



## **Preamble**

BHEL-EDN , Bangalore, a UNIT of Bharat Heavy Electricals Ltd , MAHARATNA public sector is in the field of setting up grid connected Solar PV plants in various parts of the country as an EPC solution. Grid connected Solar PV plants totaling to a capacity of 150-200MW are being targeted by BHEL in the next 2 years. BHEL-EDN desires to empanel reputed Civil Design Consultants who have capability to furnish optimized designs, drawings and estimates of Civil works of Solar Photo Voltaic (PV) plant. BHEL shall empanel Civil consultants who have experience for designing Civil works spread over an expanse of land of 100 acres or more.

The Consultants must be a firm or company based in INDIA .The project size targeted by BHEL would be 20MW and above and can be anywhere in INDIA. The details of civil design and engineering works to be carried out are as per **Annexure-1**.

## **Requirements**

1. The consultant desiring for empanelment should have experience in the field of designing, preparation of drawings and working out estimates as per specifications and DSR of at least 16 items listed in listed in Annexure -1. For the remaining items the consultant can hire services of other professional consultants who are specialists in that field. The details of such consultants are also to be furnished to BHEL.
2. The Consultant should have sufficient number of design engineers and draftsmen in order to prepare all the drawings, design calculations and estimates of at least 3 projects simultaneously and submit within 5 weeks of placement of order in a phased manner.
3. The Consultant's assistance shall be required in getting Customer approval for the design drawings, calculation etc. Possession of necessary soft tools like STAAD, Shadow analysis, AUTOCAD are basic minimum requirements along with trained engineers and draftsmen. In case of technical problems at site, consultant shall visit site to provide necessary solutions.
4. The Consultant should have adequate financial strength to carry out and complete all design Civil works simultaneously In 3 project sites of BHEL without any stoppage. The vendor shall submit the financial information for the previous 3 years in BHEL format enclosed.
5. The Consultant shall bring out their concurrent commitments on various projects and the status of their resource usage to be indicated.
6. Consultant to furnish all details in BHEL furnished format covering the following details.
  - a) Company profile & organizational information



- b) Ownership information
- c) Registration particulars
- d) Manpower
- e) Other particulars.
- f) Bank details of the Company
- g) Quality Systems
- h) Financial Information for the previous 3 years.
- i) Resources owned by the company-Formats A),B) and C)
- j) Work Experience in design of civil works in last 5 years as on the date of submission of application.

All columns are to be filled up in the space provided for. Separate sheets may be attached if the space provided is insufficient or if additional information to be given. The format shall be downloaded from [www.bhel.com](http://www.bhel.com). The link furnished may be used. [http://www.bhel.com/vender\\_registration/pdf/Guidelines\\_to\\_Contractors\\_SEARP2010Amndt\\_04for\\_web.pdf](http://www.bhel.com/vender_registration/pdf/Guidelines_to_Contractors_SEARP2010Amndt_04for_web.pdf) The response to this EOI to be addressed to **Manager -Civil (SC & PV)**, BHEL, Electronics Division, Mysore Road, Bangalore-560 026. The last date for receipt of applications in sealed cover is 09/02/2015, 15:30Hrs.

## **EVALUATION**

1. BHEL-EDN will be evaluating the Consultant on all the parameters above and shortlist based on a ranking methodology. BHEL shall intimate the shortlisted Consultants for further discussions, presentations before empaneling. BHEL decision on this will be final. BHEL at their discretion shall inspect the Consultant works/office premises/sites for evaluation.
2. Further procurement and tendering process shall be as per BHEL policy and guidelines.
3. The empanelment will be for a period of 2 years. During this period the Consultant performance will be evaluated on a continuous basis on works executed in BHEL project sites. BHEL reserves the rights to disqualify a Consultant based on their adverse performance levels if any during this period.
4. This expression of Interest is not an agreement and is not an offer or invitation to enter into an agreement of any kind with any party.



### ANNEXURE-1

#### **DESIGN, ENGINEERING AND ESTIMATE OF CIVIL WORKS FOR SOLAR PV PLANT**

All the design and drawings shall be with the calculations.(As required by BHEL)

1. Land levelling plan based on Topography.
2. Fence/ Compound wall (Chain link / Pre cast concrete panel/ Brick wall etc.)
3. Approach/Internal roads (Concrete/Bituminous)
4. Pathways (Concrete/WBM/Gravel)
5. Control room building (structural and architectural) – Concrete/Prefab
6. Inverter room buildings (structural and architectural)- Concrete/Prefab
7. Septic tank and soak pit.
8. Rain water harvesting.
9. Landscaping (Horticulture)
10. Transformer Foundations
11. Switchgear foundations (HT Panel)
12. Switchyard foundations
13. Security Room/Cabins/Watch towers (RCC/Prefab/steel)
14. Drainage system (Drains & culverts)
15. Design of transmission line foundations and towers.
16. Module water washing system.
17. Module mounting structure design (Steel design)
18. MMS foundation (Pile/Raft footing/Open foundation/Ramming/sleeper etc.)
19. Shadow Analysis for MMS structures in array layout.
20. Over all plant layout.
21. As built drawings after erection and commissioning of plant.