INVITATION FOR BIDS

IRCON RENEWABLE POWER LIMITED

INVITATION FOR BIDS (IFB) FOR
EPC PACKAGE WITH 220kV SUBSTATION FOR CTU GRID CONNECTED SOLAR PV PROJECTS - S00MW/ 600MWp) AT PAVAGADA IN STATE OF KARNATAKA

(National Competitive Bidding)

IFB No.: IRPL/SOLAR/EPC AND MODULE PACKAGE/3R **Date: 28.10.2022**

Bidding Document No: IRPL/SOLAR/EPC AND MODULE PACKAGE/3R

1.0

IRCON RENEWABLE POWER LIMITED (IRPL) invites online bids from eligible bidders on Single **Stage Two Envelope (i.e., Envelope-I: Techno-Commercial Bid and Envelope-II: Price Bid) tendering for EPC PACKAGE WITH 220 KV SUBSTATION FOR CTU GRID CONNECTED SOLAR PV PROJECTS (500MW/600MWp) AT PAVAGADA IN STATE OF KARNATAKA**

Sr.No.	Name of Work	Estimated Cost of Work (inclusive of all applicable taxes, BOCW & Optional Prices) (Rs.)	Earnest Money/ Bid Security	Completion Date/Period
1	**EPC PACKAGE WITH 220 KV SUBSTATION FOR CTU GRID CONNECTED SOLAR PV PROJECTS (500MW/600MWp) AT PAVAGADA IN STATE OF KARNATAKA**	**Rs. 23,00,00,00,000.00 /-**	**Rs. 11,79,58,000/-**	16 Months

2.0

BRIEF SCOPE OF WORK

Design, Engineering, Manufacturing, Supply, Packing and Forwarding, Insurance till commissioning, Transportation, Unloading, Storage, all related and associated civil works, Installation and Commissioning of grid-connected 500MW/600MWp Solar PV projects ***and*** Operation & Maintenance for a period of Three (03) years from the date of full capacity commissioning located at Pavagada, Karnataka in India ***on complete turnkey basis.***

Capacity to be quoted by a bidder: 500MW/600MWp with block size as per bidding document.

PV Cells & Modules: DCR (Domestic Category Requirement) Category

The scope includes the following but not limited to:

1. Supply of bi-facial PV Solar Modules with a minimum wattage of 540Wp
2. All EPC works required for Development of Solar PV Project with DCR (Domestic Category Requirement) PV Modules and 220 KV substation as per detailed technical Specifications and applicable technical standards.
3. Project commissioning and Performance testing for demonstration of Guaranteed Generation at interconnection point at CTU substation.
4. Operation & maintenance of complete Solar PV plant including 220 KV substation and power evacuation system till interconnecting grid substation along with consumables and spare parts for a period of Three (03) years from the date of commissioning of full capacity.
5. Conducting Hydrology, Geotech, Topography and PSSE studies.
6. Receipt, unloading at Site, storage, installation, testing and commissioning of solar PV module.
7. Design and construction of foundation and erection of module mounting structure (MMS) with tracker technology for PV panels including fixing of PV modules on trackers and PV modules interconnections.
8. Piling along with supply & erection of Trackers
9. Providing power supply and water supply for construction purpose incl. site illumination for night work at site.

2.0	10. Construction of pre-engineered type inverter room (if applicable) with power conditioning units associated LT and HT switchgears. In case of string inverters, construction of pre-engineered type HT switchgear 11. Construction of central monitoring and control stations with switchgear room, SCADA rooms, storeroom, battery room, with all electrical fittings and furniture along with security cabins etc. 12. All associated electrical and civil works required for interfacing with grid, i.e., Transformers, panels, protection systems, cables, metering system, grid compliance study as per regulations etc. and evacuation of power to switchyard. 13. Signages for plant as required by the Employer 14. Supply and construction of 220KV switchyard along with power transformer. 15. Supply and erection of robotic cleaning for the PV Solar Plant. 16. Construction of access road (from state highway to plant), all types internal roads and pathways, etc. 17. SCADA system for remote monitoring and control of inverters with all hardware and software and complete set of weather monitoring system including cloud cover. 18. Securing permits and approvals as per Permit and Approval matrix and all requisite documentation for tax pass through as may be sought from time to time by the Employer or Govt. bodies. 19. Comprehensive operation and maintenance of all assets of solar PV plant along with all electrical equipment including but not limited to 220kV switchyard, transmission line with consumables and spare parts for a period of three (3) years from the date of commissioning of full project capacity in MWp DC. 20. Site Security from construction period and up to end of O&M period of Three (03) Years. 21. Supply of Mandatory Spares. 22. Site-grading and clearing of vegetation. **Note:** Spares for O&M for Transmission line shall be provided by Employer **Specific Exclusions** 1. Identification, acquisition, and complete transfer of ownership/lease of encumbrance free land in favor of IRPL and construction of boundary wall. 2. Identifying and arranging Grid Connectivity at CTU substation. 3. EPC of 220kV Transmission Line and bay extension at CTU substation. 4. Third party inspection of Solar PV modules at manufactures works. 5. Clearing of permanent settlements within plant boundary 6. Shifting/ removal of all the transmission lines and poles upto 11 kV 7. ROW issues specifically related to the title of the project land and the connecting access road The detailed scope of work is as defined in **the bidding document No.: IRPL/SOLAR/EPC AND MODULE PACKAGE/3R**