SALIENT FEATURES OF BHILAI SOLAR PV POWER PROJECT (7 MWp)



1.0 INTRODUCTION

NTPC – SAIL Power Company Limited (NSPCL) is a 50:50 joint venture of two Maharatna PSUs i.e. NTPC LTD, an integrated power major and SAIL, one of the largest steel producing companies of India. It has an installed capacity of coal based 814 MW at different SAIL locations i.e Bhilai, Rourkela & Durgapur. Out of 814 MW of installed capacity 564 MW capacity is for captive use of SAIL plant at respective locations. It is also undertaking the development of Coal based units of 1X250 MW at SAIL, Rourkela (RSP) & 2X20 MW at SAIL, Durgapur (DSP), which are under construction phase by BHEL & ISGEC Ltd respectively.

NSPCL is intending to set up a 7 MWp Solar PV plant at it's Bhilai Project. The 7 MWp Solar PV power project shall be implemented in a single EPC package under domestic competitive bidding using Non DCR (open category) manufactured PV modules and cells. Further this EPC package is proposed to be awarded to single bidder in single block of 7 MWp with suitable award criteria intimated separately in the bidding documents.

"Salient Technical Features of the equipment/ systems/ services covered in the IFB No.CC/C&M/C-495 are mentioned below. These Salient Technical Features are mentioned only to facilitate the prospective bidders to prima-facie understand the requirements under the tender and shall not in any way limit or alter the scope of work and technical features/ specification of equipment/ systems/ services covered in the Bidding Documents. Detailed provisions in regard of scope of work and technical features/specification of equipment/ systems/ services, contained in the Bidding Document shall be final and binding."

2.0 LOCATION AND APPROACH

District	Durg, Chhattisgarh	
Nearest Highway	Chhattisgarh State Highway -22.	
Nearest Railway Station	Durg (10 kms from the Proposed site)	
Nearest Commercial Airport	Raipur - 35 km	

3.0 LAND AVAILABILITY

Approximately 34 acres of land at Newai Village, Distt Durg of Chattisgarh.

4.0 PROJECT CAPACITY

Name of the project	Bhilai Solar PV Power Project (7 MW) in Durg district of Chhattisgarh	
Project capacity	7MWp Solar PV Project (To be awarded to single bidder in single block of	
	7MWp)	
Technology	Solar PV Technology with Crystalline Silicon cells.	

5.0 BRIEF SCOPE OF WORK

Please refer detailed NIT/IFB.

6.0 TECHNOLOGY

In Solar Photo Voltaic Power Generation the direct conversion of solar radiation into electricity is achieved by using semiconductor devices "Solar Cells" which work on the principles of photo electric effect.

7.0 POWER EVACUATION SYSTEM

A double circuit power evacuation line (each of 5 MW capacity) shall be laid and connected between solar project site and Tower no 73 near Maroda gate of BSP's existing 11 KV Township O/H Line-3 feeding power from TSS-2 (PSD) to TDS-2 (TEED) of Maroda sector by means of a "Tee" connection with suitable isolation / switching provision. A small local switching / isolating substation shall be installed near the "Tee" point for which BSP shall provide a small piece of land in its township near Tower no 73 mentioned above.

8.0 OTHER DETAILS

SI	Item	Details
01	Water Requirement during construction and	Through Borewell. Construction of
	Module Washing at O&M stage	Borewell is under the scope of bidder.
02	Power Requirement during construction	To be arranged by bidder
03	MOEF Clearance	Not Applicable
04	Chief Electrical Inspector Clearance	To be facilitated by bidder
05	Vegetation Clearance from State Forest Department	Clearance to be arranged by owner, however vegetation removal is to be done by bidder.
06	Any other clearance required for execution of the project	Shall be facilitated by the Bidder