



# Madhya Pradesh Urja Vikas Nigam Limited

Invites

**Request for Proposal (RFP)**

**For**

**Standardization of Rates and Selection of Contractors**

**For**

**Grid Connected and Off-Grid Solar Rooftop Systems at  
Various Locations in Madhya Pradesh Under EPC Mode**

**RFP No: F/UVN/2024/RFT/01-439/3506**

**Dated: 19/11/2024**

**Issued by:-**

**Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL)**

**“Urja Bhawan” Link Road No. 2, Shivaji Nagar, Bhopal – 462016**

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## Request for Proposal for Solar Rooftop Projects in Madhya Pradesh

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## Request for Proposal for Solar Rooftop Projects in Madhya Pradesh



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**RFP No: F/UVN/2024/RFT/01-439/3506**

**Dated: 19/11/2024**

Madhya Pradesh Urja Vikas Nigam Limited, invites Bids from the eligible Bidder to participate through this Request for Proposal (RFP) for Standardization of Rates and Selection of Contractors for Grid Connected and Off-Grid Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to Twenty Six (26) MW.

For the implementation of above-mentioned work, Bidder should submit the scanned copy of bid proposal along with payment of non-refundable Bid Processing Fee, copy of Bank Guarantee towards Bid Security and all other requisite documents complete in all respects on or before 31/12/2024 up to 1700 hours in prescribed format on the MP Tenders Portal. Technical Bid will be opened on 02/01/2025 at 1700 hours. Bid proposals received without the prescribed Bid Processing Fee and copy of Bank Guarantee towards Bid Security will be summarily rejected unless exempted. In the event of any date indicated above is a declared holiday in Bhopal, Madhya Pradesh or Sunday, the next working Day shall become operative for the respective purpose mentioned herein.

Bid documents which include scope of work, eligibility criteria, technical specifications, various conditions of Contract, formats, etc. can be viewed and downloaded from MP Tenders website <https://mptenders.gov.in/nicgep/app> by paying applicable fees and charges.

**DISCLAIMER**

1. Though adequate care has been taken while preparing the RFP document, the Bidder shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from prospective Bidder on or before pre-bid meeting date, it shall be considered that the RFP document is complete in all respects and has been received by the Bidder.
2. Nodal Agency reserves the right to modify, amend or supplement RFP documents including all formats and annexure up to Bid submission date. Interested and eligible Bidders are advised to follow and keep track of MP Tender's website <https://mptenders.gov.in/nicgep/app> for updated information. Nodal Agency is not obligated to send/ communicate separate notifications for such notices/ amendments/ clarification etc. in the print media or individually. Nodal Agency shall not be responsible and accountable for any consequences to any party.
3. While this RFP has been prepared in good faith, neither Nodal Agency nor their employees or advisors make any representation or warranty, expressed or implied, or accept any responsibility or liability, whatsoever, in respect of any statement 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 RFP, even if any loss or damage is caused by any act or omission on their part.
4. The capitalized term or any other terms used in this RFP, unless as defined in RFP or repugnant to the context, shall have the same meaning as assigned to them by the Electricity Act, 2003 or Company Act, 1956/2013 or Indian Partnership Act, 1932 or Limited Liability Partnership Act, 2008 or Income Tax Act, 1961 and the rules or regulations framed under these Acts.

**A. BID INFORMATION SHEET**

<b>Document Description</b>	Request for Proposal (RFP) for Standardization of Rates and Selection of Contractors for Grid Connected and Off-Grid Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to <b>Twenty-Six (26) MW</b> .
<b>RFP No. &amp; Date</b>	RFP No: F/UVN/2024/RFT/01-439/3506 Dated: 19/11/2024
<b>RFP Purchase Start Date</b>	22/11/2024 at 1700 hours
<b>RFP Purchase End Date</b>	31/12/2024 at 1600 hours
<b>Scope of work</b>	As provided under Clause 6 of SECTION III of the RFP.
<b>Last date for submission of queries in written form</b>	The queries shall be submitted to <a href="mailto:shreya.gonage@mp.gov.in">shreya.gonage@mp.gov.in</a> till 30/11/2024 up to 1700 hours
<b>Pre-bid Meetings</b>	Pre-bid meeting (Online) shall be held online on 29/11/2024 at 1500 hours. The Bidders may nominate a maximum of 2 representatives and share the following participation details at <a href="mailto:shreya.gonage@mp.gov.in">shreya.gonage@mp.gov.in</a> : <ul style="list-style-type: none"> <li>• Name of the Bidder</li> <li>• Name, Email, Contact No. of the Participant(s)</li> </ul>
<b>Online Bid Submission Start Date</b>	09/12/2024 up to 1700 hours
<b>Online Bid Submission End Date</b>	09/12/2024 up to 1700 hours
<b>Last Date of Hard Copy Submission of Technical Bid</b>	01/01/2025 up to 1700 hours
<b>Bid Opening (Technical)</b>	02/01/2025 at 1700 hours
<b>Bid Opening (Financial)</b>	Shall be communicated to Technical Eligible Bidder separately through Nodal Agency's website/ MP Tender Portal (NIC).
<b>Project completion timelines</b>	Contractor would be expected to complete the Project(s) within five (5) Months from the issuance of Work Order.
<b>Bid Processing Fee (non- refundable)</b>	Bidder shall pay Tender Fee of Rupees 10,000/- (Rupees Ten Thousand Only) plus applicable GST through online mode at <a href="http://mptenders.gov.in">mptenders.gov.in</a> . This Tender Fee is exclusive of portal charges or payment gateway charges. The additional charges beyond the Tender Fee shall be borne by the Bidder. By paying Tender Fee, a Bidder shall be eligible to Bid for one or more Project Groups under this RFP. MSMEs are exempted

## Request for Proposal for Solar Roof top Projects in Madhya Pradesh

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	from payment of Bid Processing Fee. However, it is to clarify that MSMEs registered in the Madhya Pradesh and who qualifies as per definition under this RFP are eligible for exemption.
<b>Bid Security</b>	Bidders will submit Bid Security in accordance with provisions mentioned under Clause 3.12. MSMEs are exempted from submission of Bank Guarantee towards Bid Security. However, it is to clarify that MSMEs registered in the Madhya Pradesh and who qualifies as per definition under this RFP are eligible for exemption.
<b>Operational Performance Bank Guarantee (“O-PBG”)</b>	Contractor shall furnish Operational Performance Bank Guarantee (“O-PBG”) in the form and manner prescribed in this RFP under Clause 3.13.
<b>Update on this RfP</b>	Bidders are advised to keep track of changes/ updates/ corrigendum regarding this RfP on <a href="http://www.mprenewable.nic.in">http://www.mprenewable.nic.in</a> OR <a href="https://mptenders.gov.in/nicgep/app">https://mptenders.gov.in/nicgep/app</a>
<b>Address for Bid submission/ correspondence</b>	Project In-Charge (Rooftop Solar) MP Urja Vikas Nigam Ltd., ‘Urja Bhawan’, Link Road No. 2, Shivaji Nagar, Bhopal – 462016

**B. DEFINITIONS & ABBREVIATIONS**

In this “Bid / RFP Document” the following words and expression will have the meaning as herein defined where the context so admits:

1. **“Affiliate”** shall mean a Company/ Limited Liability Partnership (LLP) Firm/ Partnership Firm/ Sole Proprietor that directly or indirectly
  - i. controls, or
  - ii. is controlled by, or
  - iii. is under common control witha Bidder or a member (in case of a Consortium/ Joint Venture) and “Control” means the ownership, directly or indirectly, of more than 50% of the voting shares or the power to direct the management and policies by operation of law, contract or otherwise. Any bank or financial institution shall not be considered as Affiliate.
2. **“Appellate Authority”** shall mean Additional Chief Secretary/ Principal Secretary/ Secretary of Department of New and Renewable Energy, GoMP or the Committee to be formed under the direction of Additional Chief Secretary/ Principal Secretary/ Secretary of Department of New and Renewable Energy, GoMP;
3. **“Beneficiary”** shall mean any Government Department/ Government organization has establishment within Madhya Pradesh, which is desirous of installing Solar PV rooftop system(s) within their own premises in accordance with terms and conditions of this RFP;
4. **“B.I.S”** shall mean specifications of Bureau of Indian Standards (BIS);
5. **“Bid”** shall mean the Technical and Financial proposal submitted by the Bidder along with all documents, credentials, attachment, annexure etc., as requested in the RFP, in response to this RFP, in accordance with the terms and conditions hereof;
6. **“Bidder(s)”** shall mean bidding Company/ Limited Liability Partnership (LLP) firm/ Partnership Firm/ Sole Proprietor or Consortium/ Joint Venture submitting the Bid. Any reference to the Bidder includes its successors, executors and permitted assigns as the context may require;
7. **“Consortium or Joint Venture”** shall refer to a group of two entities formed a consortium/ joint venture for fulfilling the requirement set out in the RFP and, has collectively submitted a Bid, in response to RFP.
8. **“Bid Deadline”** shall mean the last date and time for submission of Bid in response to this RFP as specified in Bid Information Sheet and Clause 2.6;
9. **“CEA”** shall mean Central Electricity Authority;
10. **“Capacity Utilization Factor or CUF”** shall mean the ratio of the output of the SPV Power Plant in a year versus installed Project capacity x no. of days in the year x 24.

(CUF = Cumulative Project output in kWh / (installed Project capacity in kW x 24 x no. of days in the year));

*(no. of days shall be 366 for leap years and 365 for others)*

However, for demonstration of successful Commissioning, CUF shall mean the ratio of the output of the SPV Power Plant in a Day versus installed Project capacity x 1 x 24, adjusted to seasonality as per provisions of Clause 3.15.

11. **“Chartered Accountant”** shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949;
12. **“Competent Authority”** shall mean person or group of persons nominated by Additional Chief Secretary/ Principal Secretary/ Secretary of Department of New and Renewable Energy, GoMP for the mentioned purposes herein;
13. **“Commissioning”** shall mean the design, supply, erection, installation and the synchronization of the Project with the DISCOM grid as per prevailing regulations followed by demonstration of Minimum Guaranteed Generation (CUF) and successful operation in accordance with the Clause 3.15 of the RFP;
14. **“Company”** shall mean a body incorporated in India under the Companies Act, 1956 or Companies Act, 2013 including any amendment thereto;
15. **“Comprehensive O&M”** shall be as defined in Clause 3.16 of this RFP;
16. **“Consumer”** shall mean any person who is seeking electricity or is supplied electricity for his own use by a licensee or the Government or by any other person engaged in the business of supplying electricity to public under the Act or any other law for the time being in force and includes any person whose Premises are, for the time being, connected for the purpose of receiving electricity with the works of a Distribution Licensee, the Government or such other person, as the case may be. Users who might have merely wheeling/ supply arrangements with the licensee or users with off grid loads are also covered as Consumers.
17. **“Contract”** shall mean the agreement to be executed between Successful Bidder(s) and MPUVNL for accomplishment of Scope of Work as per Clause 6 under SECTION III of RFP on the pre-defined terms and condition of the RFP;
18. **“Contract Validity Period”** shall mean the twelve (12) Months from the date of execution of the Contract. During the Contract Validity Period, the rates shall be valid and applicable for all the Works to be awarded under the Contract;
19. **“Contractor”** shall mean the Successful Bidder or Project Company who has signed the Contract under this RFP;
20. **Day(s)”** shall mean a 24 (twenty-four) hour period beginning at 00:00 hours Indian Standard Time and ending at 23:59:59 hours Indian Standard Time;



21. **“Eligible Bidder(s)”** shall mean the Bidder who, after evaluation of their Technical Bid as per Eligibility Criteria, stand qualified for opening and evaluation of Financial Bid;
22. **“Eligibility Criteria”** shall mean the Eligibility Criteria as set forth in this RFP;
23. **“Financial Bid”** shall mean online financial Bid, containing the Bidder’s quoted price as per RFP format;
24. **“IEC”** shall mean specifications of International Electrotechnical Commission;
25. **“Indicative Capacity”** shall mean the total capacity of each Project Group as per Clause 2.2.
26. **“Inspecting Authority”** shall mean the authority designated by the Nodal Agency for the RFP purposes;
27. **“kWp”** shall mean KiloWatt Peak;
28. **“kWh”** shall mean KiloWatt Hour;
29. **“LOA”** shall mean Letter of Award;
30. **“Lead Member”** shall mean the member of Consortium/ Joint Venture authorized as a lead of the Consortium/ Joint Venture by other member of the Consortium/ Joint Venture with the rights and obligation set out in the RFP;
31. **“MNRE”** shall mean Ministry of New and Renewable Energy, Government of India;
32. **“MWp”** shall mean Mega Watt Peak;
33. **Month(s)”** shall mean a calendar month as per the Gregorian calendar;
34. **“MSME(s)”** shall means the Micro, Small and Medium Enterprises whose place of work and registered office are in the state of Madhya Pradesh as defined under the Micro, Small and Medium Enterprises Development Act 2006.
35. **“Nodal Agency”** shall mean the Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL), Bhopal;
36. **“Minimum Guaranteed Generation”** shall mean the generated solar power (in kWh) at the output of inverter/combination of inverters as per this RFP.
37. **“Premise”** shall mean land, building or structure or part thereof or combination thereof, wherein a separate meter or metering arrangement has been made by the licensee for measurement of supply of electricity, including the agricultural farms intending to use solar panels deployed for solar pumps, where an RE system is set up, provided, in case of net metered arrangement, setting up of the RE system should be ancillary to the purpose of the Premise and should not be the primary activity of Premise.
38. **“Preventive Maintenance”** shall mean maintenance of Project for preventing and/or eliminating the defects in solar panels, inverters, junction boxes, mounting structures, cables connection, checking earthing effectiveness, output check of current, voltage, power against the expected output from the project or different strings/junction boxes/

inverters etc.,.

39. **“Preventive Maintenance Report”** shall mean half-yearly report to be submitted by Contractor as per FORMAT 16: PREVENTIVE MAINTENANCE REPORT, at the end of each six months, starting from the Commissioning of the Project;
40. **“Project(s)”** shall mean the Grid Connected Solar PV Project(s) without Storage or Off-Grid Solar PV Project(s) with Storage for a Consumer. However, Consumers having contiguous Premises may be treated as single Project;
41. **“Project Capacity”** means the capacity of the Project mentioned in the Work Order issued by the Nodal Agency. For Project, inverter capacity (in kW) shall be considered as the Project Capacity (in kW) however the solar module capacity (in kWp) should be equal to or higher than the inverter capacity (in kW);
42. **“Project Company”** shall mean Company incorporated by the Bidder as per Indian Laws in accordance with Clause 3.5;
43. **“Prudent Utility Practices”** shall mean the practices, methods and standards that are generally accepted nationally from time to time by electric utilities for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation and maintenance of solar power generation equipment of the type specified in this RFP, as per requirements of Indian Law;
44. **“Qualified Bidder(s)”** shall mean, for given scope of work, the Eligible Bidder having quoted minimum Financial Bid in a Project Group or Eligible Bidder(s) accepted in written to match the minimum Financial Bid in a Project Group;
45. **“RFP”** shall mean Request for Proposal/Bid document/Tender document and shall include formats and annexures in it;
46. **“Scope of Work”** shall mean works, services and/ or activities to be accomplished by Contractor as per Clause 6 under SECTION III of RFP;
47. **“Statutory Auditor”** shall mean the auditor of a Company appointed under the provisions of the Companies Act, 1956 or Companies Act, 2013 or under the provisions of any other applicable governing law;
48. **“Successful Bidder(s)”** shall mean the Qualified Bidder(s) selected by Nodal Agency pursuant to this RFP for implementation of Project as per the terms and condition of the RFP Documents, and to whom LOA has been issued;
49. **“Year”** shall mean 365 Days or 366 Days in case of leap year when February is of 29 Days;

### **C. INTERPRETATIONS**

1. Words comprising the singular shall include the plural & vice-versa
2. An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.
3. A time of day shall save as otherwise provided in any contract or document be construed as a reference to Indian Standard Time.
4. Different parts of this RFP 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 RFP, they shall be interpreted in a harmonious manner so as to give effect to each part.
5. The terms Contract and Work Order have been used interchangeably in this RFP and shall have the same meaning unless otherwise specified or required as per the context.
6. The table of contents and any headings or subheadings in the RFP has been inserted for case of reference only & shall not affect the interpretation of this RFP.

**SECTION-I**  
**INSTRUCTIONS TO THE BIDDER**

**1. INTRODUCTION:**

- 1.1. Request for Proposal for Standardization of Rates and Selection of Contractors for Grid Connected and Off-Grid Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to **Twenty Six (26) MW** and accomplishment of Scope of Work as per Clause 6 under SECTION III of RFP and in accordance with MNRE/ MPERC/ concerned distribution licensee norms.
- 1.2. The Bidder is advised to read carefully all instructions and conditions of this RFP and understand the scope of work fully. All information and documents required as per the RFP must be furnished with bid. The Nodal Agency reserves the right to seek clarifications on submitted bids. Failure to provide the information and/or documents as required shall render the Bid(s) unacceptable for further evaluation and may lead to rejection of the bid(s). All bidder qualifying technical stage shall be treated at par. Financial Bid of Bidder qualifying at technical stage only shall be opened.
- 1.3. Bidder shall be deemed to have examined the RFP, to have obtained information in all matters whatsoever that might affect carrying out of works in line with the scope of work specified in the RFP at the bid price and to have satisfied himself of the sufficiency of his bid. The Bidder shall be deemed to know the scope, nature and magnitude of the works and requirement of materials, equipment, tools and labour involved, wage structures and as to what all works Successful Bidder shall have to complete in accordance with the RFP, irrespective of any defects, omissions or errors that may be found in RFP.

**2. BID DETAILS:**

- 2.1. The bidding process is for Indicative Capacity and Scope of Work mentioned at Clause 2.2 in this RFP.
- 2.2. The Indicative Capacity of each Project Group in Bid are mentioned in the table below:

Project Group	Type of Project Group	Project Capacity Sizes in the Project Groups		Indicative Capacity (kW)
		Minimum Size	Maximum Size	
A	Off-Grid with 4.8 kVAh battery per kW	One (1) kW	Twenty-Five (25) kW	1,000
B	Grid-Connected without battery	One (1) kW	Three (3) kW	5,000
C	Grid-Connected without battery	> three (3) kW	Ten (10) kW	10,000
D	Grid-Connected without battery	> Ten (10) kW	Five Hundred (500) kW	10,000
<b>Total Indicative Capacity (KW)</b>				<b>26,000</b>

Indicative capacity is mentioned as per Nodal Agency's assessment of requirements for each Project Group. Actual capacity at the time of issue of Work Order may vary. The Rates quoted for each Project Group shall be applicable up to Contract Validity Period. Issuance of LOA to the Contractor for a Project Group shall not guarantee the Contractor to get the work in that Project Group.

- 2.3. Bidder may opt to Bid for one or more Project Groups. It is to clarify that only one bid need to be submitted for participation in multiple Project Groups.
- 2.4. The participation shall only be considered for Project Groups as declared in the covering letter as per FORMAT 1: COVERING LETTER of this RFP. In case of any discrepancy between the covering letter and financial bid submission, the participation shall only be considered for the Project Group that the bidder opted for, in the covering letter. However, if Bidder has participated in lesser number of Project Groups in financial bid than mentioned in covering letter, then participation shall only be considered for only those Project Groups which are common in covering letter and financial bid.
- 2.5. **Provisions related to additional electrical and civil works:**
  - 2.5.1. In case of additional electrical works, over and above the scope of this RFP, the Contractor shall inform the same to Nodal Agency and Beneficiary in writing. Such additional scope and costing shall be verified by Nodal Agency and in-principle approval for incurring additional expenditure shall be issued by the Beneficiary.
  - 2.5.2. The Rates of additional electrical works for interfacing of Solar Photovoltaic Power Plants with existing Electrical Loads shall be decided on the basis of prevailing at par rates of Schedule of Rates (SOR) for Electrical works issued by the concerned discom. The rates of SOR shall be binding to the Contractor of Project for getting the work executed at the allocated sites. It is to clarify that Beneficiary is liable to pay only up to SOR rates which includes all taxes, duties, etc, and Contractor shall not charge (including taxes/ duties) any cost over and above SOR rates.
  - 2.5.3. The rates of additional civil works as per site requirement for installation of Project(s), shall be as prevailing at par the rates of Schedule of Rates (SOR) for building works, issued by Public Works Department (PIU), Bhopal, Govt. of M.P.
  - 2.5.4. The latest and prevailing SOR issued by PWD or concerned discom shall be considered and shall also be a part of the Work Order(s) under this RFP and shall be considered for execution of all necessary additional works for Completion of the Projects awarded. It is to clarify that Beneficiary is liable to pay only up to SOR rates which includes all taxes, duties, etc, and Contractor shall not charge (including taxes/ duties) any cost over and above SOR rates.
  - 2.5.5. It is clarified that the cost of additional electrical or civil works shall not be a part of the financial bid submitted.

### 2.6. Key Dates:

S. No.	Tender Stage	Date	Time (Hrs.)
1.	RFP Upload Date	22.11.2024	1700
2.	Purchase of RFP Start Date	22.11.2024	1700
3.	Pre-Bid Meeting (Online)	29.11.2024	1500
4.	Last Date for Submission of Queries	30.11.2024	1700
5.	Bid Submission Start Date	09.12.2024	1700
6.	Purchase of RFP End Date	31.12.2024	1600
7.	Bid Submission End Date	31.12.2024	1700
8.	Last Date of Hard Copy Submission of Technical Bid	01.01.2025	1700
9.	Technical Bid Opening Date	02.01.2025	1700

*Note: In case of discrepancy in dates or timing mentioned in Bid Information Sheet and Clause 2.6, Date and Time mentioned in Clause 2.6 shall prevail.*

### 3. INSTRUCTIONS TO THE BIDDER:

- 3.1. The Contractor shall be mandatorily required to submit Bid online and evaluation shall be done by considering the online submitted bid document.
- 3.2. Instructions to the bidder on e-tendering:
  - a) For participation in e-tendering module, it is mandatory for Bidders to enrol on the e-Procurement module of the MP Tenders Portal (URL: <https://mptenders.gov.in/nicgep/app>) by clicking on the link “Online bidder Enrolment” on the MP TENDERS Portal. Cost of Enrolment and renewal is dependent on the Government Order (GO) prevailing at that period of time.
  - b) As part of the enrolment process, the Bidders will be required to choose a unique username and assign a password for their accounts.
  - c) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the MP Tenders Portal.
  - d) Upon enrolment, the Bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.

- e) Only one valid Digital Signature Certificate (DSC) should be registered by a Bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse
- f) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.
- g) For further information regarding issue of DSC, the Bidders are requested to visit MP tenders website <https://mptenders.gov.in/nicgep/app>. Please note that it may take up to 3 to 5 working Days for issue of DSC. Nodal Agency shall not be responsible for delay in issue of DSC.
- h) Tender documents can be downloaded from website free of cost. Bidders need to submit the Bid Processing Fee at the time of online submission of the bid.
- i) Service and gateway charges shall be borne by the Bidders.
- j) The Browser should be Java enabled. Java Runtime Environment (JRE) should be installed in the client system. This can be downloaded from the download links of the eProcurement System.
- k) If Bidder is participating for the first time in e- tendering, then it is advised to fulfil all formalities, such as registration, obtaining DSC, etc. well in advance.
- l) Bidders are requested to regularly visit MP tenders-tendering website for any clarification and / or extension of due date.
- m) Bidder must positively complete online e-tendering procedure at <https://mptenders.gov.in/nicgep/app>.
- n) Nodal Agency shall not be responsible in any way for delay /difficulties /inaccessibility of the downloading facility from the website for any reason whatever.
- o) Whosoever on behalf of the Bidder is submitting the tender by his DSC, shall invariably upload the scanned copy of the authority letter, as well as submit the copy of the same in physical form with the offer of particular Bid.

### 3.3. ELIGIBILITY CRITERIA

#### 3.3.1. GENERAL

- a. The Bidder or, in case of a Consortium/ Joint Venture being the Bidder, its each member, should be a body incorporated in India under the Companies Act, 1956 or 2013 including any amendment thereto or a Partnership Firm having executed partnership deed and registered as per sections 58 & 59 of the Partnership Act, 1932, as amended or a Limited Liability Partnership (LLP) Firm registered under section 12 of Limited Liability Partnership Act, 2008, as amended or registered Sole Proprietor. A copy of certificate of incorporation, partnership deed or LLP/ Sole Proprietor registration, as applicable and relevant, shall be enclosed with the

technical proposal.

- b. In case of Successful Bidder being a Partnership Firm or a LLP, the equity ownership of the partners in the Successful Bidder or the Project Company shall remain in same proportion as mentioned in the partnership deed submitted along with the Bid, up to a period of one (1) Year from the execution of Contract including extensions in the Contract Validity Period. The equity proportion for ownership of such Successful Bidder shall only be changed on prior written approval of the Nodal Agency.
- c. Consortium/ Joint Venture would consist of only two members including the Lead Member. The one Member of the Consortium/ Joint Venture shall nominate the other Member of the Consortium/ Joint Venture as a Lead Member. Such nomination shall be supported by a power of attorney signed by the other Member of the Consortium/ Joint Venture (and duly acknowledged by the Lead Member) and shall substantially be in the form set out in FORMAT 14: POWER OF ATTORNEY IN FAVOUR OF LEAD MEMBER OF CONSORTIUM/ JOINT VENTURE.
- d. In case Bidder is a Consortium/ Joint Venture, a Consortium/ Joint Venture agreement as per FORMAT 13: CONSORTIUM/ JOINT VENTURE AGREEMENT shall be required to be furnished along with the Bid.
- e. The Lead Member shall have the authority to represent other Member of the Consortium/ Joint Venture during the Bid Process. In case of Successful Bidder being a Consortium/ Joint Venture, the equity ownership of the partners in the Consortium/ Joint Venture or the Project Company shall remain in same proportion as mentioned in the Consortium/ Joint Venture Agreement submitted along with the Bid, up to a period of one (1) Year from the execution of Contract including extensions in the Contract Validity Period. The equity proportion for ownership of such Successful Bidder shall only be changed on prior written approval of the Nodal Agency.
- f. In a situation, where a Consortium/ Joint Venture is selected as a Successful Bidder, decides not to form a Project Company, the Lead Member would be responsible for all the correspondence and documentation. Moreover, all the Work Orders under this tender shall be issued in the name of the Lead Member of Consortium/ Joint Venture.
- p) Bidder or any member of Consortium/ Joint Venture or its Affiliate blacklisted by Nodal Agency or by any Govt./PSU, for whatever reasons, shall not be eligible/ allowed to participate in this RFP. Bidder(s) shall be disqualified in case of conflict of interest. In the Bid, the Bidder may be considered to have conflict of interest with one or more Bidders in this bidding process, if:
  - i. A Bidder submits more than one Bid in the bidding process, either individually [including bid submitted as authorised representative on behalf of one or more Bidder(s)] or as Member of Consortium/ Joint Venture.
  - ii. They have a relationship with other Bidders, directly or through common



third parties, that puts them in position to have access to information about or influence on the Bid of another Bidder or influence the decisions of Nodal Agency regarding this bidding process.

### 3.3.2. TECHNICAL ELIGIBILITY CRITERIA

- a. Bidder should meet the Technical Eligibility Criteria independently as mentioned in table below:

<b>Project Group</b>	<b>Type of Project Group</b>	<b>Indicative Capacity (kW)</b>	<b>Technical Eligibility (kW)</b>
A	Off-Grid with 4.8 kVAh battery per kW	1,000	120
B	Grid-Connected without battery	5,000	600
C	Grid-Connected without battery	10,000	1,080
D	Grid-Connected without battery	10,000	1,080
<b>Total</b>		<b>26,000</b>	<b>2,880</b>

- b. In case Bidder is a Consortium/ Joint Venture, Technical Eligibility Criteria shall be met by Lead Member of Consortium/ Joint Venture.
- c. The Bidder should design, engineering, supply, installation, testing and commissioning along with Comprehensive O&M of grid-connected rooftop solar projects during last five (5) Years from the last date of bid submission of this RFP for meeting the technical eligibility criteria for Project Groups B, C and D. The Bidder should design, engineering, supply, installation, testing and commissioning along with Comprehensive O&M of off-grid rooftop solar projects during last five (5) Years from the last date of bid submission of this RFP for meeting the technical eligibility criteria for Project Group A. All the projects shown to meet Technical Eligibility Criteria should have been commissioned prior to last date of bid submission.
- d. For Technical Eligibility, Bidder shall submit work completion/commissioning certificate issued by Government Agency/ Department/ Company/ Organization in the name of Bidder/ Member of the Consortium/ Joint Venture, supported with a copy of concerned contract/ work order/ purchase order with Comprehensive O&M of five (5) Years.
- e. In case a Bidder has submitted Bid for more than one Project Group, cumulative experience of Project Groups shall be considered for off-grid (Project Group A) and grid connected (Project Group B, C and D) separately.

- f. In case the technical experience submitted in the Bid or the projects eligible for the evaluation based on Nodal Agency's technical evaluation is less than the required experiences of Project Groups in which Bidder would like to participate, then the preference provided in the covering letter shall be considered for evaluation of the Project Group(s) of the Bidder. No further correspondences in this regard shall be done with a Bidder. Nodal Agency's decision shall be final in this regard and Bidder shall not be allowed to make representations in such cases.

### 3.3.3. FINANCIAL ELIGIBILITY CRITERIA:

- a. Bidder shall establish eligibility through net-worth and turnover as required by this RFP.
- b. The Bidder shall meet Turnover criteria as per respective Project Groups. In case a Bidder is applying for multiple Project Groups, turnover criteria shall be cumulative value of turnover criteria for the Project Groups applied for.
- c. It should demonstrate the average annual Turnover of last three (3) Financial Years i.e., FY 2021-22, FY 2022-23 and FY 2023-24.

Project Group	Type of Project Group	Indicative Capacity (kW)	Turnover (INR Lakh)
A	Off-Grid with 4.8 kVAh battery per kW	1,000	45.0
B	Grid-Connected without battery	5,000	225.0
C	Grid-Connected without battery	10,000	405.0
D	Grid-Connected without battery	10,000	405.0
<b>Total</b>		<b>26,000</b>	<b>1,080</b>

- d. The Bidder should have positive Net Worth in the latest Financial Year either FY 2022-23 or FY 2023-24 for which audited financial statement are available. In case of Consortium/ Joint Venture, Lead Member and the other Member of Consortium/ Joint Venture both should have showcased positive Net Worth.

The Computation of Net-Worth shall be based on standalone audited annual accounts. The formula for Net-Worth calculation shall be as per Companies Act, 2013.

In case of Sole Proprietor (including any reserves), the Net-Worth shall be equal to Proprietor's Capital Account.

*Note:-*

- i. All requisite documents, such as balance sheet, P&L account, schedules etc., duly certified by a Chartered Accountant (CA) and the participants, in support of participants claim for meeting the financial eligibility criteria shall be required to be submitted.*
- ii. It is essential to submit financial eligibility criteria requirement and undertaking form as attached as Format of this RFP document.*
- e. Audited financial statements including balance sheet/ cashflow statement/ P&L statement/ schedules/ management notes shall be considered for Turnover evaluation.
- f. In case of Consortium/ Joint Venture, the Financial Eligibility Criteria shall be met independently or jointly by the Members of the Consortium/ Joint Venture including Lead Member.
- g. Bidder/ Lead Member of the Consortium/ Joint Venture can use its own financial strength or of its Affiliate to fulfill the Financial Eligibility Criteria mentioned in RFP. It is to clarify that other member of the Consortium/ Joint Venture shall not be allowed to use its Affiliate financials to fulfill the Financial Eligibility Criteria mentioned in RFP.
- h. If Bidder/ Lead Member of the Consortium/ Joint Venture is using Affiliate's financial strength to fulfill the Financial Eligibility Criteria, then he has to submit details of financial strength of its Affiliate only.
- i. In case Bidder/ Member(s) of the Consortium/ Joint Venture has not completed three (3) Years of operation or not have three audited financial statements, then Turnover and Net Worth requirement shall be assessed for the Financial Years for which the Bidding Company is having audited financial statements.
- j. In relation to a Partnership Firm/ Limited Liability Partnership Firm, the Net-Worth shall be equal to the combination of capital contribution of the partners and the undistributed profits of the partners.
- k. For the purposes of meeting financial requirements, only standalone audited annual accounts shall be used. However, audited consolidated annual accounts of the Bidder may be used for the purpose of financial requirements provided the Bidder has at least fifty one percent (51%) equity in each company whose accounts are merged in the audited consolidated accounts.
- l. In case Bidder or Lead Member of the Consortium/ Joint Venture opts to refer its Affiliate to meet the Financial Eligibility criteria, then the Affiliate shall remain in control of the Bidder or remain under common control with the Bidder/ Lead Member or Bidder/ Lead Member shall remain in control of the Affiliate for the

period of one (1) Year from the execution of Contract including extensions in the Contract Validity Period. Further, Affiliate of Bidder/ Lead Member of Consortium/ Joint Venture shall furnish information as sought in FORMAT 8: FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT and FORMAT 9: CERTIFICATE OF RELATIONSHIP OF AFFILIATE WITH THE BIDDER only in case Bidder has relied on its Affiliate for fulfilment of Net-worth/Turnover criteria.

*Note: For the purpose of this provision “control” shall mean the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such Company or right to appoint majority directors.*

- m. Bidder shall furnish documentary evidence as per the FORMAT 8: FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT, duly certified by Authorized Signatory and the Statutory Auditor / Practicing Chartered Accountant of the Bidder in support of their financial capability”.
- n. Participants shall have to give a declaration to the effect that they fulfill the terms and conditions of eligibility as per FORMAT 15: DECLARATION. If the declaration to above effect is found to be false, the eligibility would be considered null and void.
- o. The Bidder shall furnish standalone / consolidated audited annual accounts in support of meeting financial requirement, which shall consist of unabridged annual accounts, profit and loss account, profit appropriation account, auditor’s report, etc., as the case may be.

### 3.4. CHECK-LIST

- 3.4.1. To ensure that the online submission of RFP is complete in all respects, checklists for Financial Bid are required to be duly tick marked/filled for the enclosures which are attached with the RFP document. The requisite documents required are indicated in the checklists. It is essential for the participant to submit checklists duly sealed and signed. However, this checklist is indicative, and Bidder shall be responsible for meeting all information requirements as per the provisions of this RFP.

### 3.5. INCORPORATION OF A PROJECT COMPANY:

- 3.5.1. In case a Bidder is selected as a Successful Bidder(s), Bidder may choose to incorporate a Project Company. Such Bidder shall be responsible to inform Nodal Agency within fifteen (15) Days from the LOA and transfer all the clearance obtained in the name of the Project Company must be transferred in the name of the Project Company within two (2) Months from the execution of Contract including extensions in the Contract Validity Period. In case, Successful Bidder(s) fails to transfer all the clearances obtained

in the name of Project Company, Contract shall be terminated, and the any Work allotted to them, if any, shall be awarded to other Successful Bidder(s) of the Project Group. On the receipt of formal request from the Successful Bidder(s), Nodal Agency may provide additional time for the transfer of clearances obtained and completion of other formalities, if any.

- 3.5.2. The aggregate equity share holding of the Successful Bidder in the issued and paid up equity share capital of the Project Company shall not be less than fifty one percent (51%) from the incorporation of the project company till one (1) Year from the execution of the Contract including any extension in Contract validity.
- 3.5.3. In case of Successful Bidder being a Partnership Firm or a LLP, chooses to form a Project Company for execution of the awarded Project(s), the equity ownership of the partners or the members of the Successful Bidder in the Project Company shall not be less than 51% , up to a period of one (1) Year from the date of Commissioning of the Projects under all the Work Orders. In case of Successful Bidder being a Consortium/ Joint Venture chooses to form a Project Company for execution of the Awarded Projects, the equity ownership of the Lead Member of the Consortium/ Joint Venture in the Project Company shall not be less than 51%, up to a period of one (1) Year from the date of Commissioning of the Projects under all the Work Orders. The equity proportion for ownership of such Successful Bidder shall only be changed on prior written approval of the Nodal Agency.

### 3.6. **BID SUBMISSION BY THE BIDDER:**

- 3.6.1. The information and/or documents shall be submitted by the Bidder as per the formats specified in this RFP.
- 3.6.2. Bid(s) that are incomplete in any respect or those that are not consistent with the requirements as specified in this RFP or those that do not adhere to formats prescribed herein, wherever specified, may be considered non-responsive. However, Nodal Agency reserves the right to seek additional information/clarifications from the Bidders, if found necessary, during the course of evaluation / processing of the Bid(s), related to only those documents/ information/ facts which are already submitted with original bid. Non-submission or delayed submission of such additional information or clarifications sought by Nodal Agency may be a ground for rejecting the Bid(s). Each format has to be duly signed and stamped by the authorized signatory of the Bidder. Strict adherence to the documents required to be submitted, as per Clause 3.8.1 shall be ensured, failure on this account may lead to rejection of Bid.

For clarity and removal of doubts, it is reiterated that no new document/ information/ facts shall be entertained as a part of post- bid submission. In exceptional cases, purely at discretion of Nodal Agency and in the interest of bidding process integrity, it may

seek documents/ information/ facts that are historical in nature and should have been in existence before bid submission deadline.

3.6.3. The Bidder shall furnish documentary evidence in support of meeting Technical and Financial eligibility criteria as indicated in this RFP to the satisfaction of Nodal Agency.

**3.7. CLARIFICATIONS AND PRE-BID MEETING:**

3.7.1. The Bidder may seek clarifications or suggest amendments to RFP in writing, through a letter or fax or e-mail to reach Nodal Agency on or before date and time mentioned in Bid Information Sheet and Clause 2.6.

3.7.2. The Bidder(s) or their authorized representative(s) is /are invited to attend pre-bid meeting(s), which will take place on date(s) as specified in Bid information Sheet and Clause 2.6, or any such other date as notified by Nodal Agency through addendum.

3.7.3. The purpose of the pre-bid meeting will be to clarify any issues regarding the RFP including, issues raised in writing and submitted by the Bidder.

3.7.4. Nodal Agency is not under any obligation to entertain/ respond to suggestions made or to incorporate modifications sought for.

**3.8. BID DOCUMENTS:**

3.8.1. **BID FORMATS:** The Bid in response to this RFP shall be submitted by the Bidder in the manner provided in the RFP. The Bid shall comprise of the following:

a. **TECHNICAL BID:** The Technical Bid shall be submitted online. Scanned and self-attested copies have to be uploaded online in the appropriate cover folder on the portal. In case of any difference or discrepancy between hard copy and online submission, the documents submitted through online portal shall prevail:

***File-1(pdf) (Covering letter, Bid Processing fee and Bid Security)***

- Covering Letter as per Prescribed Format- 1.
- Bid Processing Fee
- Bid Security of required value as mentioned in Clause 3.12.1 as per FORMAT 4-A: BID SECURITY

***File-2(pdf) (Technical/Financial eligibility documents)***

- FORMAT 2: GENERAL PARTICULARS OF THE BIDDER of this RFP, including Certificate of Incorporation of Bidder/ Affiliate as applicable.
- Bidder's composition and ownership structure as per FORMAT 3: SHAREHOLDING CERTIFICATE as shareholding certificate certified by

Director/practicing Chartered Accountant/Company Secretary

- Original power of attorney (*To be stamped in accordance with Stamp Act, as per FORMAT 6: POWER OF ATTORNEY issued by the Bidder in favour of the authorized person signing the Bid, in the form prescribed in this RFP (Power of Attorney must be supplemented by Board Resolution to above effect for the company incorporated under Company Act 1956 or Company Act 2013).*
  - FORMAT 7: TECHNICAL ELIGIBILITY CRITERIA REQUIREMENT & FORMAT 8: FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT for meeting Eligibility Requirements along with all supporting documents.
  - FORMAT 9: CERTIFICATE OF RELATIONSHIP OF AFFILIATE WITH THE BIDDER, if applicable, supported by Board Resolution of the Affiliate.
  - FORMAT 14: POWER OF ATTORNEY IN FAVOUR OF LEAD MEMBER OF CONSORTIUM, if applicable.
  - Undertaking(s) from the member of Consortium/ Joint Venture or Affiliate of Bidder/ member of Consortium/ Joint Venture as per FORMAT 10: UNDERTAKING FORM, as applicable.
  - In case Bidder is participating as Consortium/ Joint Venture, all members of the Consortium/ Joint Venture shall submit relevant documents such as Certificate of Incorporation, PANCARD, GST and FORMAT 15: DECLARATION, etc.
  - Bidder shall have to furnish MSME registration certificate (NSIC/ DIC/ Udyam Certificate) issued by the appropriate authority. Further, submission of MSME certificate issued in the name of Affiliate / Promoter shall not be considered. However, it is to clarify that MSMEs registered in the Madhya Pradesh and qualifies as per definition under this RFP are eligible for exemption towards Bid Processing Fees and Bid Security.
  - Submission of CVs for the following Manpower:
    - Engineer for each Project Group separately with minimum experience of five (5) Years in solar rooftop installation with aggregate capacity of 1,000 kW.
    - Five (5) Field Engineers for each Project Groups who will be on different sites during the construction of the Projects.
    - Operational, Health and Safety officer with minimum experience of five (5) Years in renewable energy.
- b. **FINANCIAL BID:** Bidders are explicitly and unequivocally advised to submit Financial Bid at online portal. Financial Bid or any information related to it submitted in the Technical Bid or hard copies or offline shall not be accepted and it

shall lead to rejection of such bid.

3.8.2. Signed and stamped copy of RFP including amendments & clarifications and minutes of pre-bid meetings by authorised signatory of the Bidder on each page is required to be submitted online and hard copy. Bidder is requested to submit the Declaration of Bidder as per FORMAT 15: DECLARATION.

### 3.8.3. **METHOD OF BID SUBMISSION**

a. Bidders are required to submit the Technical Bid online, along with all relevant documents as detailed in Clause 3.8 above, by bid submission deadline as per Clause 2.6. For submission, the Bidder has to upload the scanned and self-attested copy of all the bid documents. The uploaded documents shall contain the following:

- *File-1(pdf) (Covering letter, Bid Processing fee and Bid Security)*
- *File-2(pdf) (Technical and Financial eligibility documents)*

b. Financial Bid shall be submitted only through online mode with due encryption. No hard copy submission of the financial bid would be acceptable.

c. It is to clarify that only one Technical and Financial Bid need to be submitted by the Bidder for one or more Project Groups.

3.8.4. It should be noted that except online Financial Bid, no other envelope/ document shall contain any information/document relating to Financial Bid and failure to comply with the same may render disqualification of the Bidder from further evaluation under any Project Group. Nodal Agency shall not be responsible for premature opening of the Financial Bid in case of non-compliance of above.

3.8.5. All pages of the Bid, except for the Bid Security, and any other document executed on non-judicial stamp paper, forming part of the Bid and corrections in the Bid, if any, must be signed by the authorized signatory on behalf of the Bidder. It is clarified that the same authorized signatory shall sign all pages of the Bid. Further, any published document submitted with the Bid shall be signed by the authorized signatory. Bidder shall submit the Bid in original, duly signed by their authorized signatory of the Bidder.

3.8.6. **For online bid submission:** In terms of Section 3 and 3A of chapter-II and Section 4, 5 and 6 of chapter-III of the Information Technology Act, 2000, as amended, digitally signed documents shall be treated equivalent to affixing hand written signature of authorized signatory of the Bidder. Such documents may not require hand-written signature of authorized signatory.

3.8.7. Bidder shall submit the original Technical Bid (hard copy) including but not limited to Bid Security in the form of BG, Power of Attorney and declaration at Nodal Agency



office on or before the date mentioned in Clause 2.6.

### 3.9. **BID DEADLINE:**

The Bidder should submit the online Bid on or before the time schedule mentioned in Bid Information Sheet and Clause 2.6.

### 3.10. **VALIDITY OF BID**

The Bid shall remain valid for a period of one hundred and eighty (180) Days from Bid Deadline. In case, Successful Bidder is revoking or cancelling his offer or varying any term & conditions in regard thereof or not accepting Letter of Award (“LOA”) within the defined period or not submitting the Revised Bid Security as per **Error! Reference source not found.**, Nodal Agency shall forfeit the Bid Security furnished by the Bidder. In exceptional circumstances when LOA is not issued, the Nodal Agency may solicit the Bidder’s consent to an extension of the period of Bid Validity. In such circumstances, the Bid Security provided shall also be suitably extended.

### 3.11. **COST OF BIDDING**

The Bidder shall bear all the costs associated with the preparation and submission of his offer and Nodal Agency will in no case be responsible or liable for those costs, under any conditions. The Bidder shall not be entitled to claim any costs, charges and expenses of and incidental to or incurred by him through or in connection with submission of Bid even though Nodal Agency may elect to modify/withdraw the invitation of Bid.

### 3.12. **BID SECURITY**

3.12.1. The Bidder shall furnish Bid Security as indicated in table below should be in the form of Bank Guarantee for the Project Group(s). Bidders placing Bid for more than one Project Group may furnish single Bid Security of total value of Bid Security intended for those Project Groups.

<b>Project Group</b>	<b>Type of Project Group</b>	<b>Indicative Capacity (kW)</b>	<b>Bid Security (INR Lakh)</b>
A	Off-Grid with 4.8 kVAh battery per kW	1,000	4.50
B	Grid-Connected without battery	5,000	22.50
C	Grid-Connected without battery	10,000	40.50

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D	Grid-Connected without battery	10,000	40.50
<b>Total</b>		<b>26,000</b>	<b>108.00</b>

### Illustrations

If Bidder is submitting Bid for Project Groups B and C, the Bid Security required would be 22.50 + 40.50 Lakh , i.e., Rs 63.00 Lakh. Bidder(s), applying in all Project Groups, shall submit Bid Security in the form of Bank Guarantee of Rs 108.00 Lakh.

Bidder(s) shall have to select the option 'Bid Security/EMD exemption', in the portal as exemption and submit the copy of Bank Guarantee.

- 3.12.2. Bid Security should be valid till six (6) Months beyond the Contract Validity Period with an additional claim period of one (1) Year.
- 3.12.3. Registered MSMEs are exempted from the submission of Bid Security for the submission of Bid under this RFP. However, it is to clarify that MSMEs shall be required to submit Bid Security as per Clause 3.12 if they become Successful Bidder in one or more Project Group. In case of non-submission of MSME registration certificate, Nodal Agency will consider it as a Non-responsive Bid.
- 3.12.4. Bid Security of the unsuccessful Bidders, who has not been selected in any of the Project Group(s) will be returned by the Nodal Agency within fifteen (15) Days from the execution of Contract.
- 3.12.5. MSMEs are required to submit Bid Security within 15 (fifteen) Days from the issuance of LOA. In case of non-submission of Bid Security after issuance of LOA, MSMEs and their associated companies/ agencies/ firms shall be blacklisted for three (3) Years from participation in future tenders of Nodal Agency and other Government agencies.
- 3.12.6. With the issuance of LoA, Bid Security shall be treated as a Performance Security for the purpose of monitoring the progress of Project(s) and levying penalty. Further, Nodal Agency may ask for additional Performance Security in case Performance Security requirement for the allotted Project Capacity is more than the available Bid Security with the Nodal Agency. In case, Nodal Agency has Bid Security of 2,500 kW in a Project Group from each Successful Bidder but the total allotted work but not commissioned yet is more than 2,500 kW, then in such cases the Nodal Agency shall ask the Successful Bidder to submit the additional Bank Guarantee based on the additional capacity need to be allotted to such Successful Bidder.
- 3.12.7. The Bid Security shall be forfeited without prejudice to the Bidder being liable for any further consequential loss or damage incurred to Nodal Agency under following circumstances:

- a. If a Bidder withdraws, revoke, cancel, or unilaterally varies his Bid in any manner during the period of Bid Validity specified in the RFP document.
- b. If the Successful Bidder fails to sign the Contract within twenty (20) Days from the acceptance of LOA by the Nodal Agency unless delays are on account of Nodal Agency.
- c. If the Successful Bidder fails to accept the LOA within fifteen (15) Days from the issuance of LOA.
- d. If the Successful Bidder fails to submit the Revised Bid Security within fifteen (15) Days from the issuance of LOA.

### **3.13. PERFORMANCE BANK GUARANTEE FOR OPERATION AND MAINTENANCE PHASE (O-PBG)**

- 3.13.1. Contractor shall be required to furnish O-PBG from a nationalized/ scheduled bank, in form of Bank guarantee as per prescribed FORMAT 4-B: OPERATIONAL PERFORMANCE BANK GUARANTEE (O-PBG) within ten (10) Days from the date of Commissioning.
- 3.13.2. The value of the O-PBG of a Project in a Project Group shall be 20% of L1 rate of the Project Group.
- 3.13.3. In case of additional civil or electrical works are carried out by Bidder in accordance with Clause 2.5 of this RFP, Bidder shall be required to submit additional O-PBG of 10% of cost of such additional works.
- 3.13.4. The Contractors shall submit the O-PBG for a duration of five (5) Years from the date of Commissioning of the Project, with an additional claim period of at least six (6) Months. Alternatively, the contractor can submit a revolving yearly O-PBG for a duration of five (5) Years with an additional claim period of at least 6 Months.
- 3.13.5. However, Contractor may submit one O-PBG of desired combined value for all Projects achieving Commissioning in a Month with an undertaking (FORMAT 11: UNDERTAKING FOR COMBINED O-PBG) in that behalf. Validity for O-PBG shall be five (5) Years from the last Day of the Month in which Projects achieve Commissioning, with an additional claim period of at least six (6) months. However, it is to clarify that, O-PBG shall be separate for each Project Group.
- 3.13.6. In case one or more Project fails to achieve Commissioning in a Month, the Contractor shall be required to extend the validity of O-PBG for the required period or submit another O-PBG for the Project(s) achieve commissioning in subsequent Month(s).
- 3.13.7. Nodal Agency shall release the O-PBG of the Project after completion of five (5) Years from the Commissioning duly supported by the satisfactorily Preventive Maintenance Report of the Project as per FORMAT 16: PREVENTIVE MAINTENANCE REPORT

and handover of all the documents including warranty related documents, equipment, components of the Project and certification shall be required from the Beneficiary.

**3.14. EXTENSION AND LIQUIDATED DAMAGES**

3.14.1. Progress in the implementation of a Project shall be monitored by Nodal Agency.

3.14.2. In case of natural calamity or any reason beyond the control of Contractor or unavoidable circumstances including but not limited to access to site, permission for construction, availability of sufficient space for Project during construction period, the Contractor may fails/ delays the Commission of the Project within the given timeframe. In such cases, Nodal Agency may consider grant of extension after finding the reasons found satisfactory submitted by Contractor without levying LD. Delay in supply of any equipment of Solar System like solar panel, PCU, battery bank etc. by the related vendors, to whom the Bidder has placed order, shall not be considered as a reason for extension without levying LD.

3.14.3. Beneficiary is responsible for clearing the Electricity Bill dues, if any, within thirty (30) Days from the Work order date, else timeline given for the work in the respective Work Order will be extended for the number of Days till dues get cleared by the Beneficiary. In case, time for clearing electricity bill dues extended beyond three (3) Months from the issuance of Work Order, Nodal Agency may cancel the respective work of the Work Order.

3.14.4. In case, Contractor delays the execution of the Project, for the reasons other than mentioned in Clause 3.14.2, as per the timelines defined in a Work Order, subject to provisions of Clause 5, following clauses shall be applicable:

- a) In case there is a delay in achievement of date of Commissioning of Project, a LD @0.30% of Project value per week shall be levied from the date of Commissioning or extended date of Commissioning, subject to maximum ten (10) Weeks delay.
- b) In case, Project is not Commissioning even after ten (10) Weeks beyond the date of Scheduled Commissioning or the extended date of Scheduled Commissioning as per Clause 3.14.2 and Clause 3.14.3, the Project shall stand cancelled and additional LD of 5% of Project value shall be levied (maximum LD in any case for a work shall be 8% of Project value).
- c) Nodal Agency shall not be liable to make any payments for such cancelled Project.
- d) In case of cancellation, the work shall be re-allocated as per the Clause 5.9 and “Principles of Work Allocation” under Clause 5.9.

3.14.5. If Nodal Agency has cancelled/terminated ten (10) or more work(s) of a Contractor, on account of Contractors defaults under Clause 3.14.4, then the Nodal Agency reserves

the right to terminate the Contract as per provisions of Clause 3.26.5.

**3.15. PERFORMANCE MONITORING MECHANISM AND PENALTIES FOR UNDER PERFORMANCE**

3.15.1. Contractor(s) shall inform Nodal Agency for Commissioning at least fifteen (15) Days prior to the schedule date of Commissioning and inform about the internet connectivity for operation of the RMS during commissioning procedure and operational period of the Project.

3.15.2. Nodal Agency or the Inspecting Authority may inspect the Project installation on or before the Day of Commissioning in accordance with the Scope of Work of the RFP.

3.15.3. If physical inspection not completed prior to the Day of Commissioning, Nodal Agency or Inspecting Authority may conduct the physical inspection within one month from the Date of Commissioning. However, it is to clarify that physical inspection of the Project is sole discretion of the Nodal Agency, but it is not the mandatory condition to issue the Commissioning Certificate of the Project unless mentioned explicitly.

3.15.4. The Contractor(s) shall have to demonstrate that the Project is capable of Generating Minimum Guaranteed Generation for three (3) continuous Days for showcasing the successful Commissioning of Project.

*Minimum Guaranteed Generation considering seasonal variations:*

<b>January</b>	3.04
<b>February</b>	3.53
<b>March</b>	4.29
<b>April</b>	4.39
<b>May</b>	4.58
<b>June</b>	4.08
<b>July</b>	2.94
<b>August</b>	3.09
<b>September</b>	3.27
<b>October</b>	3.68
<b>November</b>	3.42
<b>December</b>	2.89

3.15.5. The Contractor shall submit the output of RMS for the period of three (3) continuous Days including the day of Commissioning (Performance Monitoring Period) in support

of Minimum Guaranteed Generation, adjusted for seasonality as tabulated above. During the Performance Monitoring Period, Contractor shall achieve the maximum generation for at least two (2) hours, adjusted for seasonality as tabulated above.

- 3.15.6. For the Project (both off-grid and grid-connected), RMS is mandatorily installed/ data-logger should be built in PCU/inverter, as applicable, to record various parameters on hourly basis, which should be stored for, at least, quarterly basis.
- 3.15.7. Nodal Agency shall monitor the performance of the Project during the Performance Monitoring Period based on the data available through RMS. Further, Contractor(s) shall provide the necessary login ID and password of the system to the Nodal Agency prior to the date of Commissioning. Furthermore, Contractor(s) shall ensure the internet connectivity during the Performance Monitoring Period of the Project so that RMS work accurately and generation and performance of the Project can be measured by Nodal Agency.
- 3.15.8. However, in case of no network availability at the Project site which was communicated to Nodal Agency as per the provision above, Nodal Agency or the Inspecting Authority visit the site prior to completion of Performance Monitoring Period. Further, in such cases, the self-certified data of Performance Monitoring Period shall be submitted by the Contractor to the Nodal Agency. Thereafter, Nodal Agency shall issue the Commissioning Certificate based on the self-certified data by the Contractor duly counter-signed by the Beneficiary and the inspection report of Nodal Agency or its Inspecting Authority. In such cases, physical inspection is must for issuance of Commissioning Certificate.
- 3.15.9. It is to clarify that RMS should be installed with all the Projects; it should not be contingent on availability of network. Further, in case network is reached to such site during the five (5) Years of Comprehensive O&M, Contractor shall be responsible for providing necessary connection to start the RMS and make it operational for remaining period of Comprehensive O&M.
- 3.15.10. In case performance of the Project during the Performance Monitoring Period is unsatisfactory, Nodal Agency may ask the Contractor to take corrective measures to ensure the performance of the Project. Based on the corrective measure taken by the Contractor, Nodal Agency shall undertake a performance review of the said Project within ten (10) Days from the intimation on the corrective measures taken by the Contractor. Accordingly, Nodal Agency shall issue the Commissioning Certificate based on satisfactory corrective measures undertaken by the Contractor and performance of the Project.
- 3.15.11. Comprehensive O&M period of five (05) Years of the Project shall start from the date of issuance of Commissioning Certificate for the Project. Nodal Agency shall not have any role beyond the five (5) Years of Comprehensive O&M period under this RFP.

- 3.15.12. In future, when Centralized Monitoring Center (CMC) of the Nodal Agency will be developed, it will be the responsibility of the Contractor to provide support in establishing technical handshake between the data RMS system and the CMC, while ensuring uninterrupted connectivity at the same time. The Contractor shall ensure that the data from RMS should be accessible to Centralized Monitoring Center of Nodal Agency. All types of communication protocol will be as per relevant latest IEC standard which works on TCP/IP based communication. Here the primary data information should be directly sent to Nodal Agency.
- 3.15.13. For the purpose of measuring CUF:
- a. Nodal Agency may inform to Contractor about the parameters as per Clause 8.11.3. The Contractor shall submit the data collected by the data-logger/ RMS to the Nodal Agency on quarterly basis during the CMC period, within fifteen (15) Days from the end of each quarter, which would be analyzed to ensure desired level of performance.
  - b. The data shall be recorded and provided in a common work sheet chronologically. The data file shall be MS Excel compatible. The data collection should conform to the applicable RS and IEC communication protocols. Moreover, the Contractor should ensure that the data is not proprietary or restrictive in nature and is provided to the Nodal Agency, as and when required.
  - c. The Contractor shall ensure and shall have no objection to provide access to RMS system for data acquisition and monitoring the performance of Project(s) by Nodal Agency. The Contractor shall ensure that the connectivity of the Project with the Centralized Monitoring Centre of Nodal Agency is uninterrupted at all times during O&M period and shall make all necessary arrangements for the same. The Contractor must ensure the functionality of the RMS system for the duration of the O&M period. Nodal Agency or its authorized agency reserves right to validate the authenticity of such data for which Contractor shall extend full access and its cooperation.
- 3.15.14. During the Comprehensive O&M period, the Contractor shall maintain a CUF of fifteen percent (15%) for each year of the Contract Period. In the event of annual CUF falling below fifteen percent (15%), except for the period of force majeure event and the period during which Project is not working due to Beneficiary's default including but not limited to theft and damage of the Project, a penalty for an amount equivalent to product of loss in annual generation in kWh and applicable energy charges during the solar hours applicable to the Beneficiary shall be claimed by the Nodal Agency after the completion of a particular Year. The applicable energy charges during solar hours payable by the Beneficiary shall be based on tariff determined by the MPERC Tariff Order determined for that particular year plus Electricity Duty and cess, but not Fuel Charge Adjustment. For illustration purposes following example can be referred:-

*Assuming that a system of 1 kW has been installed, Minimum expected CUF of 15%*

would generate 1314 kWh. If the project achieves a CUF of 14% in first year of operation, then the generation would be 1226.4 kWh. In this case the loss in generation would be 87.60 kWh (1314-1226.4). If the Energy charge during solar hours for the Beneficiary's consumer category is Rs. 5.0 /kWh then the penalty shall be Rs. 438.

3.15.15. Nodal Agency reserves the right to recover above penalty(ies) as mentioned in clause above. Nodal Agency may issue the tax invoice for recovering the penalty from the Contractor for all the Project in each Project Group. If it is not recoverable from payments due to Contractor, settlement shall be made as per Clause 7.3.

3.15.16. In case, the CUF of the Project is below 7.5% in any of the contract year, Nodal Agency reserves the right to terminate the Contract and forfeit the O-PBG. Nodal Agency may also recover the amount, if any shortfall, from the other sources including O-PBG of other Projects.

3.15.17. In case of delay in Commissioning for reasons not attributable to Contractor (e.g. arrears of Beneficiary, load enhancement/ reduction delay by Beneficiary, Force Majeure etc.), Nodal Agency shall provide suitable extension without levying any penalty. However, for Commissioning of the Projects, Contractor is intact to demonstrate performance as per Clause 3.15 of RFP. Contractor shall not be accountable or liable to incur any extra cost or/and effort to demonstrate performance of full Project as per Work Order.

### 3.16. COMPREHENSIVE OPERATION AND MAINTENANCE (COMPREHENSIVE O&M)

3.16.1. The Comprehensive O&M of solar PV system shall include maintenance due to wear, tear, overhauling, machine breakdown and replacement of defective modules, invertors / Power Conditioning Unit (PCU), battery, spares, consumables & other parts for a period of five (5) Years from **Commissioning** of the Project.

3.16.2. The performance of the Project supplied, installed & commissioned along with additional work shall be under Warranty by the Contractor for a period of minimum five (5) Years from the date of **Commissioning** of Project at site. However, solar module shall have warranty of twenty-five (25) Years from the date of supply of solar modules for the Project.

3.16.3. During the course of aforesaid five (5) Years of Comprehensive O&M, the Contractor(s) will operate and maintain the Projects. The Contractor will have to arrange all required instruments, tools, spares, components (including battery as applicable per se battery life), manpower and other necessary facilities at his own cost. The Contractor has to ensure proper arrangements for periodic cleaning of panels in order to maintain the requisite performance expectations.



3.16.4. The Contractor shall be required to do Preventive Maintenance and submit the signed quarterly Preventive Maintenance report FORMAT 16: PREVENTIVE MAINTENANCE REPORT, within fifteen (15) Days from the end of the each quarter. Preventive Maintenance Report shall be certified by the Contractor and Beneficiary. Further, Contractor shall be required to submit the signed reports as per quarterly to Nodal Agency through e-mail and hard copy.

3.16.5. The Contractors are advice to ensure a maximum expected turnaround time of seven (7) Days for any major fault in the project (under special circumstances, additional time limit may be considered) due to which 50% of the Project is non-operational. Up to seven (7) Days, only generation related penalty shall be levied. However, delay in turnaround time beyond seven (7) Days would be considered non-compliance related to operation and maintenance responsibility of the Contractor. Under this, Nodal Agency shall levy an additional penalty of Rs. Twenty (20) per kW per day. Nodal Agency shall raise a tax invoice for levying penalty on the Contractor. Nodal Agency may take necessary action as per Clause 7.3.

Further, if the outage of the Project is more than sixty (60) continuous Days, then the 50% O-PBG amount shall be encashed by Nodal Agency. If the outage is exceedingly more than ninety (90) continuous Days, then the 100% of O-PBG amount shall be encashed by Nodal Agency and Nodal Agency reserves the right to terminate the Contract. Further, Nodal Agency shall appoint agency for Comprehensive O&M at the cost of the Contractor. This will be applicable for entire period of contract of O&M as per the Scope of the RFP.

3.16.6. Any supplies which have not been specifically mentioned in this RFP but which are necessary during construction or Comprehensive O&M period of the Project shall be provided by the Contractor without any extra cost and within the time schedule for efficient and smooth construction and Comprehensive O&M of the Project.

### **3.17. CONTRACTOR'S DEFECT LIABILITY**

3.17.1. If it shall appear to the Nodal Agency that any supplies have been executed with unsound, imperfect on skilled workmanship, or with materials of any inferior description not as per Work Order(s), the Contractor shall forthwith rectify or remove and replace that item so specified and provide other proper and suitable materials at its own charge and cost if so desired by Nodal Agency in writing.

3.17.2. The Contractor shall also be undertaking the operation and maintenance of the Project and consequently shall be required to rectify any defects that emerge during the operation & maintenance of the Project for the entire term of the Contract.

3.17.3. Furthermore, without prejudice to the generality of the foregoing, it is clarified that the Contractor shall also be responsible for the repair, replacement or making good of any

defect, or of any damage to the project arising out of or resulting from improper operation or maintenance of the Project by the Contractor during operation and maintenance of the system.

**3.18. OPENING OF BID**

3.18.1. Technical bid of the Bidder shall be opened at the time mentioned in Key Dates indicated in this RFP or as per the Corrigendum issued for this RFP on MP Tenders portal and website of Nodal Agency.

**3.19. RIGHT TO WITHDRAW THE RFP AND TO REJECT ANY BID**

3.19.1. This RFP may be withdrawn or cancelled by the Nodal Agency at any time without assigning any reasons thereof. In such cases, submitted Bid Security will be returned to all respective Bidders. The Nodal Agency further reserves the right, at its complete discretion, to reject any or all of the Bids without assigning any reasons whatsoever and without incurring any liability on any account.

3.19.2. The Nodal Agency reserve the right to interpret the Bid submitted by the Bidder in accordance with the provisions of the RFP and make its own judgment regarding the interpretation of the same. In this regard the Nodal Agency shall have no liability towards any Bidder and no Bidder shall have any recourse to the Nodal Agency with respect to the selection process.

3.19.3. Nodal Agency reserves its right to vary, modify, revise, amend or change any of the terms and conditions of the RFP before Bid Deadline. The decision regarding acceptance of Bid by Nodal Agency will be full and final.

**3.20. ZERO DEVIATION**

3.20.1. This is a zero-deviation bidding process. Bidder is to ensure compliance of all provisions of the RFP and submit their Bid accordingly. Bid with any deviation to the RFP conditions shall be liable for rejection without any explanation.

**3.21. EXAMINATION OF BID DOCUMENT**

3.21.1. Before submission of Bid, Bidder is required to carefully examine the technical specification, terms and conditions of RFP/ Contract, and other details relating to envisaged work as per the RFP.

3.21.2. The Bidder shall be deemed to have examined the RFP and Contract, to have obtained information on all matters whatsoever that might affect the execution of the Project activity and to have satisfied himself as to the adequacy of his Bid. The Bidder shall be

deemed to have known the full scope, nature and magnitude of the work and related supplies and the requirements of material and labor involved etc. and as to all supplies he has to complete in accordance with the RFP.

3.21.3. Bidder is advised to submit the Bid on the basis of conditions stipulated in the RFP. Bidder's standard terms and conditions, if any for what-so-ever reasons, will not be considered. The cancellation / alteration / amendment / modification in RFP shall not be accepted by Nodal Agency and shall invite rejection of such Bid(s).

3.21.4. Bid not submitted as per the instructions to Bidder is liable to be rejected. Bid shall confirm in all respects with requirements and conditions referred in this RFP or its amendments, if any.

### **3.22. TAXES AND DUTIES**

The Financial Bid submitted by Bidder should be exclusive of GST, but inclusive of all other taxes (if any) and duties. Further, Contractor shall be entirely responsible for license fees and any other costs, including duties and taxes (excluding GST). It is clarified that no Change in Law or price escalation will be allowed on account of any statutory increase in or fresh imposition of taxes and duties, except GST, Bidders are advised to take into consideration any such escalations in the prevailing taxes/levies/duties (except GST), GST shall be payable as applicable.

### **3.23. PROGRESS REPORT**

3.23.1. Project specific work completion timeline shall be as specified in respective Work Order(s), depending upon type, size and location of Project. Nodal Agency will have the right to depute his/their representatives to ascertain the progress of Contract at the premises of work of the Contractor.

### **3.24. PROJECT INSPECTION AND HANDOVER**

3.24.1. The Project progress will be monitored by Nodal Agency and the Projects will be inspected for quality at any time on or before Commissioning or within three (3) Months from the Commissioning of the Project either by Nodal Agency or Inspecting Authority. Nodal Agency may also depute third party technical person(s) for inspection, third party verification, monitoring of Projects installed to oversee the implementation as per required standards and also to visit the manufactures' facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required.

3.24.2. Contractor shall be required to handover the Project to the Beneficiary within thirty (30)

Days from the Commissioning of the Project. In case of delay in Handover of the Project due to Contractor's default, Insurance cost related to the Project including theft shall be borne by the Contractor. However, In case of delay in Handover of the Project due to Beneficiary default including delay in getting insurance of the Project, Contractor shall not be obligated to insure the Project after thirty (30) Days from the Commissioning.

### **3.25. FORCE MAJEURE**

3.25.1. For purpose of this RFP, force majeure shall mean an event beyond the control of the Contractor and not involving his fault or negligence and not foreseeable, in its contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restriction, fright embargoes and site clearance etc. Whether a force majeure situation exists or not, shall be decided by Nodal Agency and its decision shall be final and binding on the Contractor and all other concerned.

3.25.2. In the event that the Contractor is not able to perform his obligations under this Contract on account of force majeure, he will be relieved of his obligations during the force majeure period.

3.25.3. If a force majeure situation arises, the Contractor shall notify Nodal Agency in writing promptly, not later than three (3) Days from the date such situation arises (in case, communication is not possible to Nodal Agency, Contractor shall notify Nodal Agency not later than 1 Day from the Day when communication system will be restored). The Contractor shall notify Nodal Agency not later than three (3) Days of cessation of force majeure conditions. After examining the cases and associated facts, Nodal Agency shall decide and grant suitable additional time for the completion of the work, if required.

3.25.4. Failure of such bidder in timely intimating Nodal Agency will suspend its right for any relief otherwise eligible under such force majeure conditions.

### **3.26. VALIDITY & TERMINATION OF CONTRACT**

3.26.1. Contract shall be valid for Contract Validity Period. Nodal Agency may extend Contract Validity Period for a period of up to four (4) Months with formal consent from the Contractor(s) with same terms and condition of this RFP and Contract. Further, Nodal Agency also reserves the right for execution of additional works above Indicative Capacity for any/ all Project Groups as per Clause 2.2 but not more than 2.5% over and above the Indicative Capacity.

3.26.2. The Nodal Agency may terminate the Contract in the event of occurrence of following events:-

a. At any instance, if it is discovered that the Contractor has used sub-standard

material/system components in execution of the work (in variance with the standards and specifications under this RFP);

- b. If, in the opinion of the Nodal Agency, the Contractor fails to complete the work within the time specified in the Work Order or within the period for which extension has been granted by Nodal Agency to the Contractor, subject to the provisions of Clause 3.14.2.
- c. If the Contractor fails to furnish or replenish Bid Security or O-PBGs within specified time as per provisions of this RFP.
- d. If the number of cancelled or terminated work is ten or more, as per Clause 3.14.5.
- e. If in the opinion of Nodal Agency, the Contractor fails to comply with any of the provisions of this Contract.

3.26.3. Subject to the provisions of Clauses, if the Contractor is found unable to commission the given Projects within specified time period mentioned in Work Order issued for that Project including the extensions, Nodal Agency will be free to purchase the balance goods from elsewhere with a notice to the Contractor and carry out the work, but at Contractor's cost and risk through a separate Work Orders. The goods or any part thereof which the Contractor has failed to supply or if not available, the best and nearest available substitute thereof, shall be purchased and work executed by the Nodal Agency. Any loss or damage that the Nodal Agency may sustain due to such failure on the part of the Contractor, recovery of such loss or damage shall be made from any payment payable to the Contractor.

3.26.4. However, Contractor should be responsible for clearing the site with existing installations, remove all the material and provide the roof in the condition in which it was initially provided to them before start of works within one (1) Month from the termination of works. In case, Contractor fails to clear the 100% site and provide the site in the condition which was before the start of work, Nodal Agency has right to remove the material at the cost of Contractor.

3.26.5. In case of termination of the Contract, the Contractor shall be responsible for fulfilling all obligations required for Commissioning and Comprehensive O&M having attained completion. In case Contractor did not fulfil the obligations, Nodal Agency shall forfeit Bid Security and/or O-PBG of that Project. If additional cost required by Nodal Agency to complete the remaining works, Nodal Agency is authorised to forfeit Bid Security and/or O-PBG related to other Projects and complete the works through another Contractor or Qualified Bidder. In case, recovered amount is not sufficient to complete the works, Nodal Agency may take necessary legal actions to recover the amount.

### 3.27. APPLICABLE LAW

3.27.1. The Contract shall be interpreted in accordance with the laws of India.

**3.28. SETTLEMENT OF DISPUTE**

3.28.1. If any dispute of any kind whatsoever arises between Nodal Agency and the Contractor in connection with or arising out of the Contract including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, the parties shall seek to resolve any such dispute or difference by mutual consent.

3.28.2. If the parties fail to resolve, such a dispute or difference by mutual consent, within forty-five (45) Days of its arising, then the dispute shall be referred to the Competent Authority. Competent Authority shall resolve the matter within forty-five (45) Days from the dispute registered with Competent Authority.

3.28.3. Appeal against the order of the Competent Authority can be referred within thirty (30) Days to the Appellate Authority. Appellate Authority shall resolve the matter within forty-five (45) Days from the dispute registered with Appellate Authority.

3.28.4. If a Party is not satisfied with the decision of Appellate Authority, the dispute shall be referred by either party by giving notice to the other party in writing of its intention to refer to arbitration conducted under the provisions of the “Madhya Pradesh Madhyastham Adhikaran Adhiniyam, 1983”. The decision of MP Madhyastha Adhikaran Adhiniyam shall be final and binding up on the parties. The language of the arbitration proceedings and that of the documents and communications between the parties shall be English. All the disputes will be settled in the High Court of MP. No arbitration proceedings will commence unless such notice is given.

3.28.5. Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree.

3.28.6. Cost of arbitration shall be shared between the Contractor and Nodal Agency as per the award of the arbitration.

3.28.7. If any dispute of any kind whatsoever arises between Beneficiary and the Contractor in connection with or arising out of the Contract including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, the parties shall seek to resolve any such dispute or difference by mutual consent. If the issue is not resolved through mutual consent, either party can refer the case to the Nodal Agency. The decision of the Nodal Agency shall be binding.

**3.29. LANGUAGE**

3.29.1. All documents, drawings, instructions, design data, calculations, operation, maintenance and safety manuals, reports, labels and any other data shall be in Hindi/ English

Language. The Contract and all correspondence between the Nodal Agency and the Bidder shall be in Hindi/ English language.

**3.30. REMOVAL OF DIFFICULTIES/ CLARIFICATION ON RFP**

3.30.1. After the execution of Contract, in case Contractor or Nodal Agency has raised an issue/ concern regarding applicability/ operability of any Clause due to which the Project encounters obstacles like:

- a. Delay in construction/ operation of the Project; or
- b. Release of payment/ bank guarantees (Bid Security/ O-PBG); or
- c. Assessment of performance of the Project; or
- d. Contradiction among two Clauses/ provisions of the RFP or Work Order; or
- e. Non-submission of documents/ details/ reports due to change in regulatory/ policy requirement; or
- f. Any other issue related to successful construction/ operation of the Project.

Competent Authority have rights to resolve such issues amicably to fill the gap in the RFP document for successful Commissioning and completion of five (5) Years of Operation of the Project. However, it is to clarify that this Clause is for removal of difficulties in the RFP document related to successful Commissioning and completion of five (5) Years of Operation of the Project.

**3.31. OTHER CONDITIONS**

3.31.1. Successful Bidder has to obtain all the necessary approvals/Consents/Clearances required for design, engineering, supply, installation, testing and commissioning including Comprehensive O&M of the Project including connectivity to the licensee's network. Nodal Agency will extend possible cooperation to Contractor in this regard. However, the Contractor shall be solely responsible for obtaining such approvals/consents/clearances.

3.31.2. The Contractor shall not transfer, assign or sublet the work in whole under the Contract pursuant to this RFP or any substantial part thereof to any other party.

3.31.3. All the relevant test certifications must be kept valid up to the period of the contract (as applicable).

3.31.4. Contractor shall be obligated to comply with all the relevant Acts/ Regulations/ Rules including but not limited to Contract Act, Building and Other Construction Workers (Regulation of Employment and Condition of Services) Act, Child Labour (Prohibition and Regulation) Act, etc.,. Nodal Agency may take necessary action against the

Contractor including termination who fails to comply with the norms under the related Acts/ Regulations/ Rules.

**3.31.5.AMENDMENT**

Nodal Agency reserves the right to modify, amend or supplement RFP documents including all formats and annexures at least three Days before Bid Submission End Date except in case of amendment/modification required in Bid Submission End Date. Interested and Eligible Bidder(s) are advised to follow and keep track of Nodal Agency website for updated information. No separate notifications will be issued for such notices/ amendments/ clarification etc. in the print media or individually. Nodal Agency shall not be responsible and accountable for any consequences to any party.

**3.31.6.SUCCESSORS AND ASSIGNS**

In case the Nodal Agency or Contractor may undergo any merger or amalgamation or a scheme of arrangement or similar re-organization and this Contract is assigned to any entity partly or wholly, the Contract shall be binding mutatis mutandis upon the successor, entities and shall continue to remain valid with respect to obligation of the successor, entities.

**3.31.7.SEVERABILITY**

It is stated that each paragraph, clause, sub-clause, schedule or annexure of this contract shall be deemed severable, and, in the event of the unenforceability of any paragraph, clause sub-clause, schedule or the remaining part of the paragraph, clause, sub-clause, schedule annexure & rest of the contract shall continue to be in full force and effect.

**3.31.8.PRICE PREFERENCE**

There is no relaxation in terms of any conditions of the RFP or Processing Fee or Bid Security or O-PBG for any private company or State or Central company/agency.

**3.31.9.TAX EXEMPTIONS**

Nodal Agency will extend possible cooperation to Contractor in availing any tax exemptions. However, the responsibility of availing any such exemptions, if any, would rest with the Contractor.



**3.31.10. INSPECTION AND AUDIT BY THE NODAL AGENCY**

- a. The Nodal Agency may inspect the progress of work, if so required, at any time.
- b. Nodal Agency shall have the right to inspect the goods to confirm their conformity to the technical specifications at the works of Contractor. In addition to this, and in accordance with the directives of MNRE, New Delhi, the Nodal Agency/Authorised representative of Nodal Agency may pick a sample of Project component on random basis and have it tested on the cost of the Nodal Agency. Third party inspection of the Projects may be performed by Nodal Agency at its own cost. However, in case, any discrepancy is found during third party inspection, then Contractor shall be liable to incur all costs for removing/rectifying the defects identified as a result of such inspection.

**3.31.11. FRAUD AND CORRUPTION**

- a. The Bidders, suppliers and contractors and their subcontractors under the contracts are required to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this, the Nodal Agency:
  - I. Defines, for the purpose of this provision, the terms set forth below as follows:
    - (i) **“corrupt practice”** is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
    - (ii) **“fraudulent practice”** is any act or omission, including a misrepresentation, that knowingly or recklessly misleads or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
    - (iii) **“collusive practice”** is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
    - (iv) **“coercive practice”** is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
    - (v) **“obstructive practice”** is
      - aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Nodal Agency’s investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation;

**or**

- ab) acts intended to materially impede the exercise of the Nodal Agency's inspection and audit rights.
- II. will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;
- III. will sanction a firm or individual, including declaring ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a contract; and
- IV. will have the right to require that the provision be included in Bidding Documents and in contracts, requiring Bidders, suppliers, and contractors and their sub-contractors to permit the Nodal Agency to inspect their accounts and records and other documents relating to bid submission and contract performance and to have them audited by auditors appointed by the Nodal Agency.

**3.31.12. DEBARRED/ BLACKLIST FROM PARTICIPATING IN NODAL AGENCY'S TENDER**

Nodal Agency reserves the right to carry out the performance review of each Bidder from the time of submission of Bid onwards. In case it is observed that a Bidder has not fulfilled its obligations in meeting the various timelines envisaged, in addition to the other provisions of the RFP, such Bidder may be debarred or blacklisted from participating in Nodal Agency's any future tender/ RFP for a period as decided by the Competent Authority unless specifically mentioned in the RFP. In case of Consortium/ Joint Venture, any debarment or blacklisting shall be applicable for all the members of the Consortium/ Joint Venture.

## **SECTION-II**

### **BID EVALUATION AND WORK ALLOCATION**

#### **4. BID EVALUATION**

4.1. The evaluation process comprises the following four steps:

- a. Step I-Responsiveness check of Technical Bid
- b. Step II-Evaluation of Bidder's fulfilment of Eligibility Criteria described in Section-I
- c. Step III-Evaluation of Financial Bid
- d. Step IV-Selection of Successful Bidder

#### **4.2. RESPONSIVENESS CHECK OF TECHNICAL BID**

4.2.1. The Technical Bid submitted by Bidder shall be scrutinized to establish responsiveness to the requirements laid down in the RFP. Any of the following may cause the Bid to be considered "Non-responsive" and liable to be rejected, at the sole discretion of Nodal Agency, subject to sufficient justification:

- a. Bid not submitted in prescribed format;
- b. Bid that are incomplete, i.e. not accompanied by any of the applicable formats;
- c. Bid not accompanied by contents as mentioned in Clause 3.8.1;
- d. Bid not signed by authorized signatory and /or stamped in the manner indicated in this RFP;
- e. Material inconsistencies in the information /documents submitted by the Bidder affecting the Eligibility Criteria;
- f. Information not submitted in the formats specified in this RFP;
- g. Bid being conditional in nature;
- h. Bid not received by the Bid Deadline;
- i. Bid having conflict of interest;
- j. Bidder makes any misrepresentation;
- k. Any other act of Bidder which may be unlawful for the purpose of this RFP;
- l. Bid submitted is not in requisite format(s);

4.2.2. Each Bid shall be checked for compliance with the submission requirements set forth in this RFP before the evaluation of Bidder's fulfilment of Eligibility Criteria is taken up.

#### **4.3. EVALUATION OF BIDDER'S FULFILMENT OF ELIGIBILITY CRITERIA**

4.3.1. Evaluation of Bidder's Eligibility will be carried out based on the information furnished by the Bidder as per the prescribed formats and related documentary evidence in support of meeting the Eligibility Criteria as specified in RFP. Non-availability of information and related documentary evidence for the satisfaction of Eligibility Criteria as per the RFP may cause the Bid to be non-responsive.

#### **4.4. EVALUATION OF FINANCIAL BID**

4.4.1. All Bidder qualifying Eligibility Criteria (including Technical and Financial Eligibility Criteria) shall be placed as equal. Technical qualification is must for a Bidder to become eligible for assessment on Financial Bid.

4.4.2. Financial Bid of the Eligible Bidder shall be opened online, on date as may be intimated by Nodal Agency to the Bidder through MP tender's website/Nodal Agency's website or E-mail. The evaluation of Financial Bid shall be carried out based on the rates furnished. The Financial Bid submitted by the Bidder shall be scrutinized to ensure conformity with the RFP. Any Bid not meeting any of the requirements of this RFP may cause the Bid to be considered "Non-responsive".

4.4.3. In case a Bidder submitted Technical and Financial Bid for more than one Project Group but, after the Technical and Financial evaluation, the Bidder does not qualify for the Project Group for which Technical and Financial Bid was submitted. In such cases, Bid to be considered as a technically disqualified and Bid of such Bidder shall be summarily rejected.

#### **5. SUCCESSFUL BIDDER(S) SELECTION AND WORK ALLOCATION:**

5.1. Bid qualifying in as per Eligibility Criteria shall only be evaluated in this stage.

5.2. All Bidder qualifying Eligibility Criteria shall be placed as equal. Technical qualification is must for a Bidder to become eligible for assessment on financial criteria.

5.3. For each Project Group, Eligible Bidder shall be ranked from the lowest to the highest based on the Financial Bid submitted by the Bidder. The Eligible Bidder quoting the lowest rate for a particular Project Group shall be the highest ranked (L1 bidder) for that Project Group.

5.4. The rate quoted by L1 Bidder (L1 rate) shall be the discovered rate for that Project Group. Nodal Agency shall shortlist maximum five (5) Successful Bidder(s)/ Contractors for each Project Group.

5.5. Nodal Agency shall invite the Bidders with financial quote below or equal to 10% of the L1 rate of the Project Group (110% of L1 rate) to match the L1 rate in the sequence of Eligible Bidders prepared in Clause 5.3. Nodal Agency shall continue inviting Eligible Bidders who financial quote is below or equal to 10% of the L1 rate of the Project Group until Nodal Agency shortlist the five (5) Eligible Bidders who agrees to

match L1 rate.

- 5.6. In case, the number of Eligible Bidders agrees to match L1 rate is less than five (5) in any Project Group, Nodal Agency has right to invite the Bidders with financial quote above 10% of the L1 rate (115% of L1 rate) but below or equal to 15% of the L1 rate of the Project Group (115% of L1 rate) for matching the L1 rate in the sequence of Qualified Bidders prepared in Clause 5.3.
- 5.7. Eligible Bidder(s) of each Project Group separately, maximum upto five (5), agrees to match L1 rate shall be termed as L1, L2, L3, L4, L5 and L5 Qualified Bidders for given scope of work.
- 5.8. In a situation where two or more Eligible Bidders have quoted the same rate, they shall be offered to become Qualified Bidder by matching L1 rate in the order of their decreasing turnover. It means that the Eligible Bidder with the highest turnover shall be given preference and subsequently the remaining Eligible Bidders would be asked to match L1 until five (5) Qualified Bidders are not selected. In case two or more Eligible Bidders have quoted the same rate and their turnover is also the same (up to zero decimal digit only), then the Nodal Agency shall offer to match the L1 rate to the Eligible Bidder who has submitted the final bid first. It is to clarify that time stamping as per tender portal shall be considered for offering Eligible Bidder to match the L1 rate.
- 5.9. **THE WORK ALLOCATION FOR ALL THE PROJECT GROUPS SHALL BE AS UNDER**

Allotment of works within a Project Group shall also be subject to following provisions:

- a. The works shall be allotted to L1, L2, L3, L4 and L5 Successful Bidders at L1 rate approved by the Nodal Agency for the relevant Project Group as per the percentage indicated above.
- b. For each project Group separately, LOA shall be issued to the L1, L2, L3, L4 and L5 Qualified Bidders.
- c. Based on Beneficiary requests received by Nodal Agency, Work Order(s) shall be issued to the L1, L2, L3, L4 and L5 Successful Bidders on First in First Out (FIFO) basis. Work Order(s) shall be initially issued to L1 Successful Bidder for the aggregate Project Capacity of 300 kW (deviation of upto 5% is allowed) followed by Work Order shall be issued to L2 to L5 Successful Bidders for aggregate Project Capacity of 210 kW (deviation of upto 5% is allowed) to each Successful Bidder (L2 to L5).
- d. Once the works allocated to each Successful Bidder as per above Clause in round one, Nodal Agency shall follow the above process repeated for issuance of Work

Orders (300 kW to L1 Successful Bidder and 210 kW to remaining Successful Bidders in each round) till the Indicative Capacity exhausted.

- e. In case Successful Bidder fails/ delays the commissioning of the allotted works in previous Work Order(s), Nodal Agency may reduce the allocation capacity in subsequent round of work allotment up to the capacity for which Projects are not commissioned.
- f. Further, in case Successful Bidder fails/ delays the commissioning of the allotted works awarded in Work Order(s) allotted in previous rounds unless delays/ failures in commissioning are on account of Beneficiary(s) default, Nodal Agency may reduce the cumulative allocation capacity in subsequent round of work allotment up to the capacity for which Projects have not commissioning.

*Illustration:*

*Assuming Project Group D has Indicative Capacity of 10,000 kW. In accordance with work allocation scheme given above, Projects aggregating to capacity of 300 kW (5% deviation is allowed) shall be awarded to L1 Successful Bidder and capacity of 210 kW shall be awarded to other Successful Bidder (L2 to L5).*

*After the first round of work allocation, Nodal Agency will repeat the work allotment process and allot work to L1 Bidder for 300 kW in round 2 and subsequently 210 kW to L2 to L5 Successful Bidders.*

*In case at the start of allotment process in round 1 to L1 Successful Bidder, 20 kW out of total awarded works of 300 kW to L1 Successful Bidder has not achieved commissioning (either Successful Bidder fails/ delays), Nodal Agency shall allocate only 280 kW of works L1 Successful Bidder in round 2 to ensure that Successful Bidder should have works for capacity of 300 kW. Thereafter, Nodal Agency will start allotting works to L2 and other Successful Bidders till L5.*

*In case at the start of allotment process in round 2 to L4 Successful Bidder, 30 kW out of total awarded works of 210 kW to L4 Successful Bidder has not achieved commissioning (either Successful Bidder fails/ delays), Nodal Agency shall allocate only 180 kW of works L4 Successful Bidder in round 2 to ensure that Successful Bidder should have works for capacity of 210 kW. Thereafter, Nodal Agency will start allotting works to L5 and other Successful Bidders in accordance with allotment process.*

- g. In case the number of Contractors is less than five (5), work allotment procedure remains the same. In such cases, the round of work allotment shall be increased and overall allocation of capacity out of Indicative Capacity shall be increased.

### 5.10. LETTER OF AWARD

- 5.10.1. As per timelines stipulated in this RFP, LOA shall be issued to the Qualified Bidder as per the provisions of the RFP.
- 5.10.2. If Successful Bidder fails to acknowledge the same within the stipulated time, the Nodal Agency reserves the right to annul/cancel the award of the LOA of such Successful Bidder.
- 5.10.3. Nodal Agency at its own discretion has the right to reject any or all the Bid without assigning any reason whatsoever.
- 5.10.4. The Work Order of a single or multiple Projects shall consist of a single rate for Supply, Erection, Commissioning and Comprehensive O&M. There shall not be any further bifurcation.
- 5.10.5. Nodal Agency at its own discretion has the right to cancel/annul the Contract any time without assigning any reason whatsoever. In such cases, Contract Validity period and discovered rate of this RFP will expire at that time only, further nodal agency after adjustment, if any, will return the applicable submitted Bid Security to the respective Bidder/ Contractor.

### 5.11. **PROJECT CAPACITY REVISION / RESIZING:**

- 5.11.1. Within thirty (30) days from the award of Work Order, the Contractor shall undertake Site Survey, assess free capacity of the concerned DT and analyze last twelve (12) Months of electricity bills (at least six (6) Months) received from the beneficiary. The Contractor shall submit a survey report (techno-commercial feasibility report) which shall contain the following:
- Technical feasibility based on the shadow free space available;
  - Commercial feasibility considering the load profile and applicable regulations;
  - Technical Minimum consumption obligation as per retail tariff order of MPERC;
  - Any additional cost related to civil/ electrical works.

In case of any delay in submission of survey report and letter of request (if required as per below clause), Contractor shall be responsible and no extension in Commissioning timeline shall be granted by the Nodal Agency unless Contractor has informed about the challenges related to access to site within fifteen (15) Days from the issuance of Work Order.

- 5.11.2. If there is a change in a Project's capacity from that as indicated in the Work Order, Contractor shall submit a "letter of request" for change in Capacity (if any, with due analysis) to Nodal Agency, copying the Beneficiary. The capacity of the Project may increase or decrease subject to Nodal Agency's approval on analysis submitted by the Contractor.

5.11.3. In case the revised capacity is approved, the Nodal Agency shall communicate the same in writing to the Contractor and the Beneficiary, within fifteen (15) Days from date of submission of “letter of request” for change in capacity. Further, Beneficiary shall confirm the revision in Project Capacity within fifteen (15) Days from the receipt of Nodal Agency’s letter. In case of any delay in Nodal Agency and/ or Beneficiary’s response related to Contractor’s proposal, day to day extension in Commissioning timeline shall be granted by the Nodal Agency to the Contractor.

5.11.4. In case the project lies under the same Project Group after revision:

- a. In case approved survey report suggested the increase in the Project Capacity, Nodal Agency shall take necessary approval from the Beneficiary and accordingly Nodal Agency shall communicate the same to the Contractor.
- b. Non-fulfilment of the above clause shall be considered as refusal to execute the Work Order and Clause 3.14 shall be applicable.

5.11.5. In case the project shifts to a lower Project Group after revision:

- a. In case approved survey report suggested the decrease in the Project Capacity due to which Project shift to the lower Project Group, Nodal Agency shall take necessary approval from the Beneficiary and accordingly Nodal Agency shall communicate the same to the Contractor.
- b. Nodal Agency shall communicate the same to all the Successful Bidder of that lower Project Group.
- c. The work allocation will be done considering work proportion as per Clause 5.9.
- d. The Successful Bidder(s) of that Project Group shall be required to submit Bid Security as per Clause 3.12. It should reach to the office of nodal agency within ten (10) days from the date of allocation by the MPUVNL to contractor. After receipt of Bid Security, Nodal Agency shall issue a new Work Order to the Contractor and the project site shall be removed from the previous Work Order.
- e. Non-fulfillment of the above clause shall be considered as refusal to execute the Work Order, Clause 3.14 shall be applicable.

5.11.6. In case the project shifts to a higher Project Group after revision:

- a. In case approved survey report suggested the increase in the Project Capacity due to which Project shift to the lower Project Group, Nodal Agency shall take necessary approval from the Beneficiary and accordingly Nodal Agency shall communicate the same to the Contractor.
- b. Nodal Agency shall communicate the same to the all the Successful Bidder of that higher Project Group.
- c. The work allocation will be done considering work proportion as per Clause 5.9 .



- d. The Contractor shall be required to submit Bid Security as per Clause 3.12. It should reach to the office of nodal agency within ten (10) days from the date of allocation by the MPUVNL to Contractor. After receipt of Bid Security, Nodal Agency shall issue a new Work Order to the Contractor and the project site shall be removed from the previous Work Order.
  - e. Non-fulfillment of the above clause shall be considered as refusal to execute the Work Order, Clause 3.14 shall be applicable.
- 5.12. In case of any delay in confirmation from the Beneficiary on above Clauses, Nodal Agency has right to take necessary actions including cancellation of Work Order on account of Beneficiary's default.
- 5.13. As per timelines stipulated in this RFP, Letter of Award (LOA) shall be issued to the Qualified Bidder as per the provisions of the RFP.
- 5.14. If Successful Bidder fails to acknowledge the same within the stipulated time, the Nodal Agency reserves the right to annul/cancel the award of the LOA of such Successful Bidder.
- 5.15. Nodal Agency at its own discretion has the right to reject any or all the Bid without assigning any reason whatsoever.
- 5.16. The Work Order shall consist of a single rate for Supply, Erection, Commissioning and Comprehensive O&M. There shall not be any further bifurcation.
- 5.17. Nodal Agency at its own discretion has the right to cancel/annul the Agreement any time without assigning any reason whatsoever. In such cases, Contract Validity period and discovered rate of this RFP will expire at that time only, further Nodal Agency after adjustment (if any) will return the applicable submitted bid security to the respective contractors.

**SECTION III  
SCOPE OF WORK**

**6. DETAILS OF WORKS**

- 6.1. RFP envisages projects aggregating to Twenty Six (26) MW as per Clause 2.2 of RFP. The Indicative Capacity for each Project Group mentioned in Clause 2.2 of RFP. However, the actual capacity of the work order(s) may vary depending on the requests received by the Nodal Agency from the Beneficiaries.
- 6.2. Designing, engineering, supply, installation, testing, completion and commissioning including insurance of various capacities of Project as per standard design and specifications of MNRE and connecting up to existing Mains/ACDB and interfacing internal electrical loads of Project with licensee's network/electrical loads. The scope of work shall also include:
  - 6.2.1. Transferring product warranty to Beneficiary as per standard terms and conditions of original equipment manufacturers (OEMs) of panel/ cell, inverter, cable etc.
  - 6.2.2. Ensuring Comprehensive O&M for period of five (05) Years as per Clause 3.16 of RFP and submit CMC Report as per FORMAT 16: PREVENTIVE MAINTENANCE REPORT
  - 6.2.3. Apply and follow up for approval of interfacing, if required, the Project with Grid/Electrical Loads, as applicable, of concerned location from distribution licensee, with lead support and primary ownership of Beneficiary.
  - 6.2.4. Take up related civil and electrical works (as per site requirement) as per Clause 2.5 of RFP.
  - 6.2.5. Procuring and maintaining insurance as per Clause 6.7 of this RFP.
- 6.3. **THE SCOPE OF WORK SHALL ALSO INCLUDE THE FOLLOWING**
  - 6.3.1. The Contractor shall be required to produce detailed system design and drawing supported with requisite test reports of the system components before commencement of work, the proposed make & capacities of the component should be in accordance with requisite technical standards of MNRE/RFP Document, and should be supported with required test reports.
  - 6.3.2. Within thirty (30) Days from the award of Work Order, Contractor is required to submit the Net-Metering application to the concerned DISCOMs for grid connected Beneficiary and follow up for approval of every location from distribution licensee, with lead support and primary ownership of Contractor.
  - 6.3.3. A layout plan of the site should be submitted to the Inspecting Authority clearly indicating the identified location for installation of SPV modules & control room,

where batteries & control panels shall be installed.

- 6.3.4. Detailed planning of time bound smooth execution of Project.
- 6.3.5. Procurement and installation of net-meter/ smart meter, as applicable, and its associated cost, generation meter (AC or DC as applicable), CEIG (Chief Electrical Inspectorate General) charges for Projects above 100 kW and transformer, as applicable shall be paid to the Contractor by the Nodal Agency based on the rates approved by the concerned DISCOM. Beneficiary is liable to make payment to the Nodal Agency for such procurement and installations.
- 6.3.6. Works mentioned in Clause 2.5 would not be a part of the financial bid.
- 6.3.7. The Contractor must demonstrate performance as per Clause 3.15.
- 6.3.8. The Bidder has to quote Project Cost (INR) considering structure height of 1 meter (from the centre of the mounting table).
- 6.3.9. Coverage of risk liability of all personnel associated with implementation and realization of the Project;
- 6.3.10. Training of at least two persons each to be nominated by Beneficiary at every Project site, on the various aspects of design and maintenance of the Project after Commissioning of the Project and shall also submit the drawings and designs of the cabling and other components.
- 6.3.11. The Contractor shall maintain sufficient inventory of the spare parts to ensure that the Project is functional during the period of warranty.
- 6.3.12. The Contractor shall run the Project on trial basis and shall closely monitor the performance of the Project before handing over the same. Nodal Agency shall examine the data of energy generation.
- 6.3.13. The Contractor shall be required to establish a well equipped Service Centre in Madhya Pradesh.

#### **6.4. INTERNAL ELECTRIFICATION**

- 6.4.1. Inspection of the existing electrical network of each of the Project site;
- 6.4.2. Inspection of the Project in respect of its interfacing with licensee network/identified electrical load;
- 6.4.3. Preparation and submission of electrical drawing for the site with quantity of material required;
- 6.4.4. Obtaining prior approval of the additional work from the Beneficiary along with additional cost;

- 6.4.5. Execution of the work in accordance with the norms and regulation directives for testing and Commissioning of the Project to the satisfaction of the Nodal Agency;
- 6.4.6. Any additional work, which is not covered above but is related and required to be done. These additional works shall have to be carried out as per relevant SOR's, on prior approval of Nodal Agency.

### **6.5. GRID CONNECTION**

- 6.5.1. The Contractor shall be responsible for synchronization of the Project with licensee's network under relevant regulations of MPERC/ CERC/ CEA or orders of government, as applicable.
- 6.5.2. Assessment of the additional works required such as switch gear, transformation, isolator etc.;
- 6.5.3. Submission of bill of material with estimate in accordance with prevailing SOR of DISCOMs of MP, and obtaining approval of Nodal Agency/DISCOMs whichever is applicable;
- 6.5.4. Connectivity of Project with the licensee's network.
- 6.5.5. Commissioning of the Project as applicable.

### **6.6. METERING AND GRID CONNECTIVITY**

- 6.6.1. Metering and grid connectivity of the Projects would be the responsibility of the Contractor in accordance with the prevailing guidelines of the concerned distribution licensee and/or CEA and net metering provisions in the state of MP, as applicable, with primary ownership of the process being that of Beneficiary and Contractor shall not be accountable to any delays in net metering for reasons attributable to concerned Beneficiary. Nodal Agency may facilitate in the process. The required meters (Net Meter/ Smart Meter, Generation Meter) and modem (if required) shall be procured and provided by Contractor. All the costs pertaining to net-meter/ smart meter, generation meter, etc. shall be reimbursed by Nodal Agency to Contractor based on rates approved by the concerned DISCOM. It is advised that Bidders do not include the same in their financial quote for this RFP.

### **6.7. INSURANCE:**

- 6.7.1. *Insurance during construction phase:* The Contractor shall take insurance for men and material, third party liability, covering loss of human life, engineers and workmen

and also covering the risks of damage, theft of material/ equipment/ properties. Contractor shall ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or death arising out of the execution of the work. It is to clarify that Contractor shall be responsible for Insurance till handover of Project to the Beneficiary.

6.7.2. **Insurance during operations and maintenance phase:** Post Commissioning and handover of the Project(s), the Beneficiary of the Project(s) shall be responsible for insurance of the installed system/materials and balance of system, including insurance for risks due to theft or damage. However, Contractor shall ensure that all its employees and representatives, including any third-party manpower are covered by suitable insurance against any damage, loss, injury or death arising during any maintenance activities, and/or preventive maintenance activities of the installed Project.

**6.8. WARRANTY AND GUARANTEES:**

6.8.1. The Bidder shall warrant that the goods supplied under this Contract are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials as per standards specified in the technical specifications of this RFP. The Contractor shall provide warranty covering the rectification and replacement, if required, of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of five (05) Years from the date of Commissioning.

6.8.2. The responsibility of operation of warranty and guarantee clauses and claims/settlement of issues arising out of said clauses shall be responsibility of the Contractor and Nodal Agency will not be responsible in any way for any claims whatsoever on account of the above.

**6.9. TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP:**

6.9.1. The design, engineering, manufacture, supply, installation, testing, completion, Commissioning and performance of the equipment shall be in accordance with latest/appropriate IEC/Indian Standards as detailed in the technical specifications of this RFP or its subsequent amendments. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE/ CEA/ electricity regulators/ Nodal Agency shall be used. All the relevant test certifications must be kept valid up to the period of the contract (as applicable).

6.9.2. The specifications of the components should meet the technical specifications mentioned in this RFP or its subsequent amendments.

6.9.3. Nodal Agency may at its option, replace or rectify such defective materials and / or

work and recover the extra cost so involved from the Contractor plus fifteen (15) percent service charges of the cost of such rectification, from the Contractor and / or terminate the Contract for balance work/ supplies with enforcement of penalty as per Agreement.

**6.10. CONSTRUCTION OF BATTERY BANK/CONTROL ROOM ETC. (AS PER SITE REQUIREMENT)**

6.10.1. Assessment of requirement for construction of battery/control room or any other relative civil work essential for completion of Project;

6.10.2. Contractor shall obtain prior approval of the work, drawing and estimate from Nodal Agency;

6.10.3. Taking up and completion of the required such additional civil and electrical works as per specification and norms indicated in the respective items of Schedule of Rates (SOR); The Beneficiary will bear the cost of construction of battery/control room as per the SOR. However, actual cost towards such execution shall be reimbursed by Nodal Agency to Contractor from advance fund made available by Beneficiary.

**6.11. PROVISION OF SIGN BOARD AND LIGHTENING ARRESTOR**

6.11.1. Contractor will have to provide sign board of dimension 5'x2' (M.S. sheet size 2'x3' of 16 gauge, M.S. angle 40x40x5 mm with essential bracing & adequate grouting with PCC 1:3:6 i/c painting & writing) at each site with complete specification & matter will be provided to the Contractor with Agreement.

6.11.2. The provision for lighting arrestor shall be mandatory.

**6.12. REQUISITE CERTIFICATIONS**

6.12.1. **Commissioning Certificate:** After Commissioning of the Project, the Nodal Agency shall issue Commissioning certificate to the Contractor, in accordance with all applicable regulations/policies and after submission of Meter Sealing Report/Charging of net metering by the Contractor and CEIG approval (as applicable). Toward this, following shall be broadly observed:

- a. Requirements under Clause 6.6 have been fulfilled and performance in terms of Clause 3.15. Contractor shall submit the request for issuance of Commissioning certificate with the signed Installation Report from the Beneficiary within seven (7) Days from Performance Monitoring Period.
- b. Based on Installation Report submitted by the Contractor and the data from RMS (in case of no connectivity at site, data logger report and inspection report by Nodal

Agency/ Inspecting Authority), Nodal Agency shall issue the Commissioning certificate.

**6.13. EXTENSION IN COMPREHENSIVE MAINTENANCE OF SYSTEMS**

6.13.1. After completion of five (5) Years of O&M of the installed systems under this RFP, the Contractor and Nodal Agency will be able to extend the duration of Comprehensive O&M of systems as decided through mutual Contract on negotiations held between the Nodal Agency and the Contractor.

## **SECTION IV**

### **TERMS AND CONDITION FOR PAYMENT**

#### **7. PAYMENT TERMS:**

- 7.1. **Payment on Commissioning:** 100% of Project cost shall be paid on Commissioning of Project, entailing the following points:
- 7.1.1. Submission of documents in support of systems performance criteria as per Clause 3.15 including RMS report of Performance Monitoring Period.
  - 7.1.2. In case, connectivity is not available at Project site, inspection report of Nodal Agency or its Inspecting Authority and the data of data-logger for the Performance Monitoring Period.
  - 7.1.3. Appropriate Bills along with Challan in Duplicate.
  - 7.1.4. Commissioning Certificate along with Installation Report signed by the Contractor and Beneficiary and counter signed by Inspection Authority of the Nodal Agency. In case of Off-Grid, Completion Certificate shall be submitted along with Installation Report signed by the Contractor and Beneficiary and counter signed by Inspection Authority of the Nodal Agency.
  - 7.1.5. Geo-tagged colored photograph of SPV Array, Battery Bank (if applicable), PCU/Inverter (as applicable), meters with unique serial number, final SLD, MPPT wise string details of modules, layout plan approved by Nodal Agency and sign board, original Bills along with Measurement Book (“MB”), for all additional electrical & civil works executed (if any).
  - 7.1.6. In case of grid connected projects Commissioning Certificate for the Projects as per provisions of Clause 6.12.1 or disposal slip/ meter replacement document issued by concerned DISCOM.
  - 7.1.7. Copy of Insurance of the Project and premium receipts.
  - 7.1.8. A certificate from A-class electrical licensee or contractor / supervisor certifying that the electrical internal/external electrical work carried out is in accordance with the norms of electrical safety standards, if applicable.
  - 7.1.9. Copy of Warranty and Guarantee of major components of the Project like module, controller/ PCU/ Inverter, battery, etc.,.
  - 7.1.10. Submission of required O-PBG of 20% of Project cost.
  - 7.1.11. Self-certified list of serial no. of SPV modules used in the system.
  - 7.1.12. Handover of the Project to the Beneficiary.



- 7.1.13. Undertaking on DCR modules used in the Project as per MNRE.
- 7.1.14. Self-certified Final SLD and Layout of the Project.
- 7.1.15. Self-certified List of serial No. of SPV Modules used in the Project.
- 7.1.16. Relevant prescribed formats shall be shared with Contractor at the time of issuance of Work Order.
- 7.1.17. Self-certified IV Curves and original flash test report of SPV modules issued by OEM.
- 7.2. Applicable Taxes shall be deducted at source.
- 7.3. **RECOVERY OF PENALTY AND/OR LIQUIDATED DAMAGES**
- 7.3.1. Nodal Agency shall recover/ adjust LD/penalty from any payments due on the Contractor. If recovery/ adjustment is not possible from payments due, Nodal Agency may raise a tax invoice for the same.
- 7.3.2. In case Contractor fails to make 100% payment against the tax invoice, within fifteen (15) Days from the issuance of tax invoice, Nodal Agency shall forfeit available Bid Security/ O-PBG against the concerned Work Order.
- 7.3.3. In case, if recovery/ adjustment of LD/ penalty is not possible against payment due or concerned Bid Security/ O-PBG, it shall be done against any Bid Security/ O-PBG of the Contractor with Nodal Agency with respect to any other work given by Nodal Agency.
- 7.3.4. In case Bid Security or O-PBG is utilized, partly or fully, towards recovery/ adjustment of LD/ penalty, the same shall be replenished to its original value with the original validity period within seven (7) Days of written communication from Nodal Agency. In case Contractor fails to replenish Bid Security or/and O-PBG to the original value, Nodal Agency has right to take necessary action against the Contractor, as Nodal Agency deem fit appropriate.

## **SECTION V**

### **TECHNICAL PARAMETERS**

The proposed Projects shall be completed as per the technical specifications given below. The participants are hereby advised to take a note of the guidelines issued by MNRE in respect of minimum technical requirements, quality standards, best practices and specifications for off-grid and grid connected roof top PV systems in addition to technical parameters mentioned in this RFP and comply accordingly. Projects installed under this RFP must adhere to the technical specification, testing procedure and construction standards specified by the BIS and MNRE.

A Grid Connected and Off-Grid Roof Top Solar PV Projects shall consist of following equipment/components:

- a. Solar Photo Voltaic (SPV) modules
- b. Inverter or PCU consisting of Maximum Power Point Tracker (MPPT)
- c. Battery with Charge Controller (for battery based systems)
- d. Module Mounting structures with a suitable structure of 1-1.5 meter height from the centre of the mounting table
- e. Energy Meter (Net Meter and/or Generation Meter, as applicable)
- f. Array Junction Boxes
- g. DC Distribution Box
- h. AC Distribution Box
- i. Protections – Earthing, Lightning, Surge
- j. Cables
- k. Drawing & Manuals
- l. Miscellaneous

### **8. TECHNICAL SPECIFICATIONS**

#### **8.1. PARAMETERS:**

8.1.1. A Project consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker (MPPT), charge controller (if required), Inverter, Controls & Protections, interconnect cables and switches. PV Array should be mounted on a suitable structure. Project may be with or without battery and should be designed with necessary features to synchronize with the grid power. Components and parts used in the Project including the PV modules, metallic structures, cables, junction box, switches, PCUs etc., should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

8.1.2. All Components/ equipments should conform to the BIS or IEC or international specifications, wherever such specifications are available and applicable.

- 8.1.3. Contractors shall be required to comply with MNRE's ALMM (Approved List of Models and Manufacturers of Solar Photovoltaic Modules) in line with the respective orders in this regard released by MNRE from time to time.
- 8.1.4. Solar Modules should be "Made in India" only and also Solar Cells that are used to make those Solar Modules should also be "Made in India" i.e. Contractor must use only those Solar Modules which fulfills "Domestic Content Requirement" as per MNRE.
- 8.1.5. All the equipment to be used in the project should be "Made in India" only including Lithium Ferro Phosphate batteries/cells.

### **8.2. SOLAR PHOTOVOLTAIC (PV) MODULE**

- 8.2.1. As per the MNRE order dated 6th September 2019, eligible models and manufacturers of solar PV cells and modules complying with BIS standards shall be included in ALMM. In compliance with the directives, contractors shall be required to procure solar PV modules from manufacturers indicated in the ALMM list. Thus, the Contractors will have to ensure adherence to this order and its subsequent amendment. However, in case the list is not released by MNRE on or before the issuance of Work Order for a site, contractors shall be permitted to procure from the supplier/vendor whose modules are adhering to the prevailing MNRE standards, certification requirements and guidelines.
- 8.2.2. Solar Modules should be "Made in India" only and also Solar Cells that are used to make those Solar Modules should also be "Made in India" i.e. contractor must use only those Solar Modules which fulfills "Domestic Content Requirement" scheme of MNRE in the Project.
- 8.2.3. The PV modules used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286. In addition, the modules must conform to IEC 61730 Part-1-requirements for construction & Part 2 – requirements for testing, for safety qualification or equivalent IS.
- 8.2.4. For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/IS 61701. The total solar PV array capacity should not be less than allocated capacity (kWp) and should comprise of solar crystalline modules of minimum 500 Wp and above wattage. Module capacity less than minimum 500 Wp should not be accepted.
- 8.2.5. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.

- 8.2.6. PV modules must be tested and approved by one of the IEC authorized test centers. The module frame shall be made of corrosion resistant materials, having Pregalvanized/ anodized Aluminium or superior material (after approval from MNRE).
- 8.2.7. The Contractor shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his Bid.
- 8.2.8. Other general requirement for the PV modules and subsystems shall be the following:
- a. The rated output power of any supplied module shall have tolerance of +3%.
  - b. The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.
  - c. The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for provision of by-pass diode. The box shall have hinged, weather proof lid with captive screws and cable gland entry points or may be of sealed type and IP-65 rated.
  - d. I-V curves at STC should be provided by Contractor.
- 8.2.9. Modules deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each module (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).
- a. Name of the manufacturer of the PV module
  - b. Name of the manufacturer of Solar Cells.
  - c. Month & year of the manufacture (separate for solar cells and modules)
  - d. Country of origin (for solar cells)
  - e. I-V curve for the module Wattage,  $I_m$ ,  $V_m$  and FF for the module
  - f. Unique Serial No and Model No of the module
  - g. Date and year of obtaining IEC PV module qualification certificate.
  - h. Name of the test lab issuing IEC certificate.
  - i. Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001
- 8.2.10. General Technical Parameter are given hereunder:
- a. The capacity of Solar PV Module should not be less than: 500 Wp
  - b. The PV modules should be made up of crystalline silicon solar cells and must

have a certificate of testing conforming to IEC 61215 Edition II / BIS 14286 from NABL or IECQ accredited Lab.

- c. Only indigenous solar module with minimum efficiency of 19% and a fill factor of more than 75% are allowed.
- d. The terminal box on the module should have a provision for opening, for replacing the cable, if required.

### 8.2.11. Quality and Warranty:

- a. The PV module(s) will be warranted for a minimum period of 25 Years from the date of supply. PV Modules must be warranted for their output peak watt capacity, which Should not be less than 90% at the end of ten (10) Years and 80% at the end of Twenty-five (25) Years.
- b. Material Warranty: The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a Period as specified in MNRE guidelines from the date of Commissioning and following to be ensures:
  - i. Defects and/or failures due to manufacturing
  - ii. Defects and/or failures due to quality of materials
  - i. Nonconformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the manufacturer will replace the solar module(s)
- c. The manufacturer should warrant the solar module(s) to be free from the defects and/or failures specified below for a period not less than five (5) Years from the date of sale to the Contractor. The Warranty Card to be supplied with the system must contain the details of the system. The manufacturers can also provide additional information about the system and conditions of warranty as necessary.
- d. Each PV module deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each module. (This can be inside or outside the laminate but must be able to withstand harsh environmental conditions).
- e. Performance Warranty: The predicted electrical degradation of power generated not exceeding 20% of the minimum rated power over the 25-year period and not more than 10% at the end of tenth (10<sup>th</sup>) year of the full rated original output.

8.2.12. Module supply date should not older than the issuance date of LOA to the Contractor.

### 8.3. BATTERY: LITHIUM FERRO PHOSPHATE (LFP) BATTERY

8.3.1. The battery should be Lithium Ferro Phosphate (LiFePO<sub>4</sub>) having given capacity. The

other feature of battery should be:

<b>Battery Type</b>	LiFePO4
<b>Working temperature range (both for charging &amp; discharging)</b>	20 - 60 °C
<b>Allowed Cell Voltages</b>	3.2 V, 3.6 V, 3.8 V (apart from these voltages of cells, permission from MPUVNL shall be required)
<b>Type of Cell</b>	Prismatic or Cylindrical

- 8.3.2. The nominal voltage and capacity of the storage bank shall be selected and specified by the supplier in the bid. Storage cell / batteries should conform to any of the latest applicable standard of IEC 62619 / IEC 62133 / IEC 61427 / IEC 62281 / IS 16805 / IS 16046 as per specifications. Batteries shall be in conformance with applicable BIS and MNRE standards.
- 8.3.3. The self-discharge rate of the battery bank or individual cell shall not exceed three (3) percent per month.
- 8.3.4. The battery must have a life of more than 2,000 cycles.
- 8.3.5. The battery must be operating/ running successfully for 5 years during the CMC period and the responsibility lies with the Contractor including replacement, if required.
- 8.3.6. The permitted maximum depth of discharge (DOD) shall not be less than 80%.
- 8.3.7. The battery should be placed at safe location inside the room and should be placed inside suitable battery enclosure with battery stand.
- 8.3.8. It should have a very good battery management system to ensure the proper charging and discharging of each cell of battery with proper protection of battery when temperature is reaching beyond battery permissible limits.
- 8.3.9. All the connectors should be insulated except for the end portions.
- 8.3.10. Batteries shall be in conformance with applicable BIS and MNRE standards.
- 8.3.11. The Lithium iron phosphate battery needs a very good “Battery Management System” BMS to ensure the proper charging and discharging of each cell of battery with proper

protection of battery when temperature is reaching beyond battery permissible limits. This battery also needs constant current and constant voltage charging methodology related to upper voltage limit of battery. BMS primary focus is therefore on the safety and the protection of the battery, to minimize the risk of sudden failure and to maximise the life cycle of the battery.

8.3.12.

8.3.13. The secondary function of the BMS is to perform battery diagnostics, such as state of charge (SOC) estimation, state of health (SOH) estimation and state of power (SOP) estimation. Hence a very good battery management system to be incorporated and got it tested with battery from MNRE/NABAL/IEC accredited lab as per IEC/BIS standard. IEC 62133, IEC 61960 & UL 1642 : SAFETY OF LIFEPO4 BATTERY.

8.3.14. It should have a very good battery management system to ensure the proper charging and discharging of each cell of battery with proper protection of battery when temperature is reaching beyond battery permissible limits.

8.3.15. All the connectors should be insulated except for the end portions.

8.3.16. **BATTERY RACK:** Battery rack should be of matured treated Salwood duly painted single tier or two tier (if required) or epoxy coated MS structure with rubberized coating on battery runners. Placement of battery should be such that maintenance of the battery could be carried out easily. Battery rack should compulsorily be placed on the appropriate rubbers pads to avoid the contact of racks with the floor, and to protect wooden rack particularly from termite.

#### 8.4. **ARRAY STRUCTURE:**

8.4.1. Hot dip galvanized MS/ Pre-galvanized/ Anodized Aluminium or superior material (after approval from MNRE) mounting structures may be used for mounting the modules/ panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum insulation. However, to accommodate more capacity the angle inclination may be reduced until the Project meets the specified performance ratio requirements.

8.4.2. The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a Project is proposed to be installed (for minimum wind speed of 150 km/hour). Suitable fastening arrangement that do not require drilling in rooftops should be adopted to secure the installation against the specific wind speed.

8.4.3. The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4759.

8.4.4. Structural material shall be corrosion resistant and electrolytically compatible with the

materials used in the module frame, its fasteners, nuts and bolts. Aluminium structures also can be used, that can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided either by coating or anodization.

- 8.4.5. The fasteners used should be made up of stainless steel. The structures shall be designed to allow easy replacement of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the output from the SPV panels
- 8.4.6. Regarding civil structures the Contractor need to take care of the load bearing capacity of the roof and need arrange suitable structures based on the quality of roof. The total load of the structure (when installed with PV modules) on the terrace should be less than 60 kg/m<sup>2</sup>.
- 8.4.7. The minimum clearance of the structure from the roof level should be 300 mm.

### 8.5. JUNCTION BOXES (JBs) BASED ON SYSTEM DESIGN REQUIREMENTS:

- 8.5.1. The junction boxes are to be provided in the PV array for termination of connecting cables. The J. Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminium/cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.
- 8.5.2. Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP65 standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry. Single / double compression cable glands with provision of earthings. It should be placed at 5 feet or suitable height for ease of accessibility.
- 8.5.3. Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups.
- 8.5.4. Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification.

### 8.6. DC DISTRIBUTION BOARD BASED ON SYSTEM DESIGN REQUIREMENTS:

- 8.6.1. DC Distribution panel to receive the DC output from the array field.
- 8.6.2. DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. The bus bars are made of copper of desired size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors.

### 8.7. AC DISTRIBUTION PANEL BOARD:



- 8.7.1. AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- 8.7.2. All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- 8.7.3. The changeover switches, isolators, cabling work should be undertaken by the Contractor as part of the project.
- 8.7.4. All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air - insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50 Hz.
- 8.7.5. The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- 8.7.6. All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- 8.7.7. Should conform to Indian Electricity Act and rules (till last amendment).
- 8.7.8. All the 415 AC or 230 volts devices / equipment like bus support insulators, circuit breakers, SPDs, VTs etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions:

Variation in supply voltage	+/- 10 %
Variation in supply frequency	+/- 3 Hz

**8.8. PCU/ARRAY SIZE RATIO:**

- 8.8.1. The combined AC wattage of all inverters should not be less than rated capacity of Project under STC.
- 8.8.2. Maximum power point tracker shall be integrated in the PCU/inverter to maximize energy drawn from the array.

**8.9. PCU/ Inverter:**

- 8.9.1. As SPV array produce direct current electricity, it is necessary to convert this direct current into alternating current and adjust the voltage levels to match the grid voltage. Conversion shall be achieved using an electronic Inverter and the associated control and protection devices. All these components of the Project are termed the "Power Conditioning Unit (PCU)". In addition, the PCU shall also house MPPT (Maximum Power Point Tracker), an interface between Solar PV array & the Inverter, to the

PCU/inverter should also be DG set interactive. The PCU should also have provision of charge controller in case of systems with battery backup. Inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

- Switching devices: IGBT/MOSFET
  - Control Microprocessor /DSP
  - Nominal AC output voltage and frequency: 415V, 3 Phase, 50 Hz (In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)
  - Output frequency: 50 Hz
  - Grid Frequency Synchronization range: + 3 Hz or more
  - Ambient temperature considered: -20o C to 50o C
  - Humidity: 95 % Non-condensing
  - Protection of Enclosure: IP-20(Minimum) for indoor: IP-65(Minimum) for outdoor.
  - Grid Frequency Tolerance range: + 3 or more
  - Grid Voltage tolerance: - 20% & + 15 %
  - No-load losses: Less than 1% of rated power
  - Inverter efficiency(minimum): >98% (In case of 10kWp or above)
  - Inverter efficiency (minimum): > 90% (In case of less than 10 kWp)
  - THD: < 3%
  - PF: > 0.9
- a. Three phase PCU/ inverter shall be used as required.
  - b. PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
  - c. The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power; inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
  - d. Built-in meter and data logger to monitor Project performance retrievable through external computer shall be provided.
  - e. The power conditioning units/inverters should comply with applicable IEC/ equivalent BIS standard for efficiency measurements and environmental tests as

- per standard codes IEC 61683/IS 61683 and IEC 60068- 2(1,2,14,30)/Equivalent BIS Std.
- f. The charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS standard. The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.
  - g. The PCU/ inverters should be tested from the MNRE approved test centres/NABL/BIS/IEC accredited testing-calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.
  - h. The PCU/inverters shall conform to the MNRE guidelines for series approval of solar PV inverters for conducting testing in test labs for implementation of solar photovoltaic systems, devices and component goods order, 2017 and subsequent guidelines issued by MNRE dated 9<sup>th</sup> April 2019.

### 8.10. INTEGRATION OF PV POWER WITH GRID:

8.10.1. For better grid interaction and functioning of Project with energy storage, the following arrangement shall be ensured by Contractor:

- a. Battery shall be placed between solar panel and load. The PCU should be programmed for pre-alarm depth of discharge of 70% and maximum DoD of 80%, when, if not recharged, the battery's supply to load shall stop. PCU and energy storage system must be configured in such a way that the moment energy storage system's DoD reaches 70%, it should get connected to power mains to draw power to charge itself.
- b. Project should have appropriate instruments installed at solar panel output, PCU, battery and load to facilitate minute-wise recording and storage of monthly data (voltage, current, generation, consumption and grid injection) for twelve (12) months of energy flow at various nodes.
- c. In case of network failure, or low or high voltage, Project shall go under islanding mode but not be out of synchronization so far as its operation with connected load is concerned. The supply from Project to the load points would be resumed from its battery bank or once the DG set comes into service, Project shall again be synchronised with DG supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid/ DG power connection need to be provided.
- d. The Project commissioned under the Madhya Pradesh Policy for Decentralized Renewable Energy Systems, 2016 as amended from time to time, shall be provided with reverse protection relays in order to prevent reverse flow of active

power into the Grid. The relay and devices used for such arrangement shall be of relevant standards.

**8.11. DATA ACQUISITION SYSTEM / PROJECT MONITORING:**

8.11.1. Data Acquisition System shall be provided for each of the solar PV Project. RMS is mandatory for all the Projects along with necessary internet connectivity.

8.11.2. Data Logging Provision for Project control and monitoring, time and date stamped system data logs for analysis computer for data monitoring, metering and instrumentation for display of systems parameters and status indication to be provided.

8.11.3. The following parameters should be accessible via the operating interface display in real time separately for Project:

- a. AC Voltage
- b. AC Output current.
- c. Output Power
- d. Power factor
- e. DC Input Voltage
- f. DC Input Current
- g. Time Active
- h. Time disabled
- i. Time Idle
- j. Power produced
- k. Protective function limits (Viz-AC Over voltage, AC Under voltage, Over frequency, Under frequency ground fault, PV starting voltage, PV stopping voltage).

8.11.4. All major parameters available on the digital bus and logging facility for energy auditing through the internal microprocessor and read on the digital front panel at any time) and logging facility (the current values, previous values for up to a year and the average values) should be made available for energy auditing through the internal microprocessor and should be read on the digital front panel.

8.11.5. String and array DC Voltage, Current and Power, Inverter AC output voltage and current (All 3 phases and lines), AC power (Active, Reactive and Apparent), Power Factor and AC energy (All 3 phases and cumulative) and frequency shall be monitored.

8.11.6. The data shall be recorded in a common work sheet chronologically date wise. The data file shall be MS Excel compatible. The data shall be represented in both tabular

and graphical form.

8.11.7. All instantaneous data should be available through RMS.

8.11.8. Software shall be provided for USB download and analysis of DC and AC parametric data for individual Project.

8.11.9. Provision for Internet monitoring and download of data shall be necessarily incorporated for all Projects.

8.11.10. Remote Monitoring and data acquisition through Remote Monitoring System software with latest software/hardware configuration and service connectivity for online / real time data monitoring/control complete to be supplied and Comprehensive O &M/control to be ensured by the supplier. Provision for interfacing these data on Nodal Agency server and portal in future shall be kept.

**8.12. TRANSFORMER “IF REQUIRED”**

8.12.1. Dry/oil type appropriate kVA, of transformer Step up along with all protections, switchgears, Vacuum circuit breakers, cables etc. along with required civil work.

8.12.2. The Contractor must take approval/NOC from the concerned distribution licensee for the connectivity, technical feasibility, and synchronization of Project with distribution network and submit the same to Nodal Agency before Commissioning of Project.

8.12.3. Reverse power relay shall be provided by Contractor (if necessary), as per the local distribution licensee’s requirement.

**8.13. POWER CONSUMPTION:**

8.13.1. Regarding the generated power consumption, priority needs to be given for internal consumption first and thereafter any excess power can be exported to the distribution licensee network.

**8.14. PROTECTIONS:**

The Project should be provided with all necessary protections like earthing, Lightning, and grid islanding as follows:

**8.14.1. LIGHTNING PROTECTION**

The SPV power Project shall be provided with lightning & overvoltage protection of appropriate size. The main aim in this protection shall be to reduce the over voltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors. Lightning protection should be provided as per IEC 62305 standard. The protection against induced high-voltages shall be provided by the use of metal oxide varistors (MOVs) and suitable earthing such that induced transients find

an alternate route to earth.

**8.14.2. SURGE PROTECTION:**

Internal surge protection shall consist of three MOV type surge-arrestors connected from +ve and –ve terminals to earth (via Y arrangement).

**8.14.3. EARTHING PROTECTION:**

Each array structure of the PV yard should be grounded/ earthed properly as per IS:3043-1987. In addition, the lighting arrester/masts should also be earthed inside the array field.

Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential.

**8.14.4. GRID ISLANDING:**

In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as “islands.” Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Project shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided.

A manual disconnection of pole isolation switch, besides automatic disconnection to grid would have to be provided at utility end to isolate the grid connection by the utility personnel to carry out any maintenance. This switch shall be locked by the utility personnel.

**8.15. CABLES:**

8.15.1. Cables of appropriate size to be used in the Project shall have the following characteristics:

- a. Shall meet IEC 60227/IS 694, IEC 60502/IS 1554 standards
- b. Temp. Range: –10oC to +80oC.
- c. Voltage rating 660/1000V
- d. Excellent resistance to heat, cold, water, oil, abrasion, UV radiation
- e. Flexible
- f. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop (power loss) of the entire Project to the minimum. The cables (as per IS) should be insulated with

a special grade PVC compound formulated for outdoor use.

- g. Cable Routing/ Marking: All cable/wires are to be routed in a GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable easily identified.
- h. The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. twenty-five (25) years.
- i. The ratings given are approximately, Contractor to indicate size and length as per system design requirement. All the cables required for the Project provided by the Contractor. All cable schedules/layout drawings approved prior to installation.
- j. Multi Strand, Annealed high conductivity copper/aluminium conductor PVC type 'A' pressure extruded insulation or XLPE insulation. Overall PVC/XLPE insulation for UV protection Armored cable for underground laying. All cable trays including covers to be provided. All cables conform to latest edition of IEC/ equivalent BIS Standards as specified below: BOS item / component Standard Description Standard Number Cables General Test and Measuring Methods, PVC/XLPE insulated cables for working Voltage up to and including 1100 V, UV resistant for outdoor installation IS /IEC 69947.
- k. The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2%.
- l. The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.

8.15.2. All such external electrical works shall be required to be done as per DISCOMs SOR.

### 8.16. CONNECTIVITY

8.16.1. The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code/Supply Code of the State and amended from time to time. The work should be done in compliance with respective regulations and policy.

8.16.2. Further, all the cost related to augmentation of transformer/distribution network shall be borne by the consumers as per the prevailing regulations and any subsequent amendments thereof.

8.16.3. For Project (Above 100 kW) for installations having large load, the solar power can be generated at low voltage levels and stepped up to 11 kV level through the step-up transformer. The transformers and associated switchgear would require to be carried out by the Contractor as per DISCOMs SOR.

### 8.17. NET METER AND GENERATION METER

8.17.1. **Net Meter** – Each grid connected solar rooftop systems shall be connected to a bi-

directional meter (net meter) capable of recording import and export of energy. The net meter shall conform to the latest and applicable standards for net meter as per Madhya Pradesh Policy for Decentralized Renewable Energy Systems, 2016 and/or specifications provided in CEA Regulations and/ or Madhya Pradesh Electricity Regulatory Commission (MPERC).

8.17.2. **Generation Meter** – A Generation Meter at the Premise, as per prescribed standards, shall be installed. The generation meter shall conform to the latest and applicable standards for net meter as per Madhya Pradesh Policy for Decentralized Renewable Energy Systems, 2016 and/or specifications provided in CEA Regulations and/ or Madhya Pradesh Electricity Regulatory Commission (MPERC).

8.17.3. The net meter and generation meter will be equipped with modem as per requirement of the distribution companies and Nodal Agency.

### 8.18. **TOOLS & TACKLES AND SPARES:**

8.18.1. The requirement of maintaining tools, tackles and spares at site or at service centre is left to the discretion of the bidder with a condition that the same would be made available immediately as and when required.

8.18.2. Minimum requisite spares to be maintained by the Contractor, in case of PCU/inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Boxes, fuses, MOVs / arrestors, MCCBs etc. along with spare set of PV modules be indicated, shall be maintained at site or at nearest service centre for the entire period of Comprehensive O&M.

### 8.19. **DANGER BOARDS AND SIGNAGES**

8.19.1. Danger boards should be provided as and where necessary as per IE Act. /IE rules as amended up to date.

### 8.20. **FIRE EXTINGUISHERS**

8.20.1. The fire fighting system for the proposed Project for fire protection shall consist of portable fire extinguishers in the control room for fire caused by electrical short circuits. The installation of Fire Extinguishers should conform to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs.

### 8.21. **DRAWINGS & MANUALS**

8.21.1. Two sets of Engineering, electrical drawings and Installation and Comprehensive O&M manuals are to be supplied. Contractor shall provide complete technical data sheets for each equipment giving details of the specifications along with make/makes in their bid with basic design of the Project and power evacuation, synchronization as also protection equipment.



8.21.2. Approved ISI and reputed makes for equipment be used.

8.21.3. For complete electro-mechanical works, Contractor shall supply complete design, details and drawings to Nodal Agency.

**8.22. PLANNING AND DESIGNING**

8.22.1. The Contractor should carry out Shadow Analysis at the site and accordingly design strings & arrays layout considering optimal usage of space, material and labour. The Contractor should submit the array layout drawings along with Shadow Analysis Report to the designated authority of Nodal Agency.

8.22.2. Nodal Agency reserves the right to modify the landscaping design, Layout and specification of sub-systems and components at any stage as per local site conditions/requirements.

8.22.3. The Contractor shall submit preliminary drawing for approval & based on any modification or recommendation, if any. The Contractor shall submit one sets and soft copy in CD of final drawing for formal approval to proceed with construction work.

**8.23. SAFETY MEASURES**

8.23.1. The Contractor shall take entire responsibility for electrical safety of the installation(s) including connectivity with the grid and follow all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA/CEIG guidelines etc.

**SECTION VI**

**FORMATS FOR SUBMITTING RFP**

**FORMAT 1: COVERING LETTER**

*(The covering letter should be on the Letter Head of the Bidder/ Lead Member of Consortium/  
Joint Venture)*

**Ref. No.:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**From:** (Insert name and address of Bidder)

**Tel:** \_\_\_\_\_

**Fax:**

**Email address:** \_\_\_\_\_

**To:** \_\_\_\_\_

Additional Executive Engineer,  
Madhya Pradesh Urja Vikas Nigam Limited  
'Urja Bhawan', Link Road No. 2,  
Shivaji Nagar, Bhopal – 462016

Sub: Request for Proposal (RFP) for Standardization of Rates for work of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage capacity aggregating to about Twenty Six (26) MW at various locations in the state of MP with RFP No: \_\_\_\_\_ , Dated \_\_\_\_\_

Dear Sir,

We, the undersigned \_\_\_\_ [*insert name of the Bidder*] having read, examined and understood in detail the RFP for Request for Proposal (RFP) for Standardization of Rates for Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to about Twenty Six (26) MW at various locations in the state of MP, hereby submit our Bid comprising of Financial Bid and Technical Bid. We confirm that neither we nor any of our Affiliate has submitted Bid other than this Bid directly or indirectly in response to the aforesaid RFP.

We give our unconditional acceptance to the RFP No: \_\_\_\_\_, Dated \_\_\_\_\_, and RFP attached thereto, issued by Madhya Pradesh Urja Vikas Nigam Limited, as amended. As a token of our acceptance to the RFP, the same have been initialled by us and enclosed to the Bid.

**Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

We shall ensure that we execute such RFP as per the provisions of the RFP and provisions of such RFP shall be binding on us.

**Project Groups**

We are pleased to submit our bid for the following Groups as mentioned in table below:

Project Group	Participation* (Yes / No)	Preference #	Bidder Details		
			Company/ LLP/ Partnership Firm/ Sole – Proprietor or Consortium/ Joint Venture (Fill as applicable)	Name of the Members of Consortium/ Joint Venture (if applicable)	Participation of member of Consortium/ Joint Venture as Company/ LLP/ Partnership Firm/ Sole – Proprietor
<b>A</b>					
<b>B</b>					
<b>C</b>					
<b>D</b>					

Note:

\* Bidder shall mention ‘Yes’ corresponding to Groups it wants to bid and clearly mention ‘No’ for Groups where it does not intend to bid.

# Applicable only if Bidder participated in the Project Group

**Bid Security**

Bidder should submit Bid Security in the form of Bank Guarantee for single Project Group or multiple Project Groups. Bank Guarantee(s) details like BG Number, Date, Amount, expiry date are provided in the table below.

<b>A</b>			
<b>B</b>			
<b>C</b>			
<b>D</b>			

\*Note: Bidder shall mention ‘Yes’ corresponding to Groups it wants to bid and clearly mention ‘No’ for Groups where it does not intend to bid.

We have submitted our Financial Bid strictly as per this RFP, without any deviations, conditions and without mentioning any assumptions or notes for the Financial Bid in the said format(s).

## **Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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### **Acceptance**

We hereby unconditionally and irrevocably agree and accept that the decision made by Madhya Pradesh Urja Vikas Nigam Limited in respect of any matter regarding or arising out of the RFP shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process.

We confirm that there are no litigations or disputes against us, which materially affect our ability to fulfil our obligations with regard to execution of projects of capacity offered.

### **Familiarity with Relevant Indian Laws & Regulations**

We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this Bid and execute the RFP, in the event of our selection as Contractor. We further undertake and agree that all such factors as mentioned in RFP have been fully examined and considered while submitting the Bid.

### **Contact Person**

Details of the contact person are furnished as under:

[Redacted]	
Name	
Designation	
Company	
Address	
Phone Nos.	
Fax Nos.	
E-mail address	

We are enclosing herewith the documents as per Clause 3.8 containing duly signed formats, each one duly sealed separately, in one original as desired by you in the RFP for your consideration.

It is confirmed that our Bid is consistent with all the requirements of submission as stated in the RFP and subsequent communications from Madhya Pradesh Urja Vikas Nigam Limited. The information submitted in our Bid is complete, strictly as per the requirements stipulated in the RFP and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid. We confirm that all the terms and conditions of our Bid are valid for acceptance for a period of 180 Days from Bid Deadline. We confirm that we have not taken any deviation so as to be deemed non-responsive.

Dated the \_\_\_\_\_ Day of \_\_\_\_\_ 2024

Thanking you,

We remain,

Yours faithfully,

**Name, Designation and Signature of Authorized Person in whose name Power of Attorney/Board Resolution.**

**FORMAT 2: GENERAL PARTICULARS OF THE BIDDER**

*(To be submitted for the bidder or each member of the consortium/ Joint Venture, as applicable)\**

1	Name of the Company	
2	Registered Office Address	
3	E-mail	
4	Web site	
5	Authorized Contact Person(s) with name, designation, Address and Mobile Phone No., E-mail address/ Fax No. to whom all references shall be made	
6	Year of Incorporation	
7	Have the Bidder/Company ever been debarred By any Govt. Dept. / undertaking for undertaking any work.	
8	Reference of any documentation attached by the Bidder other than specified in the RFP.	
9	Whether the Bidder wishes to form a Project Company for execution of work	Yes/No
10	Bidder is listed in India	Yes/No
11	GSTIN No. (Copy enclosed)	
12	PAN No. (Copy enclosed)	
13	Certificate of Incorporation of Bidder/ Affiliate (as applicable) enclosed	Yes/No
14	Partnership deed or LLPF/ Sole Proprietor registration (as applicable) enclosed	Yes/No

---

(Signature of Authorized Signatory)

**With Stamp**

\*Note: Bidder shall provide incorporation certificate, partnership deed, GSTIN registration certificate, etc. and should be labelled according to the serial no. as mentioned in the table.

**FORMAT 3: SHAREHOLDING CERTIFICATE**

*(To be submitted for the bidder or each member of the consortium/ Joint Venture, as applicable)*



\_\_\_\_\_

(Signature of Authorized Signatory) With Stamp

\_\_\_\_\_

(Signature of Company Secretary/Chartered Accountant) with stamp

FORMAT 4-A: BID SECURITY

(To be stamped in accordance with Stamp Act, the Non-Judicial Stamp Paper of Appropriate Value)

Reference: .....

List No.: .....

Date: .....

In consideration of the \_\_\_\_\_ [Insert name of the Bidder] (hereinafter referred to as 'Bidder') submitting the response to RfS inter alia for \_\_\_\_\_ [Insert title of the RfP] for Project Group(s) declared in FORMAT 1: COVERING LETTER, in response to the RFP No. \_\_\_\_\_ dated \_\_\_\_\_ issued by Madhya Pradesh Urja Vikas Nigam Limited (hereinafter referred to as MPUVNL) and MPUVNL considering such response to the RFP of ..... [Insert the name of the Bidder] as per the terms of the RfP, the \_\_\_\_\_ [Insert name & address of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to MPUVNL at [Insert Name of the Place from the address of MPUVNL] forthwith without demur on demand in writing from MPUVNL or any Officer authorized by it in this behalf, any amount upto and not exceeding Rupees \_\_\_\_\_ [Insert amount], only, on behalf of M/s \_\_\_\_\_ [Insert name of the Bidder].

This guarantee shall be valid and binding on this Bank up to and including \_\_\_\_\_ [insert date of validity in accordance with RFP] and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to INR \_\_\_\_\_ (Indian Rupee \_\_\_\_\_ only).

Our Guarantee shall remain in force until \_\_\_\_\_ [insert date of validity in accordance with RFP]. MPUVNL shall be entitled to invoke this Guarantee till [insert date of validity in accordance with RFP].

The Guarantor Bank hereby agrees and acknowledges that the MPUVNL shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.



## **Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by MPUVNL, made in any format, raised at the above-mentioned address of the Guarantor Bank, in order to make the said payment to MPUVNL.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by \_\_\_\_\_ [Insert name of the Bidder] and/ or any other person. The Guarantor Bank shall ~~not require~~ MPUVNL to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against MPUVNL in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Bhopal shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly MPUVNL shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder or to enforce any security held by MPUVNL or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

This BANK GUARANTEE shall be effective only when the Bank Guarantee issuance message is transmitted by the issuing Bank through SFMS and a confirmation in this regard is received by MPUVNL.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to INR \_\_\_\_\_ (Indian Rupees \_\_\_\_\_ Only) and it shall remain in force until \_\_\_\_\_ [Date to be inserted on the basis of this RFP].

We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if MPUVNL serves upon us a written claim or demand.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

**Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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Power of Attorney No.: \_\_\_\_\_

For

\_\_\_\_\_ [*Insert Name and Address of the Bank*]

Contact Details of the Bank:

E-mail ID of the Bank:

Banker's Stamp and Full Address. Dated this Day of , 20

Witness:

\_\_\_\_\_

Signature

Name and Address \_\_\_\_\_

\_\_\_\_\_

Signature

Name and Address \_\_\_\_\_

## **Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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### **FORMAT 4-B: OPERATIONAL PERFORMANCE BANK GUARANTEE**

*(To be provided as applicable for a particular purpose in accordance with RFP)*

*(Minimum stamp of Rs 1,000 or to be stamped in accordance with Stamp Act)*

In consideration of the *[Insert name of the Bidder]* (hereinafter referred to as (Contractor) submitting the response to RFP inter alia for selection of the Request for Proposal (RFP) Standardization of rates and Selection of Contractors for Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to about \_\_\_\_ (\_\_) MW in response to the RFP No: \_\_\_\_\_, Dated \_\_\_\_\_ issued by Madhya Pradesh Urja Vikas Nigam Limited (hereinafter referred to as Nodal Agency) and Nodal Agency considering such response to the RFP of *[insert the name of the Contractor]* (which expression shall unless repugnant to the context or meaning thereof include its executers, administrators, successors and assignees) and selecting the Project of the Contractor and issuing Work Order No. \_\_\_\_ to *(Insert Name of Successful Bidder)* as per terms of RFP and the same having been accepted by the selected Project Company, M/s {a Special Purpose Vehicle (SPV) formed for this purpose}, if applicable]. As per the terms of the RFP, the *[insert name & address of bank]* hereby agrees unequivocally, irrevocably and unconditionally to pay to Nodal Agency at *[Insert Name of the Place from the address of the Nodal Agency]* forthwith on demand in writing from Nodal Agency, or any officer authorized by it in this behalf, any amount up to and not exceeding Rupees \_\_\_\_\_ [Rupees \_\_\_\_\_ (Total Value in words)] only, on behalf of M/s *[Insert name of the Contractor / Project Company]*. This guarantee shall be valid and binding on this Bank up to and including \_\_\_\_\_ *[Enter last date of validity period as per RFP]* and shall not be terminable by notice or any change in the constitution of the Bank or the term of Contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective Agreement.

Our liability under this Guarantee is restricted to Rupees \_\_\_\_\_ (both in numbers and words)

Our Guarantee shall remain in force until Nodal Agency shall be entitled to invoke this Guarantee till \_\_\_\_\_. The Guarantor Bank hereby agrees and acknowledges that Nodal Agency shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by Nodal Agency, made in any format, raised at the above-mentioned address of the Guarantor Bank, in order to make the said payment to Nodal Agency.

## **Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by *[Insert name of the Contractor]*. The Guarantor Bank shall not require Nodal Agency to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against Nodal Agency in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Bhopal shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly Nodal Agency shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the selected Contractor / Project Company, to make any claim against or any demand on the Contractor or to give any notice to the Contractor / Project Company or to enforce any security held by Nodal Agency or to exercise, levy or enforce any distress, diligence or other process against the Contractor / Project Company.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rupees \_\_\_\_\_ (Rupees \_\_\_\_\_ only) and it shall remain in force until we are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if Nodal Agency serves upon us a written claim or demand.

\_\_\_\_\_

Signature

Name

Power of Attorney No.

For

*[Insert Name of the Bank]*

*Banker's Stamp and Full Address.*

**Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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Dated this \_\_\_\_ Day of \_\_\_\_, 20\_\_

Witness:

\_\_\_\_\_

Signature

Name and Address \_\_\_\_\_

\_\_\_\_\_

Signature

Name and Address \_\_\_\_\_

**FORMAT 5-A: CHECK LIST FOR TECHNICAL BID**

**Checklist for submission of Technical Bid**

File - 1 (pdf format [online submission](#))

<b>S.No.</b>	<b>Particular</b>	<b>Format No.</b>	<b>Copy Attached (Yes/No)</b>
1.	Covering Letter	1	
2.	Bid processing Fee (Payment receipt in pdf/scan copy/screen shot/copy of proof of payment)	-	
3.	Bid Security (Bank Guarantee in requisite format)	4-A	

File -2 (pdf format [online submission](#)):

<b>S.No.</b>	<b>Particular</b>	<b>Format No.</b>	<b>Copy Attached (Yes/No)</b>
1.	General Particulars	2	
2.	Bidder's composition and ownership structure (Shareholding certificate)	3	
3.	Power of Attorney in favor of authorized signatory, on requisite value of stamp paper (To be stamped in accordance with Stamp Act).	6	
4.	Declaration for Technical Eligibility Criteria	7	
5.	Declaration for Financial Eligibility Criteria	8	
6.	Certificate of Relationship in case of Affiliate (if applicable)	9	
7.	Undertaking Form	10	
8.	Consortium/ Joint Venture Agreement	13	
9.	Power of Attorney in favour of Lead Member, if any	14	
10.	Declaration	15	
11.	Certificate of Incorporation/ GST Certificate	-	
12.	Technical Eligibility (Work order/ Contract/ Agreement for EPC works along with 5 Years of Comprehensive O&M)	-	
13.	Technical Eligibility (Work Order and Completion/ Commissioning Certificate)	-	
14.	Financial Eligibility (Annual Reports, disclosures, management notes, balance sheet, profit and loss account, cash flow statement)	-	

## Request for Proposal for Solar Roof top Projects in Madhya Pradesh

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<b>15.</b> Board Resolution in support of power of attorney in favor of authorized signatory (if applicable)	-
<b>16.</b> RFP Document Stamped and Signed along with the corrigendum and addendums along with copy of minutes of pre-bid meeting/ clarifications	-

**FORMAT 5-B: CHECK LIST FOR O-PBG**

<b>S.No.</b>	<b>Details of checks</b>	<b>YES/NO</b>
1	Is the BG on non-judicial Stamp paper of appropriate value, as per applicable Stamp Act of the place of execution	
2	Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of Stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the party on whose behalf the BG has been issued.	
3	Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG?	
4	Is each page of BG duly signed / initialled by executant and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed Performa?	
5	Does the Performance Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents?	
6	Are the factual details such as Bid Document No. / Specification No., / Work Order No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG	
7	Whether overwriting/cutting if any on the BG have been properly authenticated under signature & seal of executant?	



**FORMAT 6: POWER OF ATTORNEY**

*(Minimum stamp of Rs 1,000 or to be stamped in accordance with Stamp Act)*

Power of Attorney to be provided by the Bidder in favour of its representative as evidence of authorized signatory's authority.

Know all men by these presents, We *(name and address of the registered office of the Bidder as applicable)* do hereby constitute, appoint and authorize Mr./Ms. *(name & residential address)* who is presently employed with us and holding the position of \_\_\_\_\_ as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for Standardization of Rates and Selection of Contractors for Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to about \_\_\_\_ (\_\_\_) MW in response to the RFP No: \_\_\_\_\_, Dated \_\_\_\_\_ issued by Nodal Agency including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which the Nodal Agency may require us to submit. The aforesaid Attorney is further authorized for making representations to the Madhya Pradesh Urja Vikas Nigam Limited and providing information / responses to Nodal Agency representing us in all matters before Nodal Agency and generally dealing with Nodal Agency in all matters in connection with Bid till the completion of the bidding process as per the terms of the above mentioned in RFP.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the RFP.

\_\_\_\_\_

Signed by the within named

*(Insert the name of the executants company)*

through the hand of

Mr \_\_\_\_\_

duly authorized by the Board to issue such Power of Attorney

Dated this \_\_\_\_\_ Day of \_\_\_\_\_

**Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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Accepted

\_\_\_\_\_

Signature of Attorney

(Name, designation and address of the Attorney)

Attested

\_\_\_\_\_

(Signature of the executant)

(Name, designation and address of the executant)

\_\_\_\_\_

Signature and stamp of Notary of the place of execution

Common seal of \_\_\_\_\_ has been affixed in my/our presence pursuant to Board of Director's Resolution dated \_\_\_\_\_

WITNESS

\_\_\_\_\_

(Signature)

Name \_\_\_\_\_

Designation \_\_\_\_\_

\_\_\_\_\_

(Signature)

Name \_\_\_\_\_

Designation \_\_\_\_\_

**Request for Proposal for Solar Rooftop Projects in Madhya Pradesh**

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**FORMAT 7: TECHNICAL ELIGIBILITY CRITERIA REQUIREMENT**

(To be submitted on the letterhead of Bidder/Lead Member)

To,

Madhya Pradesh Urja Vikas Nigam Limited

\_\_\_\_\_  
\_\_\_\_\_

Bhopal

Dear Sir,

Sub: Standardization of rates and Selection of Contractors for Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to about \_\_\_\_ (\_\_\_\_) MW in response to the RFP No: \_\_\_\_\_, Dated \_\_\_\_\_

We submit our Bid for which details of Technical Eligibility Criteria Requirements\* are as follows.

[Redacted]					

Yours faithfully

\_\_\_\_\_

(Signature and stamp of Authorized Signatory of Bidder/ Lead Member)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Place: \_\_\_\_\_

\*Note: Bidder shall provide projects details with their completion and commissioning certificate attached in the same sequencing and should be labelled according to the serial no. as mentioned in the table.

**Request for Proposal for Solar Rooftop Projects in Madhya Pradesh**

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**FORMAT 8: FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT**

(To be submitted on the letterhead of Bidder/ Lead Member)

To,  
Madhya Pradesh Urja Vikas Nigam Limited

\_\_\_\_\_  
\_\_\_\_\_

Bhopal

Dear Sir,

Sub: Standardization of rates Standardization of Rates and Selection of Contractors for Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to about \_\_\_\_ (\_\_\_\_) MW in response to the RFP No: \_\_\_\_\_, Dated \_\_\_\_\_

We submit our Bid for which details of our Financial Eligibility Criteria Requirements are as follows.

Net worth/Turnover (tick as applicable) of Indian Rupees \_\_\_\_\_ Lakh computed as per instructions provided in this RFP based on standalone audited annual accounts (refer Note-1 below). The relevant financial statement for respective years shall be enclosed, duly signed by authorised signatory.

We state that, our Financial Eligibility must be evaluated on Net worth/Turnover (tick as applicable):



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*\* Refer applicable provision of RFP*

Note:

The bidders shall declare in undertaking FORMAT 10: UNDERTAKING FORM the criteria on which they fulfil the financial eligibility as per the provisions of this RFP.

Yours faithfully

\_\_\_\_\_  
(Signature and stamp of Authorized Signatory of Bidder)

Name:\_\_\_\_\_

Date:\_\_\_\_\_

## **Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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Place: \_\_\_\_\_

\_\_\_\_\_

(Signature and stamp (on each page) of Chartered Accountant/Statutory Auditors of Bidder.

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Place: \_\_\_\_\_

### **Notes:**

Audited consolidated annual accounts of the Bidder may also be used for the purpose of financial criteria provided the Bidder has at least 51% equity in each company whose accounts are merged in the audited consolidated accounts and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for the purpose of evaluation of the Bid.

**Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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**FORMAT 9: CERTIFICATE OF RELATIONSHIP OF AFFILIATE WITH THE  
BIDDER**

(On the letterhead of the Affiliate)

To,

\_\_\_\_\_

Dear Sir,

Sub: Request for Proposal (RFP) for Standardization of rates and Selection of Contractors for Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to about \_\_\_\_ (\_\_) MW in response to RFP No. \_\_\_\_\_

We hereby certify that M/s\_\_\_\_\_,M/s\_\_\_\_\_,M/s\_\_\_\_\_are the Affiliate(s) of the Bidder as per the definition of Affiliate as provided in this RFP and based on details of control of the voting shares as on seven (7) Days prior to the Bid Deadline.

The details of equity holding of the Affiliate/Bidder or vice versa as on seven (7) Days prior to the Bid Deadline are given as below:

*Note:*

*(Share a table with the details of equity holding and percentage of voting shares between the affiliate and the bidder or vice versa. In case of Consortium/ Joint Venture, the same details shall be shared with respect to each member of the Consortium/ Joint Venture and their respective affiliate or vice versa)*

Yours Faithfully

\_\_\_\_\_

(Insert Name and Signature of Statutory Auditor or practicing Company Secretary of the Bidder/  
Member of Consortium/ *Joint Venture*)

## **Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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### **FORMAT 10: UNDERTAKING FORM**

*(Undertaking from Affiliate of Bidder / Member of Consortium/ Joint Venture other than Lead Member)*

Name: \_\_\_\_\_

Full Address: \_\_\_\_\_

Telephone No.: E-mail address: Fax/No.: \_\_\_\_\_

To,

\_\_\_\_\_

Dear Sir,

We refer to the RFP No: \_\_\_\_\_, Dated \_\_\_\_\_ for Request for Proposal (RFP) for Standardization of Rates Standardization of Rates and Selection of Contractors for Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to about \_\_\_\_ (\_\_\_) MW.

We have carefully read and examined in detail the RFP regarding submission of an undertaking, as per the prescribed Format at Annexure of the RFP.

We confirm that M/s \_\_\_\_\_ (Insert name of Bidder) has been authorized by us to use our financial capability for meeting the Financial Eligibility as specified in the RFP referred to above in terms of Networth / Turnover (**strike out the one which is not applicable**).

We have also noted the amount of the Performance Guarantees and Bid Security required to be submitted as per the RFP by (Insert the name of the Bidder) in the event of it being selected as the Successful Bidder”.

In view of the above, we hereby undertake to you and confirm that in the event of failure of (Insert name of the Bidder) to submit the Performance Guarantees and Bid Security in full or in part at any stage, as specified in the RFP, we shall submit the Performance Guarantee and Bid Security not submitted by (Insert name of the Bidder)”.

We also undertake that we shall remain in *control of M/s \_\_\_\_\_(insert name of bidder)/ common control with M/s \_\_\_\_\_(insert name of bidder)* from the date of bid submission, till the period of 1 Year from the date of Commissioning of Projects under all the Work Orders, subject to provisions of Clause 3.3.3 (1).(*in case of affiliate*)

We have attached hereto certified true copy of the Board Resolution, whereby the Board of

**Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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Directors of our Company has approved issue of this Undertaking by the Company.

All the terms used herein but not defined, shall have the meaning as ascribed to the said terms under the RFP.

\_\_\_\_\_

Signature of Chief Executive Officer/Managing Director

Common seal of \_\_\_\_\_ has been affixed in my/our presence pursuant to

Board of Director's Resolution dated \_\_\_\_\_

WITNESS

\_\_\_\_\_

(Signature)

Name \_\_\_\_\_

Designation \_\_\_\_\_

\_\_\_\_\_

(Signature)

Name \_\_\_\_\_

Designation \_\_\_\_\_



## **Request for Proposal for Solar Rooftop Projects in Madhya Pradesh**

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### FORMAT 11: UNDERTAKING FOR COMBINED O-PBG

*(On the Letter Head of the Contractor)*

To,  
Madhya Pradesh Urja Vikas Nigam Limited  
Urja Bhawan, Link Road No. 2,  
Shivaji Nagar, Bhopal – 462016

Dear Sir,

We refer to the work order Nos.

1. \_\_\_\_\_ dated
2. \_\_\_\_\_ dated
3. \_\_\_\_\_ dated
4. \_\_\_\_\_ dated

for execution of Grid Connected/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about \_\_\_\_\_kW at \_\_\_\_\_locations in the state of MP.

Hereby, we are submitting O-PBG for INR\_\_\_\_\_ (\_\_\_\_\_) valid for\_\_\_\_\_ as per requirement of RFP No:\_\_\_\_\_, Dated \_\_\_\_\_, its amendments and subsequent Contract between Nodal Agency and \_\_\_\_\_(name of Contractor) dated\_\_\_\_\_. This O-PBG is being furnished against the work orders mentioned above.

\_\_\_\_\_

Nam, designation & signature of authorized signatory

Seal of the company/ Firm

Date

FORMAT 12: CONTRACT

*(Minimum stamp of Rs 1,000 or to be stamped in accordance with Stamp Act)*

This contract is signed on this ---- (Day)----- of ----(month)---- of ----(year)----- at Bhopal between M/s----- (here-in-after called as “Party No 1”), and Madhya Pradesh Urja Vikas Nigam Ltd., Bhopal (here-in-after called as “Party No.2”), on the following terms and conditions:

That, the “Party No.1” has agreed to execute work as per Scope of Work, Technical Specifications and all terms and conditions mentioned in the RFP No: \_\_\_\_\_, Dated \_\_\_\_\_ issued by “Party No.2”.

That, the “Party No.1” has also agreed to execute work of Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode as per scope of work, specifications and all terms and conditions mentioned in RFP No: \_\_\_\_\_, Dated \_\_\_\_\_ issued by “Party No.2”, on the rates already accepted / agreed upon as mentioned in the annexed “Financial Bid” sheet, on standardized rates.

That, the rates shown in the Financial Bid sheet(s) enclosed are valid up to \_\_\_\_\_ **(date)**.

That, all terms and conditions, scope of work and specifications mentioned in RFP No: \_\_\_\_\_, Dated \_\_\_\_\_ issued by “Party No.2”, which have been agreed upon and also the condition(s) contained in the correspondence(s) made in this matter will also form part of this Contract.

That all the terms and conditions of the Contract for five (05) Years warranty cum Comprehensive O&M shall form part of this Contract.

That, in the event of any dispute or difference whatsoever arising under this Contract, the same shall be referred to arbitrator which shall be as per the provisions of the Indian Arbitration Act, 1996 and the Rule(s) there under. All the proceedings under arbitration will take place in Bhopal. The award in such arbitration shall be final and binding on both the parties. In this case, the arbitrator shall be Additional Chief Secretary/ Principal Secretary, New and Renewable Energy Department, Govt. of Madhya Pradesh.

The Contract will be valid up to **Contract Validity Period** as defined in RFP.

For, the matter(s) of any dispute between the “Party No.1” and “Party No.2” shall be subjected to Bhopal jurisdiction.

That, this Contract executed between the parties who affix their signatures at Bhopal, in witness whereof the parties hereto have signed the Contract:

Witnesses;

Party No.1

1.

Party No.2

2.

FORMAT 13: CONSORTIUM/ JOINT VENTURE AGREEMENT

**Consortium/ Joint Venture Agreement Format for Participation in  
“Request for Proposal (RFP)**

**For**

**Standardization of Rates and Selection of Contractors**

**For**

**Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode**

*(Minimum stamp of Rs 1,000 or stamped in accordance with Stamp Act)*

THIS CONSORTIUM/ JOINT VENTURE AGREEMENT is entered into on this [dd] day of [mm]  
2025.

**AMONGST**

{[\_\_\_\_\_], party on **First Part**} and having its registered office at \_\_\_\_\_ (Hereinafter referred to as the “**First Part**” or “**Lead Member**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

**AND**

{[\_\_\_\_\_], party on **Second Part** of consortium/ joint venture} and having its registered office at \_\_\_\_\_. (Hereinafter referred to as the “**Second Part**” or “**Member**” which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above-mentioned parties of the First and Second Part are collectively referred to as the “**Parties**” and each is individually referred as a “**Party**”

**WHERE AS,**

- i. Madhya Pradesh Urja Vikas Nigam Ltd. (hereinafter referred to as the “**Nodal Agency**” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited applications (the “**Applications**”) by its RFP No: \_\_\_\_\_, Dated \_\_\_\_\_ for “Standardization of Rates and Selection of Contractors For Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode for capacity aggregating to about \_\_\_\_ (\_\_) MW .
- ii. The Parties are interested in jointly bidding for the Project as members of Consortium/ Joint Venture in accordance with the terms and conditions of the RFP document and other bid documents in respect of the Project, and

iii. It is a necessary condition under the RFP document that the members of the Consortium/ Joint Venture shall enter into a Consortium/ Joint Venture agreement and furnish a copy thereof with the Application.

**NOW IT IS HEREBY AGREED as follows:**

**Definitions and Interpretations**

In this agreement, the capitalized terms shall, unless the context otherwise require, have the Meaning ascribed thereto under the above-mentioned RFP.

**1. Consortium/ Joint Venture**

The Parties do hereby irrevocably constitute a consortium (the “**Consortium**”) or Joint Venture (the “**JV**”) for the purposes of jointly participating in the Bidding Process. The Parties hereby undertake to participate in the Bidding Process in a Project Group of Project as per Table 1 of this RFP, only through this Consortium/ Joint Venture and not individually and/ or through any other Consortium/ Joint Venture constituted for this RFP, either directly or indirectly or through any of their Affiliate(s).

**2. Role of the Parties**

The Parties hereby undertake to perform the roles and responsibilities as described below:

- a) The parties agree to submit bid as Consortium/ Joint Venture for Project Groups as agreed under FORMAT 1: COVERING LETTER:
- b) First Part shall have the power of attorney from other Part for conducting all business for and on behalf of the Consortium/ Joint Venture during the Bidding Process and during the period of Contract/ after its selection as Successful Bidder.
- c) In consideration of the award of the Contract by the Nodal Agency/ Beneficiary to the Consortium/ Joint Venture members, we, the members of the Consortium/ Joint Venture agreement do hereby agree that M/s.....shall act as Lead Member and further declare and confirm that we shall jointly and severally be bound unto the Nodal Agency/ Beneficiary for the successful performance of the Contract and shall be fully responsible for the design, manufacture, supply, and successful performance of the equipment in accordance with the Contract.
- d) In case of any breach of the said Contract by the Lead Member or other Member of the Consortium/ Joint Venture agreement, the other member do hereby agree to be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
- e) If the Nodal Agency/ Beneficiary suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the Project in meeting the performance guaranteed as per the specification in terms of the Contract, the Members of Consortium/ Joint Venture undertake to promptly make good such loss or damages caused to the Nodal Agency/ Beneficiary,

## Request for Proposal for Solar Roof top Projects in Madhya Pradesh

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on its demand without any demur. It shall not be necessary or obligatory for the Nodal Agency/ Beneficiary to proceed against Lead Member to these presents before proceeding against or dealing with the other member.

- f) Parties have agreed and documented clearly stated roles and responsibilities between First Part and Second Part for execution of work awarded by Nodal Agency. The same shall be as delineated in Appendix-I (To be incorporated suitably by the Partners) to this agreement. It is further agreed by the Members that the above sharing of responsibilities and obligations shall not in any way be a limitation of joint and several responsibilities of the Members under this Contract.
- g) The financial liability of the members of this Consortium/ Joint Venture agreement to the Nodal Agency/ Beneficiary, with respect to any of the claims arising due to non-performance of the obligations set forth in the said Consortium/ Joint Venture agreement, read in conjunction with the relevant conditions of the Contract shall, however, not be limited in any way so as to restrict or limit the liabilities of any of the member of the Consortium/ Joint Venture agreement.
- h) Subject to the terms of this agreement, the share of each Member of the Consortium/ Joint Venture in the “issued equity share capital” shall be in the following proportion: (if applicable).

<b>Lead Member</b>	.....
<b>Member</b>	.....
<b>Member</b>	.....

### 3. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until the execution of projects under the Word Order(s) issued in favor of Lead Member of Consortium/ Joint Venture during the Contract Validity Period. However, in case the Consortium/ Joint Venture is either not pre-qualified for the Project or does not get selected for Award of the work, the Agreement will stand terminated.

### 4. Governing Laws

This Consortium/ Joint Venture Agreement shall be governed by laws of India and the courts of Madhya Pradesh shall have the exclusive jurisdiction in all matters arising there under.

### 5. Amendment

The Parties acknowledge and accept that this Agreement shall not be amended by Parties without the prior written consent of the Nodal Agency. Party of First Part would decide on the representative of Consortium/ Joint Venture at Nodal Agency.

### 6. Effective Date of Agreement

It is further agreed that the Consortium/ Joint Venture agreement shall be irrevocable and shall form an

## Request for Proposal for Solar Roof top Projects in Madhya Pradesh

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integral part of the Contract, and shall continue to be enforceable till the Nodal Agency discharges the same. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the members to the Consortium/ Joint Venture agreement have through their authorized representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above..

SIGNED, SEALED AND DELIVERED  
For  
and on behalf of Lead Member by:

SIGNED, SEALED AND DELIVERED  
For  
and on behalf of Second Part:

(Signature)

(Signature)

(Name & Designation)

(Name & Designation)

(Address)

(Address)

In Presence of :

In Presence of :

Witness -1

Witness -1

Witness -2

Witness -2

## **Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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### **FORMAT 14: POWER OF ATTORNEY IN FAVOUR OF LEAD MEMBER OF CONSORTIUM/ JOINT VENTURE**

*(To be submitted by member of the Consortium/ Joint Venture other than Lead Member)*

*(Minimum stamp of Rs 1,000 or stamped in accordance with Stamp Act)*

Whereas Madhya Pradesh Urja Vikas Nigam Ltd. (MPUVNL) has invited applications (the “Applications”) by its RFP No: \_\_\_\_\_, Dated \_\_\_\_\_ for “Standardization of Rates and Selection of Contractors For Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to about \_\_\_\_ (\_\_\_) MW as per Scope of Work.

Whereas, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ (collectively the **Consortium/ Joint Venture**) being Members of the Consortium/ Joint Venture and having signed a Joint Bidding Agreement dated [●], are interested in submitting a Bid in accordance with the terms and conditions of the Request for Proposal (**RFP**) and the other Bid Documents, and

Whereas, it is necessary for the Members of the Consortium/ Joint Venture to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium/ Joint Venture, all acts, deeds and things as may be necessary in connection with the Consortium's/ Joint Venture's bid under this RFP and execution of Projects.

### **NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS**

We, \_\_\_\_\_, having our registered office at \_\_\_\_\_, and \_\_\_\_\_, having our registered office at \_\_\_\_\_, (hereinafter collectively referred to as the **Principals**) do hereby irrevocably designate, nominate, constitute, appoint and authorise \_\_\_\_\_ having its registered office at \_\_\_\_\_, being one of the Members of the Consortium/ Joint Venture, as the Lead Member and true and lawful attorney of the Consortium/ Joint Venture (hereinafter referred to as the **Attorney**). We hereby irrevocably authorize the Attorney (with power to sub-delegate) to conduct all business for and on behalf of the Consortium/ Joint Venture, and any one of us, during the Bid Process, including undertaking all acts required for the submission of the Bid in accordance with the terms and conditions of the RFP. Additionally, we also authorise the Lead Member to do any other acts or submit any information and documents related to the above Bid submission, to do on our behalf and on behalf of the Consortium/ Joint Venture, all or any of such acts, deeds or things as are necessary or required or incidental to the submission of its Bid for the Unit(s), including but not limited to signing and submission of all applications, undertakings and other documents and writings, participate in bidders and other conferences and respond to queries, if required. In the event the Consortium/ Joint Venture is awarded the Project Documents for developing the Units, we authorise the Lead Member to submit



**Request for Proposal for Solar Roof top Projects in Madhya Pradesh**

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information/documents, sign and execute contracts and undertakings consequent to acceptance of the Bid of the Consortium/ Joint Venture in relation to the incorporation of the SPV and generally to represent the Consortium/ Joint Venture in all its dealings with Nodal Agency, and/or any other Government Agency or any Person, in all matters in connection with or relating to or arising out of the Consortium's/ Joint Venture's Bid under this RFP and/or upon award of works or till incorporation of the SPV.

**AND** hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by Consortium/ Joint Venture.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS ..... DAY OF ....., 2020

For .....

(Signature)

.....

(Name & Title)

For .....

(Signature)

.....

(Name & Title)

For .....

(Signature)

.....

(Name & Title)

## Request for Proposal for Solar Roof top Projects in Madhya Pradesh

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(To be executed by authorized signatories of the Members of the Consortium/ Joint Venture, other than the Lead Member)

Witnesses:

1.

2.

(Notarised)

Accepted

.....

(Signature of the authorized signatory of the Lead Member)

(Name, Title and Address of the Attorney)

### Instructions:

- (1) *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.*
- (2) *Also, wherever required, the Members should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Member of the Consortium/ Joint Venture.*

FORMAT 15: DECLARATION

**(Required to be submitted by the Bidder/Lead Member of Consortium/ Joint Venture on Original Letter Head of company)**

We have carefully read and understood Terms and Conditions of RFP (RFP no. \_\_\_\_\_/\_\_\_\_ dated \_\_/\_\_/\_\_\_\_) for “Standardization of Rates and Selection of Contractors For Grid Connected and Off-Grid Solar Rooftop Systems at Various Locations in Madhya Pradesh under EPC Mode aggregating to about \_\_\_\_ ( ) MW” and its corrigenda/ addenda/ amendments issued from time to time before bid submission end date (collectively called as “RFP Documents”). In case, at any stage of bidding process or after award of work, our bid or award of work is found non-compliant with any provisions of RFP Documents or any of our undertakings/ declarations are found wrong/ unsolicited/ misrepresented/ unfulfilled, we unconditionally declare and undertake to accept, without any responsibility/ accountability/ implications/ liabilities/ obligations on anyone other than us, decision of competent authority as appropriate, including rejection of our bid and/ or cancellation of award of work, without prejudice to any other rights that competent authority may be entitled to exercise as per law or under provisions of RFP documents.

1. We declare that we or our affiliates/Members of Consortium/ Joint Venture (in case Bidder is Consortium/ Joint Venture) have not been Blacklisted or otherwise for any Supply of Goods / Services / Works by any Ministry / Department / PSU of Central Government / Any of the State Government(s), anytime / anywhere in the Country Debarred or have failed to execute any previous work of MPUVN.
2. We solemnly undertake that the responsibility of execution of the Work as per the terms and conditions of the RFP/ Contract shall be entirely ours.

If this Declaration is found to be incorrect or if any RFP Condition is found violated by us, then without prejudice to any other action our Bid Security / Security Deposit may be forfeited in full and the Proposal to the Extent of Acceptance / anytime during Execution of Assignment may be cancelled.

(Signature of Authorized Signatory)

(Name & Designation in block letters)

**FORMAT 16: PREVENTIVE MAINTENANCE REPORT**

*(To be jointly signed by Beneficiary and Contractor)*

Quarterly Report (from \_\_\_\_\_ to \_\_\_\_\_)

This is to certify that M/s \_\_\_\_\_ has extended preventive/routine maintenance at the Beneficiary's place at \_\_\_\_\_ (Project Capacity \_\_\_\_ kWp) For the systems installed against MPUVNL's work order no. \_\_\_\_\_

Dated \_\_\_\_\_ and commissioned on \_\_\_\_\_ and that the preventive / routine maintenance work during the I/II/III/IV quarter (from \_\_\_\_\_ to \_\_\_\_\_) of the Year 20..... has been done properly to ensure proper functionality of the systems. This is also to certify that all the systems are working satisfactorily.

The record of preventive / routine maintenance and breakdown / corrective maintenance work carried out by the Contractor(s) during the quarter is submitted via e-mail on [shreya.gonage@mp.gov.in](mailto:shreya.gonage@mp.gov.in).

Enclosures:

- i. Last three months of online energy generation data, as available.
- ii. CUF as per functional data available from data logger or inverter or generation meter, as applicable.
- iii. Pre-approved Performance Parameters by Nodal Agency.

Date:

Place

Signature, Name, Designation  
and seal of **Contractor**

Signature, Name, Designation  
and seal of **Beneficiary Organization**

Signature, Name, Designation  
and seal of concerned **inspecting authority of  
Nodal Agency**

**SECTION VII**

**FINANCIAL BID PROJECT GROUP A**

**(To be submitted online only with due encryption)**

Project Group A	

Note:

1. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) Years Warranty cum Comprehensive O&M all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
2. As mentioned in Clause 6.7.2, Insurance Costs for the installed system(s) till handover of the Project to the Beneficiary shall be borne by Contractor and Insurance cost during O&M Phase shall be responsibility of Beneficiary.

**FINANCIAL BID PROJECT GROUP B, C AND D**  
**(To be submitted online only with due encryption)**

Project Group B/C/D	

**Note:**

1. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) Years Warranty cum Comprehensive O &M all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
2. As mentioned in Clause 6.7.2, Insurance Costs for the installed system(s) till handover of the Project to the Beneficiary shall be borne by Contractor and Insurance cost during O&M Phase shall be responsibility of Beneficiary.