

NOTICE INVITING TENDER (NIT) DOCUMENT
FOR
SETTING UP OF TOTAL CAPACITY OF 1300 KW AC GRID
CONNECTED
SOLAR PHOTO VOLTAIC PLANT
AT
BHARAT HEAVY ELECTRICALS LIMITED
FACTORY SITUATED IN U.P. -
1. TP, JHANSI (800KW)
2. HERP, VARANASI (500 KW)

NIT No. -WEX/TW/25/13

Date: 08/09/2025

ISSUED BY
BHARAT HEAVY ELECTRICALS LIMITED, TP JHANSI

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DISCLAIMER:

1. Though adequate care has been taken while preparing the NIT document, the Bidders shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within fifteen (15) days from the date of notification of NIT/ Issue of the NIT document, it shall be considered that the NIT document is complete in all respects and has been received by the Bidder.
2. BHEL reserves the right to modify, amend or supplement this NIT document including Power Purchase Agreement (PPA).
3. While this NIT has been prepared in good faith, neither BHEL nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this NIT, even if any loss or damage is caused by any act or omission on their part.

Place: Jhansi

Date:

Bid Information Sheet

Document Description	Request for Selection of Solar Project Developer for Setting up of Grid Connected Solar Photo Voltaic (PV) Roof top Project of Total 1300 KW capacity at Bharat Heavy Electricals Limited, Manufacturing units situated in U.P. at Jhansi and Varanasi. Out of 1300 KW the 800 KW capacity to be install at BHEL TP Jhansi and 500 KW capacity to be installed at BHEL HERP Varanasi Factory roofs on RESCO/Build, own, operate and maintain mode
NIT No.& Date	
Broad Scope	Setting up of Solar PV Project including Power Evacuation network up to the designated point in BHEL/nearest Substation available in BHEL Campus and selling the Solar Power to BHEL
Last date & Time for Online Submission of Response to NIT and all documents as per NIT	
Bid Opening (techno commercial)	
Cost of NIT document (nonrefundable)	
EMD	
Type of tender and bidding system	
PBG	
E reverse auction	
Name Designation, Address and other details (For any clarification, submission of EMD/cost of tender etc and other response to RFS)	
Details of persons to be contacted in case of any assistance required from BHEL	For BHEL TP Jhansi - hirendra@bhel.in / Mobile no.8610260638 For BHEL HERP Varanasi – j.prakash@bhel.in / Mobile no. 8294389654
Tender terms & condition	The terms and conditions specified in this NIT documents shall prevail over the General Terms and Conditions (GTC). In cases where specific terms and conditions are not covered in the NIT documents, the relevant clauses of the GTC shall apply and be binding.
	The Draft PPA (Agreement) is also enclosed with this NIT which is to be signed by techno commercial successful L1 bidder and Successful bidder also to abide the terms and conditions mentioned in draft PPA along with this NIT terms & conditions and GTC. (Bidder to ensure the same)

1. INTRODUCTION, BACKGROUND & SCHEME DETAILS

1.1 INTRODUCTION

Bharat Heavy Electricals Limited (BHEL), is a Maharatna Public sector company (Under the Ministry of Heavy industries). Following two Manufacturing units are located in the State of Uttar Pradesh -

1.1.1 Bharat Heavy Electricals Limited, TP Jhansi, Khailar 284120 (hereinafter called “BHEL TP, Jhansi ”)

1.1.2 Bharat Heavy Electricals Limited, HERP Varanasi U.P.(hereinafter called “BHEL HERP, Varanasi”)

Above two units of BHEL wishes to invite proposals for setting up the grid connected Roof top Solar Photo Voltaic Project on RESCO (Renewable energy service company) mode i.e. “Build Own Operate and Maintain” basis. BHEL shall enter into a Power Purchase Agreement (PPA) with the selected bidder for purchase of solar power for a period of 25 years as per the terms, conditions and provisions of the NIT.

1.2 BACKGROUND

As part of its initiatives towards transformation into a ‘Green (Harit)’ Company & as per PM Surya Ghar Mufta Bijali Yojna scheme(PMSGMBY) under which all PSUs roofs are also to be covered with solar plants; BHEL has proposed to set up

1. 800 KW Rooftop Solar Plant in BHEL TP Jhansi
2. 500 KW Rooftop Solar plant in BHEL HERP Varanasi

Total – 1300 KW solar roof top in BHEL Factory buildings located in above Manufacturing units

1.3 Project Details

The Solar PV project is proposed to be located at Roofs of BHEL, TP Jhansi and HERP Varanasi Factory premises. The complete address of the project site is as follows:-

1. **Bharat Heavy Electricals Limited, Transformer Plant, Khailar area, Distt Jhansi, U.P. 284120,**
2. **Bharat Heavy Electricals Limited, Heavy equipment repair plant, Tarna Shivpur, Varanasi, U.P.**

1.4 Scope of supply and work -

The scope of work for setting up total capacity of 1300KW AC Roof Top Solar PV plant under Developer model shall include but not limited to the following:

- Design, Develop, Supply, install, construct, synchronize, commission, operate and maintain in RESCO mode or Build, own, operate and maintain (BOOM) mode for 1300KW Roof Top Solar PV plant at designated roofs at BHEL Manufacturing units, to sell the power generated to respective unit of BHEL for period of 25 years in accordance with the terms of the PPA. All capital expenditure, O&M expenditure and other Misc. expenditure shall be in scope of Solar Power Developer (SPD)
- Liasoning with any third party, renewable agency and government agency for distribution or exporting to grid or any compliance of law etc shall also be in SPD scope. During operation and maintenance - manpower, spares & consumable required shall be in SPD scope of work. Auxiliary Electricity and water shall be provided at suitable locations for this work by BHEL as per standard rates during the period of contract.

- The SPD shall also provide sufficient CCTV cameras in consultation with BHEL to monitor the movement of personnel including integrating with the existing network of CCTV cameras. Protection and safety of asset/equipment/solar panels etc from vermin like monkeys and others etc shall be in scope of SPD.
- The SPD (Solar Power Developer) shall be responsible for all associated civil works like, for installation of solar panels on different roofs. Strengthening & Repairing of Roof Gutters and other work etc. as per requirement. The civil work to be carried out such that there shall be no water ingress from the work area where civil works has been carried out. Presently the galvanized roofs are accessible from ground through a single temporary ladder. Hence, the roof shall be made accessible first by putting suitable permanent ladders. The ladders to be provided from ground to the roof for movement during execution and O & M as per requirement. Height, slope, width of ladders will be depending upon roof height. Bidder to submit design and drawing of permanent ladders to BHEL for approval before Installation at site. The installation of ladders/stairs shall be in the scope of the bidder and shall be done before start of work on the roofs. No temporary ladders will be used during execution except wherever utmost necessary.

1.5 SELECTION OF TECHNOLOGY & ELIGIBLE PROJECT UNDER THIS SCHEME

The Project under developer mode will be free to procure solar cells/modules under open category.

1.6 MNRE GUIDELINES FOR IMPLEMENTATION OF THE SCHEME

This NIT document has been prepared based on the “Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects” issued by MNRE which is uploaded on the web site of MNRE, www.mnre.gov.in. In case of any difference in interpretation between this NIT document and said guidelines issued by MNRE. Any such differences, interpretation etc., shall be referred to BHEL and the decision of BHEL shall be final and binding on Bidder/SPD.

TENTATIVE ROOFS IDENTIFIED FOR BHEL TP JHANSI

Sr.No	Name /identifier (Permanent Cemented Roof)	Rooftop Area Sq Meter (Available)	Rooftop area Sq Meter (for installation)
1	Admin Building	2025	2025
2	TRE Annex Building	1950	1950
3	Jayanti building	892	892
4	HRD Building	320	320
5	Canteen	1751	1751
6	CDC New Building	380	380
7	Bay 9 Testing Annexe	600	600
8	Main Gate Building	1128	1128
9	Samadhan Bhavan	221	221

TENTATIVE ROOFS IDENTIFIED FOR BHEL HERP VARANASI

Sr.No	Name /identifier (Galvalume Sheet Roof (0.5mm))	Rooftop Area Sq Meter (Available)	Rooftop area Sq Meter (for installation)
1	Bay 1&Bay2	2340	2340
2	Store	252	252
3	NPS	2000	2000

In case during execution, if any one of the above roofs will found unsuitable for installation, similar kind of alternate roof for installation will be provided. However, no addition cost will be given for change in roof location as all roofs are within factory premises only.

2. DEFINITIONS

Following terms used in the document will carry the meaning and interpretations as described below:

1. **"Act" or "Electricity Act, 2003"** shall mean the Electricity Act, 2003 and include any modifications, amendments and substitution from time to time;
2. **"Affiliate"** shall mean a Company that, directly or indirectly,
 - i. controls, or
 - ii. is controlled by, or
 - iii. is under common control with, a Company developing a Project or a Member in a Consortium developing the Project and control means ownership by one Company of at least 26% (twenty-six percent) of the voting rights of the other Company;
3. **"Appropriate Commission"** shall mean as defined in the PPA
4. **"Bidder"** shall mean Bidding Company (including a foreign company) or a Bidding Consortium submitting the Bid. Any reference to the Bidder includes Bidding Company /Bidding Consortium / Consortium, Member of a Bidding Consortium including its successors, executors and permitted assigns and Lead Member of the Bidding Consortium jointly and severally, as the context may require; foreign companies participating in the bidding process shall be registered as companies as per the rules of their country of origin;
5. **"Bidding Company"** shall refer to such single Company that has submitted the response in accordance with the provisions of this NIT;
6. **"Bidding Consortium" or "Consortium"** shall refer to a group of Companies that have collectively submitted the response in accordance with the provisions of this NIT under a Consortium Agreement;
7. **"Capacity Utilization Factor (CUF)"** shall have the same meaning as provided in CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2009 as amended from time to time; For illustration, CUF shall be calculated based on the annual energy injected and metered at the Delivery Point. In any Contract Year, if 'X' MWh of energy has been metered out at the Delivery Point for 'Y' MW Project capacity,

$$CUF = \left(\frac{X \text{ kWh}}{Y \text{ kWh} \times 365 \times 24} \right) \times 100\%$$

8. **"Chartered Accountant"** shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949;
9. **"Company"** shall mean a body corporate incorporated in India under the Companies Act, 1956 or the Companies Act, 2013, as applicable;
10. **"Contracted capacity"** shall mean the AC capacity in MW contracted with BHEL for supply by the SPD to BHEL at the Delivery Point from the Solar Power Project;
11. **"Commercial Operation Date (COD)"** shall mean the date as defined in Clause no. 3.14, Section-III, Instructions to Bidders (ITB) of NIT Documents;
12. **"Contract Year"** shall mean the period beginning from the Effective Date and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that:
 - i. in the financial year in which the Scheduled Commissioning Date would occur, the Contract Year shall end on the date immediately before the Scheduled Commissioning Date and a new Contract Year shall commence once again from the Scheduled Commissioning Date and end on the immediately succeeding March 31, and thereafter each period of twelve (12) months commencing on April 1 and ending on March 31, and

- ii. provided further that the last Contract Year of this Agreement shall end on the last day of the Term of this Agreement;
- 13. **“Control”** shall mean holding not less than 51% of paid up share capital
- 14. **“Controlling shareholding”** shall mean not less than 51% of the voting rights and paid up share capital in the Company;
- 15. **“Day”** shall mean calendar day;
- 16. **“Effective Date”** shall mean the date of execution of Power Purchase Agreement (PPA) by both the parties;
- 17. **“Equity”** shall mean Net Worth as defined in Companies Act, 2013
- 18. **“Financial Closure or Project Financing Arrangements”** means arrangement of necessary funds equivalent to the total estimated project cost, by the Solar Project Developer either by way of commitment of funds by the Company from its internal resources and/or tie up of funds through a bank / financial institution by way of sanction of a loan or letter agreeing to finance;
- 19. **“Group Company”** of a Company means
 - i. a Company which, directly or indirectly, holds 10% (ten percent) or more of the share capital of the Company or;
 - ii. a Company in which the Company, directly or indirectly, holds 10% (ten percent) or more of the share capital of such Company or;
 - iii. a Company in which the Company, directly or indirectly, has the power to direct or cause to be directed the management and policies of such Company whether through the ownership of securities or agreement or any other arrangement or otherwise or;
 - iv. a Company which, directly or indirectly, has the power to direct or cause to be directed the management and policies of the Company whether through the ownership of securities or agreement or any other arrangement or otherwise or;
 - v. a Company which is under common control with the Company, and control means ownership by one Company of at least 10% (ten percent) of the share capital of the other Company or power to direct or cause to be directed the management and policies of such Company whether through the ownership of securities or agreement or any other arrangement or otherwise.;
 - vi. Provided that a financial institution, scheduled bank, foreign institutional investor, Non-Banking Financial Company, and any mutual fund shall not be deemed to be Group Company, and its shareholding and the power to direct or cause to be directed the management and policies of a Company shall not be considered for the purposes of this definition unless it is the Project Company developing the Project;
- 20. **“Inter-connection point / Delivery Point”** shall mean the point at the grid substation designated by BHEL, where the power from the solar power Project is injected (including the dedicated transmission line connecting the solar power project with the interconnection point). For interconnection with grid and metering, the SPD shall abide by the relevant CERC Regulations, Grid Code and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 as amended and revised from time to time;
- 21. **“Joint Control”** shall mean a situation where control is equally distributed among the interested parties;
- 22. **“Letter of Intent” or “LOI”** shall mean the letter issued by Bharat Heavy Electricals Limited (BHEL) to the Selected Bidder for award of the Project;
- 23. **“Limited Liability Partnership” or “LLP”** shall mean a Company governed by Limited Liability Partnership Act 2008 or as amended;
- 24. **“LLC”** shall mean Limited Liability Company;
- 25. **“Month”** shall mean calendar month;
- 26. **“Metering Point”** shall mean the location at which the Main, Check and Stand – By energy meters are connected to the grid through instrument transformers (voltage transformers and current transformers) and energy injected or drawn is measured

27. **"Net-billing / Net feed-in"** scheme means a prosumer of any category, in the area of supply of the Distribution Licensee, who intends to/ has set up a grid connected rooftop solar PV system in his/ her premises, which can be self-owned or third party owned, where-in the energy imported from the Grid and energy exported to the Grid Interactive rooftop Solar photovoltaic system of a Prosumer are measured through a single bi-directional energy meter valued at two different Tariffs which are determined by the Commission
28. **"Paid-up Share Capital"** shall mean such aggregate amount of money credited as paid-up as is equivalent to the amount received as paid up in respect of shares issued and also includes any amount credited as paid up in respect of shares of the company, but does not include any other amount received in respect of such shares, by whatever name called;
 - i. Paid-up share capital includes:
 - ii. Paid-up equity share capital;
 - iii. Fully, compulsorily and mandatorily convertible Preference shares and
 - iv. Fully, compulsorily and mandatorily convertible Debentures.
29. **"Parent"** shall mean a Company, which holds not less than 51% equity either directly or indirectly in the Project Company or a Member of Consortium developing the Project;
30. **"PPA"** shall mean the Power Purchase Agreement signed between the successful SPD and BHEL according to the terms and conditions of the standard PPA enclosed with this NIT;
31. **"Power Project" or "Project"** shall mean the solar power generation facility having separate points of injection into the grid at Inter-connection/Metering Point and having a separate boundary, control systems and metering. This includes all units and auxiliaries such as water supply, treatment or storage facilities, bay/s for transmission system in the switchyard, dedicated transmission line up to the Delivery Point and all the other assets, buildings/structures, equipment, plant and machinery, facilities and related assets required for the efficient and economic operation of the power generation facility, whether completed or at any stage of development and construction or intended to be developed and constructed for the purpose of supply of power to BHEL;
32. **"Project Capacity"** shall mean the maximum AC capacity at the delivery point that can be scheduled on which the Power Purchase Agreement shall be signed.
33. **"Project Commissioning"**: The Project will be considered as commissioned if all equipment as per rated project capacity has been installed and energy has flown into grid, in line with the Commissioning procedures defined in the PPA;
34. **"Project Developer" or "Developer" or "Solar Project Developer (SPD)"** shall mean the Bidding Company or a Bidding Consortium participating in the bid and having been selected and allocated a project capacity by BHEL (through a competitive bidding process), including the SPV formed by the selected bidder/consortium for the purpose of setting up of project and signing of PPA.
35. **"RESCO /BOOM MODEL"** shall mean a business model where the Project Developer sets up a Rooftop Solar PV Power Project on the rooftop of a building owned by a different entity, by obtaining right to access the rooftop/leasing the rooftop with the rooftop owning entity on mutually agreed terms and conditions, and enters into the PPA with rooftop owner/ DISCOM/ others for supply of Solar power for the term of the PPA. The Project Developer is responsible for construction, commissioning, ownership, maintenance and operation of the Project for the entire term of the PPA at its own risk and cost
35. **"NIT document"** shall mean the bidding document issued by BHEL including all attachments, clarifications and amendments thereof vide NIT no. BHEL.....dated
36. **"BHEL"** shall mean Bharat Heavy Electricals Limited,

37. **“Selected Bidder or Successful Bidder”** shall mean the Bidder selected pursuant to this NIT to set up the Project and supply electrical output as per the terms of PPA;
38. **“Solar PV Project”** shall mean the Solar Photo Voltaic power Project that uses sunlight for direct conversion into electricity through Photo Voltaic technology;
39. **“STU or State Transmission Utility”** shall mean the Board or the Government Company notified by the respective State Government under Sub-Section I of Section 39 of the Electricity Act, 2003;
40. **“TOE”** shall mean Tender Opening Event;
41. **“Ultimate Parent”** shall mean a Company, which owns not less than fifty-one percent (51%) equity either directly or indirectly in the Parent and Affiliates;
42. **“Week”** shall mean calendar week.