

**CIL Navikarniya Urja Limited**  
(A Subsidiary Company of Coal India Limited)

**Tender**

**Document For**

**Design, Engineering, Procurement & Supply, Construction & Erection, Testing, Commissioning, Associated Transmission System and Comprehensive O&M for 10 Years of Cumulative 28MW(DC)/20 MW (AC) Solar PV Power Plant at 2 locations (Jagannath and Lakhanpur Area) of MCL, Orissa, India.**

**(Only through limited e-Tender mode for the CIL Empanelled EPC Contractors for Solar Projects)**



CIL Navi Karniya Urja  
Limited 7<sup>th</sup> Floor, Coal  
Bhawan, Premises  
No-4 MAR Action Area –  
1A, New Town, Rajarhat,  
Kolkata (WB) – 700156  
Email:  
ceo.cnul@coalindia.in

## **About the Company**

CIL Navikarniya Urja Limited (CNUL), a wholly owned subsidiary company of Coal India Limited was incorporated on 16th of April,2021 to venture into new business area of New and Renewable Energy (Non-Conventional) segment including Solar, Wind, Small Hydro, Biomass, Geo-Thermal, Hydrogen, Tidal, etc., along with other prevalent technologies/emerging technologies for development of non-conventional/clean & renewal energy Business.

Parent company Coal India Limited (CIL) is the state-owned coal mining corporate came into being in November 1975 is at the forefront of the nation's coal production in the Indian energy sector. CIL alone produces around 83% of country's entire coal output. In a country where 69% of the total electricity generation is coal based, CIL virtually empowers the nation's power sector. Around 80% of CIL's total supplies are catered to power sector.

Mahanadi Coalfields Limited (MCL), one of the eight subsidiaries of CIL, is operating mines in the state of Orissa. The Miniratna Category-I CPSE intends to utilize power from Solar PV power plant for its captive consumption in Lakhanpur and Jagannath Area (in Orissa).MCL has given in-principle approval for the preparation of DPR under CAPEX mode for the development of cumulative 20 MW (AC)/28 MW (DC) Solar PV power plants in the above mentioned 2 Areas in the state of Orissa.

MCL has selected CIL Navikarniya Urja Limited (CNUL) - the newly incorporated subsidiary of Coal India Limited - for the PMC service for its 20 MW(AC) ground-mounted and grid-connected solar PV power Projects in Orissa.

### About the Project

The envisaged 28MW(DC)/20 MW(AC)Solar Power plant will be established through EPC contractor at 2 locations of MCL, Orissa Region, India.

- Area wise segregation of projects and respective project capacity is as follows:

Name of Area	Available Land (Ha)	Total Capacity of Area in MW (AC)
Jagannath	20	10
Lakhanpur	15.05	10

- MCL has planned to evacuate the Power generated from the Solar Plants in the following manner:

Name of Area	Evacuation
Jagannath	Generated Solar Power shall be evacuated at 33kv through a 5 km long 33 kV OHTL at 120 MVA (2X40MVA+ 2X20MVA),132/33KV Nandira Substation (feeding power to Anant, Bhubaneswari, Bharatpur 1&2, Balaram, Hingula, Nandira, Lingaraj & CSS-I&II feeder.) Erection of this OHTL shall be in the scope of EPC Contractor.
Lakhanpur	Generated Solar Power shall be evacuated at 33kv through a 5 km long 33 kV OHTL at 40 MVA (2X20 MVA),132/33KV Jorabag substation feeding power to Lakhanpur-1,Lakhanpur-2,CWS & Y-Curve feeder. Erection of this OHTL shall be in the scope of EPC Contractor.

*\*\* The above is tentative and subject to alteration/modification during execution of the job. EPC Contractor shall have the responsibility to evacuate power at suitable points, if not possible in the way mentioned as above.*

- Installation, Testing and Commissioning of the 20 MW(AC) Solar Plant along with Transmission line / cable from plant take off point to the interconnecting substations and bay(s) at substations shall be **in the scope of EPC Contractor**. The EPC Contractor will also maintain the OHTLs during O&M period of 10 years at the cost of EPC Contractor. Safety, security, Construction of boundary wall , Hotters at suitable places to avoid theft , Security system including adequate CCTV camera and, PTZ Cameras for web based digital surveillance with centralized control room for the entire plant, maintenance and operation of the said transmission line upto 10 years O&M period will be the sole responsibility of the EPC Contractor.

- Any other statutory approval, if required to be taken during execution of the project, will be taken by the EPC Contractor at its own cost. MCL and CNUL shall extend required help to the EPC Contractor for obtaining such statutory approval.
- CNUL (on behalf of MCL) now issues this Tender for selection of EPC-cum-O&M contractor for the entire EPC work for the Project as well as O&M of the Project for 10 years after the project Commissioning date (COD) (to be executed through **MCL** after awarding work by **MCL**. CNUL will be responsible for providing award recommendation of the work to the selected EPC Contractor.
- Post-award activities, such as signing of contract agreement, contract execution, payment and other activities will be under **MCL'S** scope. CNUL will provide PMC service during commissioning period as per the agreement between MCL and CNUL.
- Procurement of Environment clearance including public hearing and all other activities including various studies, survey, scientific investigation, SIA, EIA, EMP, preparation of various plans/reports or any assessment for fulfilling the requirements of any statutory authority for compliance of terms of reference ("ToR"), Public consultation etc. for procurement of Environmental Clearance and subsequent amendment & enhancement of EC ,if required.
- Procurement of Forest clearance (Stage-I and Stage-II) including tree enumeration, pannisabha for obtaining NoC from Collector under FRA-2006 and all other activities including DGPS survey of CA land, including submission of online applications with the MoEF, Govt of India from grass root level to ministry, if required.
- Video recording :During the Contract period , the EPC contractor shall provide to the Owner for every calendar quarter, a video recording, which will be compiled into a 3 (three) hour digital video covering the system in pen drive/ any storage system.
- The EPC contractor shall install required fencing and security equipment, engage security guards and take such other measures as may be necessary to prevent theft of plant, machineries etc in the entire plant Area. The EPC Contractor shall launch criminal proceedings in cases of theft or unauthorised activities within the plant premises.
- Right of way and compensation payment to the land owners and all statutory permission required for erection of 33KV lattice tower and drawal over head line from proposed solar power plant to interconnection substation shall be under the scope of EPC contractor. It is clarified that, all these expenditure if any shall be

deemed to included in contact price. No additional payment on above is admissible from Owner's account.

## CONTENTS

<b>SECTION</b>	<b>TITLE</b>	<b>FRO M</b>	<b>TO</b>
1	e-TENDER NOTICE	5	20
2	GENERAL TERMS AND CONDITIONS OF CONTRACT	21	48
3	ADDITIONAL TERMS AND CONDITIONS OF CONTRACT	49	49
4	GENERAL TECHNICAL CONDITIONS	50	60
5	ERECTION CONDITIONS OF CONTRACT	61	78
6	SPECIAL CONDITIONS OF CONTRACT	79	106
7	SAFETY CODE	107	111
8	BID SUBMISSION CHECKLIST	112	112
APPENDIX 1	FORMAT OF LETTER OF BID	113	114
APPENDIX 2	DETAILS OF SITE	115	115
APPENDIX 3	FORMAT FOR BANK GUARANTEE	117	120
APPENDIX 4	PRE-CONTRACT INTEGRITY PACT	121	127
APPENDIX 5	ILLUSTRATIVE COMPUTATION OF EVALUATED BID VALUE (EBV)	128	130
APPENDIX 6	FORMAT FOR PRE-BID QUERIES	131	131
APPENDIX 7	MANDATE FORM FOR EFT	132	133
APPENDIX 8	FORMAT FOR POWER OF ATTORNEY	134	135
APPENDIX 9	PROFORMA FOR EXECUTION OF AGREEMENT	136	137
APPENDIX 10	PROFORMA OF MEMORANDUM	138	138
APPENDIX 11	TECHNICAL SPECIFICATIONS	139	139
APPENDIX 12	BID SECURING DECLARATION	140	140
APPENDIX 13	PROFORMA FOR WRITTEN CONSENT FOR ARBITRATION CLAUSE	141	143
APPENDIX 14	PROFORMA FOR UNDERTAKING	144	145
APPENDIX 15	FORMAT FOR DETAILED PROJECT SCHEDULE	146	146
APPENDIX	VALID DIGITAL SIGNATURE	147	147