



**Tender Document for Selection and
Empanelment of Solar Power Developers
for Setting up of Grid-Connected Rooftop Solar PV
Project on Ordnance Factory Dehradun buildings
under RESCO mode through Tariff-Based Competitive
Bidding**

Tender No. OFDun/C&P/IPP/14/0005/24-25 dated: 10.10.2024

TenderSearchCodeonCPPP:OFDun-2024

DISCLAIMER

- I. Though adequate care has been taken while preparing the tender document, the bidder(s) shall satisfy themselves that the document is complete in all respect. Intimation regarding any discrepancy shall be given by the prospective bidders to the office of OFDun immediately. If no intimation is received from any bidder within **20 (Twenty) days from the date of issuance of tender documents**, it shall be considered that the document is complete in all respect and has been received/ acknowledged by the bidder(s).
- II. Ordnance Factory Dehradun (OFDun) reserves the right to modify, amend or supplement this document.
- III. This tender document has been prepared in good faith, and on best endeavor basis. Neither OFDun 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 document, even if any loss or damage is caused by any act or omission on their part.
- IV. In case of any discrepancy in the documents uploaded on the websites of CPPP, the documents uploaded on the CPPP website will prevail.

Place: Dehradun

Date: .10.2024

BIDINFORMATION SHEET

The brief details of the tender areas under:

| | | | |
|------------|---|--|-------------------------------|
| (A) | NAME OF WORK/ BRIEF SCOPE OF WORK/ JOB | Selection of Project Developers for setting up of Grid-Connected Rooftop Solar PV Projects on OFDun Buildings under RESCO mode. | |
| (B) | Tender NO. & DATE | Tender No. OFDun/C&P/IPP/14/0005/24-25 Dated. 10.2024 | |
| (C) | TYPE OF BIDDING SYSTEM | TWO BID SYSTEM | |
| (D) | TYPE OF TENDER | E- TENDER | |
| (E) | COMPLETION/ CONTRACT PERIOD | As mentioned in tender Document | |
| (F) | BID PROCESSING FEE | NOT APPLICABLE | |
| (G) | EARNEST MONEY DEPOSIT (EMD) | <p>APPLICABLE</p> <p>Amount: INR 900 /- (Indian Rupees Nine Hundred) per KW to be submitted in the form of Bank Guarantee/Payment On Order Instrument, along with the Response to Tender. Any offer without EMD, will be rejected.</p> | |
| (H) | PERFORMANCE BANK GUARANTEE | APPLICABLE | Yes, 5% of estimated value |

| | | |
|------------|--|--|
| (I) | DATE, TIME & VENUE OF PRE-BID MEETING | Ordnance Factory Dehradun (A Government of India Enterprise) Ordnance Factory Dehradun - 248008 Uttarakhand Scheduled as per NIT on CPP portal or website. |
| (J) | OFFLINE & ONLINE BID-SUBMISSION DEADLINE | As per NIT on CPP portal |
| (K) | TECHNO-COMMERCIAL BID OPENING | As per NIT on CPP portal |
| (L) | e-REVERSE AUCTION (e-RA) | Not Applicable |
| (M) | CONTACT DETAILS OF CPP PORTAL | Contact Person: CPPP Support Team Customer Support: +91-0120-4001 002, 4001 005, 4493395 (For any technical related queries please call at 24 x 7 Help Desk Number) Technical - support-eproc(at)nic(dot)in Policy Related - cppp-doe(at)nic(dot)in |
| (N) | NAME, DESIGNATION, ADDRESS AND OTHER DETAILS (FOR SUBMISSION OF RESPONSE TO Tender) | Chief General Manager Ordnance Factory Dehradun Raipur Road, Dehradun – 248008 Uttarakhand Contact No.: 0135 2787371-3 Email: ofdunenggo@ord.gov.in |
| (O) | DETAILS OF PERSON TO BE CONTACTED IN CASE OF ANY ASSISTANCE REQUIRED | Sh. Vikas Vardhan Manager Ph: 0135 -2785234 Email: vikashvardhan@ord.gov.in |

- Bids must be submitted strictly in accordance with Section-2 and 3 of the Tender, depending upon Type of Tender as mentioned at Clause no. (D) of Bid Information Sheet.
- Bidders are required to quote strictly as per terms and conditions of the tender documents and not to stipulate any deviations/ exceptions.
- Any bidder, who met the CPP Qualifying Requirement and wishes to quote against this Tender, may download the complete tender document along with its amendment(s) and clarifications if any, from CPP Portal (<https://eprocure.gov.in>) and submit their Bid complete in all respect as per terms & conditions of tender Document on or before the due date of bid submission.
- Clarification(s)/ Corrigendum(s) if any shall also be available on the above referred websites.

Bidders are requested to remain updated for any notices/ amendments/ clarifications etc. to the tender document through the websites <https://eprocure.gov.in>. No separate notifications will be issued for such notices/ amendments/ clarifications etc. in the print media or individually. Intimation regarding notification on the above shall be updated on <https://eprocure.gov.in>

SECTION 1. INTRODUCTION&INVITATIONFORBIDS

1 Background&Introduction

- 1.1 Ordnance Factory Dehradun(hereinaftercalled“OFDun” a unit of India Optel Limited)isaGovernment of India Enterprise under the administrative control of the Ministry of Defence. One of the main objectives of the Company is to assist theMinistryandfunctionastheimplementingandfacilitatingarmoftheoptical devices for development, promotion and commercialization in the country.
- 1.2 One of the target CP Pen shrined by the Government under the “Panchamrit” announced by Hon’ble Prime Minister at the COP 26 summit in Glasgow, is meeting 50% of total energy requirements from renewable energy by 2030. Accordingly, several Government organizations, Ministries and other institutions have taken necessary steps to install Grid-Connected Rooftop Solar PV Projects at their premises/buildings, to increaseelectricityconsumptionthroughrenewableenergy.Aspartoftheseinitiatives, OFDunhasbeenapproachedbytheseorganizationstocarryoutthebiddingandselection of Project developers through a competitive bidding process, to set up Projects under RESCO mode. In line with the above, OFDun, on behalf of such as Ministry of Defence (MOD), hereby invites proposals for setting up of around 200 KW Grid- Connected Rooftop Solar PV (RTSPV) Projects on Build Own Operate (BOO) basis, on the buildings owned by Ordnance Factory Dehradun under India Optel Limited.
- 1.3 The Bidders will be free to avail fiscal incentives like Accelerated Depreciation, Concessional Customs and Excise Duties, Tax Holidays etc. as available for such Projects. The same will not have any bearing on comparison of bids for selection. As equal opportunity is being provided to all Bidders at the time of tendering itself, it is up to the Bidders to avail various tax and other benefits. No claim shall arise on OFDun for any liability if Bidders are not able to avail fiscal incentives and this will not have any bearing on the applicable tariff. OFDun does not however, give a representation on the availability of fiscal incentive and submission of bid by the Bidders hall being dependent of such availability or non-availability as the case may be of the fiscal incentives.
- 1.4 No separate Central Financial assistance is envisaged for implementation of the projects selected under this Tender.

2 Invitation for Bids

- 2.1 A Single Stage, Two-Envelope Bidding Procedure will be adopted and will proceed as detailed in the tender Documents. Bidding will be conducted through the competitive bidding procedures as per the provisions of Sections 2 and 3 of the Tender.
- 2.2 Interested bidders have to necessarily register themselves on the portal <https://eprocure.gov.in>(“CPP portal”) to participate in the bidding under this invitation for bids. It shall be the sole responsibility of the interested bidders to get themselves registered at the aforesaid portal for which they are required to contact Ordnance Factory, Dehradun to complete the registration formalities. Contact details of CPPP is

mentioned on the Bid Information Sheet. All required documents and formalities for registering on CPPP are mentioned in the subsequent tender documents.

They may obtain further information regarding this tender from the registered office of OFDun at the address given on the Bid Information Sheet from 10:00 hours to 17:00 hours on all working days.

For proper uploading of the bids on the CPP portal, it shall be the sole responsibility of the bidders to apprise themselves adequately regarding all the relevant procedures and provisions as detailed in the portal as well as by contacting Ordnance factory Dehradun directly, as and when required, for which contact details are also mentioned on the Bid Information Sheet. OFDun in no case shall be responsible for any issues related to timely or proper uploading/submission of the bid in accordance with the relevant provisions of the Bidding Documents.

- 2.3 Bidders should submit their bid proposal complete in all aspect on or before last date and time of Bid Submission as mentioned on CPP Portal (<https://eprocure.gov.in>), and as indicated in the Bid Information Sheet.
- 2.4 Bidder shall submit its proposal along with non-refundable Bid Processing Fee (if applicable)s (if applicable) and Earnest Money Deposit (EMD) (if applicable) complete in all respect as per the Bid Information Sheet. Techno-Commercial bids will be opened as per the Bid Information Sheet in online presence of authorized representatives of bidders who wish to be present online. Bid proposals received without the Bid Processing Fee (if applicable)s (if applicable) and/or Earnest Money Deposit (EMD) (as applicable) will be rejected. **In the event of any date indicated being declared a holiday, the next working day shall become operative for the respective purpose mentioned herein.**

Tender documents which include Eligibility Criteria, Technical Specifications, various Conditions of Contract, and Formats etc. can be downloaded from the CPP Portal. It is mandatory to download official copy of the tender Document from CPP Portal only to participate in the Tender. Any amendment(s)/corrigendum(s)/clarification(s) with respect to this tenders shall be uploaded on CPPP website. The Bidders should regularly check for any Amendment(s)/Corrigendum(s)/Clarification(s) on the above mentioned CPPP website. However, in case of any discrepancy, the information available on CPP website shall prevail.

- 2.5 OFDun reserves the right to cancel/withdraw/defer this invitation for bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.

2.6 INTERPRETATIONS

- Words comprising the singular shall include the plural & vice versa.
- An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.
- A time of day shall save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.

- Different parts of this contract are to be taken as mutually explanatory and supplementary to each other and if there is any differentiation between or among the parts of this contract, they shall be interpreted in a harmonious manner so as to give effect to each part.
- The table of contents and any headings or subheadings in the contract has been inserted for case of reference only & shall not affect the interpretation of this agreement.

SECTION 2. SPECIAL CONDITIONS OF CONTRACT

3 Scope of Work

- 3.1 Under this Tender, the Solar Power Developer (SPD) shall be required to set up Grid-Connected Rooftop Solar PV (RTSPV) Project, with the primary objective of supplying solar power to OFDun, as per the provisions of the tender and draft standard Power Purchase Agreement (PPA).
- 3.2 The Projects shall be set up under the RESCOM Mode, as defined by MNRE. The scope of work of the SPD, inter alia, includes obtaining No Objection Certificate (NOC) from the Distribution Company (DISCOM) for grid connectivity, complete design, engineering, supply, storage, civil work, erection, testing & commissioning of the RTSPV Project including Operation and Maintenance (O&M) of the project for the term of the PPA. The O&M of the Project may include wear, tear, overhauling, machine breakdown, insurance, and replacement of defective modules, invertors/ Power Conditioning Unit (PCU), spares, consumables & other parts for the PPA term.
- 3.3 Obtaining Net-metering and grid connectivity of the Project under this tender would be the responsibility of the bidder in accordance with the prevailing guidelines of the respective State Regulators (SERC) or Central Electricity Authority (CEA) or the DISCOM in the respective area. The OFDun could facilitate connectivity and necessary approvals, however, the entire responsibility lies with the SPD only.
- 3.4 The SPD shall take all necessary permits, approvals and licenses, insurance etc., provide training and such other items and services required to complete the scope of work mentioned above.
- 3.5 The Projects to be selected under this scheme provide for deployment of Solar Photovoltaic Technology. However, the selection of Projects would be technology agnostic.

4 Total capacity offered

- 4.1 The estimated cumulative Project capacity envisaged for OFDun buildings is around 200 KW. The tentative list of Buildings (Zone-wise) under OFDun has been annexed at Annexure-C. The final capacity to be installed will be determined at the time of signing of PPA between the SPD and OFDun.
- 4.2 A Bidder, including its Parent, Affiliate or Ultimate Parent or any Group Company shall submit a single bid offering a minimum quantum of Contracted Capacity of 160 KW and a maximum quantum of 250 KW.

5 Project Location

- 5.1 The Projects shall be located at the locations (inside OFDun)
- 5.2 Project Configuration:

The term "Project" shall have the meaning as defined in Section 6 of the Tender. A project shall refer to one or multiple Grid-connected RTSPV systems installed on a

single/group of buildings, connected to the grid through a single or multiple meters. Configuration of a Project is under scope of the SPD, subject to the condition that the minimum Project size shall be 200 kW. Configuration of each project shall be decided mutually between OFDun and Successful bidders/SPD.

6 Connectivity with the Grid

- 6.1 The Project should be designed for interconnection with the grid in accordance with prevailing CERC/SERC/DISCOM regulations in this regard. For interconnection with the grid and metering, the SPD shall abide by applicable Grid Code, Grid Connectivity Standards, Regulations on Communication System for transmission of electricity and other regulations/procedures (as amended from time to time) issued by Appropriate Commissions and Central Electricity Authority (CEA), and any other regulations of the concerned DISCOM where the Project is located. Minimum voltage level for interconnection with the grid shall be as determined by the respective DISCOM.
- 6.2 The responsibility of getting connectivity and necessary approvals for grid connection and net-metering shall entirely be with the SPD and shall be at the risk and cost of the SPD. The transmission of power up to, and including at the point(s) of interconnection where metering is done for energy accounting, shall be the responsibility of the SPD at its own cost. The maintenance of transmission system up to and including at the Interconnection Points shall be responsibility of the SPD, to be undertaken entirely at its risk and cost.
- 6.3 Metering arrangement of each Project shall have to be adhered to in line with relevant clauses of the PPA. The entire cost of transmission (if applicable) including cost of construction of line, wheeling charges, SLDC/Scheduling charges, SOC, MOC, maintenance, losses etc. and any other charges from the Project up to and including at the Interconnection Point will be borne by the SPD.
- 6.4 Note: The SPD shall apply for Net-metering approval with the respective DISCOM within 30 days of signing of PPA, failing which, the PPA will be liable to be terminated by the OFDun, along with encasement of PBG for the respective Project.

7 Energy Supply by the Solar Power Developer (SPD)

7.1 Criteria for Energy Supply

The Bidders will declare the annual CUF of the Projects at the time of submission of response to Tender, and the SPDs will be allowed to revise the same once within first year after COD. Thereafter, the CUF for the Project shall remain unchanged for the entire term of the PPA. The declared annual CUF shall in no case be less than 100% for Projects to be set up in OFDun. It shall be the responsibility of the SPD, entirely at its cost and expense to install all such number of Solar panels and associated equipment as may be necessary to achieve the required CUF. The SPD shall maintain generation so as to achieve annual energy supply corresponding to CUF within +10% and -15% of the declared value till the end of 10 years from COD, subject to the annual CUF remaining minimum of 15/13.5% (as applicable), and within +10% and -20% of the declared value of the annual CUF

thereafter till the end of the PPA term. The lower limit will, however, be relaxable to the extent of non-availability of grid, during solar generation hours, for evacuation which is beyond the control of the SPD. The annual CUF will be calculated every year from 1st April of the year to 31st March next year. Relaxation to the non-availability of grid beyond the control of SPD need to be certified by OFDun. Further, duly signed hindrance register shall be maintained during the time of execution and O&M.

7.2 **Shortfall in Energy Supply**

Subsequent to Project commissioning, If for any Contract Year, expect for the first year after Project commissioning, it is found that the SPD has not been able to supply minimum energy corresponding to the value of annual CUF within the permissible lower limit of CUF declared by the SPD, the SPD shall be levied liquidated damages @50% of the PPA tariff for the shortfall in energy terms, in accordance with terms of the PPA. This compensation shall be applied to the amount of shortfall in energy supply during the year. However, this compensation shall not be applicable in events of Force Majeure identified under PPA affecting supply of power by SPD.

8 ***Commissioning of Projects***

Commissioning of the Projects shall be carried out by the SPD in line with the procedure as per the PPA document. The OFDun may authorize any individual or committee or organization to witness and validate the commissioning procedure on site. Commissioning certificates shall be issued by the DISCOM/OFDun after successful Project commissioning. OFDun authorized representative may also be allowed for the inspection/ commissioning if required.

8.1 **Commissioning Schedule and Liquidated Damages Not Amounting to Penalty for Delay in Commissioning**

- a. For Projects located in OFDun, the Scheduled Commissioning Date (SCD) for commissioning of the full capacity of the Project shall be the date as on **06 months** from the Effective Date of the PPA (for e.g. if Effective Date of the PPA is **07.10.2024**, then SCD shall be **07.04.2025**).
- b. The maximum time period allowed for commissioning of the full Project Capacity with applicable liquidated damages, shall be limited to the date as on **3 months** from the SCD or the extended SCD (if applicable) (for e.g. if SCD of the Project is **07.04.2025**, then the above deadline for Project commissioning shall be **07.07.2025**).
- c. In case of delay in commissioning of the Project beyond the SCD until the date as per Clause 9.1.b above, as part of the liquidated damages, the total PBG amount for the Project shall be encashed on per-day-basis and proportionate to the balance capacity not commissioned. For example, in case of a Project of 2MW capacity, if commissioning of 1 MW capacity is delayed by 18 days beyond the SCD, then the liquidated damages shall be: PBG amount X (1/2) X (18/180). For the purpose of calculations of the liquidated damages, 'month' shall be considered consisting of 30 days.

- d. In case Commissioning of the Project is delayed beyond the date as per Clause 9.1.b above, the PPA capacity shall stand reduced/amended to the Project Capacity commissioned and the PPA for the balance capacity will stand terminated.

9 Operation & Maintenance (O&M) Guidelines to be mandatorily followed by the SPD

- 9.1 The SPD shall be responsible for all the required activities for successful O&M of the Rooftop Solar PV system for the PPA term from the date of commissioning of the Project.
- 9.2 Following guidelines shall be followed in this regard. In addition, O&M practices shall be strictly followed.
- i. O&M of the Project shall be compliant with grid requirements to achieve committed energy generation.
 - ii. Deputation of qualified and experienced engineer/ technicians till the O&M period at project site.
 - iii. Periodic cleaning of solar modules. The modules shall be cleaned with a periodic interval of 15 days or as and when required as per actual site conditions. It's the responsibility of the SPD to get the modules cleaned during O&M Period.
 - iv. A "hindrance register" shall be maintained to record any issues affecting Project O&M. The same shall be duly signed by both parties of the PPA, recording
 - v. Periodic checks of the Modules, PCUs and BoS shall be carried out as a part of routine, preventive and breakdown maintenance.
 - vi. Immediate replacement of defective Modules, Invertors/PCUs and other equipment as and when required.
 - vii. Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for all associated equipments and materials as per manufacturer's / supplier's recommendations.
 - viii. All the testing instruments required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by the SPD. The testing equipments must be calibrated once in a year from NABL accredited labs and the certificate of calibration must be kept for reference as required.
 - ix. If negligence/ mal-operation on part of the SPD's operator results in failure of equipment, such equipment should be repaired/ replaced by the SPD free of cost.
 - x. Co-ordination with Owner/DISCOM/CEIGas per the requirement for Joint Meter Reading (JMR) Report. The person-in-charge present at site from the SPD's side shall take a joint meter reading in the presence of rooftop owner on a monthly basis. Online Performance Monitoring, controlling, troubleshooting, maintaining of logs & records. A maintenance record register is to be maintained by the operator with effect from Commissioning to record the daily generation, regular maintenance work carried out as well as any preventive and breakdown maintenance along with the date of maintenance, reasons for the breakdown, duration of the breakdown, steps taken to

attend the breakdown, etc.

- xi. For any issues related to operation & maintenance, a toll-free number shall be made available to the rooftop owner to resolve the same within 72 hours.
 - xii. If any jobs covered in O&M Scope as per tender are not carried out by the SPD during the O&M period, the OFDun shall take appropriate action as deemed fit. OFDun reserves the right to make surprise checks/ inspection visits at its own or through authorized representative to verify the O&M activities being carried out by the SPD. Failure to adhere to above guidelines may result in penal action including debarring from participation in next tender.
 - xiii. It is up to SPD and OFDun to mutually decide on the source and amount of water to be supplied for module cleaning during O&M period.
- 9.3 **O&M PBG:** Prior to release of the PBG upon successful commissioning of the Project, the SPD shall submit O&M Performance Bank Guarantee (PBG) for the same value as per Clause 16 of the Tender, valid up to 3 years from COD. This PBG shall also be issued in the name of the Chief General Manager OFDun, and the OFDun reserves the right to encash this PBG up to the amount as per his choosing, in case of any lapses discovered during the O&M period which may be ascribed to the SPD. OFDun shall not have any role in this regard.