U.N.O. – UNLESS NOTED OTHERWISE
C – CENTER LINE

 – SIDE HUNG OPENABLE PANEL
 – FIXED GLASS PANEL

LEGEND FOR TOILET AREA		
	WC	WATER CLOSET
	HF	HEALTH FAUCET FOR EWC
	WB	WASH BASIN
	MR	MIRROR
	TR	TOWEL RAIL
	FD	FLOOR DROP

FOR TENDER PURPOSE ONLY

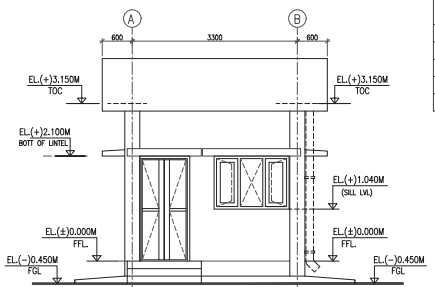


TYP. DETAIL OF ISOLATED
FOOTING MKD F1

SLAB R/F. SCHEDULE
(a) = 800150 c/c
(b) = 800150 c/c

COLUMN SCHEDULE	
FOUNDATION TO TERMINATION LV.	
SIZE.	(300x300)
REINFORCEMENT.	8-16 ϕ
SPACING (ST1)	ϕ 100 C/C (X)
SPACING (ST2)	ϕ 150 C/C (X)
COL. MARKING	C1





STIRRUPS SCHEDULE	
S1	= 2L-8@100c/c
S2	= 2L-8@150c/c

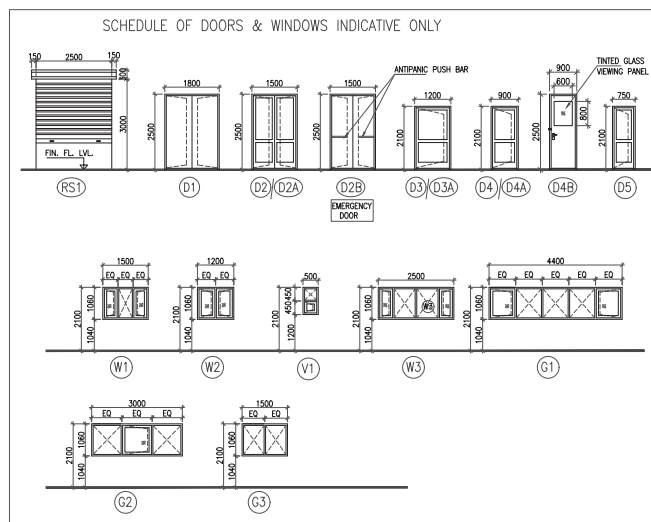
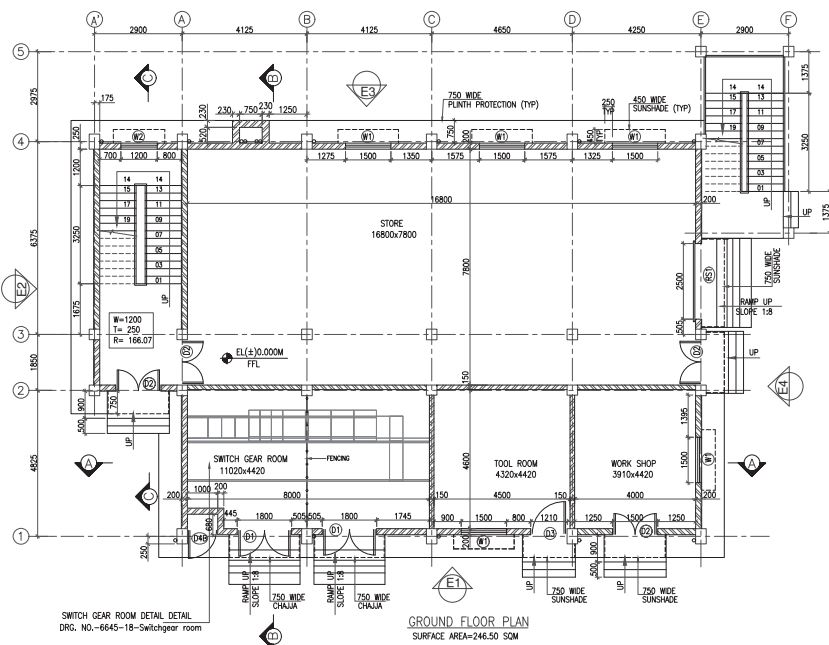
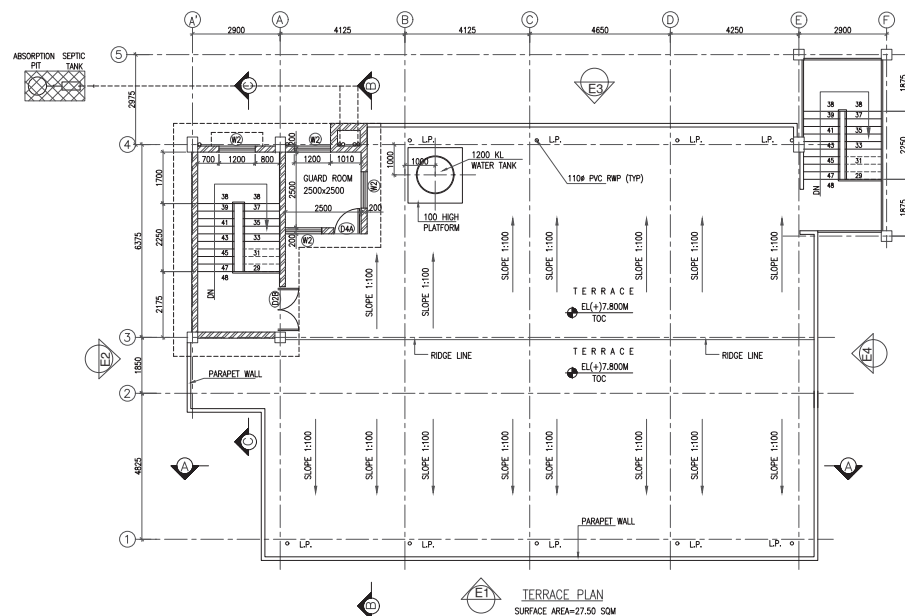
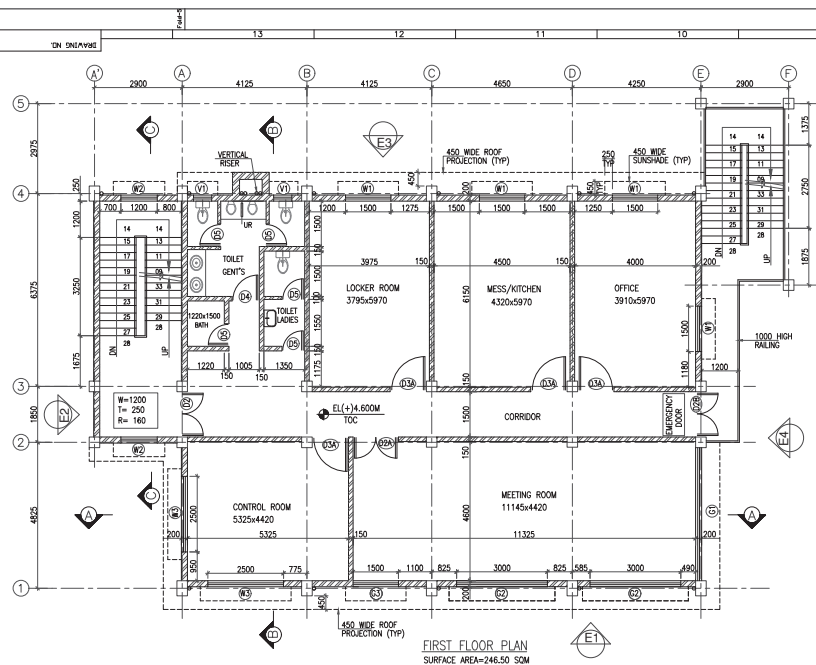


ELEVATION ALONG GRID-1

REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD

DEPT.	SC&PV
STATUS	CONTRACT
DISTRIBUTION	

PROJECT:	BMwac SOLAR PV FARM AT TAMARIND FALLS, HENRIETTA (PHASE-II), MAURITIUS		
OWNER:		CEB (GREEN ENERGY) Co. Ltd.	
EPC CONTRACTOR:		BHARAT HEAVY ELECTRICALS LTD ELECTRONICS DIVISION, BANGALORE, INDIA	
TITLE:	GATE POST BUILDING – STRUCTURAL, ARCHITECTURAL PLANS, ELEVATIONS, SECTIONS & REINFORCEMENT DETAILS		
		SCALE 1:100	DRAWING NO.
		SHEET 1 OF 1	REV. 00



- NOTES:-**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITION SPECIFICATION AND SCHEDULE OF ITEMS.
 2. ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METRES, UNO.
 3. FINISHED FLOOR LEVEL CORRESPONDS TO EL(+0.000M, WHICH IS AT 450MM ABOVE FGL/NGL
 4. ALL CONCRETE SHALL BE GRADE M-30.
 5. SEPTIC TANK AND ABSORPTION PIT LOCATION TO SUIT AS PER SITE CONDITION.

PROJECT: 8MWac SOLAR PV FARM AT TAMARIND FALLS,
HENRIETTA (PHASE-II), MAURITIUS

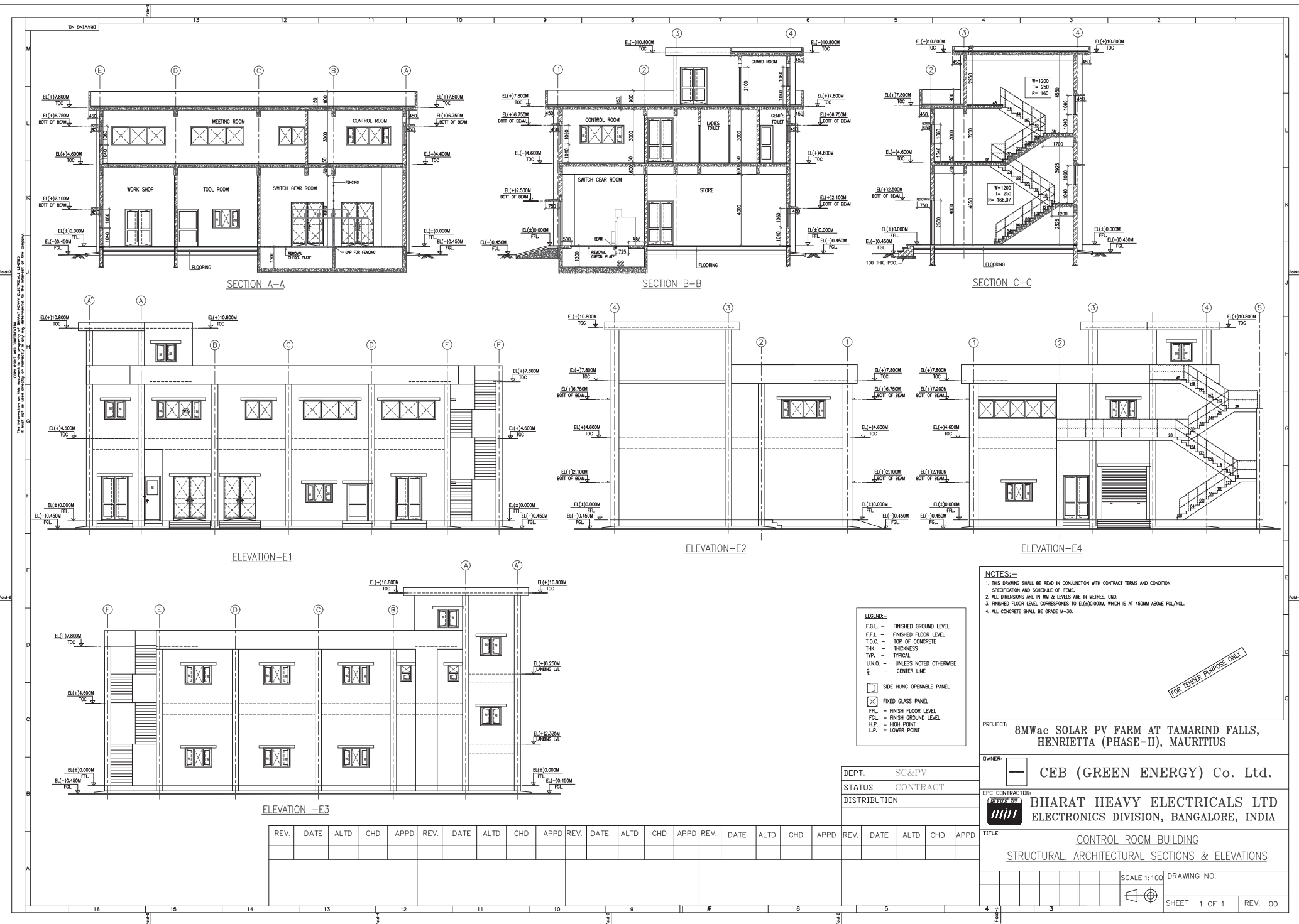
OWNER: — CEB (GREEN ENERGY) Co. Ltd.

EPC CONTRACTOR:  **BHARAT HEAVY ELECTRICALS LTD**
ELECTRONICS DIVISION, BANGALORE, INDIA

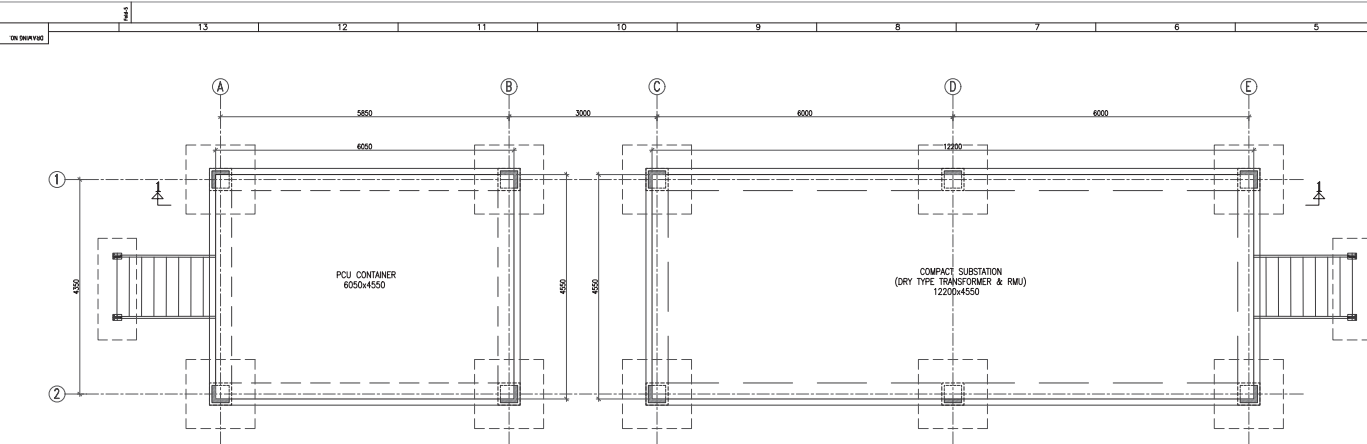
D	TITLE:	<u>CONTROL ROOM BUILDING</u>
		STRUCTURAL, ARCHITECTURAL PLANS

SCALE 1:100	DRAWING NO.
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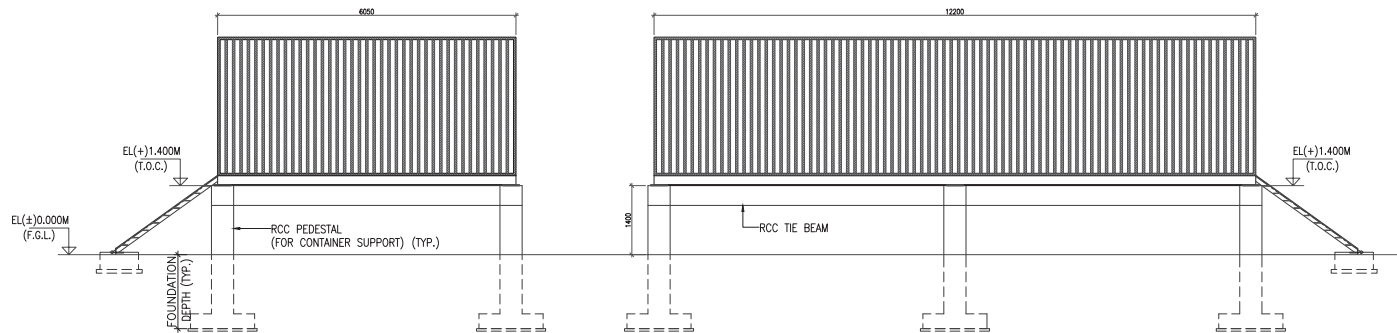
SHEET 1 OF 1	REV. 00
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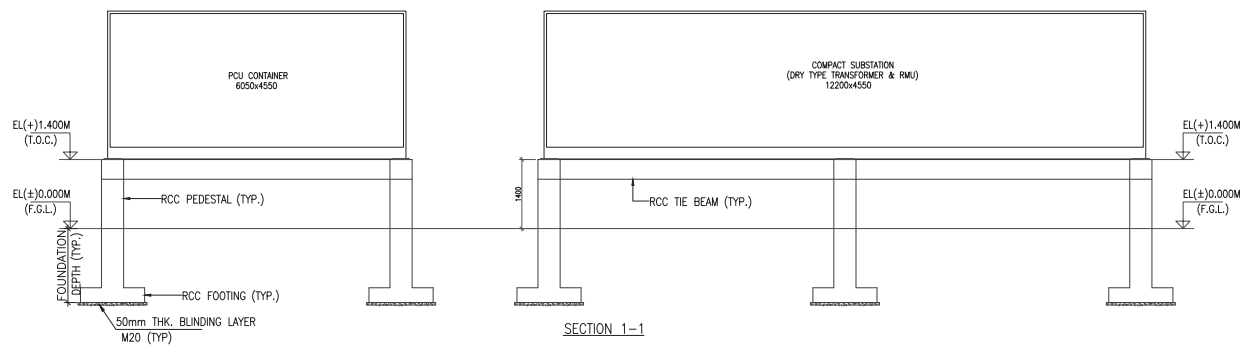




PLAN AT TOP EL(+1.40M) LVL.



FRONT ELEVATION



SECTION 1-1

REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD	REV.	DATE	ALTD	CHD	APPD

NOTES:-

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH CONTRACT TERMS AND CONDITION SPECIFICATION AND SCHEDULE OF ITEMS.
2. ALL DIMENSIONS ARE IN MM & LEVELS ARE IN METRES, UNO.
3. FINISHED FLOOR LEVEL CORRESPONDS TO EL(+1.400M), WHICH IS AT 450MM ABOVE FGL/NGL.
4. ALL CONCRETE SHALL BE GRADE M-30.
5. DETAILS SHOWN IN THE DRAWING IS TENTATIVE.

LEGEND:

- F.G.L. - FINISHED GROUND LEVEL
 F.F.L. - FINISHED FLOOR LEVEL
 T.O.C. - TOP OF CONCRETE
 THK. - THICKNESS
 TYP. - TYPICAL
 U.N.O. - UNLESS NOTED OTHERWISE
 C - CENTER LINE

FOR TENDER PURPOSE ONLY

PROJECT: 8MWac SOLAR PV FARM AT TAMARIND FALLS, HENRIETTA (PHASE-II), MAURITIUS

OWNER: CEB (GREEN ENERGY) Co. Ltd.

DESIGNER: BHARAT HEAVY ELECTRICALS LTD
 ELECTRONICS DIVISION, BANGALORE, INDIA

TITLE: SOLAR COMPACT STATION - GENERAL ARRANGEMENT AND DETAILS

SCALE 1:100 DRAWING NO. SHEET 1 OF 1 REV. 00

**FORMAT FOR VERIFICATION OF LOCAL CONTENT UNDER PREFERENCE TO MAKE IN INDIA
ORDER**

(To be submitted with the offer)

[Applicable for procurement value from Rs. 5.00 Lac to Rs. 10.00 Crore]

**Self-certification giving the percentage of local content, in line with PPP-MII order, if applicable
[to be submitted on the letterhead of the issuer].**

Item Name	:	
Enquiry No.	:	
Project	:	
Applicable percentage of Local Content	:	<i>(Bidder to indicate local content in percentage)</i>

We have read and understood the provisions of "Public Procurement (Preference to Make in India) Order, 2017" dated 15/06/2017, its revision dated 28/05/2018 and any subsequent modifications/Amendments, if any [hereinafter, "PPP-MII Order"] issued by Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India.

In line with the provisions of the PPP-MII Order, We, M/s. *[Enter the name of the Bidder]* [hereinafter, "Local Supplier"] submits self-certification to M/s. Bharat Heavy Electricals Limited [hereinafter, BHEL] regarding Local Content in Goods/Services/Works to be supplied by the Local Supplier for *(Enter the name of the Equipment/Item for Project)*, wherein we have agreed to abide by the terms and conditions of the PPP-MII Order.

Details of location at which local value addition will be made is as follows:

We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

For and on behalf of,

Date:

Authorized Signatory
(With Company Seal & Signature)

Note: This is a guiding format. In case the bidder submits the certificate in a format different from the above, the same may be considered provided it meets the intent and purpose, as may be ascertained by BHEL.

Annexure-1(B)

**FORMAT FOR VERIFICATION OF LOCAL CONTENT UNDER PREFERENCE TO MAKE IN INDIA
ORDER**

(To be submitted with the offer)

[Applicable for procurement value more than Rs. 10.00 Crore]

Certificate from statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of Local Content, in line with PPP-MII order, if applicable [to be submitted on the letterhead of the issuer].

Item Name	:	
Enquiry No.	:	
Project	:	
Applicable percentage of Local Content	:	(Bidder to indicate local content in percentage)

We have read and understood the provisions of "Public Procurement (Preference to Make in India) Order, 2017" dated 15/06/2017, its revision dated 28/05/2018 and any subsequent modifications/Amendments, if any [hereinafter, "PPP-MII Order"] issued by Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India.

In line with the provisions of the PPP-MII Order, We, M/s. *[Enter the name of the Bidder]* [hereinafter, "Local Supplier"] submits self-certification to M/s. Bharat Heavy Electricals Limited [hereinafter, BHEL] regarding Local Content in Goods/Services/Works to be supplied by the Local Supplier for *(Enter the name of the Equipment/Item for Project)*, wherein we have agreed to abide by the terms and conditions of the PPP-MII Order.

Details of location at which local value addition will be made is as follows:

We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

For and on behalf of,

Date:

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
सोलर बिजनेस डिवीज़न /सोलर बिजनेस डिवीज़न / Solar Business Division.
बंगलुरु/बेंगलुरु/Bengaluru

Authorized Signatory
(With Company Seal & Signature)

We, the Statutory Auditor(s) / Cost auditor (applicable in the case of companies) of the Local Supplier / a practicing cost accountant or practicing chartered accountant (applicable in respect of suppliers other than companies), certify that the Local Content as defined under the PPP-MII, in the Goods/Service/Works to be supplied by the Local Supplier for (Enter the name of the Equipment/Item for Project) is percentage [specify the percentage of Local content].

For and on behalf of,

Date:

Authorized Signatory
(With Company Seal & Signature)
Firm Reg No:
Membership No.

Note: This is a guiding format. In case the bidder submits the certificate in a format different from the above, the same may be considered provided it meets the intent and purpose, as may be ascertained by BHEL.

Annexure-2(A)

(Applicable only for MSE Suppliers)
Certificate by Chartered Accountant on Letterhead
(as applicable)

This is to Certify that M/s _____, (hereinafter referred to as 'company') having its registered office at _____ is registered under MSMED Act 2006, (Entrepreneur Memorandum No (Part-II) _____ dtd: _____, Category: _____ (Micro/Small)). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as on date _____ as per MSMED Act 2006 is as follows:

1. For Manufacturing Enterprises: Investment in plant and machinery (Le. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.1722(E) dated October 5,2006:
Rs. _____ Lakhs
2. For Service Enterprises: Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006: Rs _____ Lakhs The above investment of Rs _____ Lakhs is within permissible limit of Rs _____ Lakhs for _____ Micro / Small (Strike off which is not applicable) Category under MSMED Act 2006.

Date:

(Signature)

Name

Membership Number

Seal of Chartered Accountant with UDIN reference

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
ಸೋಲಾರ್ ಬಿಸಿನೆಸ್ ಡಿವಿಜನ್ /ಸೋಲರ ಬಿಜನಸ್ ಡಿವಿಜನ್ / Solar Business Division.
ಬೆಂಗಳೂರು/ಬೆಂಗಲೂರು/Bengaluru

Annexure-2(B)

(Applicable only for MSE Suppliers)
Certificate by Chartered Accountant on Letterhead
(as applicable)

This is to certify that M/s _____ (hereinafter referred to as 'enterprise') having PAN Number _____ and UDYAM Registration Number _____, registered office at _____ is falling under the category _____ (**Micro / Small / Medium**) under MSMED A c t 2006. (Copy of UDYAM Registration Certificate to be enclosed).

The said classification of _____ (**Micro / Small / Medium**) is arrived at based on the Notifications / guidelines / clarifications issued under Micro, Small and Medium Enterprises Development Act, 2006 including the notification S.O.2119 (E) dated 26th June 2020.

The Investment of the enterprise in Plant and Machinery or Equipment as at 31st March' 20__ as per Clause - 4 of the Notification is Rs. _____ (Rupees in Lakhs).

The turnover of the Enterprise for the period ending 31st March 2020 as per Clause - 5 of the Notification is Rs. _____ (Rupees in Lakhs).

Date:

(Signature)

Name

Membership Number

Seal of Chartered Accountant with UDIN reference

भारत हेवी इलेक्ट्रिकल्स लिमिटेड
Bharat Heavy Electricals Limited
सोलर बिजनेस डिवीज़न / सोलर बिजनेस डिवीज़न / Solar Business Division.
बंगलुरु/बेंगलुरु/Bengaluru

Annexure-3(A)

(Compliance to be submitted on the Bidder's Letterhead)
(as applicable)

Sub: Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017

Item Name	:	
Enquiry No.	:	
Project	:	

We M/s _____ (name of the bidder company) have read the clauses pertaining to Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1,2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020) regarding restrictions on procurement from a bidder of a country which shares a land border with India.

We hereby certify that **we are not from such a country** and eligible to be considered for this tender.

(Note: Non-compliance of above said GoI Order and its subsequent amendment, (if any), by any bidder(s) shall lead for commercial rejection of their bids by BHEL)

For and behalf of _____ (Name of the bidder)

(Signature, date & seal of authorized representative of the bidder)

Annexure-3(A)

**(Compliance to be submitted on the Bidder's Letterhead)
(as applicable)**

Sub: Compliance to Government of India order OM No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020 regarding restrictions under Rule 144 (XI) of the General Financial Rules (GFRs), 2017

Item Name	:	
Enquiry No.	:	
Project	:	

We M/s _____ (name of the bidder company) have read the clauses pertaining to Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1,2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020) regarding restrictions on procurement from a bidder of a country which shares a land border with India.

We are from such a country which shares a land border with India & have been registered with the Competent Authority as specified in above said order. We hereby certify that we fulfil all requirements in this regard and are eligible to be considered.

Evidence of valid registration by the Competent Authority is attached.

(Note: Non-compliance of above said GoI Order and its subsequent amendment, (if any), by any bidder(s) shall lead for commercial rejection of their bids by BHEL).

For and behalf of _____ (Name of the bidder)

(Signature, date & seal of authorized representative of the bidder)

Annexure-4

**(Compliance to be submitted on the Bidder's Letterhead)
(as applicable)**

Sub: Compliance to order No. 25-111612018-PG, Dated 02.07.2020 of Ministry of Power, GOI

Item Name	:	
Enquiry No.	:	
Project	:	

This is to certify that all equipment, components, and parts imported for use in the Power Supply System and Network are in strict compliance to directions issued by Ministry of Power, Govt. of India vide order No. 25-111612018-PG dated 02.07.2020. The imported component(s), part or assembly item(s) does not carry any malware/Trojan etc.

Note: Non-compliance of MoP Order and its subsequent amendment(s), (if any), by vendor shall lead to rejection of their offer or cancellation of contract, which is awarded by BHEL.

For and behalf of _____ (Name of the bidder)

(Signature, date & seal of authorized representative of the bidder)

On Bidder Letter Head

Date:

To,

M/s Bharat Heavy Electricals Ltd.
Electronics Division, Mysore Road,
Bangalore – 560026

Sub: Model Clause / Certificate as per Annex-III (Tenders) of Restrictions Under Rule 144 (xi) of the
General Financial Rules (GFRs) 2017, Dated 23.07.2020.

Ref: BHEL Tender / RFQ / NIT Number

I (authorized signatory for M/s) have read the clause
regarding restrictions on procurement from a bidder of a country which shares a land border with India ,
we certify that this bidder M/s [Vendor Name & address] is not from such a country
or , if from such a country , has been registered with the competent authority . We hereby certify that
we fulfill all requirements in this regard and is eligible to be considered [attach evidence of valid
registration certificate with competent authority].

For M/s

Authorized Signatory
(With company seal & Name)

**FORMAT FOR VERIFICATION OF LOCAL CONTENT UNDER PREFERENCE TO MAKE IN INDIA
ORDER**

(To be submitted with the offer)

[Applicable for procurement value from Rs. 5.00 Lac to Rs. 10.00 Crore]

**Self-certification giving the percentage of local content, in line with PPP-MII order, if applicable
[to be submitted on the letterhead of the issuer].**

Item Name	:	
Enquiry No.	:	
Project	:	
Applicable percentage of Local Content	:	<i>(Bidder to indicate local content in percentage)</i>

We have read and understood the provisions of "Public Procurement (Preference to Make in India) Order, 2017" dated 15/06/2017, its revision dated 28/05/2018 and any subsequent modifications/Amendments, if any [hereinafter, "PPP-MII Order"] issued by Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, Government of India.

In line with the provisions of the PPP-MII Order, We, M/s. *[Enter the name of the Bidder]* [hereinafter, "Local Supplier"] submits self-certification to M/s. Bharat Heavy Electricals Limited [hereinafter, BHEL] regarding Local Content in Goods/Services/Works to be supplied by the Local Supplier for *(Enter the name of the Equipment/Item for Project)*, wherein we have agreed to abide by the terms and conditions of the PPP-MII Order.

Details of location at which local value addition will be made is as follows:


We also understand, false declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

For and on behalf of,

Date:

Authorized Signatory
(With Company Seal & Signature)

Note: This is a guiding format. In case the bidder submits the certificate in a format different from the above, the same may be considered provided it meets the intent and purpose, as may be ascertained by BHEL.

	ELECTRO- PORCELAINS DIVISION	GENERAL CONDITIONS OF CONTRACT (GCC) Revision No. R0 (For supply and services)	ANNEXURES Issued on 14.03.2017
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ANNEXURE-XII

FORMAT FOR NO DEVIATION CERTIFICATE

(To be submitted in the bidder's letter head)

TO
 BHARAT HEAVY ELECTRICALS LIMITED,
 Electroporcelains Division
 Prof. CNR Rao Circle,
 Malleshwaram Bangalore – 560012

Sub :	No deviation certificate
Job :	----
Ref :	Your enquiry No -
	All the pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)

INTEGRITY PACT

Between

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at “BHEL House”, Siri Fort, New Delhi – 110049 (India) hereinafter referred to as “The Principal”, which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

and

_____, (description of the party along with address), hereinafter referred to as “The Bidder/ Contractor” which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

Preamble

The Principal intends to award, under laid-down organizational procedures, contract/s for

_____. The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

- 1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
 - 1.1.1 No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
 - 1.1.2 The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - 1.1.3 The Principal will exclude from the process all known prejudiced persons.
- 1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

Section 2 – Commitments of the Bidder(s)/ Contractor(s)

- 2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
 - 2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material, immaterial or any other benefit which he / she is not legally entitled to, in

order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

- 2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or undisclosed agreement or understanding, whether formal or informal. 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.
- 2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal offence under the relevant IPC/ PC Act; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- 2.1.4 The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- 2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidders(s)/ Contractor(s) from the tender process or take action as per the separate “Guidelines for Suspension of Business Dealings with Suppliers/ Contractors” framed by the Principal.

Section 4 – Compensation for Damages

- 4.1 If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- 4.2 If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

Section 5 – Previous Transgression

- 5.1 The Bidder declares that no previous transgressions occurred in the last 3 years with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- 5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all Bidders/ Contractors/ Sub-contractors

- 6.1 The Bidder(s)/ Contractor(s) undertake(s) to demand from his sub-contractors a commitment consistent with this Integrity Pact. This commitment shall be taken only from those sub-contractors whose contract value is more than 20% of Bidder's/ Contractor's contract value with the Principal.
- 6.2 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- 6.3 The Principal will disqualify from the tender process all bidders who do not sign this pact or violate its provisions.

Section 7 – Criminal Charges against violating Bidders/ Contractors /Sub-contractors

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the Vigilance Office.

Section 8 –Independent External Monitor(s)

- 8.1 The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- 8.2 The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, BHEL.
- 8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- 8.5 As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or

take corrective action, or heal the situation, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

- 8.6 The Monitor will submit a written report to the CMD, BHEL within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- 8.7 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.
- 8.8 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant IPC / PC Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.
- 8.9 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.
- 8.10 The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

- 9.1 This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the respective contract and for all other Bidders 6 months after the contract has been awarded.
- 9.2 If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified as above, unless it is discharged/ determined by the CMD, BHEL.

Section 10 – Other Provisions

- 10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.
- 10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- 10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 10.4 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 10.5 Only those bidders/ contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

For & On behalf of the Principal
(Office Seal)

For & On behalf of the Bidder/ Contractor
(Office Seal)

Place-----


Date-----

Witness: _____

(Name & Address) _____

Witness: _____

(Name & Address)_____

	<p>ELECTROPORCELAINS DIVISION</p>	<p>GENERAL CONDITIONS OF CONTRACT (GCC)</p> <p>Revision No. R0 (For supply and services)</p> <p>Issued on 01.04.2017</p>
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GENERAL CONDITIONS OF CONTRACTS (GCC)

DEFINITIONS OF TERMS


ABBREVIATIONS

INSTRUCTIONS TO BIDDERS

GENERAL COMMERCIAL TERMS & CONDITIONS

ANNEXURES

ELECTROPORCELAINS DIVISION
BHARAT HEAVY ELECTRICALS LIMITED
 (A Govt. of India Undertaking)
 PROF. CNR RAO CIRCLE, IISc POST
 MALLESHWARAM
 BANGALORE - 560012

	ELECTRO-PORCELAINS DIVISION	GENERAL CONDITIONS OF CONTRACT (GCC) Revision No. R0 (For supply and services)	DEFINITION OF TERMS
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Not for Publication

For Official Use

DEFINITION OF TERMS


Throughout the Tender Documents including the Enquiry Letter, the following words shall have the meanings assigned to them herein, unless the subject matter or the context requires otherwise.

- 1 **Purchaser / BHEL** shall mean **M/s Bharat Heavy Electricals Limited** (A Govt. of India Undertaking) incorporated under the Companies Act 1956 acting through its **Electroporcelains Division (EPD)**, IISc Post, Prof. CNR Rao Circle, Malleswaram, Bangalore - 560012 (Karnataka) which expression shall include its successors and assigns.
- 2 **EXECUTIVE DIRECTOR**" or 'GROUP GENERAL MANAGER or "GENERAL MANAGER (In-charge)" or "GENERAL MANAGER" shall mean the Officer in Administrative charge of EPD, Bangalore.
- 3 **"COMPETENT AUTHORITY"** shall mean Executive Director or Group General Manager or General Manager (In -charge) or General Manager or BHEL Officers who are empowered to act on behalf of the Executive Director or General Manager (In-charge) or General Manager of BHEL.
- 4 **Owner** shall mean the **Customer or Client** for whose project the enquiry is issued by Purchaser and shall include its successors and assigns as well as authorized officer(s)/ representative(s).
- 5 **Consultant** shall mean the agency appointed by Owner or Purchaser to provide consultancy services for the project and shall include its successors and assigns as well as authorized officer(s)/ representative(s).
- 6 **Tenderer** shall mean the Firm/ Company/ Organization which quotes against the Tender Enquiry issued by Purchaser. It may also be referred as **Bidder or Vendor**.
- 7 **"CONTRACT"** or "CONTRACT DOCUMENT" shall mean and include the Agreement of Purchase order / Work Order, the accepted appendices of Rates, Schedules, Quantities if any, General Conditions of Contract, Special Conditions of Contract, Instructions to the Bidders, Drawings, Technical Specifications, the

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Special Specifications, if any, Integrity Pact (if applicable), the Tender documents, subsequent amendments mutually agreed upon and the Letter of Intent/Acceptance issued by BHEL. Any conditions or terms stipulated by the contractor in the tender documents or subsequent letters shall not form part of the contract unless, specifically accepted in writing by BHEL in the Letter of Intent/Award and incorporated in the agreement.

- 8 **Seller/Contractor** shall mean the Firm/ Company/ Organization with whom the Order/Contract is made and shall be deemed to include its successors, representatives, heirs, executors, administrators and permitted assigns, as the case may be. It may also be referred as **Supplier**.
- 9 **Sub-Contractor** shall mean the person/ firm/ company/ organization to whom any part of the work has been sub-contracted by Seller/ Contractor, with the written consent of Purchaser, and shall include sub-contractor's heirs, executors, administrators, representatives and assigns.
- 10 **"ENGINEER"** or **"ENGINEER IN CHARGE"** shall mean an Officer of BHEL as may be duly appointed and authorized by BHEL to act as "Engineer" on his behalf for the purpose of the Contract, to perform the duty set forth in this General Conditions of Contract and other Contract documents. The term also includes 'RESIDENT MANAGER1 or 'SITE INCHARGE1 as well as Officers at Site or at the Headquarters at Bangalore.
- 11 **"GENERAL CONDITIONS OF CONTRACT"** shall mean the 'Instructions to Bidders1 and 'General Conditions of Contract pertaining to the work for which above tenders have been called for.
- 12 **"TENDER SPECIFICATION"** or **"TENDER"** or **"TENDER DOCUMENTS"** shall mean General Conditions, Common Conditions, Special Conditions, Price Bid, Rate Schedule, Technical Specifications, Appendices, Annexure, Corrigenda, Amendments, Forms, procedures, Site information, etc and drawings/ documents pertaining to the work for which the bidders are required to submit their offers or any other document(s) as mentioned in NIT. Individual specification number will be assigned to each Tender Specification.
- 13 **LETTER OF AWARD / INTENT"** shall mean the intimation by a Letter/Fax/email to the bidder that the tender has been accepted in accordance with provisions contained in the letter. The responsibility of the contractor


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commences from the date of issue of this letter and all terms and conditions of the contract are applicable from this date

- 14 **COMPLETION TIME**" shall mean the period by 'date/month' specified in the 'Letter of Intent/Award' or date mutually agreed upon for handing over of the intended scope of work, the erected equipment/plant which are found acceptable by the Engineer, being of required standard and conforming to the specifications of the Contract.
- 15 **"PLANT"** shall mean and connote the entire assembly of the plant and equipments covered by the contract.
- 16 **"EQUIPMENT"** shall mean equipment, machineries, materials, structural, electrical and other components of the plant covered by the contract.
- 17 **"TESTS"** shall mean and include such test or tests to be carried out on the part of the contractor as are prescribed in the contract or considered necessary by BHEL, in order to ascertain the quality, workmanship, performance and efficiency of the contractor or part thereof.
- 18 **"APPROVED", "DIRECTED" or "INSTRUCTED"** shall mean approved, directed or instructed by BHEL.
- 19 **"WORK or CONTRACT WORK"** shall mean and include supply of all categories of labour, specified consumables, tools and tackles and Plants required for complete and satisfactory site transportation, handling, stacking, storing, erecting, testing and commissioning of the equipments to the entire satisfaction of BHEL.
- 20 **"HEADING"** - The heading in these General Conditions are solely for the purpose of facilitating reference and shall not be deemed to be part thereof or be taken as instructions thereof or of the contract.
- 21 **"WRITING"** shall include any manuscript type written or hand written or printed statement or electronically transmitted messages, under the signature or seal or transmittal of BHEL.

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- 22** "TEMPORARY WORK" shall mean all temporary works for every kind required in or for the execution, completion, maintenance of the work.
- 23** 'CONTRACT PRICE or 'CONTRACT VALUE shall mean the sum mentioned in the LOI/LOA/Contract Agreement subject to such additions thereto or deductions there from as may be made under provisions hereinafter contained
- 24** "COMMENCEMENT DATE" or "START DATE" shall mean the commencement/start of work at Site as per terms defined in the Tender.
- 25** "SHORT CLOSING" or "FORE CLOSING" of Contract shall mean the premature closing of Contract, for reasons not attributable to the contractor and mutually agreed between BHEL and the contractor
- 26** "TERMINATION" of Contract shall mean the premature closing of contract due to reasons as mentioned in the contract.
- 27** "DE MOBILISATION" shall mean the temporary winding up of Site establishment by Contractor leading to suspension of works temporarily for reasons not attributable to the contractor
- 28** "RE MOBILISATION" shall mean the resumption of work with all resources required for the work after demobilization.
- 29** **Site** shall mean and include the land and place on which the power station and related facilities are to be constructed and any adjacent land which may be allocated or used by Owner or Seller/ Contractor in performance of the Order/ Contract.
- 30** **Tests on completion** shall mean such tests as prescribed in specifications and/ or tests mutually agreed upon by Purchaser and Seller/ Contractor, to be performed by Seller/ Contractor after erection of equipment to establish its satisfactory operation as per specifications.
- 31** "COMMISSIONING" shall mean the synchronization testing and achieving functional operation of the Equipment with associated system after all initial adjustments, trials, cleaning, re-assembly required at site if any, have been

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completed and Equipment with associated system is ready for taking into service.


- 32 Initial Operation or Trial Operation or Reliability Run** shall mean continuous integrated operation of the contracted/ ordered plant and materials under varying loads as proof of satisfactory operation for a specified period.
- 33 Inspection Agency (IA)** shall mean person(s) authorized by Purchaser / Owner to inspect the stores as per Order/ Contract at Contractor's/ Sub-Contractor's works. Vendors to raise inspection call on BHEL EPD.
- 34 Month** shall mean calendar month. Day' or 'Days' unless herein otherwise expressly defined shall mean calendar day or days of twenty four (24) hours each. A week shall mean continuous period of seven (7) days.
- 35 Consignee** shall mean the official(s)/ person(s) to whom the stores are required to be delivered in the manner indicated in the Order/ Contract.
- 36 Plant/ Equipment/ Stores** shall mean the goods, machinery, components, parts, spares etc. required to be supplied by Seller/ Contractor as per Order/ Contract.
- 37 Contract Engineer (CE)** shall mean the official who signs the Order/ Contract on behalf of Purchaser.
- 38 Site Engineer** shall mean officer of Purchaser/ Owner authorized to receive and verify the in-coming stores, and issue Material Receipt Certificate (MRC)/ Stores Receipt Voucher (SRV).
- 39 Site Inspection Agency (Site IA)** shall mean person(s) authorized by Purchaser/ Owner to inspect the stores/ works included in Order/ Contract at the Project Site.
- 40 GENERAL**

The words incorporating singular shall include plural and vice-versa, the words incorporating masculine gender shall include feminine gender and vice-versa, and the words incorporating persons shall include bodies, corporate, limited liability companies, partnership and other legal entities.


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ABBREVIATIONS

AWB	Airway Bill
BL	Bill of Lading
BOQ	Bill of Quantity
CAD	Cash Against Documents
CENVAT	Central Value Added Tax
CFR	Cost & Freight
CIF	Cost, Insurance and Freight
CIP	Carriage & Insurance Paid (up to destination)
CPT	Cost Freight Paid
CQ	Corporate Quality
CVD	Countervailing Duty
DMS	Document Management System
EMD	Earnest Money Deposit
E&C	Erection and Commissioning
FOB	Free on Board
GR	Goods Receipt
GRN	Goods Receipt Number
H1 bidder	Bidder quoting highest landed cost to BHEL
IP	Integrity Pact
IEM	Independent External Monitor
L1 Bidder	Bidder quoting lowest landed cost to BHEL
LC	Letter of Credit
LOI	Letter of Intent
LOA	Letter of Award

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LR	Lorry Receipt
MDCC	Material Despatch Clearance Certificate
MRC	Material Receipt Certificate
MSMED	Micro Small and Medium Enterprises Development
NIT	Notice Inviting Tender
O&M	Operation & Maintenance
PBG	Performance Bank Guarantee
P&ID	Process & Instrumentation Diagram
PO	Purchase order
PQR	Pre-Qualification Requirement
PVC	Price Variation Clause/compensation
QS	Quality Surveillance
RA	Reverse Auction
RAB	Running Account Bill
RBI	Reserve Bank of India
RFQ	Request for Quotation
RR	Railway Receipt
SAD	Special Additional Duty
SCC	Special Conditions of Contract

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GENERAL

These general terms & conditions shall apply to all enquiries, notice inviting tenders, request for quotations concerning the supply of goods and / or rendering of services to Bharat Heavy Electricals Ltd., - Electroporcelains Division (hereinafter referred to as BHEL or the Purchaser) or its Projects / Customers.

1.0 GENERAL INSTRUCTIONS

- 1.1 Tenderers are advised to study all the tender documents carefully. Any submission of tender by the tenderer shall be deemed to have been done after careful study and examination of the tender documents and with full understanding of the implications thereof. The specifications and terms & conditions shall be deemed to have been accepted unless otherwise specifically commented upon in 'Deviation sheets by the tenderer in his offer. Noncompliance with any of the requirements and instructions in the Tender Enquiry may result in rejection of the tender.

Integrity Pact (IP) will be applicable for all tenders/ contracts valuing more than a specific value or if specified in NIT/ RFQ. Integrity Pact document shall be issued as part of tender and shall be returned by bidders along with their technocommercial bids, duly signed by authorized signatories. Only those vendors/ bidders who enter into Integrity Pact with BHEL would be qualified to participate in the bidding process.


- 1.2 All commercial terms and conditions, except prices, should be submitted as part of techno-commercial offer (Part-I) along with unpriced copy of Annexure-II, which may be opened first. The price part (Part-II) along with price copy of Annexure-II is to be submitted in a separate sealed cover (or to be uploaded in website in case of e-procurement) along with techno-commercial offer. Purchaser reserves the right to open both the Parts at the same time.
- 1.3 A declaration as per Annexure-III must be sent before opening of Price Bids.

2.0 PROCEDURE FOR SUBMISSION & OPENING OF TENDERS

- 2.1 Tenders shall be submitted in **Two parts** on or before the Due Date and time indicated in the NIT/ RFQ.

PART - I : Techno-Commercial Bid

comprising of Technical Offer, Annexure-I, Commercial Terms & Conditions, Unpriced copy of Price Bid& Annexure II, PQR documents (if applicable) in two

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(2) sets.

PART – II: Price Bid

Containing Prices, cost of withdrawal of deviation as per Annexure-II, to be submitted in original, strictly, as per Price Schedule of BHEL for complete scope of Tender Enquiry.

NOTE: Offers are liable to be rejected for changes made by vendors in the Price Schedule, except those specified in the unpriced bid and accepted by Purchaser.


- 2.1.1 PART-I (Techno-Commercial bid) may be opened on Due Date and time specified in the NIT/ RFQ, or extension thereof, in presence of tenderers who may like to attend. Incomplete offers are liable to be rejected. Purchaser reserves the right to open both Part-I and Part-II together.
- 2.1.2 PART-II containing prices shall be submitted along with Part-I but in a separate sealed cover. Corrections/amendments shall be properly authenticated, else the offer is liable to be rejected.
- 2.1.3 Any discount/revised offer submitted by a bidder on its own shall be accepted provided it is received on or before the due date and time of offer submission. The discount shall be applied on pro-rata basis to all items unless specified otherwise by the bidder.

Unsolicited discounts/revised offers given after due date and time of offer submission shall not be accepted.

In case there is no change in the technical scope and/or specifications and/or commercial terms & conditions, the bidder/s shall not be allowed to change his/their price bids after the due date, within the validity period.

In case of changes in scope and/or technical specification and/or commercial terms & conditions, having price implications, techno-commercially acceptable bidders shall be asked by BHEL (after freezing the scope, technical specifications and commercial terms & conditions) to submit the impact of such changes on their price bid. A cut-off date and time shall be given to all the techno-commercially acceptable bidders to submit the impact on their price bids.

In the event of any bidder, after finalizing the technical specification & scope of supply, opting to revise and submit their latest price bid instead of submitting impact on their price bid asked by BHEL, then their original price (i.e. the previous bid) shall also be opened.

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Price Impact/ Discount/ Revised Price Bid shall be duly superscribed as:

"Price Impact / Discount/ Revised Price Bid (Part-II) (delete whichever is not applicable), Revision No. ____ against Tender Enquiry No. _____ dated ____"

- 2.2 After technical & commercial examination of the offers received and clarifications obtained (if required), Part-II (Revised Price Bid/ Original Price Bid along with Price Impact and Discount, if any) shall be opened, for which the date and time shall be intimated to technically and commercially acceptable bidders in case of public opening. BHEL may opt to finalise the prices through Reverse Auction amongst technically and commercially acceptable bidders. BHEL reserves the right to open the earlier price bids, if any, submitted by the bidder(s), if required.
- 2.3 No correspondence shall be entertained from the tenderers after opening of Part-II (Price bid), except clarifications (if any) asked by BHEL in writing.
- 2.4 **Instructions regarding centralised tender room and tender opening:**
- Vendors are advised to submit the tenders in the tender box, containing Part-I & II offers in separate covers, preferably cloth lined envelopes should be used, properly marked before due date and time.
 - BHEL-EPD shall not accept any tender in torn condition and return the same to the courier immediately with the Stamping "Returned to Sender-Package Damaged". Offers in damaged condition will not be considered and no request for extension on this account will be considered.
 - Bidder's representative shall deposit the offer in tender box only.
 - Bidders shall be allowed in the tender room in area identified for bidders and only one/two authorized representative(s) from each bidder shall be allowed.
 - Bidder shall not be allowed to carry mobile/camera /laptop in the tender room. The same shall have to be deposited at security in advance and taken back after tender opening.
 - In case of two part bid system, bidder's representative(s), witnessing the tender opening shall have to sign on all the envelopes containing the price bids. Thereafter, all the price bid envelopes shall be put in a bigger envelope / box and the same shall be properly sealed. The sealed envelope / box shall have to be signed by the tender opening official(s) / committee of Purchaser and bidder's representatives.

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- g) Details of offers shall be read out to bidders and in no case the offers shall be handed over to any of the bidders for noting down.
- h) Please ensure tender submission, minimum 1 hour before scheduled tender opening time.

Late tenders shall not be accepted.

2.5 Purchaser may negotiate the tender with L1 bidder after RA/ price bid opening.

2.6 MARKING ON ENVELOPES

2.6.1 Following shall be superscribed on the envelopes which shall be addressed by name and designation to the official inviting tender:

PART-I : 1. TENDER ENQUIRY No. AND ITEM DESCRIPTION
 2. DUE DATE FOR OPENING
 3. "TECHNO-COMMERCIAL BID".

PART-II : 1. TENDER ENQUIRY NO AND ITEM DESCRIPTION
 2. DUE DATE FOR OPENING
 3. "PRICE BID".

2.6.2 Both Parts - I & II shall be submitted in separate sealed covers duly superscribed as indicated above and shall be enclosed further in a main cover duly sealed and superscribed as:

"TENDER FOR _____ AGAINST TENDER ENQUIRY NO. _____ DUE ON _____ CONTAINING PART-I & PART-II BIDS"

2.6.3 Envelope not marked with tender enquiry number is liable to be ignored and may not be opened.

2.7 BID SUBMISSION

2.7.1 Tenders shall be addressed to BHEL officials by name & designation and sent to the following address:

Tender Box at the reception of EPD,
 Bharat Heavy Electricals Ltd.
 ELECTROPORCELAINS DIVISION
 Opp. IISc, PROF. C N R RAO CIRCLE ,
 MALLESWARAM , BANGALORE - 560 012
 Attention: 1) Mr.

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2) Mr.

- 2.7.2 Tenders can either be deposited in tender room in person or sent by Courier/Registered or Speed Post to the above mentioned address. It shall be bidders' responsibility to ensure that tenders are delivered latest by 14:00 hours (IST) of the enquiry due date.
- 2.7.3 Bidder can also submit offer through email, if called for in the enquiry, at the email address indicated in the enquiry. Such email offers shall be sent only on designated email-id to reach before 14.00 hrs of the tender due date. BHEL will not be responsible for incomplete offers and the ones delivered late through e-mail.
- 2.8 Tenders received after the Due Date and Time of submission as mentioned at 2.7.2 shall be rejected.
- 2.9 Name of vendor's dealing person with Contact No(s), Email ID and Address of correspondence shall be provided in the bid as per ANNEXURE XVIII.
- 2.10 Unsolicited tenders will not be entertained.
- 2.11 **OFFER SUBMISSION IN E-PROCUREMENT**


Tenders shall be submitted in Two parts on or before the Due Date and time indicated on the portal as per the following instructions:

PART – I : Technical & Commercial bid

Comprising of following:

1. PQ qualification documents (Mandatory, if shown on portal)
2. Annexure-I to GCC (Mandatory)
3. General conditions of contract, GCC (Mandatory)
4. Special conditions of contract, SCC (Mandatory)
5. Technical offer, comprising of technical specification and other documents as asked in technical specifications e.g. drawings, test report etc. (Mandatory)
6. Annexure-III to GCC (Declaration about completeness of price) - (Mandatory)
7. Annexure-XII to GCC (Optional)

"NO DEVIATION CERTIFICATE" FOR COMMERCIAL TERMS AND

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CONDITIONS as per General Conditions of Contracts (GCC, Rev.01), Special Conditions of Contracts and RFQ in case of no deviations

8. Integrity Pact Agreement (Mandatory if shown on portal, not applicable otherwise)
9. Unpriced copy of Annexure-II, cost of withdrawal of deviation (Mandatory)
10. Supplier details as per detail annexure.

Any deviation not mentioned in un-priced copy of this format, but mentioned in the priced copy, shall not at all be accepted.

Bidder to note all the points mentioned in "Notes" of Annexure-II to GCC Rev.01.

Cost of withdrawal for the deviations, for which, the "Cost of withdrawal" is not specified, shall be taken as NIL.

The vendors shall be forced by the system to upload the above documents which are marked mandatory. The Annexure mentioned at Sl no 2, 6 & 7 (if applicable), above should be duly filled by the bidder and should be printed on their letter head before uploading.

PART - II: Price bid


Containing

1. Prices as per price format,
2. Cost of withdrawal of deviation as per Annexure-II, to be uploaded strictly as per Price Schedule of BHEL for complete scope of Tender Enquiry.

NOTE: Offers are liable to be rejected for changes made by vendors in the Price Schedule, except those specified in the unpriced bid and accepted by Purchaser.

The clause nos 2.6 & 2.7 above of this GCC shall not be applicable in case of eprocurement

- 3.0 In case of TURNKEY PACKAGES total **erection & commissioning charges** including service tax should be minimum 15% (or as specified in NIT) of the total quoted package price (excluding mandatory spares but including all taxes and freight), failing which the break-up of prices shall be adjusted accordingly for ordering.

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4.0 Authority of the person signing the tender on behalf of the tenderer:

A person signing the tender or any other document in respect of Order/Contract on behalf of the tenderer, without disclosing his authority to do so shall be deemed to warrant that he has the authority to bind the tenderer. If it is discovered at any time that the person so signing had no authority to do so, the Purchaser may, without prejudice to any other right or remedy, cancel the Order/Contract and make or authorize the purchase of the stores at the risk and cost of such tenderer and hold such tenderer liable to Purchaser for all costs and damages arising from cancellation of the Order/Contract including any loss which Purchaser may sustain on account of such purchase.

Notes:


- a) Bids of Indian supplier shall be in Indian Rupee only.
- b) Bids of foreign suppliers shall preferably be in currency of the country of origin and on CPT/ CFR basis. In case of supplies from Indian origin, it shall be in INR on F.O.R BHEL EPD BANGALORE - 12.
- c) An authorized representative/ agent can represent only one bidder for the given package.

5.0 CLARIFICATIONS REQUIRED BY BIDDERS

Technical and commercial clarifications required before submission of the tender should be addressed to the official(s) inviting the tender. The bidders are requested to submit all their queries/clarifications by the date specified in the NIT after which it will be presumed that there are no queries/clarifications and BHEL will be under no obligation to reply queries/clarifications raised after the date.

6.0 DEVIATIONS - LISTING

- 6.1 Tenders shall be submitted strictly in accordance with the requirements of tender documents. In case of deviations from NIT, the tenderer shall give cost of withdrawal of such deviation in Sealed Cover as per Annexure-II.
- 6.2 If bidder insists for price variation clause (PVC) where NIT specifies Firm price, the offer should contain:-
 - a) PVC Formula
 - b) Ceiling for PVC
 - c) Base date and applicable indices for the base date.

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Open ended PVC formula is not acceptable. Indices shall be based on Government of India/ RBI publications/ IEEMA/ LME etc. However, BHEL reserves the right to accept/ reject the offer with PVC.

7.0 **VALIDITY OF OFFER**

Vendors' offers shall be submitted with the following validity periods:

- i) Original offer shall be valid for 90 days from Part-I opening.
- ii) If revised price bid/ price impact is asked by BHEL, the validity of the same shall be 60 days from the date of revised price bid/ price impact or 120 days from Part-I opening, whichever is later.
- iii) Prices of Recommended Spares, O&M Spares and Mandatory Spares (wherever these are Optional items) shall be valid till two years from the date of PO.
- iv) Unit prices for scope addition/ deletion shall be valid till two years from the date of PO.
- v) Prices of optional items shall be valid till the contract period for placement of order.
- vi) Offers with shorter validity are liable to be rejected.


8.0 **LANGUAGE & CORRECTIONS**

- a) Tenderer shall quote the rates in Hindi/English language and international numerals only. Total Price shall be entered in figures as well as in words. For the purpose of tender, metric system of units shall be used.
- b) All entries in the tender shall either be typed or written legibly in ink. Cancellations, corrections, insertions, erasements, over-writing (if unavoidable) shall be authenticated with signature and seal by the bidder.

9.0 **PRICE DISCREPANCY**

Following shall be considered for evaluation and ordering for non-conformities/ errors/ discrepancies in price bid:

- (a) If, in the price structure quoted for the required goods/ services/ works, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless in the opinion of the Purchaser there is an

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obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price corrected accordingly.

(b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected.

(c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject of (a) and (b) above.

(d) If there is such discrepancy in an offer, the same shall be conveyed to the bidder with target date upto which the bidder has to send his acceptance on the above lines and if the bidder does not agree to the decision of the Purchaser, the bid is liable to be ignored.

(e) Taxes and duties if not specified clearly as extra shall be considered as included in the basic price and, therefore, shall not be reimbursed.

10.0 TENDERER TO INFORM HIMSELF FULLY

10.1 Tenderer shall closely peruse all clauses, specifications & drawings etc. indicated in tender documents before quoting. In case of any doubt about meaning of any portion of tender specifications or discrepancies or omissions in drawings/tender document or clarifications regarding scope of work etc., tenderer shall contact the official(s) inviting the tender for clarifications, before submitting the offer.

10.2 Tenderer shall make independent enquiries as to conditions and circumstances affecting cost estimates, and possibility of executing supplies/works as described. Tenderer shall be deemed to have inspected and examined the site and its surroundings and to have satisfied himself as to the form and nature of the site, the quantities and materials necessary for completion of the work and means of transport and access to the site, the accommodation required, general labour position at site and to have quoted prices taking into consideration the risks, contingencies and other circumstances which may influence or affect execution of the Order/Contract.

10.3 It is the responsibility of tenderer to keep himself informed about all taxes & duties applicable on materials/services as prevailing at the time of tendering. If the rates assumed by tenderer are less than the tariff rates prevailing at the time of tendering, the tenderer will be himself responsible for such under quotations.

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11.0 ETHICS IN BUSINESS DEALINGS & FRAUD PREVENTION POLICY

11.1 The Bidder along with its associate/collaborators/sub-contractors/sub vendors/ Consultants/ service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and shall immediately

bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice."

11.2 Integrity commitment, performance of the contract and punitive action thereof:

11.2.1 Commitment by BHEL:

BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity.

11.2.2 Commitment by Bidder/ Supplier/ Contractor:

(a) The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India.

(b) The bidder/ supplier/ contractor will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL.

© The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL.

If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on [www. bhel.com](http://www.bhel.com) and/or under applicable legal provisions".

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12.0 INTEGRITY PACT

Vendors shall have to enter into Integrity Pact with BHEL if specified in NIT/ RFQ, failing which vendor's offer will be rejected (Refer Annexure-IX).

13.0 REVERSE AUCTION

BHEL reserves the right to go for Reverse Auction (RA) (Guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid (priced format submitted along with the offer in case of e-procurement), submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit 'Process compliance form' (to the designated service provider) as well as 'Online sealed bid' in the Reverse Auction. Nonsubmission of 'Process compliance form' or 'Online sealed bid' by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).

The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid (priced format submitted along with the offer in case of e-procurement) already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.

If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid (priced format submitted along with the offer in case of eprocurement) for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com)."

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14.0 REJECTION OF TENDER AND OTHER CONDITIONS

14.1 Acceptance of tender will rest with Purchaser and does not bind him to accept the lowest or any tender and reserves to itself full rights for the following without assigning any reasons whatsoever:

- a) To reject any or all the tenders.
- b) To split the work amongst two or more tenderers (where E&C is not in tenderer's scope).
- c) To award the work in part. (where E&C is not in tenderer's scope).
- d) To increase or decrease the quantities.
- e) To reject any commercial or technical deviation given in offer.

14.2 Standard pre-printed conditions of tenderer attached to offer will not be accepted and only those mentioned in the body of offer will be considered.

14.3 Purchaser will not be bound by any power of attorney granted by tenderer or by changes in composition of the firm made subsequent to award of Order/Contract. Purchaser may, however, recognize such power of attorney and changes after obtaining proper legal advice, the cost of which will be chargeable to the Seller/Contractor concerned.

14.4 If tenderer deliberately gives wrong information, Purchaser reserves the right to reject such an offer at any stage or cancel the Order/Contract, if awarded, and forfeit the security deposit and bank guarantee.


15.0 DEVIATIONS FROM NIT

15.1 Deviations (Commercial as well as Technical) from NIT are generally not acceptable. In case of deviations from NIT, the tenderer shall give cost of withdrawal of such deviation in Sealed Cover as per Annexure-II.

16.0 Loading For Commercial Deviations (where cost of withdrawal not given)

16.1 For deviations w.r.t. Payment terms, Liquidated damages, Firm prices and submission of E1/ E2 forms before claiming 10% payment, if a bidder chooses not to give any cost of withdrawal of deviation loading as per Annexure-VIII will apply.

17.0 Interest Rate for loading will be taken as Base rate of SBI (as applicable on the date of bid opening, Techno-commercial bid, in case of 2 part bids) + 6% for the period of relaxation sought by the bidders.

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18.0 DISCOUNT

Discount offered by any bidder in the original price bid, against the present Tender Enquiry, which is also indicated to be applicable to any other Enquiry, shall be considered against the present Tender Enquiry only. In case only percentage discount is indicated, the same shall be applicable to optional prices also.

Discount offered shall be valid for full duration of offer validity.


Any conditional discount shall not be considered for evaluation.

19.0 EVALUATION CRITERIA

- 19.1 Evaluation of the tender shall be on the basis of delivered cost, i.e. 'total cost to BHEL' w.r.t the finalized technical scope and commercial conditions (after considering, inter alia, Customs Duty and CENVAT/ VAT/ Service Tax/Entry Tax as applicable) and taking into consideration loadings, if any, and all available financial advantages.
- 19.2 Exchange rate (TT selling rate of State Bank of India) applicable on the date of Part-I bid opening shall be considered for evaluation of foreign bids. If the relevant day happens to be a bank holiday in India, then the FOREX rate as on the previous bank working day shall be taken for evaluation.
- 19.3 Foreign suppliers shall ensure that the benefits as applicable under Comprehensive Economic Partnership Agreement (CEPA) with Government of India are disclosed in the bid & relevant documents such as Certificate of Country of Origin, issued by the appropriate authority in the country of Export, is provided by the vendor along with dispatch documents. Bids shall be evaluated with such applicable benefits. In the event of Seller failing to provide appropriate documents for Purchaser to avail disclosed concessional duty benefits in India, financial loss, so incurred, will be to the Seller's account.
- 19.4 The quoted CFR price shall be loaded by the following to arrive at the Delivered Cost:
 - Import duty as applicable at the time of Part-II (Price) bid opening.
 - Terminal handing charges at destination & other charges & Inland freight will be loaded at 1% of CFR value.

20.0 FOREIGN SUPPLIERS & INDIAN AGENTS OF FOREIGN SUPPLIERS

Please refer 'Annexure-V' for guidelines.

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21.0 MICRO & SMALL & MEDIUM ENTERPRISES

Extant regulations of Govt. of India titled “Public Procurement Policy for Micro & Small Enterprises (MSE’s) Order dated 23.03.2012” will be applicable.

22.0 Authorisation for participation in EPS portal through DSC

E-Tender Participation requirements

Either Principal or authorised agent shall register their Digital Signature Certificate (DSC) (Class 3- SHA2- 2048 BIT- SIGNING & ENCRYPTION). You are advised to pls go through the FAQ available in the web portal

(<https://bheleps.buyjunction.in>). DSC shall be registered for the authorised person and all transaction done using that DSC against our tenders shall be taken as valid communication and shall be binding on principal/agent and is valid legally.

For foreign Principal


In case of Principal (being foreigner) they may apply for DSC through Indian embassy at their country and can register with us for participating in E-tenders. Details of the applicable procedure is available in the webpage <http://www.cca.gov.in/cca/>

For Indian agent

In case of agents participating/registering their DSC (of authorised person), it will be at the sole authorisation of principal to their agents to participate on their behalf and all transactions done using that DSC against our tenders shall be known as valid communication and shall binding on principal and is legally valid.

DSC Authorisation


Pls intimate the authorised person name, Mail ID for registering DSC with us to participate in E-Tenders

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GENERAL COMMERCIAL TERMS & CONDITIONS

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1.0 ACCEPTANCE OF ORDER

Seller/Contractor should acknowledge and accept the LOI/ Purchase Order issued by BHEL within 7 days of its receipt. Seller/Contractor should examine the LOI/ Purchase Order immediately upon receipt and bring to the notice of BHEL, within 7 days of receipt, any discrepancy with regard to scope of work, rates, taxes & duties, agreed terms & conditions etc. for due rectification. If the Seller/Contractor fails to give such intimation / acceptance within seven days, the Seller/Contractor shall be deemed to have agreed to supply the stores as per LOI/ Purchase Order.

2.0 CONTRACT

Contract between Purchaser and Seller/Contractor is merely a contract and shall not be treated as partnership between the parties to the contract.

3.0 PRICES

Prices shall be for the entire scope of work in line with the tender documents and subsequent clarifications/confirmations.

4.0 TAXES AND DUTIES

4.1 EXCISE DUTY for Indigenous purchase


4.1.1 Seller/Contractor is required to ensure that excise duty including cess, if any, is quoted as per the existing tariff on the date of the offer and all benefits as per existing rules have been considered.

4.1.2 Excise duty actually incurred by Seller/Contractor on self-manufactured items shall be reimbursed against documentary evidence.

Excise duty paid by bidder on inputs, bought out items, raw materials and components consigned directly from sources other than Seller/Contractor's factory/works shall be included by the bidder in the quoted ceiling amount of excise duty and the same shall be payable extra at actuals limited to the ceiling amount.

4.1.3 If excise duty is paid under protest or dispute, it shall not be reimbursed till the dispute is settled. If the Seller/Contractor claims/obtains any refund of the excise duty paid, the same shall be refunded to the Purchaser immediately

4.1.4 Invoice cum Excise duty gate pass (Excise Invoice) should contain the name of the ultimate consignee as per Order/Contract/ Special Conditions of Contract.

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4.1.5 If required by Purchaser, the Seller / Contractor will provide a certificate stating that CENVAT benefit has been availed of on the inputs and the same has been passed on to the Purchaser.

4.1.6 Excise duty shall be paid at actuals against documentary evidence but restricted to the amount and percentage indicated in the Order/Contract.

4.2 **SALES TAX/VALUE ADDED TAX (VAT) for Indigenous purchase**

4.2.1 Central Sales Tax / Value Added Tax shall be reimbursed only if the same is paid by the Seller / Contractor to the respective Govt. authorities on direct sales by the Seller/ Contractor to the Purchaser, meeting all statutory requirements and availing all exemptions/concessions under the respective Central Sales Tax / Value Added Tax Acts. The offer should clearly indicate CST/VAT percentage and the total amount along with concessional form(s), if any.

4.2.2 Purchaser is registered in Bangalore, Karnataka vide following Registration Numbers:

Central Sales Tax Registration No. : 00850070 w.e.f. 06-03-1999.

Karnataka TIN. : 29470052861

4.2.3 Central Sales Tax/Value Added Tax shall be reimbursed, as per tariff applicable, but restricted to the percentage and amount shown in the Order/Contract. If it is shown as included in the quoted price/ not applicable, it will not be reimbursed by the Purchaser.

4.2.4 For the purchase re-sold items, purchaser proposes to make sale-in-transit under section 6 (2) (b) of Central Sales Tax Act where goods movement is inter-state. Form-C shall be issued and exchanged against Form-E1/E2 based on quarterly transactions. Seller/Contractor is required to submit his request in the format enclosed at Annexure-VI within 30 days from end of the Quarter, giving State-wise invoice details. In compliance with the notification No. CCW/CR-44-2013-14 dt. 29/04/2014 issued by Commercial Tax Dept., Govt. of Karnataka, vendors shall submit all the requisite documents within 10 days of dispatch for the purpose of issuance of 'C' forms. Timely issuance of 'C' form will depend on the compliance of this condition.

Note: In case of non-receipt of E1/E2 forms amount of differential tax payable by BHEL shall be to vendors' account. Submission of E1/E2 forms shall be ensured by Vendor within the time specified in sales tax act.

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- 4.2.5 For the purchase re-sold items, VAT invoices, in format prescribed by the respective State Sales Tax Act, have to be submitted in the name of Nodal Agency, if specified in Special Conditions of Contract.

4.3 **SERVICE TAX for Indigenous purchase**

- 4.3.1 Service Tax and Cess leviable on taxable services for the time being in force paid by the Service Provider /contractor to the Government authorities directly shall only be paid at actuals against documentary evidence of Service tax payment (Service Tax remittance challan) made to concerned Service tax authorities corresponding to the tax claimed in the previous invoice / RAB, but restricted to the rate and amount mentioned in the order/contract. The offer should clearly indicate the percentage and the total amount of service tax as well cess. Cess to be indicated as separate line item in invoice.
- 4.3.2 Service provider/Contractor to ensure their registration for “Intended Service” to be provided, before claiming Service tax under the “intended category”. Decision of BHEL shall be final w.r.t. the “Intended category” in which the service will be falling.
- 4.3.3 If required by the Purchaser, the Service Provider/Contractor will provide a certificate stating that “CENVAT Benefit has been availed of on the input and the same has been passed on to the purchaser” or “CENVAT Benefit has not been availed of on the inputs”.
- 4.3.4 Vendor shall comply with the Point of Taxation Rules, as contemplated under the Service Tax Rules. In case, the CENVAT credit could not be availed by BHEL within the time limit (statutory), due to delay in submission of invoice(s) or for any other reason(s) attributable to vendor(s)/contractor(s), liability towards the loss of such CENVAT credit shall be to the vendor(s)/contractor(s) account. TDS shall be made for IT as per Income Tax act.

4.4 **OTHER TAXES & LEVIES for Indigenous purchase**

All taxes and duties other than Excise Duty, Sales Tax/ VAT, Service Tax shall be deemed to be included in the Ex-Works prices unless specified otherwise by the bidder in the price bid. No variation in other taxes and duties shall be payable by Purchaser. However, statutory variation in Octroi will be payable extra against documentary evidence. Anti-dumping duty, if any, shall be in the account of bidder and shall be included in their price. No separate payment shall be made by BHEL for the same.

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4.5 **CUSTOMS DUTY for Indigenous purchase**

- 4.5.1 Customs Duty element for imported items as per Special Conditions of Contract shall be included in the Ex-Works prices. No variation in customs duty and exchange rate for imported items shall be payable by Purchaser.
- 4.5.2 Seller/Contractor shall arrange for his own import license, if required, since Purchaser will not provide any import license. Therefore, Seller/Contractor alone shall be responsible for any delay in getting import license or non-availability of the same or completion of other related formalities. Purchaser shall not be responsible for any financial liability, whatsoever, on this account.
- 4.5.3 Essentiality Certificate or Project Authority Certificate (PAC) as per Import Policy, if required to avail concessional customs duty, shall be clearly specified in the offer. Import content (CIF value in rupees) with list of items, quantity, foreign currency, country of origin etc., shall be submitted by the bidder as part of Price bid.

4.6 **DIRECT TAX for Indigenous purchase**

- 4.6.1 Purchaser shall not be liable towards income tax of whatever nature including variations thereof, arising out of this Order/Contract, as well as tax liability of the Seller/Contractor and his personnel.
- 4.6.2 Deductions of Tax at source at the prevailing rates shall be effected by the Purchaser before release of payment, as a statutory obligation, if applicable. TDS certificate will be issued by the Purchaser as per statutory provisions.

4.7 **FOREIGN PURCHASE - Imports**

The offered prices shall be inclusive of all the Taxes and duties as applicable in the country of bidder / country of dispatch for the quoted price as per incoterms (FOB/CFR/CIF/CPT etc.). Any variation in the same will be in sellers account.

5.0 **STATUTORY VARIATION for Indigenous purchase**

- 5.1 If the rates for taxes and duties in respect of the quoted materials and/or services assumed by the Seller/Contractor are less than the tariff prevailing at the time of tendering, Seller/Contractor will be responsible for such under quotations. However, if the rates assumed are higher than the correct rates prevailing at the time of tendering, the difference will be to the credit of the Purchaser.

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5.2 Statutory Variations in Excise Duty, Service Tax and Central Sales Tax/Value Added Tax only on self-manufactured items/services rendered by vendor himself on the rates prevailing at the time of delivery/ completion in comparison to the date of offer, will be to the account of the Purchaser. No other variations such as on customs duty, exchange rate, minimum wages, prices of controlled commodities, any other input etc. shall be payable by the Purchaser.

5.3 Notwithstanding the above, where the actual completion of the supply occurs beyond the period stipulated in the Order/Contract or any extension thereof, variations referred to above, will be limited to the rates prevailing on the dates of such agreed completion periods only. For variations after the agreed completion periods, the Seller/Contractor alone shall bear the impact for the upward revisions and for downward revisions, purchaser shall be given the benefit of reduction in taxes/duties. This will be without prejudice to the levy of penalty for delay in delivery/completion schedule.

5.4 Any new tax structure (like Goods & Services Tax) as and when implemented by the Government shall become applicable in addition to or in lieu of existing tax structure.

6.0 **PRICE BASIS:**

6.1 **For Supply:**

6.1.1 Indigenous purchase – Firm, till the completion of contract (or with PVC if specified in NIT). Ex-works, inclusive of packing & forwarding charges. Taxes, duties and freight to be paid in line clause no 4 above.

6.1.2 Foreign purchase: Firm, till the completion of contract (or with PVC if specified in NIT). CFR/CPT/CIF/CIP Indian (air) port basis inclusive of testing, inspection, sea worthy packing & forwarding charges to be paid in line with GCC.

6.2 **For E&C:**

Firm till completion of the contract (or with PVC if specified in NIT). WCT if any, to be included in price. Service tax along with cess to be indicated separately and will be reimbursed at actuals. TDS shall be made for IT as per Income Tax act.

6.3 Prices shall remain Firm (or with PVC if specified in NIT) for any increase or decrease in the Order/Contract value (Ex-works) upto plus or minus 30% within contract period unless specified otherwise in NIT. The Purchaser shall have the right to increase or decrease quantities and scope upto the above extent of value and

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Seller/Contractor shall be bound to accept the same at the contracted prices without any escalation.

7.0 DRAWING SUBMISSION & APPROVAL:

Drawing submission & Approvals as per technical specification is the responsibility of the vendor.

8.0 DELIVERY TERMS

8.1 Indigenous Purchase

Goods shall be delivered on 'FOR Destination' basis to the named destination unless otherwise called for in the enquiry.

8.2 Foreign Purchase - Imports

8.2.1. Goods shall be dispatched by sea, unless stated otherwise in the enquiry or purchase order.

8.2.2. The goods shall be delivered on CFR basis to the ICD-BANGALORE unless specified otherwise in enquiry or Purchase order.

8.2.3 The quote should be inclusive of all charges, including testing, packing, inspection etc. Additionally ocean freight (LILO basis) for CFR, ICD BANGALORE shall also be quoted separately as per price format.

8.2.4. Goods shall be handled for ocean freight / air freight by BHEL's freight forwarder only, under FOB contracts and OBL / HAWB issued by BHEL appointed forwarder or his authorized agent(s) shall only be accepted for negotiation.

8.2.5 For CFR terms, shipped in Break Bulk/ Container, supplier shall quote the freight charges on LILO (LINER IN LINER OUT) basis. Alternately shipment by container is also acceptable and In such cases B/L should bear the endorsement that "14 free days for Container Detention is applicable" and it would be presumed by BHEL that the freight charges quoted is on LILO (LINER IN LINER OUT) basis including extra charges, if any, like Container Imbalance Charges, Trade Imbalance charges, Port congestion charges or any other charges payable to the Liner. No other charges other than the quoted Freight rate will be paid by BHEL excepting applicable Terminal Handling Charges, Container cleaning Charges, DO charges to Shipping Liner at Discharge Port.

8.2.6 In the event there is a delay by the Supplier in negotiating / submitting the document, any demurrage / wharfage arising out of the same shall be to the account of the Supplier and shall be deducted from the final payment. Also, in such cases, the Supplier shall authorize the Steamer / Shipping agent / transporter to freely release the consignment to BHEL by providing a "Surrender Bill of Lading". Over-seas Suppliers have to give a No-Objection Certificate to BHEL,

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authorizing BHEL to get the Delivery Order from the Steamer Agent without producing the Original Bill of Lading. This is required to ensure avoidance of incidence of demurrage that may arise in case of delayed presentation of documents by the Seller.

- 8.3 Delivery shall be staggered in the manner as indicated in the tender for each item. Vendors shall submit their offer accordingly.

9.0 TERMS OF PAYMENT

9.1 SUPPLY PACKAGES (Main Supply and Mandatory Spares)

9.1.1 For indigenous purchase

Hundred percent (100%) of basic price of materials supplied, as per PO, along with 100% taxes and duties (as applicable) & freight charges, shall be paid on pro-rata basis after 45 days from the date of receipt of goods & receipt of complete documents as per order/ contract subject to acceptance of materials.

9.1.2 For Foreign Purchase – Imports

Hundred percent (100%) payment on CAD basis after 45 days from the date of receipt of documents specified in PO at BHEL BANK. Respective bank charges to respective account.

9.1.3 PG TEST, INSTALLATION CHECK, SUPERVISION OF ERECTION / COMMISSIONING CHARGES

100% payment shall be released after successful completion of the activity.

Vendors shall submit documents for payment directly to BHEL. Payment will be released within 45 days after receipt of complete documents as per order/ contract.

Note:

- 1) For indigenous suppliers, if the documents are routed through Bank, then all bank charges will be to vendor's account.
- 2) Foreign bidders can opt for payment (less agency commission, if applicable) through irrevocable and unconfirmed letter of credit. In that case for evaluation purpose, prices of foreign bidders will be loaded on account of payment through LC, equal to loading specified against 'Payment through Bank' in Annexure-VIII. No loading will be done if foreign vendors agree for 75 days issuance LC or submit the documents on collection basis for payment within 75 days of submission of complete documents.

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3) LC opening/ negotiation/ confirmation charges will be to vendor's account.

4) Any negative PVC, if not adjusted in earlier payments, will be adjusted at the time of subsequent payment.

9.2 **DOCUMENTS TO BE SUBMITTED BY VENDOR**

9.2.1 **For Recognition of Dispatch**

Copy of the following documents by e-mail/ fax immediately on despatch:

- a. Invoice
- b. LR /BL/ AWB
- c. Packing List
- d. Insurance Intimation
- e. Dispatch Clearance

9.2.2 **For Claiming Payments (under clause 9.1.1, 9.2.1, 9.3.1): (under clause 9.1.1)**

- a. Original Excise Invoice & Duplicate for transporter - original+3 copies
- b. Consignee Copy of LR
- c. Packing List - clearly showing number of packages, gross weight and net weight. - original+3 copies
- d. MDCC from BHEL/ Customer - as per SCC - 4 copies
- e. Guarantee Certificate - Original + 3 copies
- f. Insurance Intimation - 4 copies
- g. PVC Calculation and copy of all applicable indices, if PVC applicable. - 4 copies
- h. Duty drawback documents (original excise invoice, original disclaimer certificate, original certificate from excise authority for payment of excise duty), if applicable. - original + 3 copies

It is the responsibility of the vendor to submit invoices along with documents required for effecting payment within the stipulated period mentioned in the applicable statute for this tender. Non-submission of invoices due to delay/reasons attributable to vendor resulting in / leading to loss of tax credit for BHEL will be into vendor's account.

(Under clause 9.1.2)

- a. Commercial Invoice - original+3 copies
- b. Original clean on board Bill of Lading or clean copy of OBL in case of Telex.
- c. Packing List - clearly showing number of packages, gross weight and net weight container wise also. - original+3 copies
- d. Delivery/ship/airplane schedule mentioning the estimated date of Arrival (ETA) at port & destination in case of CFR/CPT.

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- e. MDCC from BHEL/Customer – as per SCC – 4 copies
- f. Guarantee Certificate – Original + 3 copies
- g. Insurance Intimation - 4 copies
- h. PVC Calculation and copy of all applicable indices, if PVC applicable. – 4 copies
- i. Original Certificate of country of Origin issued by chamber of commerce.
- j. One set of original test certificates & O&M manual where called for.
- k. Fumigation certificate wherever cargo is packed in wooden packing or packing of plant origin material is used wherever called for.
- l. TUV/UL certificates where ever called for.

In case the Seller decides to negotiate all 3 originals of BL through negotiating Bank, non-negotiable documents (NND) consisting of copy of BL / HAWB & all originals at sl.no. 9.2.2 (Except OBL) will be couriered to Purchaser. Soft Copy of same documents at sl. 9.2.2 will also be sent by e-mail to the Purchaser at his e-mail address given in the PO with one copy to be mailed at ketan@bhelepd.com & rb@bhelepd.com. Other documents, as required, will be separately indicated in the Purchase Order.

Additional expenditure, if any, incurred by the Purchaser by way of detention / demurrage, resulting out of delay attributable to the Seller in providing negotiable documents, will be recovered from the Seller.

Note for 9.2.2 Additionally, vendor may furnish mfg clearance/drg/docs approval date etc. for the purpose of determining contractual delivery for expeditious processing of Invoices.

9.2.3 For Claiming Payment for Services involving Service Tax

- a. Invoice as per rule 4A of Service Tax Act – Original + 1 copy
- b. Copy of Service Tax registration certificate
- c. Copy of challan for Service Tax payment corresponding to service tax claimed in the previous invoice
- d. Certification for having carried out the work as applicable.

9.2.4 All your invoices against our order shall reach BHEL –EPD addressed to:
HEAD OF DEPARTMENT/MATERIAL MANAGEMENT,
BHEL – ELECTROPORCELAINS DIVISION,
Opp. IISc, PROF. C N R RAO CIRCLE,
MALLESWARAM, BANGALORE - 560 012

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- a. The envelope shall be super-scribed with P.O No. / W.O No., and the Bill / Invoice numbers & Contact person.
- b. Bills / invoices which are brought personally by vendors to EPD are to be dropped in the "BHEL-EPD vendor bills Box" kept near Tender Box at the Reception Office.
- c. Any additional tax implication to BHEL due to delay in submission of bills by Vendor beyond one month shall be to vendor's account.

9.8 **LOADING DETAILS IN CASE OF DEVIATIONS:-**

Loading details in respect to deviations in Payment Terms, LD, PVC indicated in Annexure – VIII.

9.9 **BHEL'S BANKERS**

List of the consortium bankers of BHEL-EPD is as per Annexure-X.

9.10 **MODE OF PAYMENT**

Payments shall be made directly to the Seller/Contractor by E-transfer. Seller/Contractor to provide necessary information for the same as per Annexure-VII.

- 9.11 No interest shall be payable by the Purchaser on the security amount, bank guarantee amount or balance payment or any money which may become due owing to difference or misunderstanding or any dispute between the Purchaser and the Contractor, or any delay on the part of Purchaser in making periodical or final payment or any other aspects incidental thereto.

10.0 **RECOVERY OF OUTSTANDING AMOUNT**

In event of any amount of money being outstanding at any point of time against the Seller/Contractor due to excess payment or any other reason whatsoever, in the present order/contract or any other order/contract from any BHEL Unit, the outstanding amount shall be recovered from the payments due to the Seller/Contractor or at any other appropriate time and manner/mode as deemed fit by the Purchaser at its sole discretion.

11.0 **CONTRACT PERFORMANCE BANK GUARANTEE**

- 11.1 No Bank Guarantee is required where original Order/ Contract value is up to Rs. 25 Lakhs (excluding taxes, duties and freight).
- 11.2 For original order / contract values above Rs. 25 Lakhs (excluding taxes, duties and freight), only if specified in SCC, the vendor shall submit Contract Performance

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Bank Guarantee within 10 days from the date of LOI/LOA (as per Annexure-IV) for 10% of Order/ Contract value (excluding taxes, duties & freight) to cover the due performance of Order/ Contract and to fulfill the guarantee conditions stipulated in the Order/ Contract. However, BG value can be proportionality reduced after completion of Guarantee period Unit-wise/ Lot-wise/ Set-wise, as applicable.

- 11.3 In case the order is to be placed in foreign currency, the BG must also be in foreign currency, so specified by the Purchaser. Foreign vendors seeking payment through Letter of Credit (LC) should submit the Bank Guarantee before LC opening.
- 11.4 Value of the Bank Guarantee (at the time of submission) shall remain unchanged for any subsequent variations in order/ contract value up to 20%. Beyond this, the Seller/ Contractor shall arrange to enhance or reduce the value of the Bank Guarantee accordingly.
- 11.5 Validity of the Bank Guarantee shall be for the entire Guarantee period + 3 months claim period. Initially, it should be at least 18 months + 3 months claim period, later extended to cover the entire guarantee period, two months before its expiry.
- 11.6 Purchaser reserves the right to encash the bank guarantee and forfeit the amount in the event of any default, failure or neglect on part of the Seller/ Contractor in fulfillment of performance of the Order/ Contract.
- 11.7 Equivalent amount shall be recovered from payment due to the Seller/ Contractor, before releasing any payment, in absence of a valid bank guarantee.
- 11.8 Bank Guarantees shall be from Consortium Bank as per Annexure-X. Bank guarantees from cooperative banks/ non-scheduled banks are not acceptable.
- 11.9 In case of private sector banks, a clause to be incorporated in the text of bank guarantee that it can be enforced by being presented at any branch of the bank located in Bangalore.
- 11.10 Two witness signatures from bank officials, other than the bank official who has already signed is a must. BG is to be submitted directly by the issuing bank to concerned purchase officer, under registered post (A/D).
- 11.11 The Bank Guarantee to be provided in the hard and not in the SFMS format". Our bank details are as follows:

Name of Site/division: BHEL EPD

Name of Bank: IDBI BANK, SPECIALIZED CORPORATE BRANCH

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Branch Address: 102, SHAKTHI COMFORT TOWER,
 KH ROAD, BANGALORE- 560027
 PH NO 67121025
 KIND ATTN: Mr. MANMOHAN SOMA
 ALT: Mrs. VP SHIVA SHAKTI
 PH NO 67121059.
Branch IFSC Code: IBKL0000377
Account No: 008103000003605

- 11.12 Wherever the contract is for supply of Goods processed on labour basis from BHEL supplied materials, the materials shall be issued against a suitable Bank guarantee as specified in the Enquiry.

12.0 GUARANTEE FOR PLANT/ EQUIPMENT/ STORES

- 12.1 Seller/ Contractor shall warrant that the stores supplied shall be free from all defects and faults in design & engineering, material, workmanship & manufacture and shall be of the highest grade and consistent with the established and generally accepted standards and in full conformity with the Order/ Contract specifications, drawing or samples, if any.
- 12.2 Guarantee period for **Supply** shall be eighteen (18) months from the date of last dispatch or as per SCC whichever is later.
- 12.3 All replacements and repairs during the guarantee period shall be delivered and completed promptly and satisfactorily within a period of one months from the time of reporting the defect/ loss/ rejection etc or any mutually agreed period without prejudice to purchaser's other legal rights. If the Seller/ Contractor so desires and the Purchaser agrees, subject to import control regulations, the replaced parts can be taken over by Seller/ Contractor or his representative or can be dispatched at Seller/ Contractor's cost. No claim, whatsoever shall be entertained by Purchaser on account of such replaced parts.
- 12.4 All the replaced and replenished stores shall also be guaranteed as per above clauses.
- 12.5 Decision of Purchaser with regard to Seller/ Contractor's liability and the amount involved, if any, payable by Seller/ Contractor under the guarantee shall be final, conclusive and binding. However, vendor's maximum liability will be limited to the total contract value including taxes, duties and freight.

13.0 DELIVERY / COMPLETION SCHEDULE

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13.1 Supply of plant/equipment/stores shall not be considered complete until they have been inspected and accepted at the place and destination specified for delivery by the time stipulated under the terms & conditions of the Order/Contract. Mere payment by itself shall not constitute acceptance of the goods or materials in any manner, whatsoever.

13.2 Vendor shall strictly adhere to delivery schedule. In case of non compliance to agreed schedules / milestones, then it would be presumed that vendor / contractor is not fulfilling contractual obligations. BHEL reserves the right to take suitable action like operating "Risk & cost clause".

14.0 INSPECTION AND TESTING AT CONTRACTOR'S PREMISES

14.1 Purchaser's nominated Inspection Agency shall have at all reasonable times access to Seller/ Contractor's premises or works and shall have the power at all reasonable times to inspect drawings of any portion of the work or examine the materials and workmanship of the stores during their manufacture, and if part of the stores is manufactured at other premises, the Seller/Contractor shall arrange for inspection, examination and testing by the Inspection Agency as if the store is manufactured on the Seller/Contractor's premises.

Inspection calls should be given adequate notice of one week or as mutually agreed period in advance in writing to the purchaser about the date & place where goods will be ready for inspection & testing, as provided for in the contract.

Such inspection, examination and testing by itself shall not relieve the Seller/Contractor from any obligation under the Order/Contract.

14.2 Seller/Contractor shall give Inspection Agency reasonable notice of any material being ready for testing and the Inspection Agency shall (unless the inspection of tests is voluntarily waived) attend at the Seller/Contractor's premises within fifteen (15) days of the date on which the material is notified as being ready. All standard shop tests, physical and chemical tests required by the standards or as may be prescribed or approved as per Order/ Contract shall be conducted by the Seller/Contractor. Purchaser/Inspection Agency reserves the right to waive any of the above tests requirements and to prescribe new tests, if found necessary, to complete the work so as to conform to the best practices. Seller/Contractor shall forthwith forward to the Inspection Agency, duly certified copies of the test certificates in quadruplicate, for approval. Further copies of the shop test certificates shall be bound with the instruction manuals referred to in "Seller/Contractor's documents, drawings and instruction manuals".

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14.3 Where the Order/Contract provides for tests/inspections at the premises or works of the Seller/Contractor or any sub-contractor, the Seller/Contractor, except specified otherwise, shall provide free of charge such assistance, labour, materials, electricity, fuel, water, stores, apparatus, measuring instruments and test equipment including any other facilities as may be reasonably required to carry out such tests efficiently. In case of inspection by BHEL or BHEL CUSTOMER, the cost of to & fro passage and boarding & lodging shall be borne by purchaser/customer, unless otherwise specifically agreed. In case of foreign vendors the cost of third party inspection, where called for shall be deemed to be included in the quoted price.

14.4 Inspection calls shall be addressed to BHEL-EPD Purchase Department irrespective of inspection categories.

14.5 INSPECTION MEASURING AND TEST EQUIPMENTS

14.5.1 Inspection Measuring and Test Equipments (IMTE) whether used by the Seller/Contractor or sub-contractor shall be calibrated, maintained and controlled. Calibration shall be valid and IMTE maintained in sound condition during usage.

14.5.2 In addition to above, Seller/ Contractor shall ensure the following :

- a) Measurement uncertainty is known and consistent with required measurement capability of the IMTE.
- b) Selection of IMTEs is compatible with the necessary accuracy and precision of required measurement.
- c) IMTEs are calibrated at the required intervals against certified equipments having known valid relationship to nationally recognized standards, at recognized calibration labs.
- d) Calibration records are available and traceable to the particular IMTE.
- e) In case, during recalibration, the IMTE is found out of calibration, report on action taken to validate the previous results along with both calibration records of the IMTE to be furnished to Inspection Agency.
- f) IMTEs are stored, handled and preserved such that accuracy and fitness are maintained and safeguarded from adjustments.

NOTE: Purchaser's decision on acceptability of the product in such cases shall be binding.

14.5.3 Responsibility of usage of valid and calibrated IMTEs by his sub-contractor(s) shall be of the Seller/ Contractor.

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14.5.4 In case, calibration records are required by purchaser, copies of the same shall be furnished.

14.6 Seller/Contractor shall be fully responsible for the Quality of products supplied by sub-contractors.

15.0 MATERIAL DESPATCH CLEARANCE CERTIFICATE (MDCC)

15.1 When the tests have been satisfactorily completed at Seller/Contractor's works, the Inspection Agency shall issue a certificate to that effect within fifteen (15) days after completion of the tests, but if the tests were not witnessed by the Inspection Agency or his representative, the certificate would be issued within fifteen (15) days after receipt of the test certificates by the Purchaser.

15.2 Purchaser/Owner will issue MDCC to the Seller/Contractor based on inspection report/ test certificates.

15.3 No item / equipments shall be dispatched without obtaining Material Dispatch clearance certificate from BHEL-EPD Purchase Department irrespective of inspection categories.

15.4 Satisfactory completion of tests or issue of MDCC shall not bind the Purchaser/Owner to accept the supply/ equipment should it, on further tests after erection, be found not to comply with the contract provisions.

16.0 DELIVERY FAILURE AND TERMINATION/LIQUIDATED DAMAGES

16.1 Timely dispatch/delivery and completion of other schedules as stipulated in Order/Contract shall be the essence of Order/Contract. If the Seller/Contractor fails to complete the dispatch/delivery and other schedules within the time period stipulated in Order/Contract, or within any extension of time granted by Purchaser, it shall be lawful for Purchaser to recover damages for breach of Order/Contract without prejudice to any other rights and/or remedies provided for, in the Order/Contract and hereunder. For any delay not attributable to the Seller/Contractor, the Seller/Contractor must report the same to Purchaser immediately.

16.2 DELAYED DELIVERY

16.2.1 Purchaser reserves the right to recover from the Seller/Contractor, as agreed liquidated damages and not by way of penalty, a sum equivalent to half (½) percent of the total contract price per week or part thereof, subject to a maximum of ten (10) percent of the total contract price excluding elements of taxes, duties and freight, if

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the Seller/ Contractor fails to deliver ordered stores within the period stipulated in the Order/Contract.

However, In case of staggered delivery schedule, the LD shall be half ($\frac{1}{2}$) percent of the undelivered portion per week or part thereof, subject to a maximum of ten (10) percent of the contract price **excluding** elements of taxes, duties and freight, if the Seller/ Contractor fails to deliver any part of the ordered stores within the period stipulated in the Order/Contract.

NOTE:

1. LR/ RR date for indigenous supplies and AWB/ BL date for FOB/CIF/CIP/CFR/CPT contracts shall be treated as the date of dispatch for levying LD as per Clause 16.
2. In case of any amendment/revision, LD shall be linked to the amended/revised contract value and delivery date(s).
3. If Order/ Contract involves two or more Units/ Sets/ Lots, then Liquidated Damages shall be for order/ contract value of the delayed Unit/ Set/ Lot, provided delivery stipulated in the Order/ Contract is Unit/ Set/ Lot wise, however total LD amount shall be limited to 10% of total order value. (excluding taxes, duties and freight)

16.2.2 Purchaser reserves the right to purchase from elsewhere on account of and at the risk and cost of Seller/Contractor, with notice to Seller/Contractor, the stores due for delivery but not so delivered, or their equivalent without cancelling the Order/Contract in respect of stores not yet due for delivery. The manner and method of such purchase shall be at the discretion of the Purchaser. The actual excess cost incurred for such purchases will be recovered from the bidder.

16.2.3 Purchaser reserves the right to cancel the Order/Contract or a portion thereof for the stores not so delivered at the risk and cost of the Seller/Contractor and the Seller/Contractor shall be liable to the Purchaser for any excess cost thereof. The actual excess cost incurred for such purchases will be recovered from the bidder.

16.2.4 Seller/Contractor shall continue performance of the Order/Contract, under all circumstances, to the extent not cancelled.

17.0 INSURANCE

17.1 Insurance shall be arranged by BHEL.

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17.2 Vendors shall inform the Underwriters, appointed/ nominated by BHEL/ Purchaser, the details of dispatches under intimation to BHEL such as LR No./BL/AWB and date, Truck No./vessel details/flight details, P.O. No. and value.

17.3 Insurance as applicable for field work such as third party liability, workmen compensation, Seller/Contractor's own Tools & Plants and automobile shall be arranged by the Seller/ Contractor.

18.0 INTER-CHANGEABILITY AND CHANGES

18.1 All similar components or parts of similar equipment supplied by Seller/Contractor shall be interchangeable with one another.

18.2 Even though all the work and materials necessary for satisfactory completion of the works may not be detailed in the specifications and schedules, the cost will be considered to be within the contract price and no extra charges shall be payable. However, if there are substantial changes in the specifications of the stores/plant, consequential changes in prices shall be mutually agreed between Purchaser and Seller/Contractor.

19.0 PACKING AND DISPATCH MARKING

19.1 Packing shall be in conformity with specifications and shall be such as to ensure prevention of damages, corrosion, deterioration, shortages, pilferage and loss in transit or storage.

19.2 In case of shipment by sea, the packing shall be sea-worthy and of international standards.

19.3 Packing List shall be submitted as per standard format along with advance set of documents for claiming payment which shall also indicate:-

- a) Packing size.
- b) Gross weight and net weight of each package.
- c) Contents of the package with quantity of each item separately.

19.4 The number of each package in a shipment shall be shown in fraction, numerator showing number of the package and the denominator showing total number of packages in a lot I consignment. The packages number shall be generally prepared in the sequence in which they will be required for erection.

19.5 Each package delivered under the Contract shall be marked by and at the expense of the supplier and such marking must be distinct and in English language (all previous irrelevant markings being carefully obliterated). Such marking shall

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show the description and quantity of contents, the name and address of consignee. the gross weight and net weight of the package, the name of the Contractor with a distinctive number of mark sufficient for purposes of identification. All markings shall be carried out with such materials as to ensure quickness of drying. fastness and indelibility. Each equipment or parts of equipment shall, when shipped or railed or otherwise dispatched be tagged with reference to the assembly drawings and corresponding part numbers. Each bale or package shall contain a packing note quoting specifically the name of the Contractor, the number and date of contract and the name of the office placing the contract, nomenclature of the stores and include a schedule of parts for each complete equipment giving the part numbers with reference to the assembly drawing and the quantity of each part, drawings nos. and tag numbers.

- 19.6 Besides wherever necessary, packing shall bear a special marking " TOP", " BOTTOM", "DO NOT TURN OVER", "KEEP DRY", "HANDLE WITH CARE".etc.
 - 19.7 All packing cases, containers (excluding marine container), packing and other similar materials shall be new.
 - 19.8 Notwithstanding anything stated in this clause, the Contractor shall be entirely responsible for loss, damage or depreciation or deterioration to the materials & supplies due to faulty and/or insecure packing.
 - 19.9 Each and every package box shall be marked with the following, as a minimum:
 - (i). Name and address of Consignee:
 - (ii). Project reference:
 - (iii). Contract No.:
 - (iv). Packing No.: (1110. 2110, 3110 when there are 10 packages For one consignment)
 - (v). Net Weight/Gross Weight:
 - (vi). Port of Loading:
 - (vii). Destination Port
 - (viii). Packing Mark: [symbols indicating "TOP" and other special markings as indicated above.
 - (ix). Type of Equipment:
- "E" (for Equipment supply)

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"T" (for Tools & Tackles)

"S" (for Mandatory Spares)

19.10 PACKING FOR SPARES

19.10.1 The commissioning spares shall be properly packed separately in separate box and each spare shall be properly tagged giving details (to match the description given in the packing slip) to facilitate their proper identification. Three copies of packing list is to be kept inside the box and one copy in a special packet at the outer side of the Box.

19.10.2 The Mandatory spares shall be properly packed separately in separate box indicating Mandatory Spares in bold letters and each spare shall be properly tagged giving details i.e. item number of the equipment in line with the Ultimate Customer/Owner Contract & Number per item (to match the description given in the packing slip) to facilitate their proper identification by ultimate Customer/Owner. Three copies of packing list along with Manufacturing drawing no. Reference. Catalogue reference etc. is to be kept inside the box and one copy in a special packet at the outer side of the Box.

20.0 STORAGE INSTRUCTIONS

Successful tenderer shall be required to submit detailed instructions for storage of supplies within two weeks of date of issue of LOI/ Order/ Contract.

21.0 MATERIAL/GOODS RECEIPT CERTIFICATE

Seller/Contractor shall arrange Material/Goods Receipt Certificate from the consignee, duly signed by Purchaser/Owner Site Engineer after receipt & physical verification of the material, wherever E&C is in the scope of Seller/ Contractor.

For Supplies, Material/Goods Receipt Certificate shall be arranged by BHEL. Vendor to provide copy of receipted LRs to enable BHEL to obtain MRC from site.

22.0 CONSIGNEE'S RIGHT OF REJECTION

22.1 Notwithstanding any approval of Purchaser or Engineer in respect of stores or materials or other particulars or work or workmanship involved in performance of order/contract (with or without any test carried out by Seller/Contractor or Inspection Agency or under direction of Contract Engineer), and notwithstanding delivery of the stores where so provided to the consignee, it shall be lawful for the consignee, on behalf of the Purchaser, to reject the stores or any part/ portion of consignment thereof, within 30 days after actual delivery at the stipulated place or

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destination, if such stores or part/ portion of consignment thereof is not in conformity with terms and conditions of order/contract whether on account of any loss, storage, deterioration or damage before despatch or otherwise, whatsoever.

- 22.2 Rejected goods or materials shall be removed by Seller/Contractor within a period of 15 days from the date of receipt of notice of such rejection. The expenses to be incurred in respect thereof shall be borne entirely by the Seller/Contractor.

23.0 RISK IN STORES (FOR E&C CONTRACTS)

Seller/ Contractor shall perform the order/ contract in all respects in accordance with terms and conditions thereof. Stores and every constituent part thereof, whether in possession or control of the Seller/Contractor, his agents or servants, or a carrier, or in joint possession of Seller/ Contractor, his agent or servants and Purchaser, his agents or servants, shall remain in every respect at the risk of Seller/Contractor until their actual delivery to consignee at the stipulated place or destination or where so provided in acceptance of offer, until their delivery to a person specified by Purchaser as interim consignee for the purpose of despatch to the consignee. Seller/Contractor shall be solely responsible for all losses, destructions, damages or deterioration to the stores from any cause whatsoever, while the stores await dispatch after approval by the Inspection Agency.

24.0 SHORTAGES/DAMAGES

24.1 FOR SUPPLY PACKAGES

- a) Shortages in sound cases shall be replenished free of cost by the vendor, as early as possible.
- b) For shortages/damages during transit/ handling at site, vendor shall supply replacements, as early as possible, at the old contractual rates upon intimation to vendor within one months of receipted LR.

24.2 FOR E&C PACKAGES

Any shortages or damages during unloading and handling at site, including at the time of erection and commissioning, shall be made good by the Seller/ Contractor at his risk and cost, to meet the project schedule. In case of faults/discrepancies in any material, component, sub-assembly, assembly, etc., the same shall be supplied/replenished free of cost to enable the equipment to be put to service.

25.0 CONFIDENTIALITY

Seller/Contractor shall, at all times, undertake to maintain complete confidentiality of all data, information, software, drawings & documents, etc. belonging to the

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Purchaser and also of systems, procedures, reports, input documents, manuals, results and any other company documents discussed and/or finalised during the course of execution of order/contract.

26.0 DEFAULT/BREACH OF CONTRACT, INSOLVENCY AND RISK PURCHASE

- 26.1 If Seller/Contractor fails to deliver goods or materials or any installment thereof within the period(s) fixed for such delivery or delivers goods or materials not of the contracted quality and failing to adhere to the contract specifications or at any time repudiates or otherwise abandons the contract before expiry of such period or refuses or is unable to supply goods or materials covered by the Order/Contract either in whole or in part or otherwise fails to perform the Order/Contract or commits any breach of Order/Contract not herein specifically provided for or in the event of the death or insanity or if the Seller/Contractor being an individual or if a firm on a partnership thereof, shall at any time, be adjudged insolvent or shall have a receiving order for administration of his estate made against him or shall take any proceeding for composition under any Insolvency Act for the time being in force or make any assignment of the Order/Contract or enter into any arrangement or composition with his creditors or suspend payment or if the firm is dissolved under the Partnership Act or if the Seller/Contractor being a company is wound up voluntarily or by order of a Court or a Receiver, Liquidator or Manager on behalf of the debenture holders and creditors is appointed or circumstances shall have arisen which entitles the Court of debenture holder and creditors to appoint a receiver, liquidator or manager, the purchaser without prejudice to his right to recover any expenses, losses or damages to which the Purchaser may be put to incur or sustain by reason of Seller/Contractor's default or breach of Order/Contract, Purchaser shall be entitled to cancel the Order/Contract either in whole or portion thereof without compensation to Seller/Contractor and if the Purchaser so desires, may procure upon such terms and in such manner as deemed appropriate, stores not so delivered or others of similar description where stores exactly complying with particulars are not, in the opinion of the Purchaser, which shall be final, readily procurable, at the risk and cost of the Seller/Contractor and the Seller/Contractor shall be liable to the Purchaser for any excess costs provided that the Seller/Contractor shall continue the performance of the Order/Contract to the extent not cancelled under the provisions of this clause. The Seller/Contractor shall on no account be entitled to any gain on such repurchases.

Except for Clause 26.2, vendor's maximum liability will be limited to the total contract value including taxes, duties and freight.

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- 26.2 Recovery on account of purchases made by Purchaser at the risk and cost of Seller/ Contractor shall be worked out as follows:

Excess of new purchase cost over old purchase cost, where the total value of new PO is more than total value of old PO.

27.0 TERMINATION OF CONTRACT

- 27.1 Purchaser shall have the right to cancel Order/Contract, wholly or in part, in case they are obliged to do soon account of any decline, diminution, curtailment or stoppage of their business and in that event, the Seller/Contractor compensation claim shall be settled mutually.
- 27.2 Purchaser shall have the right to cancel order/contract at the risk and cost of Seller/Contractor in case either the Seller/Contractor himself or any of his representative or agent is found to have been a previous employee of the Purchaser immediately before retirement and has within a period of two years of such retirement accepted the employment of the Seller/Contractor either as a Seller/Contractor or as an employee without having obtained prior permission of Purchaser.
- 27.3 In case of cancellation of main supply order/ contract, all other associated orders/ contracts like mandatory spares/ recommended spares/ E&C/ supervision of E&C would also get cancelled.

28.0 TRANSFER, SUB-LETTING/ASSIGNMENT/SUB-CONTRACTING

- 28.1 Seller/Contractor shall not sublet, transfer or assign order/contract or any part thereof or interest therein or benefit or advantage thereof save without the prior consent in writing of Purchaser. In the event of Seller/Contractor sub-letting, transferring or assigning order/contract or any part thereof or interest therein or benefit or advantage thereof without such permission, the Purchaser shall be entitled to cancel the Order/Contract and to purchase the stores from elsewhere at risk and costs of Seller/Contractor and the Seller/Contractor shall be liable for any loss or damage which Purchaser may sustain in consequence of or arising out of such risk purchase.
- 28.2 If Seller/Contractor is an individual or proprietary concern and the individual or the proprietor dies or the partnership is dissolved or substantially affected, then unless the Purchaser is satisfied that legal representative of individual seller/contractor or proprietor of proprietary concern and surviving partners of partnership firm are capable of carrying out and completing the order/contract, the Purchaser shall be entitled to cancel the order/ contract as to its incomplete portion

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and without being in any way liable to payment of any compensation to estate of seller/contractor and/or to surviving partners of seller's/contractor's firm on account of cancellation of the order/contract.

28.3 Decision of Purchaser that legal representatives of deceased seller/contractor or surviving partners of the seller's/contractor's firm can not carry out and complete the order/contract shall be final and binding on the parties hereto.

28.4 Terms and Conditions shall not get affected in case of merger/amalgamation/takeover/re-arrangement etc.

29.0 FORCE MAJEURE

29.1 Notwithstanding anything contained in Clause 13.0, if at any time during the continuance of the Order/Contract, the performance in whole or in part by either party of any obligations under the Order/Contract shall be prevented or delayed by reason of any war hostilities, acts of the public enemy, restrictions by Govt. of India, civil commotion, sabotage, fires, floods, explosion, epidemics, quarantine restrictions, strike, lock-outs, or acts of God (hereinafter referred to as 'event'), then, provided notice of the happening of such event is given by either party to the other within fifteen (15) days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate the Order/Contract nor shall have any claim for damages against each other in respect of such non-performance and delay in performance. Performance under the Order/Contract shall be resumed immediately after such event has come to an end or ceased to exist and decision of Purchaser as to whether the deliveries have to be resumed or not shall be final, conclusive and binding on the parties hereto.

29.2 In the event of the parties hereto not able to agree that a force majeure event has occurred, the parties shall submit the disputes for resolution pursuant to the provisions hereunder, provided that the burden of proof as to whether a force majeure event has occurred shall be upon the party claiming such an event.

29.3 Notwithstanding the above provisions, Purchaser shall reserve the right to cancel the Order/Contract, wholly or partly, in order to meet the overall schedule and make alternative arrangements for completion of delivery and other schedules.

30.0 INDEMNIFICATION

Seller/Contractor shall fully indemnify and keep indemnified the Purchaser against all claims of whatsoever nature arising during the course and out of the execution of this Order/Contract.

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31.0 SETTLEMENT OF DISPUTES

- 31.1 Except as otherwise specifically provided in the Order/Contract, all disputes concerning questions of the facts arising under the Order/Contract, shall be decided by Purchaser, subject to written appeal by the Seller/Contractor to the Purchaser, whose decision shall be final.
- 31.2 Any dispute or difference shall be, to the extent possible, settled amicably between the parties hereto, failing which the disputed issues shall be settled through arbitration.
- 31.3 Seller/Contractor shall continue to perform the order/contract, pending settlement of dispute(s).

32.0 ARBITRATION & CONCILIATION

- 32.1 Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the parties; or, in relation to interpretation of any provision of the contract; or, in any manner touching upon the Contract, then, either party may, by a notice in writing to the other party refer such dispute or difference to the sole arbitration of an arbitrator appointed by head of the BHEL Unit/Region/Division issuing the Contract.
- 32.2 The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the parties.
- 32.3 Subject as aforesaid, the provisions of arbitration and conciliation act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be **Bangalore**. The cost of arbitration shall be borne as per the award of the Arbitrator.
- 32.4 Subject to the arbitration in terms of Clause 32.0 above, the Courts at **Bangalore** shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract.
- 32.5 Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the Contractor shall proceed with and continue without hindrance the performance of its obligations under this contract with due diligence and expedition in a professional manner except where the contract has been terminated by either party in terms of this Contract.

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32.6 In case of contract with public sector enterprise (PSE) or a government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either party for arbitration to the sole arbitrator in the Department of public Enterprises to be nominated by the secretary to the government of India in-charge of the Department of public enterprises. The arbitration and Conciliation act, 1996 shall not be applicable to arbitration under this clause the award of the arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make further reference for setting aside or revision of the award to the law secretary, department of legal affairs, Ministry of law and justice, Government of India. Upon such reference the dispute shall be decided by the law secretary or the special secretary or Additional secretary when so authorized by the law secretary, whose decision shall bind the parties hereto finally and conclusively. The parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.”

33.0 LAWS GOVERNING THE CONTRACT

Contract, including all matters connected with contract, shall be governed by the Indian Law, both substantive and procedural, for the time being in force including modification thereto, and shall be subject to the exclusive jurisdiction of the Indian courts at Bangalore.

34.0 JURISDICTION OF COURT

Courts at Bangalore shall have exclusive jurisdiction to decide the dispute, if any, arising out of or in respect of the contract(s) to which these conditions are applicable.

35.0 ORDER OF PRECEDENCE

In the event of any ambiguity or conflict between the Tender Documents, the order of precedence shall be in the order below:

1. Amendments/Clarifications/Corrigenda/Errata etc issued in respect of the tender documents by BHEL.
2. Notice Inviting Tender (NIT)
3. Price Schedule

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4. Special Conditions of Contract (SCC)
5. Technical specification & scope of work
6. General Conditions of Contract (GCC)

36.0 SUPPLIER PERFORMANCE MONITORING AND RATING SYSTEM

Seller/Contractor's performance will be evaluated as per Supplier Performance Monitoring and Rating System of BHEL. Please refer BHEL website www.bhel.com for details.

37.0 DEALING WITH BANNED SUPPLIERS/ CONTRACTORS IN BHEL

Offers of the bidders who are on the banned list, as also the offers of the bidders who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL website www.bhel.com.

ANNEXURE No.	DESCRIPTION
I	OFFER SUBMISSION AS PER NIT
II	DEVIATION SHEET COST OF WITHDRAWAL)
III	DECLARATION
IV	CONTRACT PERFORMANCE BANK GUARANTEE
V	GUIDELINES FOR FOREIGN SUPPLIERS AND INDIAN AGENTS OF FOREIGN SUPPLIERS
VI	REQUEST FOR ISSUE OF FORM-C
VII	NEFT DETAILS
VIII	LOADING CRITERA
IX	INTEGRITY PACT
X	LIST OF CONSORTIUM BANKS
XI	REVERSE AUCTION GUIDLINES
XII	NO DEVIATION FORMAT
XIII	AUTHORISED SIGNATORY
XIV	FORMAT FOR POWER OF ATTORNEY
XV	RAB FORMAT FOR E&C
XVI	INDEMNITY BOND
XVII	CONSORTIUM AGREEMENT
XVIII	VENDOR PARTICULARS & LOGISTICS INFORMATION
XIX	NON DISCLOSURE AGREEMENT
XX	

ANNEXURE-I

(To be filled up by the Bidder)

Ref. No.:

Date :

M/s Bharat Heavy Electricals Ltd.,
Electroporcelains Division
Prof. CNR Rao Circle
Malleshwaram
Bangalore - 560012

Attention : Shri

Dear Sir,

1 Having examined the tender documents against your tender Enquiry No _____ dated _____ and having understood the provisions of the said tender documents and having thoroughly studied the requirements of BHEL related to the work tendered for, in connection with _____ (name of work & project site), we hereby submit our offer for the proposed work in accordance with terms and conditions mentioned in the tender documents, at the prices quoted by us in your price schedule format and as per the indicated delivery schedule.

2. If the work or any part thereof is awarded to us, we undertake to submit security-cumcontract performance bank guarantee as per your requirement.

3. We have annexed to this tender the following documents:-

Part-I (Techno Commercial Bid) - in a properly sealed cover (uploaded in website in case of e-procurement).

- a) Complete Techno-Commercial Offer.
- b) Un-priced copy of deviation sheet (cost of withdrawal) – Annexure-II
- c) Un-priced copy of Price Schedule using format given by BHEL.
- d) Any other documents (please specify).

Part-II (Price Bid along with Priced Annexure-II) - in a separate, properly sealed cover, in the format given by BHEL (uploaded in website in case of e-procurement).

Thanking you,

Yours faithfully,

(Signature of the bidder with Name, Designation and Company's Seal)

ANNEXURE - III

DECLARATION

It is hereby declared that the original/ revised* price bid for _____

_____ (Name of Package) for _____ project is complete in all respects and contains prices for complete scope of supply, including tests etc., as per BHEL's requirement. If in the original/ revised* price bids where itemized price is not available for any part of scope of supply, including tests etc. for completion of the package, the same should be treated to have been included in our original/ revised* price bid.

It is also agreed that no further chance for seeking clarification/ confirmation to any missing point will be necessary.

Absence of itemized prices against some items does not mean that they are not included. Even though itemized prices are given for major items, those items which are not specially shown, are also included to meet the entire system as per BHEL requirements.

Signature of authorized Representative Name
and Designation:

Name & Address of the Bidder

Date

Forwarded to:

BHARAT HEAVY ELECTRICALS LTD

Electroporcelains Division

Prof. CNR Rao Circle

Malleshwaram

Bangalore - 560012

* (Please delete whichever is not applicable)

ANNEXURE - IV

PROFORMA OF PERFORMANCE BANK GUARANTEE
(FOR INDIEGNOUS PURCHASE ORDERS)

Note: 1) To be executed in Rs 100/- Non-Judicial stamp paper.
2) To be submitted to Purchase Dept. directly by the Banker

PERFORMANCE GUARANTEE
(PROFORMA OF BANK GUARANTEE)

THIS DEED OF GUARANTEE made and executed on the _____ day of _____(month) _____(year), by the _____ (Bank), registered under the Companies Act 1956/Nationalised Bank constituted under the Banking Companies (acquisition and transfer of undertakings) Act/ constituted under the State Bank of India Act / Subsidiary Banks Act, having its registered / head office at _____ (Hereinafter called 'guarantor ' which term shall mean and include its successors and assigns)

IN FAVOUR OF BHARAT HEAVY ELECTRICALS LIMITED

a company registered under the companies Act, 1956 having its registered office at BHEL House at Siri Fort , New Delhi-100 049 and its Electroporcelains Division at Malleswaram, Bangalore-12 (hereinafter referred to as the 'Company' Which term shall include its successors and assigns):

Whereas the company has placed an order on _____ (State the name of the Seller- company / firm and its address) (hereinafter referred to as the 'Supplier' which term shall mean and include its liquidators, successors and assign) for the supply of system under Purchase Order No _____Dt _____.

AND WHEREAS the supplier has agreed to supply the materials and carryout the works as detailed and in accordance with the terms set out in the said order.

AND WHEREAS the Contract inter-alia provides that the SUPPLIER shall furnish to the Company a sum of Rs..... (Rupees.....) towards security deposit for due and faithful performance of the CONTRACT in the form and manner specified therein.

AND WHEREAS the SUPPLIER has approached the GUARANTOR and in consideration of the arrangement arrived at between the SUPPLIER and the GUARANTOR, the GUARANTOR has agreed to give the Guarantee as hereinafter mentioned in favour of the

COMPANY.

NOW THIS DEED WITNESSES THAT in pursuance of the above said agreement, the guarantor hereby agrees and covenants with company is as follows :-

- 1) That during the period this contract of Guarantee remains effectual, the guarantor shall be liable in respect of the amount due and owing to the company in respect of the payments to the extent of Rs _____ (in words) _____ against any loss or damage caused to or suffered by the company by reasons of any breach of the terms of the said Purchase order by the supplier.
- 2) The Guarantor hereby undertakes to pay the amounts due and payable under this guarantee without any demur, merely on demand from the company intimating that the amount claimed is due by way of loss or damage caused to or suffered or would be caused or suffered by the supplier of any terms contained in the said Purchase order. Any such demand made on the guarantor shall be conclusive as regards the amount due and payable by the Guarantor irrespective of the fact whether the Supplier admits or denies.
- 3) The Guarantor further agrees that the agreement herein contained shall remain in force and effect till all the supplies to be made / Works to be performed / Services to be rendered under the said Purchase order are completed to the entire satisfaction of the company or till company certifies that the terms and conditions of the said order have been fully and properly carried out by the said supplier and accordingly discharges the Guarantee. Unless a demand or claim under this guarantee is made on the guarantor in writing on or before the expiry of claim period indicated in clause 6 below , the guarantor shall be discharged from all the liability under this guarantee thereafter.
- 4) The guarantor further agrees with the company that the company shall have the fullest liberty without the consent of the guarantor and without effecting in any manner the obligations of the guarantor hereunder to vary any of the terms of the said order or extend the time of performance by the said supplier from time to time or refrain from exercising the power exercisable by the company against the said supplier or to forebear or omit to enforce any of the terms and conditions relating to the said order, and the guarantor shall not be relieved of its liability in whole or in part , by reason of any act, commission or forbearance on the part of the company or by reason of any such variation, or extension being granted to the said supplier or by reason of any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving the guarantor.
- 5) The guarantor undertakes not to revoke this guarantee during the period it is in force except with the previous consent of the COMPANY in writing, and agree that any liquidation or winding up or dissolution or any change in the constitution of the

SUPPLIER or the GUARANTOR shall not discharge the GUARANTOR's liability hereunder.

- 6) Notwithstanding anything herein above contained, the liability of the guarantor under these presents is restricted to Rs_____. The guarantee shall be in force till its expiry on _____. Unless a demand is made on the guarantor within THREE months from the date of expiry, all the liability of the guarantor under this guarantee shall stand fully discharged. The decision of the claimant in regard to breach of contract is final and binding on the Bank.

(Seal of the Bank to be affixed)

NOTES: (NOT TO BE TYPED)

1. A minimum of TWO Bank Official Signatories
2. Signatories to sign on all pages of the Bank Guarantee
3. Any correction to be validated by the Banker Signatories
4. One common e-mail ID of issuing branch and e-mail & contact no of at least one issuing official should be provided on PBG forwarding letter.

ANNEXURE - V

FOREIGN SUPPLIERS & INDIAN AGENTS OF FOREIGN SUPPLIERS

1. BHEL shall deal directly with foreign vendors, wherever required, for procurement of goods/ services. However, if the foreign Principal desires to avail the services of an Indian Agent, then the foreign Principal should ensure compliance to regulatory guidelines – which require mandatory submission of an Agency Agreement.
2. It shall be incumbent on the Indian Agent and the foreign Principal to adhere to the relevant guidelines of Government of India, issued from time to time.
3. An Indian Agent of foreign Origin Equipment Manufacturer (OEM)/ Principal is an individual, a partnership, an association of persons, a private or public company, that carries out specific obligation(s) towards processing of BHEL tender or finalization or execution of BHEL's contract on behalf of the foreign supplier.
4. The Agency Agreement should specify the precise relationship between the foreign OEM/ Principal and their Indian Agent, and their mutual interest in the business. All services to be rendered by the Agent/ Associate, whether of general nature or in relation to the particular contract, must be clearly stated by the foreign Supplier/ Indian Agent. Any payment which the Agent or Associate receives in India or abroad from the OEM/ Principal, whether as commission or as general retainer fee should be brought on record in the Agreement and be made explicit in order to ensure compliance to laws of the country.
5. Any agency commission to be paid by BHEL to the Indian Agent shall be in Indian currency only.
6. Tax deduction at source is applicable to the agency commission paid to the Indian Agent as per the prevailing rules.
7. In absence of any Agency Agreement, BHEL shall not deal with any Indian Agent (authorized representative/ associate/ consultant, or by whatever name called) and shall deal directly with the foreign OEM/ Principal only for all correspondence and business purposes.
8. In a tender, either the Indian Agent on behalf of the foreign OEM/ Principal or foreign OEM/ Principal itself can bid but both cannot bid simultaneously for the same item/ product in the same tender.
9. If an Agent submits bid on behalf of one OEM/ Principal, the same Agent shall not submit a bid on behalf of another OEM/ Principal in the same tender for the same item/ product.
10. The "Guidelines for Indian Agents of Foreign Suppliers" at Annexure-A shall apply in all such cases.
11. The supply and execution of Purchase Order/ Contract (including indigenous supplies/ services) shall be in the scope of foreign OEM/ Principal. The foreign OEM/ Principal should submit their offer inclusive of all indigenous supplies/ services and

evaluation will be based on the 'Total Cost to BHEL'. In case foreign OEM/ Principal recommends placement of order(s) towards indigenous portion of supplies/ services on Indian supplier(s)/ agent on their behalf, the credentials/ capacity/ capability of the Indian supplier(s)/ agent to make the supplies/ services shall be checked by BHEL as per its extant guidelines of Supplier Evaluation, Approval & Review Procedure (SEARP) before opening of price bids. In this regard, details may be checked as per Annexure-B. It will be responsibility of the foreign OEM/ Principal to get acquainted with the evaluation requirements of Indian supplier/ agent as per SEARP available on www.bhel.com.

The responsibility for successful execution of the contract (including indigenous supplies/ services) lies with the foreign OEM/ Principal. All bank guarantees to this effect shall be in the scope of the foreign OEM/ Principal.

Guidelines for Indian Agents of Foreign Suppliers

- 1.0 There shall be compulsory registration of agents for all Global (Open) Tenders and Limited Tenders. An agent who is not registered with BHEL shall apply for registration in the registration form in line with SEARP.
 - 1.1 Registered agents will file an authenticated photocopy duly attested by a Notary Public/ Original certificate of the Principal confirming the Agency Agreement and giving the status being enjoyed by the Agent and the commission/ remuneration/ salary/ retainership being paid by the Principal to the Agent before placement of order by BHEL.
 - 1.2 Wherever the Indian representatives have communicated on behalf of their Principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.
- 2.0 Disclosure of particulars of agents/ representatives in India (if any)**
- 2.1 Tenderers of Foreign nationality shall furnish the following details in their offers:
 - 2.1.1 The Bidder(s)/ Contractor(s) of foreign origin shall disclose the name and address of the agents/ representatives in India, if any, and the extent of authorization and authority given to commit the Principals. In case the agent/ representative be a foreign Company, it shall be confirmed whether it is existing Company and details of the same shall be furnished.
 - 2.1.2 The amount of commission/ remuneration included in the quoted price(s) for such agents/ representatives in India.
 - 2.1.3 Confirmation of the Tenderer that the commission/ remuneration, if any, payable to his agents/ representatives in India, may be paid by BHEL in Indian Rupees only.
 - 2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:
 - 2.2.1 The Bidder(s)/ Contractor(s) of Indian Nationality shall furnish the name and address of the foreign Principals, if any, indicating their nationality as well as their status, i.e. whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/ representatives.
 - 2.2.2 The amount of commission/ remuneration included in the price (s) quoted by the Tenderer for himself.

2.2.3 Confirmation of the foreign principals of the Tenderer that the commission/ remuneration, if any, reserved for the Tenderer in the quoted price(s), may be paid by BHEL in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.

2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission/ remuneration, if any payable to the agents/ representatives in India in Indian Rupees, on expiry of 90 days after the discharge of the obligations under the contract.

2.4 Failure to furnish correct and detailed information as called for in paragraph 2.0 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by BHEL. Besides this, there would be a penalty of banning business dealings with BHEL or damage or payment of a named sum.

Annexure-B

This format is applicable only to Indian Suppliers/ Agents supplying indigenous portion of Foreign Purchases.

In all other cases, extant guidelines of SEARP, 2010 are to be followed.

SEARP (SRF) Clause No.	Detail
	Name & address of the firm
1.0	Products/ Systems / Services being considered for
2.0	General Information
2.2	Name of Chief Executive
2.3	Details of authorized signatory
3.0	Ownership Information
3.1	Type of Firm
3.2	Nature of Business <i>Attach authorization letter and agency agreement from Principal (from whom capital equipment is procured)</i> <i>Attach copy of declaration from Foreign Principal for total guarantee/ warranty of indigenous supplies</i>
3.3	Year of establishment
3.4	Year of commencement of business
4.0	Registration particulars
4.1	Permanent Account No.
4.2 / 4.3	Sales Tax / TIN No.

4.6	Service Tax No. (in case of Erection & Commissioning)
5.0	Organisational strength
6.0	Other particulars
6.1	If the company is already registered with other BHEL Units
6.2	Directors/ Partners, if related to any BHEL employee
6.9	If any Ex-BHEL personnel employed by the Company
6.12	Details of pending legal issues with BHEL
6.13	Bank Account information
9.0	Financial information
9.6	Sales/ Turnover details of last 3 years (or from the date of incorporation, whichever is less)

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ANNEXURE- VI

Request for Issue of Form-C

FINANCIAL YEAR -----

Supplier Name & Address	
Quarter-wise details of invoices for issuance of 'C' forms for a Financial Year	

Quarter	Seller Tin	Invoice No	Invoice Date	Net Value	Tax amount	Commodity Description	Purchase Order No	Purchase Order Dt
Q-1								

Quarter	Seller Tin	Invoice No	Invoice Date	Net Value	Tax amount	Commodity Description	Purchase Order No	Purchase Order Dt
Q-2								

Quarter	Seller Tin	Invoice No	Invoice Date	Net Value	Tax amount	Commodity Description	Purchase Order No	Purchase Order Dt
Q-3								


Quarter	Seller Tin	Invoice No	Invoice Date	Net Value	Tax amount	Commodity Description	Purchase Order No	Purchase Order Dt
Q-4								

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ANNEXURE-VII

NEFT Application Form

Vendors Name	
Vendor Address	
BANK NAME	
BANK BRANCH	
BANK ADDRESS	
BANK BRANCH CODE	
BANK 9 DIGIT MICR CODE	
BANK NEFT CODE(IFC)	
BANK SWIFT CODE	
BANK PHONE	
ACCOUNT NAME	
ACCOUNT TYPE	
ACCOUNT NO.	
PAN NO.	


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SERVICE TAX NO.	
TIN NO.	
E-MAIL ID	

Authorised Signatory Seal

Above details are to be submitted on company's letterhead. The details may either be attested by vendor's bankers or accompanied by a cancelled cheque leaf with IFSC code & A/c no. Printed on it.

Undertaking to report immediately any changes in the above to be submitted in company's letterhead.

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ANNEXURE-VIII

LOADING CRITERIA

No deviations in GCC terms and conditions are generally acceptable, and bids with deviations are liable to be rejected. However, in exceptional circumstances, BHEL may accept deviations with Loading as given below:

A) PAYMENT TERMS

1. Payment will be released within 45 days after receipt of complete documents as per order/ contract.

Loading will be done for vendors seeking earlier payment w.r.t. above, for the value and the period of deviation, as per Clause 17.0 of 'Instructions to Bidders'.

Time periods assumed by BHEL for a few activities are as follows:

Payment through Bank	- 30 days from receipt of invoice + documents.
Received LR	- 30 days from despatch.
Material Receipt Certificate (MRC)	- 120 days from despatch.

However, for Foreign Purchase, CAD at sight and Confirmed LCs are not permitted.


B) BANK GUARANTEE `

Non submission of Bank Guarantee – No deviation is permitted, if applicable as per NIT.

C) LIQUIDATED DAMAGES

If maximum limit asked for is 10% or 5% of Undelivered Portion – 10% value of the total quoted price including taxes, duties & freight.


If maximum limit asked is less than 10 % of contract value loading shall be to the extent to which not agreed by bidder (at offered value) .

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D) PRICE VARIATION CLAUSE (PVC)


PVC Instead of Firm Price – Maximum ceiling of PVC as demanded by vendor.

F) NO DEVIATION IS ALLOWED IN RISK PURCHASE/RISK & COST CLAUSE.

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ANNEXURE-X

List of Consortium Banks			
Nationalised Banks		Public Sector Bank	
1	Allahabad bank	20	IDBI
2	Andhra bank		
3	Bank of Baroda	Foreign banks	
4	Canara Bank	21	CITI Bank N.A
5	Corporation bank	22	Deutsche Bank AG
6	Central bank	23	HSBC
7	Indian Bank	24	Standard Chartered Bank
8	Indian Oversea Bank	25	J P Morgan
9	Oriental bank of Commerce		
10	Punjab National Bank		
11	Punjab & Sindh Bank	Private banks	
12	State Bank of India	26	Axis Bank
13	State Bank of Hyderabad	27	The Federal Bank Limited
14	Syndicate Bank	28	HDFC
15	State Bank of Travancore	29	Kotak Mahindra Bank
16	UCO Bank	30	ICICI
17	Union Bank of India	31	Indusind Bank
18	United Bank of India	32	Yes Bank
19	Vijaya Bank		


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ANNEXURE-XI


Terms & Conditions of Reverse Auction

Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL may resort to “REVERSE AUCTION PROCEDURE” i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).

- 1 For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
- 2 Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit „online sealed bid” in the Reverse Auction. Non-submission of „online sealed bid” by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.
- 3 BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
- 4 In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
- 5 Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
- 6 Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
- 7 In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at “Total Cost to BHEL” like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Service Tax for Services and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) etc. for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.

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- 8 Reverse auction will be conducted on scheduled date & time.
- 9 At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
- 10 The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, (Annexure VII) as provided on case-to-case basis to Service provider within two working days of Auction without fail.
11. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL"s standard practice.
12. Bidders shall be required to read the "Terms and Conditions" section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the „Business Rules of Reverse Auction", which will be communicated before the Reverse Auction.
13. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action *as per extant BHEL guidelines*, shall be initiated by BHEL and the results of the RA scrapped/ aborted.
14. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
15. In case BHEL decides to go for reverse auction, the H1 bidder(s) (whose quote is highest in online sealed bid) may not be allowed to participate in further RA process.
16. Updates:-
 - 16.1 "BHEL reserves the right to go for Reverse Auction (RA) (GUIDELINES as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.

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Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit “Process Compliance Form” (to the designated service provider) as well as ‘online sealed bid’ in the Reverse Auction. Non-submission of Process Compliance Form or Online Sealed Bid by the agreed bidders will be considered as tempering of the tender process & will invite action by BHEL as per the extent guidelines for suspension of business dealings with suppliers/contractors (as available on www.bhel.com).

The bidders have to necessarily submit the online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L-1 bidder in RA, if conducted, shall also be opened after RA & the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition & undertakes to execute the contract on thus awarded rates.

If it is found that L-1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item, the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be consider as fraud & will invite action by BHEL as per the extent guidelines for suspension of business dealings with the suppliers/contractors (as available on www.bhel.com).

As a reminder to bidders, system will flash the following message (in RED color) during the course of ‘online sealed bid’:

“Bidders to submit online sealed bid less than or equal to their envelope sealed bid already submitted to BHEL”

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ANNEXURE-XII

FORMAT FOR NO DEVIATION CERTIFICATE

(To be submitted in the bidder's letter head)

TO
 BHARAT HEAVY ELECTRICALS LIMITED,
 Electroporcelains Division
 Prof. CNR Rao Circle,
 Malleshwaram Bangalore – 560012

Sub :	No deviation certificate
Job :	----
Ref :	Your enquiry No -
	All the pertinent issues till date.

Dear Sirs,

With reference to above, this is to confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.


In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted offer in accordance with tender instructions and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized representative of the bidder)

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ANNEXURE-XIII

DECLARATION BY AUTHORISED SIGNATORY OF BIDDER

(To be typed and submitted in the Letter Head of the Company/Firm of Bidder)

To,

(Write Name & Address of Officer of BHEL inviting the Tender)

Dear Sir,

Sub : Declaration by Authorised Signatory

Ref : 1) NIT/Tender Specification No:

2) All other pertinent issues till date

I / We, hereby certify that all the information and data furnished by me with regard to the above Tender Specification are true and complete to the best of my knowledge. I have gone through the specifications, conditions, stipulations and all other pertinent issues till date, and agree to comply with the requirements and Intent of the specification.


I further certify that I am authorised to represent on behalf of my Company/Firm for the above mentioned tender and a valid Power of Attorney to this effect is also enclosed.

Yours faithfully,

(Signature, Date & Seal of Authorized
Signatory of the Bidder)

Date:

Enclosed : Power of Attorney

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ANNEXURE-XIV

POWER OF ATTORNEY for SUBMISSION OF TENDER/SIGNING CONTRACT

AGREEMENT

(To be typed on non judicial Stamp Papers of appropriate value as applicable and Notarised)

KNOW ALL MEN BY THESE PRESENTS, that I/We do hereby make, nominate, constitute and appoint Mr , whose signature given below herewith to be true and lawful Attorney of M/s_____ hereinafter called 'Company', for submitting Tender/entering into Contract and inter alia, sign, execute all papers and to do necessary lawful acts on behalf of Company with M/s Bharat Heavy Electricals Ltd, Electroporcelains Division, Bangalore in connection with vide Tender Specification
No _____ dated _____

And the Company do hereby agree to ratify and confirm all acts, deeds, things or proceedings as may be lawfully done by the said attorney and by or on behalf of the company and in the name of the company, by virtue of the powers conferred herein and the same shall be binding on the company and shall have full force and effect.

IN WITNESS WHEREOF the common seal of the company has been hereunto affixed in the manner hereinafter appearing on the document.

Dated at _____ , this _____ day of _____

Director/CMD/Partner/Proprietor

Signature of Mr _____ (Attorney)

Attested by:

Director/CMD/Partner/Proprietor

Witness

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Notary Public

ANNEXURE-XVI

INDEMNITY BOND

(To be executed on a Non Judicial Stamp Paper of the requisite value as per Stamp Duty prevalent in the respective State)


This Indemnity Bond executed by <name of company> having their Registered Office at <xxxxxxxxxxxx> in favour of M/s Bharat Heavy Electricals Limited, a Company incorporated under the Companies Act, 1956, having its Registered Office at BHEL House, Siri Fort, Asiad, New Delhi - 110049 through its Unit at Electroporcelains Division, Bangalore (Hereinafter referred to as the Company).

And whereas the Company has entered into a Contract with M/s xxxxxxxxxx, the executants of this Deed (hereinafter referred to as the Contractor) as its contractor in respect of the work of "xxxxxxxxxxxxxxxxxxxxxxxxxxxxxx".

AND WHEREAS under the provisions of GCC further stipulates that the Contractor shall indemnify the Company against all claims of whatever nature arising during the course of execution of Contract including defects liability period of <xx Months > i.e till <xx xx xxxx>

Now this deed witness that in case the Company is made liable by any Authority including Court to pay any claim or compensation etc. in respect of all labourers or other matters at any stage under or relating to the Contract with the Contractor, the Contractor hereby covenants and agrees with the Company that they shall indemnify and reimburse the Company to the extent of such payments and for any fee, including litigation charges, lawyers' fees, etc, penalty or damages claimed against the Company by reason of the Contractor falling to comply with Central/States Laws, Rules etc, or his failure to comply with Contract (including all expenses and charges incurred by the Company).

The Contractor further indemnifies the Company for the amount which the Company may be liable to pay by way of penalty for not making deductions from the Bills of the Contractor towards such amount and depositing the same in the Government Treasury.

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The Contractor further agree that the Company shall be entitled to with hold and adjust the Security Deposit and/or with hold and adjust payment of Bills of Contractor pertaining to this Contract against any payment which the Company has made or is required to make for which the Contractor is liable under the Contract and that such amount can be withheld, adjusted by the Company till satisfactory and final settlement of all pending matters and the Contractor hereby gives his consent for the same.

The Contractor further agrees that the terms of indemnity shall survive the termination or completion of this contract.

The contractor further agrees that the liability of the contractor shall be extended on actual basis notwithstanding the limitations of liability clause, in respect of:

1. breach of terms of contract by the contractor
2. breach of laws by the contractor
3. breach of Intellectual property rights by the contractor
4. breach of confidentiality by the contractor

Nothing contained in this deed, shall be construed as absolving or limiting the liability of the Contractor under said Contract between the Company and the Contractor. That this Indemnity Bond is irrevocable and the condition of the bond is that the Contractor shall duly and punctually comply with the terms and the conditions of this deed and contractual provisions to the satisfaction of the Company.

In witness where of M/s xxxxxxxxxxxxxx these presents on the day, month and year first, above written at xxxxxxxx by the hand of its signatory Mr. xxxxxxxxxxxx.

Signed for and on behalf of
M/s

xxxxxxxxxxxxxxxxxx

Witness:

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ANNEXURE-XVII

Annexure- A

CONSORTIUM AGREEMENT

(To be executed on Rs. 50/- Non - Judicial Stamp Paper)

THIS AGREEMENT is made and executed on ____ day of _____ by and between (1) M/s. _____, represented by Shri _____, designated as _____, having its registered office at _____, (The First Party, i.e, the Bidder) Company incorporated under the Company's Act 1956 having its registered office at _____ (hereinafter referred to as the "Bidder" which expression shall include its successors, administrators, executors and permitted assigns) and (2) M/s. _____, (The Second Party, i.e, the associates), a company incorporated under _____ (Company act), having its registered office at _____ (hereinafter called the "Associates", which expression shall include its successors, administrators, executors and permitted assigns).

WHEREAS, the Electroporcelains Division, one of the Units of M/s. Bharat Heavy Electricals, having its office at Prof. CNR Rao Circle, Opp. Indian Institute of Science, Malleswaram, Bangalore-560 012, A Government of India Undertaking (hereinafter called the "Employer", " which expression shall include its successors, administrators, executors and permitted assigns), proposes to issue / issued a Notice Inviting Tender (hereinafter referred to as NIT), inviting bids from the individual bidders for undertaking the work of " _____ (Package name) for _____ (Project name) at _____ (site location) (hereinafter referred to as the "Project") being set up by M/s. _____ (hereinafter referred to as the " Owner").

AND WHEREAS, the said NIT enables submission of a bid by a Party subject to fulfilment of the stipulations pre-qualification criteria specified in the said NIT.

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AND WHEREAS, the Bidder desirous of submitting bid in response to the said NIT for the said Project, and by itself is not meeting all the qualifying the Pre-qualification Criteria specified in the said NIT and in order to fully meet the qualifying requirements of NIT, the Bidder entered into this Consortium Agreement with the Associates.


AND WHEREAS the Bidder and the Associates are contractors engaged in the business of carrying out various items of works. WHEREAS, the two parties have agreed to and constitute themselves into a consortium for the purpose of carrying out the said works relating to this Project, and that the consortium will be continued till the completion of the works in all respects including the performance guarantee period as may be specified in the NIT or Purchase Order/Work Order.

AND WHEREAS, with this consortium Agreement, the Bidder and Associates together meets all the pre-qualification criteria as mentioned in the NIT.

WHEREAS, the parties have agreed to certain terms and conditions which forms a part of this consortium agreement, as mentioned hereinbelow :

NOW therefore, this agreement witnesseth as follows :

1. The Bidder and Associates hereby constitute themselves into a Consortium for the purpose of submitting a Bid and undertaking the said works pursuant to the said NIT as hereinafter stated.
2. The Bidder will be the leader (Lead Partner) and will be responsible for the execution of the entire scope of works and its complete functioning as stated in the NIT.
3. The Bidder shall undertake the entire scope of work as detailed in the NIT jointly with the Associates.
4. The Associates shall undertake their part of work as detailed in the NIT jointly with the Bidder.
5. The Bidder and the Associates hereby declare and confirm that each of them jointly and severally will fulfil the required minimum qualifying requirements as prescribed in the said NIT for the works agreed to be undertaken by them as stated herein above.

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6. The Bidder and the Associates also hereby agree that both of them shall be jointly and severally responsible for the completion of the said works as per the schedule. Further, if the Employer and or the Owner sustains any loss or damage on account of non-performance or any breach of contract, both the Bidder and Associates, as a consortium partners, individually and severally undertake to compensate and pay such losses / damages so caused to the Employer and or the Owner on its written demand without any demur, reservation, contest or protest in any manner whatsoever.

7. AND WHEREAS, the Bidder and the Associates, do hereby undertakes to indemnify both the Employer and the Owner to make good any losses/damages sustained by them due to the negligence or any acts of Bidder and or the Associates which results in loss / damages to the Employer / Owner.

8. AND WHEREAS Bidder and the Associates hereby agree that in case of any dispute arising in and out of this consortium agreement shall be dealt in accordance with the provisions of Indian Arbitration and Conciliation Act, 1996 and the place of Arbitration will be at India and the language of Arbitration will be English.

9. AND WHEREAS both the Bidder and the Associates hereby agree and undertake that they shall provide adequate finances, suitable Tools, Plants, equipments, tractors, trailers, other transportation equipment, other Tools and Plants, Measuring and Monitoring Equipments (MMEs), Men and Machinery etc., for the proper and effective execution of the works to be undertaken by them as specified herein above.

10. AND WHEREAS, it was agreed to interse, between the parties hereto that all the consequential liabilities ec., arising out of any default in the due execution of the said works shall be borne by the consortium leader and or party in default, that is by party in whose area of works default has occurred, provided however, so far as the Employer is concerned, both The bidder and the Associates shall be jointly and severally liable irrespective of their scope of work.

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IN WITNESS WHEREOF, the parties above named have signed this agreement on the day month and year first above written at Faridabad.

For and on Behalf of The Bidder

AUTHORISED SIGNATORY ::

OFFICIAL ADDRESS :

COMPANY SEAL

WITNESSES :

1.

2.

For and on Behalf of the Associates

AUTHORISED SIGNATORY ::


OFFICIAL ADDRESS :

COMPANY SEAL

WITNESSES :

1

2

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ANNEXURE XVIII

Vendor Particulars & Logistics Information

Vendor's particulars & logistics information (Bidder to give details against each of the provisions)

1. Name of the vendor's executive to deal with this tender / project:-
2. E-mail address of the contact person
3. Telephone no. of the contact person
4. Name of location from where the goods shall be offered for inspection and dispatch
5. Additional logistics information for Imports
6. Bid currency
7. Name of the load port where the goods are offered for Delivery on FOB terms
8. Name of Airport in the country of dispatch for FCA delivery terms
9. Additional freight over FOB price, for delivery on CFR named port in the country of destination, if the Seller decides to bid on CFR / CIF / CPT basis

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10. Numbers, Type & size of containers estimated for delivery of Tendered quantity (Applicable where the goods are to be sent in containers)

11. No. of Packages with cumulative gross weight and CBM volume (Applicable for break-bulk shipment)

12. Additional FOB cost for loading the cargo on-board in case of EX-Works or FAS delivery terms

13. Approx. distance in km. from Vendor's works to Port of loading
 - a Sea port

 - b Air port

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ANNEXURE XIX

NON DISCLOSURE AGREEMENT

I, _____, on behalf of the _____ (Name of Company), acknowledge that the information received or generated, directly or indirectly, while working with BHEL, EPD on contract is confidential and that the nature of the business of the BHEL, EPD is such that the following conditions are reasonable, and therefore:

I warrant and agree as follows:

I, or any other personnel employed or engaged by our company, agree not to disclose, directly or indirectly, any information related to the BHEL, EPD Without restricting the generality of the foregoing, it is agreed that we will not disclose such information consisting but not necessarily limited to:

- Technical information: Methods, drawings, processes, formulae, compositions, systems, techniques, inventions, computer programs/data/configuration and research projects.
- Business information: Customer lists, project schedules, pricing data, estimates, financial or marketing data,

On conclusion of contract, I, or any other personnel employed or engaged by our company shall return to BHEL, EPD all documents and property of BHEL, EPD, including: drawings, blueprints, reports, manuals, computer programs/data/configuration, and all other materials and all copies thereof relating in any way to BHEL, EPD's business, or in any way obtained by me during the course of contract. I further agree that I, or any others employed or engaged by our company shall not retain copies, notes or abstracts of the foregoing.

This obligation of confidence shall continue after the conclusion of the contract also.

I acknowledge that the aforesaid restrictions are necessary and fundamental to the business of the BHEL, EPD and are reasonable given the nature of the business carried on by the BHEL, EPD I agree that this agreement shall be governed by and construed in accordance with the laws of country.

I enter into this agreement totally voluntarily, with full knowledge of its meaning, and without duress.

Place:- _____

Date:- _____

Name

Company

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Signature