

Madhya Pradesh Urja Vikas Nigam Limited

Invites

Request for Proposal (RFP)

For

Standardization of Rates and Selection of Contractors

For

Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation & Maintenance of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage at Various Locations in the State of Madhya Pradesh

RFP No: F/UVN/2022/RFT/01-391/3526 Dated: 17/10/2022

Issued by:-

Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL)

"Urja Bhawan" Link Road No. 2, Shivaji Nagar, Bhopal – 462016 Telephone No.: +91-755-2553595, 2556566, 2767270 Fax No: 91-755-2553122

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RFP No: F/UVN/2022/RFT/01-391/3526

Dated: 17/10/2022

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 Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation & Maintenance for five (05) years from the date of Commissioning) of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage aggregating to about eleven (11) MW at various locations in the state of MP, India. The Grid connected projects may be under one of the following configurations- a) Grid connected net metered systems; b) Grid connected systems for consumption within premises with no export of power.

For the implementation of above-mentioned work, Bidder should submit their scanned copy of bid proposal along with payment of non-refundable Bid Processing Fee and all requisite documents complete in all respects on or before 21/11/2022 up to 1800 hours in prescribed format on the MP Tenders Portal. Bid proposals received without the prescribed Bid Processing Fee and Bid Security will be rejected. In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein. Technical Bid will be opened on 22/11/2022 at 1100 hours.

Bid documents which include eligibility criteria, technical specifications, various conditions of Agreement, formats, etc. can be viewed from Nodal Agency's website and can be downloaded from https://mptenders.gov.in/nicgep/app for online.

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 five (5) days before the Bid submission date. Interested and eligible Bidders are advised to follow and keep track of Nodal Agency's website 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

Request for Proposal (RFP) for Standardization of Rates and Selection of Contractors for Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation & Maintenance of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage aggregating to about eleven (11) MW at Various Locations in the State of Madhya Pradesh	
RFP No: F/UVN/2022/RFT/01-391/3526 Dated: 17/10/2022	
01/11/2022 at 1800 hours	
21/11/2022 at 1800 hours	
Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation & Maintenance of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage aggregating to about eleven (11) MW at Various Locations in the State of Madhya Pradesh	
The queries shall be submitted to epc.mpuvn@gmail.com till 07/11/2022 up to 1800 hours	
 Pre-bid meeting (Online) shall be held online on 09/11/2022 at 1100 hours. The Bidders shall nominate a maximum of 2 representatives and share the following participation details at epc.mpuvn@gmail.com: Name of the Bidder Name, Email, Contact No. of the Participant(s) 	
11/11/2022 up to 1100 hours	
21/11/2022 up to 1800 hours	
22/11/2022 at 1100 hours	
28/11/2022 at 1400 hours (For any modification in Date, time and venue for Financial bid opening shall be updated on our website. Bidders are advised to keep track of the same).	

Project completion timelines	Contractor would be expected to complete Projects as per the timeline mentioned in the work order.		
Bid Processing Fee (non- refundable)	Bidder shall pay Tender Fee of Rupees 10,000/- (Rupees Ten Thousand Only, Inclusive of GST) through online mode at mptenders.gov.in. 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. No exemption towards Tender Fee or E-tendering fees is allowed to any type of organizations/ agencies including MSMEs, Startups or any Govt./Semi Govt./ PSUs.		
Bid Security	Token Bid Security is Rs 100 per kW. Interested Bidder shall furnish Bid Security as per indicative capacity of the categories Bidder is applying for. Bidders placing Bid for more than one Category shall furnish single Bid Security of total value of Bid Security(s) required for those Categories.		
	For example, if Bidder is applying for categories A1 and A2, the Token Bid Security required would be $100 \ge 200 + 100 \ge 400$, i.e., Rs 60,000/-		
	The Token Bid Security as indicated in Table 2 shall be paid online only through MP Tender's portal. The bidder(s) applying in all categories , shall pay full Token Bid Security amount of Rs 11 lakh, without opting the option 'Bid Security/EMD exemption' on MP tenders' portal. Bidder(s) who are not participating in all the categories shall have to select the option 'Bid Security/EMD exemption', in the portal and enter the differential amount (i.e. Total Bid security – category wise applicable bid security, in INR). as exemption and pay the Bid security amount as per the categories applied for.		
	For example, bidder applying for categories A1, A2, B, C, D1, D2, E1 shall be required to pay a bid security of Rs 2.15 lakhs and shall opt for the Bid Security/EMD exemption option and enter a differential amount of Rs 8.85 lakhs (i.e. 11-2.15), on entering the differential amount, the payable bid security amount would be automatically visible.		
	Exemption towards submission of Bid Security is allowed for startup as per clause 3.3.4. In such cases, appropriate proof shall be uploaded while opting for exemption on the portal i.e. DPIIT recognition certification for startup in the 'Renewable Energy field'.		
	As mentioned in clause 3.12.3 Successful bidder(s) shall have to submit Actual Bid Security as shown in Table 2 at the time of signing of agreement. Actual Bid Security would have to be submitted in the		

	form of Bank Guarantee (as per <u>FORMAT 4: PERFORMANCE</u> <u>BANK GUARANTEE</u> or FDR in favor of MP Urja Vikas Nigam with provision of auto-renewal.		
Performance Bank Guarantee ("PBG")	Post commissioning of system, Contractor shall furnish Operational Performance Bank Guarantee ("O-PBG") of 10% of discovered Project Cost in the form and manner prescribed in this RFP. Further description for the same is in the RFP document in clause 3.13. Contractor shall furnish the Bank Guarantee as per the prescribed <u>FORMAT 4: PERFORMANCE BANK GUARANTEE</u>		
Bank Account Details of Nodal Agency (For Bank Guarantee)	Account Holder Name Bank Name Bank Branch Address Account No. IFSC Code MICR Code	: M. P. Urja Vikas Nigam Ltd. : ICICI Bank Ltd. : Shivaji Nagar, Bhopal : 656501700049 : ICIC0006565 : 462229012	
Update on this RfP	Bidders are advised to keep track of changes/ updates/ corrigendum regarding this RfP on http://www.mprenewable.nic.in OR https://mptenders.gov.in/nicgep/app		
Address for Bid submission/ correspondence	Shri Ajay Shukla, Executive Engineer, MP Uria Vikas Nigam Ltd		

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.** "Actual Bid Security" shall mean as defined in Clause 3.12.3, which would be submitted by the Successful Bidder(s).
- 2. "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 with

a Bidder or a member (in case of a Consortium) 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.

- **3.** "Agreement" shall mean the terms and condition agreed and signed between Contractor and Nodal Agency;
- **4.** "Awarded Capacity" shall mean the total capacity awarded to the Contractor for implementation of Project under this RFP;
- 5. "B.I.S" shall mean specifications of Bureau of Indian Standards (BIS);
- 6. "Bid" shall mean the Technical and Financial proposal submitted by the Bidder along with all documents, credentials, attachment, annexure etc., in response to this RFP, in accordance with the terms and conditions hereof;
- 7. "Bidder(s)" shall mean bidding Company/Limited Liability Partnership (LLP) firm/ Partnership Firm/ Sole Proprietor or Consortium submitting the Bid. Any reference to the Bidder includes its successors, executors and permitted assigns as the context may require;
- 8. "Bidding Consortium or Consortium" shall refer to a group of two or three bidding Company/Limited Liability Partnership (LLP) firm/ Partnership Firm/ Sole Proprietor that has collectively made a Bid, in response to RFP for the project.
- **9. "Bid Deadline"** shall mean the last date and time for submission of Bid in response to this RFP as specified in Bid Information Sheet;
- 10. "CEA" shall mean Central Electricity Authority;
- **11.** "Capacity Utilization Factor or CUF" CUF in a year 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 Completion, 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 0.

- 12. "Category" shall mean a category of Project(s) as per clause 2.1 of this RFP;
- **13.** "Capital Cost" shall mean the lowest (L1) rate of that particular category.
- **14.** "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;
- **15.** "Competent Authority" shall mean Managing Director of Nodal Agency, and/or a person or group of persons nominated by him for the mentioned purpose herein;
- **16.** "Completion" shall mean supply and erection/installation of a Project that has been completed, operationally and structurally and put in a tight and clean condition and that all works in respect of pre-commissioning of the Project have been completed except for demonstration of Minimum Guaranteed Generation (CUF) the installation of net meter and is ready for synchronisation with the grid.
- **17.** "Commissioning" means demonstration of Minimum Guaranteed Generation, subject to seasonal variations as per provisions of clause 3.15 and successful operation of the Grid Connected Project(s), in accordance with prevailing regulations and Off-Grid Project by the Contractor as defined in clause 3.15 of the RFP as applicable;
- **18.** "**Company**" shall mean a body incorporated in India under the Companies Act, 1956 or Companies Act, 2013 including any amendment thereto;
- 19. "Comprehensive O&M" shall be as defined in clause 3.16 of this RFP
- **20.** "Contract" shall mean the design, engineering, supply, installation, testing & Commissioning including insurance (as mentioned in Clause 6.6), warranty, spare parts and operation & maintenance (for five (5) years from the date of Commissioning) of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage including other related civil and electrical works (as per site requirement) at various locations in the State of M.P;
- 21. "Contract Validity Period" shall mean the period between date of opening of Financial Bid and up to 31st January 2024 or date of commissioning of last system by the Contractor for all categories of work awarded to the Contractor, whichever is later. During the Contract Validity Period, the rates standardised after bidding process under this RFP shall be valid and applicable for Contract(s) awarded. The Contract Validity Period may be extended further for a period of One (1) year with mutual consent by

the Nodal Agency and the Contractor(s);

- **22.** "Contractor" shall mean the Successful Bidder or Project Company who has signed the Agreement;
- **23.** 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;
- 24. "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;
- 25. "Eligibility Criteria" shall mean the Eligibility Criteria as set forth in this RFP;
- **26. "Financial Bid"** shall mean online financial Bid, containing the Bidder's quoted price as per RFP format;
- 27. "IEC" shall mean specifications of International Electrotechnical Commission;
- **28.** "**Inspecting Authority**" shall mean the authority designated by the Nodal Agency for the said purpose;
- **29. "Invalid Bid"** shall mean bids which will be not be considered for evaluation of Financial Bid
- 30. "kWp" shall mean KiloWatt Peak;
- 31. "kWh" shall mean KiloWatt Hour;
- 32. "LICA" shall mean Letter Inviting Consent for Agreement;
- **33. "Lead Member"** shall mean the member of Bidding Consortium which is designated as lead of the Consortium by other member(s) to represent them as Bidder for this RFP;
- 34. "MNRE" shall mean Ministry of New and Renewable Energy, Government of India;
- 35. "MWp" shall mean Mega Watt Peak;
- 36. Month(s)" shall mean a calendar month as per the Gregorian calendar;
- **37. "Nodal Agency"** shall mean the Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL), Bhopal;
- **38.** "Minimum Guaranteed Generation" shall mean the generated Solar Power Units at the output of inverter/combination of inverters.
- **39.** "**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.
- 40. "Project(s)" shall mean the Grid Connected Solar PV Project(s) with/without

Storage or Off-Grid Solar PV Project(s) with Storage;

- **41. "Project Capacity"** means the capacity of the Projects mentioned in the Agreement. For such project, minimum of deployed SPV array capacity or inverter capacity shall be considered as the deployed capacity as per MNRE guidelines;
- **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 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 Category or Eligible Bidder(s)accepted in written to match the minimum Financial Bid in a Category;
- **45.** "**RFP**" shall mean Request for Proposal/Bid document/Tender document and shall include formats and annexures in it;
- **46. "RFP Capacity"** shall mean capacity for which bid has been invited by the Nodal Agency;
- **47. Startup:** An entity shall be considered as 'Startup', as defined in Madhya Pradesh Startup Policy, 2019 and shall have DPIIT Registration as startup in the Renewable Energy field. Startup can be Private Limited Company or a Registered Partnership Firm or a Limited Liability Partnership. The entity should also meet the age criteria of not exceeding 10 years from date of incorporation/registration of the startup. Any amendments to the Startup Policy, 2019 shall also be applicable for qualification as a Startup under this RFP.
- **48.** "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;
- **49.** "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 LICA has been issued;
- 50. "Token Bid Security" shall mean as defined in Clause 3.12.1 of this RFP.
- **51.** "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 agreement 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 Agreement, Contract and Work Order have been used interchangeably in this document 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 Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation & Maintenance (for five (5) years from the date of Commissioning) and interfacing of Projects with licensee's network(if required) and existing electrical loads(as applicable), including other related civil and electrical works (as per site requirement) at various locations aggregating to approximately eleven (11) MW, in the State of M.P. 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 approximate eleven (11) MW capacity of Project under EPC with comprehensive O&M of five (05) years for Grid Connected Roof Top Solar PV Projects with/ without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage at various locations in the state of MP, India. However, total capacity as indicated above may increase or decrease, if required, subject to sole discretion of Nodal Agency. Bidders are advised to note that the Grid connected projects may be under following categories- a) Grid connected net metered systems; b) Grid connected systems for consumption within premises with no export of power. However, the prevalent regulations of MPERC and policy notified by MP state Govt. shall prevail on and above the aforementioned classification of categories.
- 2.2. Bidder shall be required to bid in different categories mentioned in the below table 1;

	Projects Available in the Category			Technical Eligibility through experience**		Financial Eligibility		
Project Catego ry	Type of Project	Minimum Size (Exclusive)	Maximum Size (Inclusive)	Indicative Capacity (kW)*	Minimum capacity of a Project (kW)	Cumulative capacity of Projects (kW)	through Net worth (INR Lakh)	through Turnover (INR Lakh)
A1	Off-Grid with 4.8 VAh battery per W	Two Forty- Nine (249) W	One (1) kW	200	-	One (1) kW	16	48
A2	Off-Grid with 4.8 kVAh battery per kW	One (1) kW	Three (3) kW	400	One (1) kW	Three (3) kW	32	96
В	Off-Grid with 4.8 kVAh battery per kW	Three (3) kW	Ten (10) kW	400	Three (3) kW	Ten (10) kW	32	96
С	Off-Grid with 4.8 kVAh battery per kW	Ten (10) kW	Twenty-Five (25) kW	400	Ten (10) kW	Twenty-Five (25) kW	32	96
D1	Grid-Connected without battery	One (1) kW	Three (3) kW	150	One (1) kW	Three (3) kW	12	36
D2	Grid-Connected with 0.8 kVAh battery per kW	One (1) kW	Three (3) kW	100	One (1) kW	Three (3) kW	8	24
E1	Grid-Connected without battery	Three (3) kW	Ten (10) kW	500	Three (3) kW	Ten (10) kW	40	120
E2	Grid-Connected with 0.8 kVAh battery per kW	Three (3) kW	Ten (10) kW	350	Three (3) kW	Ten (10) kW	28	84

TABLE 1: CATEGORY WISE BREAKUP OF PROJECTS WITH RELEVANT ELIGIBILITY REQUIREMENTS

F1	Grid-Connected without battery	Ten (10) kW	Twenty-Five (25) kW	1500	Ten (10) kW	Twenty-Five (25) kW	120	360
F2	Grid-Connected with 0.8 kVAh battery per kW	Ten (10) kW	Twenty-Five (25) kW	500	Ten (10) kW	Twenty-Five (25) kW	40	120
G1	Grid-Connected without battery	Twenty-Five (25) kW	Fifty (50) kW	1250	Twenty- Five (25) kW	Fifty (50) kW	100	300
G2	Grid-Connected with 0.8 kVAh battery per kW	Twenty-Five (25) kW	Fifty (50) kW	500	Twenty- Five (25) kW	Fifty (50) kW	40	120
H1	Grid-Connected without battery	Fifty (50) kW	One Hundred (100) kW	1000	Fifty (50) kW	One Hundred (100) kW	80	240
H2	Grid-Connected with 0.8 kVAh battery per kW	Fifty (50) kW	One Hundred (100) kW	750	Fifty (50) kW	One Hundred (100) kW	60	180
I1	Grid-Connected without battery	Hundred (100) kW	Five Hundred (500) kW	3000	Hundred (100) kW	Five Hundred (500) kW	240	720
	Total Indicative Capacity (KW)			11000	Total Netwo	orth/Turnover	880	2,640

*Indicative capacity is mentioned as per current assessment of requirements for each category by MPUVN. Actual capacity at the time of issue of work order may range up to 200% of indicative capacity. Bidder shall quote for indicative capacity as mentioned in the table above. Rates quoted for each category shall be applicable only up to 31st January 2024.

**'Technical eligibility through experience'under'minimum capacity of project' means that the Bidder should have commissioned, at least, one project of the mentioned capacity or more. 'Technical eligibility through experience'under'cumulative capacity of projects' means that all projects commissioned by the Bidder should be as mentioned or more. These would be irrespective of whether the project(s) commissioned is/are with or without battery and grid connected or otherwise, till date of technical opening. Bidders must meet the above-mentioned technical criteria, for individual Category.

[Explanation: If a Bidder has experience of implementing at least one project of minimum capacity of ten (10) kW or more and has implemented cumulative capacity of 100 kW, such Bidder shall be eligible to Bid for Categories A1, A2, B, C, D1, D2, E1, E2, F1, F2 but shall not be eligible to bid for Category G1, G2, H1, H2, I1 because such Bidder does not meet the minimum capacity requirement of those categories. Similarly, if a Bidder has experience of implementing at least one project of minimum sixty (60) kW or more and has implemented total capacity of one hundred and eighty (180) kW, such Bidder shall be eligible to Bid for Categories A1, A2, B, C, D1, D2, E1, E2, F1, F2, G1 and G2 but shall not be eligible to Bid for Category H1, H2 and I1 because such Bidder does not meet the cumulative capacity requirement of those Categories].

- 2.3. Bidder may opt to Bid for any, some or all of the project categories.
- 2.4. The participation shall only be considered for categories as declared in the covering letter (0). In case of any discrepancy between the covering letter and financial bid submission, the participation shall only be considered for the categories that the bidder opted for, via the covering letter. However, if bidder has participated in lesser number of categories in financial bid than mentioned in covering letter, then participation shall only be considered for only those categories which are common in covering letter and financial bid. Moreover, bids shall be rejected from the categories where the participation was not declared in either the covering letter or the financial bid.

2.5. Provisions related to additional electrical and civil works

- 2.5.1. The Rates of Electrical work for interfacing of Solar Photovoltaic Power Plants with existing selective Electrical Loads will be decided on the basis of prevailing at par rates of Schedule of Rates (SOR) for Electrical works and Public Works Department (PIU), Bhopal, Govt. of M.P. in force from 15th September 2022 and amendment¹ thereof issued by Project Director, M.P.P.W.D, Bhopal, which shall be the part of this RFP. The rates of this SOR shall be binding to the selected Successful Bidders of Projects for getting the work executed at the allocated sites.
- 2.5.2. The rates of Civil work for construction of battery / control room, or any other related work 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, Public Works Department (PIU), Bhopal, Govt. of M.P.in force from 15th September 2022 and amendment² thereof issued By Project Director; this SOR shall be the part of this RFP.
- 2.5.3. The Rates of external electrical work, so required to be done for interfacing the system with the grid shall be as per the prevailing schedule of rates (SOR)³, at par, for electrical works, of MP Madhya Kshetra Vidhyut Vitran Company Ltd. (MPMKVVCL)in force from 19 July 2021; this SOR and any amendments thereof shall be part of this RFP.
- 2.5.4. All amendments made in the above said SOR's of PWD and MPMKVVCL shall also be a part of this RFP and shall be considered for execution of all necessary additional works for Completion of the Projects awarded.
- 2.5.5. It is clarified that the above would not form a part of the financial bid submitted.

¹ Latest amendment, is available on the MPPWD website: http://wms.mppwd.gov.in

² SOR dated 15/09/2022 for Building works is available on MPPWD website as Volume I and Volume II ³SOR Rates for MPMKVVCL are available on the following link:

https://portal.mpcz.in/upload_files/pdf/employee_corner/works/works_sectiom/sor_2021_22/sor_2021_22.pdf

2.6. Key Dates:

S. No.	Tender Stage	Date	Time (Hrs.)
1.	Purchase of RFP Start Date	01.11.2022	1800
2.	Last Date for Submission of Comments/ Clarification on RFP and its Annexures	07.11.2022	1800
3.	Pre-Bid Meeting (Online)	09.11.2022	1100
4.	Online Bid Submission Start Date	11.11.2022	1100
5.	Online Bid Submission End Date	21.11.2022	1800
6.	Technical Bid Opening Date	22.11.2022	1100
7.	Financial Bid Opening Date	28.11.2022	1400

3. INSTRUCTIONS TO THE BIDDER:

- 3.1. The Contractor shall be required to establish its Service Centre(s) at Bhopal and if required, in other districts.
- 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 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 Digital Signature Certificate, the Bidders are requested to visit MP tenders website. Please note that it may take up to 3 to 5 working days for issue of Digital Signature Certificate. Nodal Agency will not be responsible for delay in issue of Digital Signature Certificate.
- 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 Digital Signature Certificate, etc. well in advance.
- For further information regarding issue of Digital Signature Certificate, the Bidders are requested to visit website https://mptenders.gov.in/nicgep/app. Please note that it may take up to 3 to 5 working Days for issue of Digital Signature Certificate. Nodal Agency will not be responsible for delay in issue of Digital Signature Certificate.
- m) Bidders are requested to regularly visit MP tenders-tendering website for any clarification and / or extension of due date.
- n) Bidder must positively complete online e-tendering procedure at https://mptenders.gov.in/nicgep/app.
- o) Nodal Agency shall not be responsible in any way for delay /difficulties /inaccessibility of the downloading facility from the website for any reason whatever.
- p) Whosoever on behalf of the Bidder is submitting the tender by his Digital Signature Certificate, 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.
- q) Bid Security/EMD Payment:
 - a) Token Bid Security/EMD Payment should be paid online through MP Tenders portal Only.
 - **b)** For Start-ups (Instructions to be followed on MP Tenders portal): On the "EMD exemption" page,
 - i) Bidder will receive a prompt stating "Are you exempted from EMD/Bid Security payment: Yes/No"; select "Yes"
 - ii) Bidders will receive a prompt stating "If yes, provide the exemption type: Percentage/Amount"; select "Percentage".

- iii) In the "Percentage/Amount" field, fill in "100".
- iv) Then upload the scanned copy of DPIIT certificate as mentioned under clause no. 3.4.4 of this RFP the "Upload EMD exemption document" heading.
- r) After the final submission of bid, Bidder should ensure that he has received the acknowledgment slip and should keep this slip until opening of the Bid. If acknowledgment slip is not generated, it means the Bid is not submitted.
- s) The Bidders shall have to submit their Financial Bid and other required relevant documents/ certificates, if any, online only (duly encrypted bids) as per time schedule (Key dates) as mentioned in Clause2.6. The Technical Bid should be submitted online and shall contain signed copy of RFP along with Annexures, formats, relevant document/ certificates etc. duly sealed and signed and uploaded.
- t) For any type of clarification, Bidders can visit https://mptenders.gov.in/nicgep/app and can call at 24*7 help desk contact no. 0120-4001 002/005 which is also mentioned in the website. Bidder can also send email to "support-eproc@nic.in".
- u) On the online MP Tenders portal, start-ups registered with DPIIT should opt for exemption of payment of Bid Security (EMD). In such cases, appropriate proof shall be uploaded while opting for exemption on the portal i.e. DPIIT recognition certification for start-up. Refer point no. q b) as above for start-ups. A Bidder shall not have a conflict of interest. Bidder(s) shall be disqualified in the Category (ies) where it has conflict of interest. In a particular Category, the Bidder may be considered to have conflict of interest with one or more parties in this bidding process, if:
 - a) 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.
 - b) They have a relationship with each other, 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. ELIGIBILITY CRITERIA:

3.3.1. **GENERAL:**

a. The Bidder or, in case of a consortium 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 0

- b. Consortium would consist of a maximum of three members. The Members of the Consortium shall nominate the Lead Member. Such nomination shall be supported by a power of attorney signed by all the Members of Consortium (and duly acknowledged by the Lead Member) and shall substantially be in the form set out in 0
- c. The Lead Member shall have the authority to represent all the Members of the Consortium during the Bid Process.
- d. In a situation, where a consortium that 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.
- e. Bidder must meet Eligibility Criteria either independently or as consortium of two or three members comprising of Companies or Sole Proprietor or Limited Liability Partnership Firms or Partnership Firms or any combination of these. In case Bidder is a Consortium, a consortium agreement as per <u>FORMAT 14: CONSORTIUM</u> <u>AGREEMENT</u> shall be required to be furnished along with the Bid.
- f. Bidder or any member of consortium or its Affiliate having been blacklisted by Nodal Agency or by any Govt./PSU, for whatever reasons, shall not be eligible/ allowed to participate in this RFP.
- g. Bidder or any member of consortium shall be ineligible for participation in this RFP in following cases:
 - i. If it has not performed satisfactorily for Nodal Agency, leading to cancellation of Work Order(s) or Agreements or contracts of value more than or equal to twenty five percent (25%) of cumulative value of Work Order(s) or Agreements or contracts awarded in last five (5) years.
 - ii. If it is involved in litigation or arbitration with Nodal Agency arising out of work completed or under execution by it, of value more than or equal to twenty five percent (25%) of cumulative value of Work Order(s) or Agreements or contracts awarded in last five (5) years.

3.3.2. TECHNICAL ELIGIBILITY CRITERIA:

- a. In case Bidder is a Consortium, Technical Eligibility Criteria shall be independently met by Lead Member of Consortium.
- b. The Bidder should have experience in design, engineering, supply, installation, testing and commissioning including Comprehensive O&M for different sizes of

project, in last three (3) years, under different Categories as mentioned in

- c. TABLE 1: CATEGORY WISE BREAKUP OF PROJECTS WITH RELEVANT ELIGIBILITY REQUIREMENTS. In case of Consortium, eligibility of Lead Member shall be evaluated. The credentials of Affiliate of Bidder/ other members of Consortium shall not be considered for qualification against Technical Eligibility Criteria.
- d. All the projects shown to meet Technical eligibility criteria should have been commissioned prior to Technical Bid opening date. The list of Projects commissioned prior to Technical Bid opening date along with a copy of the Completion certificate and work order/contract/agreement from the State Nodal Agency/Government Organisation/SECI in the name of Bidder shall be submitted. Projects executed in Market Mode is allowed but bidder has to submit the Work order and Completion certificate issued by any Government agency.

3.3.3. FINANCIAL ELIGIBILITY CRITERIA:

- a. Bidder shall have the option of establishing eligibility through net-worth or turnover as required by this RFP.
- b. The Bidder shall meet networth and turnover as per Table 1 of the RFP. Networth and Turnover criteria shall be as per respective categories mentioned in Table 1. In case a Bidder is applying for multiple categories, networth and turnover criteria shall be cumulative value of networth/turnover criteria for the categories applied for.
- c. Financial Eligibility Criteria can be met individually or jointly by other members of Consortium.
- d. Bidder can use its own financial strength or of its Affiliate to fulfill the Financial Eligibility Criteria mentioned in RFP.
- e. If Bidder 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.
- f. In case of Consortium, Financial Eligibility Criteria can be met individually or jointly by members of the Consortium or their respective Affiliates, if the members opt to do so.
- g. For Consortium members too, Bidder should submit the financial strength details of either affiliate or themselves depending on through which they are satisfying Financial Eligibility Criteria.
- h. The Bidder should have Net-Worth for FY 2021-22 (if audited balance sheet not available for FY 2021-22, then Net Worth for FY 2020-21 can be considered), as per

i. TABLE 1: CATEGORY WISE BREAKUP OF PROJECTS WITH RELEVANT ELIGIBILITY REQUIREMENTS.

- j. The Computation of Net-Worth shall be based on unconsolidated audited annual accounts. The formula for Net-Worth calculation shall be as per Companies Act, 2013.
- k. If the participants are not incorporated as companies, then the Net-Worth should not be older than one year from the bid submission date.
- 1. 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.
- m. In case of Sole Proprietor (including any reserves), the Net-Worth shall be equal to Proprietor's Capital Account.
- n. Bidder shall submit the average turnover since the incorporation not going prior to FY 2018-19, supported with year wise audited annual accounts duly certified by Chartered Accountant/ Statutory Auditor (as applicable) to meet the Financial Eligibility Criteria as mentioned in

o. TABLE 1: CATEGORY WISE BREAKUP OF PROJECTS WITH RELEVANT ELIGIBILITY REQUIREMENTS.

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.(submission of Provisional Balance Sheet is allowed for FY 2021-22 but for fulfilling Financial Eligibility Criteria of Turnover calculation, is to be done on audited balance sheet only, that can be for FY 2020-21 and previous years as defined in the RfP)
- ii. It is essential to submit financial eligibility criteria requirement and undertaking form as attached in Format – 10, 11 and 12 of this RFP document.
- p. For the purposes of meeting financial requirements, only unconsolidated 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.
- q. In-case Bidder or any member of Consortium 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 or remain in control of the Bidder from the date of bid submission till the period of 1 year from the date of Commissioning of Awarded Capacity, without prior written approval of Nodal Agency. In cases wherein the Awarded Capacity gets exhausted and Bidder requests for additional capacity, the period of one (1) Year for control in the Successful Bidder or the Project Company shall be applicable till one (1) Year from the date of Commissioning of entire additional capacity awarded by the Nodal Agency. Further, Affiliate of Bidder/ member of Consortium shall furnish information as sought in <u>FORMAT 8: FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT</u> and <u>FORMAT 9: CERTIFICATE OF RELATIONSHIP OF AFFILIATEWITH THE BIDDER</u>

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.

- r. Bidder shall furnish documentary evidence as per the <u>FORMAT 8: FINANCIAL</u> <u>ELIGIBILITY CRITERIA REQUIREMENT</u>, duly certified by Authorized Signatory and the Statutory Auditor / Practicing Chartered Accountant of the Bidder in support of their financial capability".
- s. Participants shall have to give a declaration to the effect that they fulfill the terms and conditions of eligibility (0) .If the declaration to above effect is found to be false, the eligibility would be considered null and void.

3.3.4. STARTUPS

- a. The Nodal Agency has decided to promote MP based entrepreneurs/startups as per State Government's policy for promotion of startups.
- b. These entities <u>should have DPIIT</u> (Department of Promotion of Industry and Internal Trade, Govt. of India) recognition for doing business in the field of Renewable Energy and must have MP based GST registration to avail the benefits under this criterion.
- c. The entrepreneurs/startups shall be required to submit their proposals online on the MP Tenders portal.
- d. The startups are advised to refrain from submitting their Financial Proposal and leave it blank and if any price was submitted, it will be considered as Invalid Bid.
- e. Startups are exempted from payment of Bid Security.
- f. Startups are exempted from meeting the technical eligibility and financial eligibility criteria for each Category defined in Table 1.
- g. Startups shall be required to submit the list of projects installed and commissioned,

along with completion or commissioning certificate as per <u>FORMAT 18:</u> <u>TECHNICAL EXPERIENCE</u>.

- h. Furthermore, they shall be required to submit the annual turnover since the incorporation of startup, not going beyond FY 2018-19, supported with year-wise audited annual accounts duly certified by Chartered Accountant/ Statutory Auditor (if applicable) as per 019.
- i. A checklist for startups is attached in SECTION V.
- j. Proposal should contain all the requisite documents as per clause 3.8.1 of the RfP except for Bid Security.

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, it can choose to incorporate a Project Company. Such Bidder shall be responsible to get all the clearance required/ obtained in the name of the Bidder transferred in the name of the Project Company.
- 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 date of Commissioning of the entire Awarded Capacity of the Successful Bidder. In cases wherein the Awarded Capacity gets exhausted and Bidder requests for additional capacity, the period of 1 year for equity ownership of the Successful Bidder in the project company shall be applicable till the Commissioning of entire additional capacity awarded by the Nodal Agency.
- 3.5.3. In case of Successful Bidder being a Partnership Firm or a LLP or a Consortium, the equity ownership of the partners or the members of the Successful Bidder in the Project Company shall not be less than 51% of that mentioned in the partnership deed or Consortium deed submitted along with the Bid, up to a period of one (1) year from the date of Commissioning of the entire Awarded Capacity of the Successful Bidder. In cases wherein the Awarded Capacity gets exhausted and Bidder requests for additional capacity, the period of one (1) year for equity ownership of partners or the members of the Successful Bidder in the Project Company shall be applicable till 1 year from the date of Commissioning of entire additional capacity awarded by the

Nodal Agency. 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 document.
- 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). 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.
- 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 and shall also furnish unconsolidated/ 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.

3.7. CLARIFICATIONS AND PRE-BID MEETING:

- 3.7.1. The Bidder may seek clarifications or suggest amendments to RFP in writing, through a letter or by fax (and soft copy by e-mail) to reach Nodal Agency at the address, date and time mentioned in Bid Information Sheet.
- 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, or any such other date as notified by Nodal Agency.
- 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 only. Scanned

andself-attested copies have to be uploaded online in the appropriate cover folder on the portal:

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

- Covering Letter as per Prescribed Format (0).
- Bid Processing Fee
- Bid Security of Required Value as Mentioned in clause 3.12.1

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

- GENERAL PARTICULARS OF THE BIDDER as per 0 of this RFP, including Certificate of Incorporation of Bidder/ Affiliate as applicable.
- Bidder's composition and ownership structure as per prescribed 0 FORMAT 3: <u>SHAREHOLDING CERTIFICATE</u> as shareholding certificate certified by Director/practicing Chartered Accountant/Company Secretary and authorized signatory of the Bidder (as applicable).
- 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).
- 0 FORMAT 7: TECHNICAL <u>ELIGIBILITY CRITERIA</u> <u>REQUIREMENT</u> &

0 FORMAT 8: FINANCIAL <u>ELIGIBILITY CRITERIA</u> <u>REQUIREMENT</u> for meeting Eligibility Requirements along with all supporting documents.

- In case of startups participating as per the clause 3.3.4, instead of submitting FORMAT 7 and FORMAT 8 they shall submit 0FORMAT 18: <u>TECHNICAL EXPERIENCE</u> and 0FORMAT 19: TURNOVER
- <u>FORMAT 9: CERTIFICATE OF RELATIONSHIP OF AFFILIATEWITH THE</u> <u>BIDDER</u>, if applicable, supported by Board Resolution of the Affiliate.
- 0FORMAT 15: POWER OF ATTORNEY IN FAVOUR OF LEAD <u>MEMBER OF CONSORTIUM</u>
- FORMAT 14: CONSORTIUM AGREEMENT, if applicable.
- Undertaking(s) from the member of Consortium or Affiliate of Bidder/ member

of Consortium as per FORMAT 10: UNDERTAKING FORM, as applicable.

• Signed and stamped Copy of RFP including amendments & clarifications and minutes of pre-bid meetings by authorised signatory of Company on each page

3.8.2. METHOD OF BID SUBMISSION

- a. Bidders are required to submit the Technical Bid online, along with all relevant documents as detailed in clause 3.6 and 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/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.
- 3.8.3. 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 category. Nodal Agency shall not be responsible for premature opening of the Financial Bid in case of non-compliance of above.
- 3.8.4. 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.

3.9. **BID DEADLINE:**

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

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 Inviting Consent for Agreement ("LICA") within the defined period, Nodal Agency shall forfeit the Bid Security furnished by the Bidder. In exceptional circumstances when LICA 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 on MP Tenders portal, interest free **Token Bid Security** of Rs 100 per kW for each Category of Project as mentioned below in Table 2. Bidders placing Bid for more than one category may furnish single Bid Security of total value of Bid Security(s) desired for those categories.
- 3.12.2. Desired Bid Security shall be furnished by every Bidder including MSMEs or any Govt./ semi Govt./ PSU organizations/ agencies. The initial validity of Token Bid Security shall be for a period of One hundred and eighty (180) days from the Bid Deadline, which shall be extended by the Bidder on the advice of Nodal Agency, if required, at any time either before bid process is concluded or during Contract Validity Period of Agreement.
- 3.12.3. Token Bid Security of the unsuccessful bidders will be returned through MP Tenders portal. Successful bidder(s) shall have to submit **Actual Bid Security** as shown in Table 2 at post issuance of LICA. The Actual Bid Security would have to be submitted in the form of Bank Guarantee (as per <u>FORMAT 4: PERFORMANCE BANK GUARANTEE</u>) or FDR in favour of MP Urja Vikas Nigam, Bhopal. FDR shall have provision of auto-renewal.
- 3.12.4. In case of non-submission of Actual Bid Security after selection of successful bidder, the Token Bid Security of such bidder shall be forfeited and the bidder would be **blacklisted** from participation in future tenders of Nodal Agency and other Government agencies.
- 3.12.5. In case the successful bidder is given work **above the indicated capacity (kW)**, additional Bid Security in the form of Bank Guarantee will required to be submitted at 2% of L1 rate discovered for that category x capacity of additional work in kW.

Table 2: Category-wise bid security

Project Category	Type of Project	Total Indicative Capacity Available (kW)	Required Token Bid Security value at the time of bid submission (INR)	Actual Bid Security required from Successful Bidder at the time of signing of agreement (INR Lakhs)
A1	Off-Grid with 4.8 VAh battery per W	200	20,000/-	1.96
A2	Off-Grid with 4.8 kVAh battery per kW	400	40,000/-	3.91
В	Off-Grid with 4.8 kVAh battery per kW	400	40,000/-	3.91
С	Off-Grid with 4.8 kVAh battery per kW	400	40,000/-	3.51
D1	Grid-Connected without battery	150	15,000/-	0.74
D2	Grid-Connected with 0.8 kVAh battery per kW	100	10,000/-	0.64
E1	Grid-Connected without battery	500	50,000/-	2.33
E2	Grid-Connected with 0.8 kVAh battery per kW	350	35,000/-	2.23
F1	Grid-Connected without battery	1500	1,50,000/-	6.53
F2	Grid-Connected with 0.8 kVAh battery per kW	500	50,000/-	2.85
G1	Grid-Connected without battery	1250	1,25,000/-	5.44
G2	Grid-Connected with 0.8 kVAh battery per kW	500	50,000/-	2.85
H1	Grid-Connected without battery	1000	1,00,000/-	4.35
H2	Grid-Connected with 0.8 kVAh battery per kW	750	75,000	4.27

Project Category	Type of Project	Total Indicative Capacity Available (kW)	Required Token Bid Security value at the time of bid submission (INR)	Actual Bid Security required from Successful Bidder at the time of signing of agreement (INR Lakhs)
I1	Grid-Connected without battery	3000	3,00,000/-	12.25
	•	Total	11,00,000/-	57.75

- 3.12.6. At the time of signing of agreement by Successful Bidder, Successful Bidder shall have to keep the validity of Actual Bid Security till Contract Validity Period or extend the validity as required by the Nodal Agency.
- 3.12.7. For the Successful Bidders, the Actual Bid Security shall be returned within forty-five (45) days of completion of Contract Validity Period OR commissioning of the last work awarded, whichever is later.
- 3.12.8. The Actual Bid Security/Token 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 agreement within fifteen (15) days from the date of award by the Nodal Agency.

3.13. PERFORMANCE BANK GUARANTEE (PBG) FOR OPERATION AND MAINTENANCE

- 3.13.1. In line with Clause 7.2 of this RFP, Contractor shall be required to furnish O-PBG from a nationalized/ scheduled bank, in form of Bank guarantee as per prescribed format (0) after Commissioning of the Project. The Contractor shall furnish O-PBG within seven (7) days from the date of Commissioning (please refer to TERMS AND CONDITION FOR PAYMENT).
- 3.13.2. The value of the O-PBG shall be 10%
- 3.13.3.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 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 6 months for the last year.

- 3.13.4. However, Contractor may plan to submit one O-PBG of desired combined value for all Projects being Commissioned in a month with an undertaking (0) in that behalf. Validity for O-PBG shall be till the period of five (05) years from the date of successful Commissioning of the last Project, with an additional claim period of six (6) months. In case O-PBG is being submitted to the Nodal Agency before the Commissioning of the Project, as per clause 6.11, then the validity should be from the scheduled commissioning date as per the Work Order and would be required to be extended as deemed necessary in case of delay in Commissioning.
- 3.13.5. Nodal Agency shall release the O-PBG of the Project after the successful completion of five (5) years from the Commissioning and Comprehensive maintenance contract duly supported by the satisfactorily Quarterly CMC Certificates of the Project as per SECTION X of this RFP. Contractor shall be required handover all the documents including warranty related documents, equipments, components of the Project and certification shall be required from the Beneficiary for the effective handover of the Project's operation.

3.14. 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, the work is not completed within the given timeframe, Nodal Agency may consider grant of extension after having found satisfactory, the reasons submitted by contractor. 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.
- 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 in the respective work order will be extended for the number of days till dues get cleared by the Beneficiary.
- 3.14.4. In case, Contractor delays the execution of any work as per the timelines defined in a Work Order, within its Awarded Capacity, subject to provisions of Clause 5, following clauses shall be applicable:
 - a) In case there is a delay in achievement of date of Completion of work, a LD @0.625% of work value per week shall be levied from the date of Completion or extended date of Completion, subject to maximum eight (8) weeks delay.
 - b) In case, work is not completed even after 8 weeks beyond the date of Completion or the extended date of Completion, the work shall stand cancelled and additional LD of 5% of work value shall be levied (maximum LD in any case for a work shall be 10% of work value).

- c) Nodal Agency shall not be liable to make any payments for such cancelled work.
- d) In case of cancellation, the work shall be re-allocated as per the clause 5.8&"Principles of Work Allocation" under clause 5.9
- e) If other Contractor(s) are not willing to execute that work, then the Nodal Agency shall execute the said work at risk and cost of the Contractor.
- 3.14.5. If number of cancelled/refused work(s) by a Contractor are three (3) or more, then the Nodal Agency reserves the right to terminate the Agreement as per provisions of Clause 3.26.4.

3.15. PERFORMANCE MONITORING MECHANISM AND PENALTIES FOR UNDER PERFORMANCE:

The Contractor shall have to demonstrate that the said project delivers Minimum Guaranteed Generation as tabulated below, for one (1) day at the time of Commissioning of the Grid Connected (without battery) SRT Project.

Month	kWh generation in 1 day per kW system
January	3.71
February	4.14
March	4.33
April	4.27
May	3.99
June	3.30
July	2.56
August	2.33
September	3.21
October	3.89
November	3.90
December	3.56

Table 3: Minimum Guaranteed Generation considering seasonal variations

- 3.15.1. In case of Off-Grid Projects and Grid Connected Projects with battery, the Contractor shall have to submit the output of data-logger for the period of 24 hours at the time of Commissioning, in support of Minimum Guaranteed Generation, for one (1) day at the time of Commissioning, adjusted for seasonality as tabulated above.
- 3.15.2. 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 logger/RMS system and the CMC,

while ensuring uninterrupted connectivity at the same time. The Contractor shall ensure that the data from RMS/data logger should be accessible to Centralized Monitoring Center of Nodal Agency. All types of communication protocol will be as per relevant latest IEC standard i.e., IEC 104 which works on TCP/IP based communication. Here the primary data information should be directly sent to MPUVN, secondary data can also be sent to EPC contractor server as per his requirement.

3.15.3. For the purpose of measuring CUF:

- a. For all the systems (both off-grid and grid-connected), there should be a datalogger system built in PCU/inverter to record various parameters (at least 6 parameters) on hourly basis, which should be stored for, at least, 1 (one) year. Nodal Agency shall inform contractor about the parameters to be communicated. The contractor shall submit the data collected by the data-logger to the Nodal Agency on yearly basis during the O&M period, 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. All the projects with installed capacity of above 10 kW should be RMS enabled and have the provision for connection with Centralized Monitoring Center (CMC) of the Nodal Agency. It is the responsibility of the contractor to provide support in establishing technical handshake between the RMS system and the CMC, while ensuring uninterrupted connectivity at the same time. The Nodal Agency shall monitor the performance of all the projects to ensure the desired level of performance, by computing the CUF on the basis of data retrieved from the data logger of the RMS enabled PCU/inverter.
- d. 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.
- 3.15.4. During the Comprehensive O&M period, the Contractor shall maintain a CUF of 15% for each year of the Contract Period. In the event of CUF falling below 15%, a

penalty for an amount equivalent to product of loss in annual generation in kWh and applicable energy charges during normal period applicable for the Beneficiary shall be deducted within fifteen (15) days of completion of a particular year. The applicable energy charges during normal period payable by the Beneficiary shall be based on tariff determined by the MPERC Tariff Order determined for that particular year and shall include Electricity Duty and cess, but not Fuel Charge Adjustment. For illustration purposes following example can referred:-

Assuming that a system of 1kW 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 normal period for the Beneficiary's consumer category is Rs. 7/kWh then the penalty shall be Rs. 613.20.

3.15.5. Nodal Agency reserves the right to recover above penalty(ies) as mentioned in clause above, from other payments to be made to such Contractor. If it is not recoverable from payments due to Contractor, same shall deducted from concerned O-PBG residing with the Nodal Agency for the said Project before releasing it to the Contractor as final settlement. Lastly, if any amount towards such penalties is left to be recovered, the same shall be done against any other O-PBGs/ Bid Security held with MPUVNL.

3.16. COMPREHENSIVE OPERATION AND MAINTENANCE:

- 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(05) years from Commissioning of the Project.
- 3.16.2. The performance of the System Supplied, Installed & Commissioned along with additional work shall be under Warranty by the Participant for a period of five (5) years from the date of Commissioning of system at site. This Warranty shall be for a minimum period of five (5) years from the date of Commissioning of the complete system.
- 3.16.3. During the course of aforesaid five (5) years of Comprehensive O&M, the Contractor(s) will service 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 the quarterly Preventive Maintenance report to be signed by the Beneficiary after the end of each

quarter. Further, Contractor shall be required to submit the signed reports as per Format given in **SECTION X** quarterly to the district office of the Nodal Agency. The report should mention the details related to project performance/ shutdown including the reason for Project shutdown that has occurred during the period of report.

3.16.5. The Contractors are advice to ensure a maximum expected turnaround time of 48 hours for any fault in the project (under special circumstances, additional time limit may be considered).-In case of delay in turnaround time, penalty on per day basis shall be levied by the Nodal Agency which will be calculated as:

Project Capacity at site (in kW)* Minimum Guaranteed Generation (as per Table 3 at Clause 3.15) * 7.50

Nodal Agency shall deduct the same from O-PBG provided by the Contractor. Contractor shall be required to replenished O-PBG to its original value and validity as mentionedunder 3.13 of this RFP within thirty (30) days from the date of notice by Nodal Agency. If any of such instances for more than 2 times a year, then it may lead to penalty as decided by MPUVN.

Further, if the outage of the plant is more than 30 days continuously, then the 50% PBG amount shall be encased by MPUVN and if the outage is exceeding more than 60 days than complete PBG amount shall be encased by MPUVN. This will be applicable for entire period of contract of O&M as per the Scope of the RFP.

3.16.6. In case of any complaint received from the Beneficiary related to performance of the Project, Nodal Agency may visit the site and assess the Contractor's performance and maintenance records. In case assessment found that Contractor is not performing in line with the terms and condition of RFP, Nodal Agency shall be eligible to penalize the Contractor for its non-performance. Any non-performance/ non-obligation related to Preventive Maintenance, Rs. five hundred (500) per kW shall be levied by the Nodal Agency. Nodal Agency shall deduct the same from O-PBG provided by the Contractor. Contractor shall be required to replenished O-PBG to its original value and validity as mentioned under 3.13 of this RFP within thirty (30) days from the date of notice by Nodal Agency.

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

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. 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). Non-submission or delayed submission of such additional information or clarifications sought by Nodal Agency may be a ground for rejecting the Bid(s). 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.
- 3.19.4. 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/ Agreement, 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 Agreement, 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.
- 3.21.5. Taxes and Duties: The Financial Bid shall be exclusive of GST, but shall be inclusive of all other costs including any other taxes (if applicable) and duties etc.

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 Agreement at the premises of work of the Contractor.

3.24. **PROJECT INSPECTION:**

3.24.1. The Project progress will be monitored by Nodal Agency and the Projects will be inspected for quality at any time during Commissioning or after the Completion of the

Project either by officer(s) from Nodal Agency or any authorized agency/ experts. Nodal Agency may also depute a technical person(s) from its list of empanelled experts 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.

3.25. 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 Agreement 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 days 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 AGREEMENT:

- 3.26.1. Nodal Agency reserves the right to extend the validity of Agreement for another One (1) year for any/all Category(ies). Further, Nodal Agency also reserves the right for execution of additional works up to hundred percent (100%) of indicative capacity for any/all Category(ies) as per Table 1.
- 3.26.2. The Nodal Agency may terminate the Agreement 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 refused work is three 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 Agreement.
- 3.26.3. Subject to the provisions of Clauses, if the Contractor is found unable to complete given works within specified time period mentioned in Work Order issued for that Project, 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. 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. In case of termination of the Agreement, 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 O-PBG (if any) of that Project. If additional cost required by Nodal Agency to complete the remaining works, Nodal Agency is authorised to forfeit Bid Security and O-PBG related to other Projects and complete the works through other Contractor or Qualified Bidder.

3.27. APPLICABLE LAW:

3.27.1. The Agreement 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 Agreement 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 45 days of its arising, then 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 dispute will be settled in the High Court of MP. No arbitration proceedings will commence unless such notice is given.

- 3.28.3.Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the Agreement unless they otherwise agree.
- 3.28.4.Cost of arbitration shall be shared between the Contractor and Nodal Agency as per the award of the arbitration.
- 3.28.5.If any dispute of any kind whatsoever arises between Beneficiary and the Contractor in connection with or arising out of the Agreement 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 Agreement and all correspondence between the Nodal Agency and the Bidder shall be in Hindi/ English language.

3.30. OTHER CONDITIONS:

- 3.30.1.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.
- 3.30.2. The Contractor shall not transfer, assign or sublet the work in whole under the Agreement pursuant to this RFP or any substantial part thereof to any other party.
- 3.30.3.All the relevant test certifications must be kept valid up to the period of the contract (as applicable).

3.30.4. **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.

3.30.5.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 Agreement is assigned to any entity partly or wholly, the Agreement shall be binding mutatis mutandis upon the successor, entities and shall continue to remain valid with respect to obligation of the successor, entities.

3.30.6. 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.

3.30.7. PRICE PREFERENCE:

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

3.30.8. 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.

3.30.9. 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 MPUVNL. Third party inspection of the Projects may be performed by MPUVNL 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.

3.30.10. 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 MPUVNL'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 MPUVNL'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 subcontractors to permit the MPUVNL 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 MPUVNL.

3.30.11. DEBARRED 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 from participating in Nodal Agency's any future tender/ RFP for a period as decided by the competent authority of Nodal Agency.

SECTION-II BID EVALUATION

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' 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;
 - 1. 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 detailed out in Clause 4along with provisions of clause 3.6may cause the Bid to be non-responsive.

4.4. **EVALUATION OF FINANCIAL BID:**

4.4.1. 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 information 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".

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 Category as per clause 2.1, Eligible Bidder shall be ranked from the lowest to the highest based on the Financial Bid submitted by the Bidder.
- 5.4. The bids shall be evaluated for identifying three Qualified Bidders.
- 5.5. Eligible Bidder with second and third ranked Financial Bid for given scope of work under each Category shall be invited to match the lowest Financial Bid (Qualified Bidder 1) in each Category for given scope of work to become Qualified Bidder(s). Upon their acceptance of lowest Financial Bid, such Bidder(s) shall become Qualified Bidders (Qualified Bidder 2 & Qualified Bidder 3) and shall be invited (through LICA) to enter into the Agreement.
- 5.6. In case, either or both Eligible Bidders with second and third ranked Financial Bid decline to match lowest Financial Bid (L1), then Bidders with subsequent ranked Financial Bid shall be invited to match the Qualified Bidder 1 and shall be considered to fill available position till MPUVNL gets three Qualified Bidders, including Qualified Bidder 1 and shall be declared as Qualified Bidder 2 & 3. LICA shall be issued to such Qualified Bidders and they would be declared as Successful Bidders.

- 5.7. In a situation where two or more Bidders have quoted the same rate, they shall be offered to become Qualified Bidder by matching L1 rate in the order of their decreasing Net Worth, that is, the Bidder with the highest Net Worth shall be given preference and subsequently the remaining Bidders would be asked to match L1 until three Qualified Bidders are not selected. In case two or more Bidders have quoted the same rate and their Net Worth is also the same, then turnover would be the deciding criteria and Bidder with the highest average turnover will be given preference. Nodal Agency shall continue this process, if required, for Bidders quoting the same rates until three Qualified Bidders are declared.
- 5.8. The work allocation for all the Categories shall be as under:

Contractor	Capacity to be allocated
Contractor -1 (L1 of that category)	50% of the total capacity under that category
Contractor -2 (L2 of that category)	30% of the total capacity under that category
Contractor –3 (L3 of that category)	20% of the total capacity under that category

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

- a. 10% of the indicative capacity of Categories A2, B, D1, D2, E1 and E2 ranging from 1 kW to 10 kW shall be reserved for the startups that are participating in this tender as per the clause 3.3.4. The Contractor 1 shall be eligible for 50%, Contractor II shall be eligible for 30% and Contractor III shall be eligible for 20% of the of remaining 90% capacity. For all the other categories, work allocation for Contractors shall be as per the table above.
- b. After the discovery of L1 rate, the startups shall be asked to submit an undertaking stating the Categories in which they are willing to work. They will be required to match the L1 rate for each of the selected Categories.
- c. In case where works are required to be allocated among multiple startups, it will be allotted in decreasing order of their total technical experiences (in kW). In case technical experience is same for two or more startups, work will be allocated in the decreasing order of their turnover (a startup may refer to its affiliate and share with the turnover details of the affiliate). In case technical experience and turnover being equal, reserved quantity of work will be equally allocated to all such startups, if available, in respective category. A group of startups may submit a "Consortium Agreement" if they want to participate as a JV/Consortium.

- d. In case there are only two (non-startup) Contractors available, they shall be eligible for 50% and 30% of category cumulative capacity of 90% for the reserved categories and 100% for unreserved categories, respectively. The remaining share of Category capacity may be distributed equally amongst available Contractors. However, Nodal Agency may seek consent of such Contractors on allotment of the said remaining share and take appropriate decision accordingly.
- e. In case only one Contractor is available, it shall be eligible for 50% of Category cumulative capacity of 90% for the reserved categories and 100% for unreserved categories. The Nodal Agency may, at its sole discretion, offer remaining share of the Category capacity to the available Contractor. However, Nodal Agency may seek consent of such Contractor on allotment of the said remaining share of a Category capacity and take appropriate decision accordingly.
- f. In order to promote further installation of SPV systems under various categories, bidders shall also have the option to reach out to beneficiaries (i.e. Government institutions/organizations only) for installation of SPV systems at the L1 rate discovered for that category. Further, only L1, L2 and L3 bidders for a particular category shall be permitted to install such systems for beneficiaries identified by them only up to 100% of cumulative capacity for that category.

5.9. **PRINCIPLES OF WORK ALLOCATION**

- 5.9.1. Generally, the Projects in any Category shall be offered to Contractors, subject to the provisions of clause5.8.
- 5.9.2. In case of work(s)beyond the indicative capacity in clause 2.10f this RFP subject to clause 3.26.2:
 - a. Work(s) shall be first offered to the existing Contractor(s) of the Category, subject to provisions of clause 5.8.
 - b. If any Contractor of the Category does not accept work(s), then penalty as per clause 3.14 shall be levied on such Contractor and the remaining work(s) shall be equally distributed among the other Contractor(s) of the same category.

In case all the existing Contractor(s) refuses the Work, the Nodal Agency shall discard such Project site(s) from the tender.

5.9.3. Work allocation principles prescribed under Clauses 5.8 and 5.9.2 shall be applicable for Systems for which beneficiary organization/ department/ government agency has approached directly to MPUVNL. However, following shall be applicable for Systems, requisition for which is exclusively arranged by Contractor(s) though their own marketing and relationship:

- (a) Complete amount of requisition received by MPUVNL (as per FORMAT 17: LETTER FOR INSTALLATION THROUGH A PARTICULAR VENDOR OF CONSUMER'S CHOICE) resulting out of presentation/ demonstration/ marketing by concerned Contractor(s) shall be awarded to such Contractor(s).
- 5.9.4. Total work allocation shall be as per the Indicative capacity mentioned in TABLE 1, subject to limits of 200% of Indicative Capacity as indicated in Clause 2.2.

5.10. PROJECT CAPACITY REVISION / RESIZING:

- 5.10.1. 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:
 - a. Technical feasibility based on the shadow free space available
 - b. Commercial feasibility considering the load profile and applicable regulations.
- 5.10.2. 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.
- 5.10.3. 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.
- 5.10.4. In case the project lies under the same category after revision:
 - a. In case of increase in the project capacity, Actual Bid Security for the additional amount as per clause 3.12.5 shall be submitted within ten (10) days of confirmation of the capacity by Nodal Agency.
 - b. Non-fulfilment of the above clause shall be considered as refusal to execute the Work Order and clause 3.14 shall be applicable.
- 5.10.5. In case the project shifts to a lower category after revision:
 - a. Nodal Agency shall communicate the same to the contractor in that lower category.
 - b. The work allocation will be done considering work proportion as per Clause 5.8.
 - c. The Contractor shall be required to submit Actual 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.

- d. Non-fulfillment of the above clause shall be considered as refusal to execute the Work Order, clause 3.14 shall be applicable.
- 5.10.6. In case the project shifts to a higher Category after revision:
 - a. Nodal Agency shall communicate the same to the contractor in that higher category.
 - b. The work allocation will be done considering work proportion as per Clause 5.8.
 - c. The Contractor shall be required to submit Actual 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.
 - d. Non-fulfillment of the above clause shall be considered as refusal to execute the Work Order, clause 3.14 shall be applicable.
- In case an Eligible Bidder(s) identified subject to provisions of Clauses above, is 5.11. having ownership of commercially operational manufacturing facility(ies) in Madhya Pradesh, it shall be eligible for a preferential offer of 10% of the Category cumulative capacity. This preferential offer shall be applicable on submission of request in this regard by the Bidder(s) subject to the condition that such offer shall be applicable only on future work order(s) to be offered from the date of acceptance of its request by the Nodal Agency. Further, such preferential offer shall be equally distributed among such Qualified Bidder(s). The work allocation mentioned in Clause 5.9shall be for residual capacity remaining after such preferential allocation of works. However, the Bidder shall ensure that such manufacturing facility shall be manufacturing mono/poly crystalline solar photovoltaic module, meeting all specifications mentioned in Section VI: Technical Parameters of this RFP. The Bidder shall ensure that such manufacturing facility shall be empanelled with MNRE. Further, if the solar photovoltaic modules meet all specifications mentioned in Section VI: Technical Parameters of this RFP, only then it shall be eligible for preferential work allocation under this Clause.
 - 5.12. The Contractor may be allowed to submit the proposals on behalf of the interested organizations/institutes who have agreed to install the System specifically from them only. In such cases, the work will be awarded, as per RFP specification and on the standardized rates, to that Contractor who has made all the efforts to convince the

organization/institute for installing System. The Beneficiary or Contractor (on behalf of Beneficiary) must be required to submit a letter (signed and sealed by the appropriate authority of the Beneficiary) as provided in Format17.However, it is necessary to clarify that such additional capacities shall not be the part of Awarded Capacity and this will not be considered in the distribution of Works in the defined proportion. Additional capacities will be within 100% of indicative capacity for a particular category as mentioned in Table 1.

In case the proposal/ letter received by the MPUVNL directly from the interested institute/organization or MPUVNL has already approached the institute/organization, then in such case the work will be allocated to the Contractors as per the relevant conditions of the Clause 5.8 of the RFP.

- 5.13. As per timelines stipulated in this RFP, Letter Inviting Consent for Agreement (LICA) 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 LICA 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. Designing, engineering, supply, installation, testing and commissioning of various capacities of Project as per standard design and specifications and connecting up to existing Mains/ACDB and interfacing internal electrical loads of Project with licensee's network/electrical loads (for project with/without energy storage)with insurance, warranty and Comprehensive O&M for period of five (05) years from date of Commissioning. Contractor would have to take approval for interfacing the Project with Grid/Electrical Loads of every location from distribution licensee.

6.2. THE SCOPE OF WORK SHALL ALSO INCLUDE THE FOLLOWING:

- 6.2.1. 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.
- 6.2.2. Within thirty (30) days from the award of Work Order, contractor is required to submit the Net-Metering application form for the concerned DISCOMs for Category I beneficiary.
- 6.2.3. 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. The Contractor shall also submit the mode in which the system will operate in accordance with the provisions of Clauses 5.1, 5.2, 5.3 and 5.4 of Madhya Pradesh Policy for Decentralised Renewable Energy Systems, 2016 and its amendment thereof.
- 6.2.4. Detailed planning of time bound smooth execution of Project.
- 6.2.5. Procurement and installation of net-meter, generation meter and transformer as applicable.
- 6.2.6. Work mentioned in Clause 2.5 would not be a part of the financial bid.
- 6.2.7. For system above 100 kW, bidder shall include CEIG (Chief Electrical Inspector) charges under its scope.
- 6.2.8. The contractor must demonstrate CUF as per Clause 0.
- 6.2.9. The Bidder has to quote Project Cost (INR) inclusive of structure height up to 1meter.
- 6.2.10. Comprehensive O&M of the Project for five(5) year to assure faultless operation,

preventive & breakdown maintenance and inventory maintenance.

- 6.2.11. Quarterly report shall be submitted by the contractor regarding performance of the plant and maintenance activities carried out by the contractor.
- 6.2.12. After sales service through service centres.
- 6.2.13. Coverage of risk liability of all personnel associated with implementation and realization of the Project;
- 6.2.14. Training of at least two persons each to be nominated by user at every location, 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.
- 6.2.15. The Successful Bidder shall maintain sufficient inventory of the spare parts to ensure that the Project is functional during the period of warranty period.
- 6.2.16. 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.
- 6.2.17. Comprehensive O&M of the Project at every location, from the date of the Commissioning of Project must be carried out by the Contractor. Comprehensive O&M of the Project shall be for the five (05) years from the date of Commissioning.

6.3. INTERNAL ELECTRIFICATION:

- 6.3.1. Inspection of the existing electrical network of each of the Project site;
- 6.3.2. Inspection of the Project in respect of its interfacing with licensee network/identified electrical load;
- 6.3.3. Preparation and submission of electrical drawing for the site with quantity of material required;
- 6.3.4. Obtaining prior approval of the work and drawing from Inspecting Authority;
- 6.3.5. 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;
- 6.3.6. 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.

6.4. **GRID CONNECTION:**

6.4.1. The Contractor shall be responsible for synchronization of the Project with licensee's network under Madhya Pradesh Policy for Decentralised Renewable Energy Systems, 2016 as amended from time to time. The Contractor shall also suggest the Category

of operation of the system mentioned in above policy and intimate the Nodal Agency;

- 6.4.2. Assessment of the additional works required such as switch gear, transformation, isolator etc.;
- 6.4.3. Submission of bill of material with estimate in accordance with prevailing SOR of DISCOMs of MP, and obtaining approval of MPUVNL/DISCOMs whichever is applicable;
- 6.4.4. Connectivity of Project with the licensee's network.
- 6.4.5. Commissioning of the project as applicable.

6.5. METERING AND GRID CONNECTIVITY:

6.5.1. Metering and grid connectivity of the Projects except Category A1, A2, B& C 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. Nodal Agency may facilitate in the process; however, the responsibility of metering and grid connectivity lies only with the Contractor. The required meters and modem (if required) shall be provided, and their costs shall be borne by the Contractor). Costs pertaining to net-metering shall be paid at actuals to the Contractor:

6.6. **INSURANCE:**

- 6.6.1. *Insurance during construction phase:* The Contractor shall take insurance for men and material, third party liability (if applicable), covering loss of human life, engineers and workmen and also covering the risks of damage, theft to the third party/ 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.
- 6.6.2. *Insurance during operations and maintenance phase:* Post commissioning of the systems, the beneficiary/owner of the system 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 systems.

6.7. WARRANTY AND GUARANTEES:

6.7.1. The Bidder shall warrant that the goods supplied under this Agreement 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 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.

6.7.2. 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.

6.8. TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP:

- 6.8.1. The Bidder shall warrant that the goods supplied under this Agreement 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 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 design, engineering, manufacture, supply, installation, testing, 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).
- 6.8.3. The specifications of the components should meet the technical specifications mentioned in this RFP or its subsequent amendments.
- 6.8.4. 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.
- 6.8.5. 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 percent service charges of the cost of such rectification, from the Contractor and / or terminate the Agreement for balance work/ supplies with enforcement of penalty as per Agreement.

6.9. CONSTRUCTION OF BATTERY BANK/CONTROL ROOM ETC. (AS PER

SITE REQUIREMENT)

- 6.9.1. Assessment of requirement for construction of battery/control room or any other relative civil work essential for Completion of Project;
- 6.9.2. Obtaining prior approval of the work, drawing and estimate from Inspecting Authority;
- 6.9.3. Taking up and completion of the required civil work 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.

6.10. PROVISION OF SIGN BOARDAND LIGHTENING ARRESTOR:

- 6.10.1. 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.
- 6.10.2. The provision for lighting arrestor shall be mandatory.

6.11. **REQUISITE CERTIFICATIONS:**

- 6.11.1. **Completion Certificate:** When the Contractor fulfils his obligations under the Agreement and submits the signed Inspection Report of the Work(s) as per prescribed format shall be considered as deemed Completion Certificate for the Project.
- 6.11.2. **Commissioning Certificate:** After Completion of the Project, the Nodal Agency shall issue commissioning certificate to the Contractor after demonstration of satisfactory performance of the System as indicated in clause 3.15, 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).

6.12. EXTENSION IN COMPREHENSIVE MAINTENANCE OF SYSTEMS

6.12.1. After completion of 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 agreement on negotiations held between the Nodal Agency and the Contractor.

SECTION IV

TERMS AND CONDITION FOR PAYMENT

7. **PAYMENT TERMS**:

- 7.1. *Payment on Completion of Work*: 90% of Work Order value shall be paid on successful Completion of work(s) listed in the Work Order, entailing the following points:
 - a. Submission of documents in support of systems performance criteria
 - b. Appropriate Bills along with Challan in Duplicate.
 - c. Inspection Report duly signed by Contractor and Inspecting Authority as per clause 6.11.1.
 - d. Coloured photograph of SPV Array, Battery Bank (if applicable), PCU/Inverter (as applicable) and sign board duly certified by Inspecting Authority. Bill along with Measurement Book ("MB"), for all additional electrical & civil works executed (if any) duly certified by the concerned Inspecting Authority.

7.2. Payment on Commissioning:

- 7.2.1. Actual Bid Security shall be held with MPUVN till the system is commissioned as per clause 6.11.2.
- 7.2.2. Actual Bid Security and remaining 10% of work order value will be released by Nodal Agency on achieving commissioning (including net metering of system in case of Grid Connected systems) along with submission of O-PBG of 10% as mentioned in clause 3.13.
- 7.2.3. The following documents will also be required to be submitted (for both offgrid or grid connected with or without battery systems):
 - a. Commissioning Certificate for the Projects as per provisions of clause 6.11.2.
 - b. Document in support of performance of the system and achievement of CUF of 15% subject to seasonality as per provisions of clause 3.15 (if applicable).
- 7.3. Other documents required by Nodal Agency:
 - a. A certificate from any licensee or contractor / supervisor certifying that the electrical internal/external electrical work carried out is in accordance with the norms of electrical safety standards.
 - b. If asked for, by the Nodal Agency, all the documents related to purchase of Panel,

System electronics, Battery (if applicable) components of the Project.

- c. If asked for, by the Nodal Agency, all documents, premium receipts related to insurance of components of Projects.
- 7.4. Applicable Taxes shall be deducted at source.

7.0. RECOVERY OF PENALTY AND/OR LIQUIDATED DAMAGES

- 7.1. Nodal Agency shall recover/ adjust LD/penalty from any payments due to the Contractor. If recovery/ adjustment is not possible from payments due, the same shall be done through Bid Security/O-PBG against the work order concerned. Lastly, if recovery/ adjustment of LD/ penalty is not possible against payment due or Bid Security/ O-PBG concerned, it shall be done against any Bid Security/O-PBG of the Contractor with Nodal Agency with respect to any other work.
- 7.2. In case any PBG or Bid Security is utilized, partly or fully, towards recovery/ adjustment of LD/ penalty, the same shall be replenished to its original value and validity period within seven (7) days of written communication on this behalf from Nodal Agency to Contractor, failing which the Contractor shall become ineligible for further Work Order being given under this RFP.

SECTION V

CHECKLIST

8. File -1 (pdf format <u>online submission</u>):

S.No.	Particular	Format No.	Copy Attached (Yes/No)
1.	Covering Letter	1	
2.	Bid processing Fee	-	
3.	Bid Security (Payment receipt in pdf/scan copy/screen shot/copy of proof of payment)	-	

9. File -2 (pdf format <u>online submission</u>):

S.No.	Particular	Format No.	Copy Attached (Yes/No)
1.	General Particulars	2	
2.	Bidder's composition and ownership structure (applicable for bidder and each member of the consortium)	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 Eligibility Criteria Requirement	7 & 8	
5.	Format for Certificate of Relationship in case of Affiliate (if applicable)		
6.	5. Certificate of Incorporation (applicable for bidder and each member of the consortium)		
7.	Undertaking		
8.	Declaration (applicable for bidder and each member of the consortium)		
9.	Technical Eligibility (Work order/Contract/ Agreement)		
10.	Technical Eligibility (Completion Certificate)		
11.	Board Resolution in support of power of attorney in favor of authorized signatory (if applicable)		
12.			
13.	Power of attorney in favor of lead partner (if applicable, by each member of the consortium)		
14.	RFP Document Stamped and Signed along with the	-	

corrigenda and addenda along with copy of minutes of	
pre-bid meeting (if any)	

CHECKLIST FOR STARTUPS

10. *File–I* (*Pdf format <u>online submission</u>):*

S. No.	Particular	Format No.	Copy Attached (Yes/No)
1.	Covering Letter	1	
2.	Bid processing Fee	-	

11. File - 2 (Pdf format <u>online submission</u>):

S. No.	Particular	Format No.	Copy Attached (Yes/No)
1.	General Particulars	2	
2.	Bidder's composition and ownership structure (applicable for bidder and each member of the consortium)	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.	Format for Certificate of Relationship in case of Affiliate (if applicable)	9	
5.	Certificate of Incorporation (applicable for bidder and each member of the consortium)	-	
6.	Undertaking	10	
7.	Declaration (applicable for bidder and each member of the consortium)	16	
8.	Technical Eligibility (Work order/Contract/ Agreement)	-	
9.	Technical Eligibility (Completion Certificate)	-	
10.	Board Resolution in support of power of attorney in favor of authorized signatory (if applicable)	-	
11.	Consortium Agreement (if applicable)	14	
12.	Power of attorney in favor of lead partner (if applicable, by each member of the consortium)	15	
13.	Technical Experience and Turnover	18 & 19	
14.	RFP Document Sealed and Signed along with the corrigenda and addenda along with copy of minutes of pre-bid meeting (if any)	-	

SECTION VI

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 grid connected roof top PV systems in addition to technical parameters mentioned in this RFP and comply accordingly.

12. PARAMETERS:

- 12.1. 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.
- 12.2. All the equipment to be used in the project should be "Made in India" only including Lithium Ferro Phosphate batteries/cells.

Project shall consist of following equipment/components:

- a. Solar PV modules that adhere to the prevailing technical specifications & testing requirements fixed by MNRE
- b. AC or DC generation meter as applicable
- c. Net meter with other accessories as required (as per decentralised RE policy and net metering regulations)
- d. Grid interactive/ off-grid system with battery will have Power Conditioning Unit with Remote Monitoring System and grid interactive systems without battery shall have string inverters with Remote Monitoring System.
- e. Mounting structures
- f. Battery Bank (if required)
- g. Junction Boxes
- h. Earthing and lightening protections
- i. IR/UV protected PVC Cables, pipes and accessories

13. SOLAR PHOTOVOLTAIC MODULES:

- 13.1. 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.
- 13.2. 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.
- 13.3. 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.
- 13.4. 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 250 Wp and above wattage. Module capacity less than minimum 250 Wp should not be accepted.
- 13.5. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- 13.6. 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)
- 13.7. The Contractor shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his Bid.
- 13.8. 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.
- 13.9. 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, Im, Vm 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

13.10. Warranties:

a. Material Warranty:

Material Warranty is defined as:

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.

Defects and/or failures due to manufacturing

Defects and/or failures due to quality of materials

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)

b. 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 (10th) year of the full rated original output.

14. ARRAY STRUCTURE:

- 14.1. 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.
- 14.2. 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.
- 14.3. 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.
- 14.4. 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.
- 14.5. 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
- 14.6. 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^2 .
- 14.7. The minimum clearance of the structure from the roof level should be 300 mm.

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

15.1. 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 JBs shall be such that input & output termination can be made through suitable cable glands.

- 15.2. 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.
- 15.3. 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.
- 15.4. 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

16. DC DISTRIBUTION BOARD BASED ON SYSTEM DESIGN REQUIREMENTS:

- 16.1. DC Distribution panel to receive the DC output from the array field.
- 16.2. 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.

17. AC DISTRIBUTION PANEL BOARD:

- 17.1. 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.
- 17.2. All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- 17.3. The changeover switches, isolators, cabling work should be undertaken by the Contractor as part of the project.
- 17.4. 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.
- 17.5. The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- 17.6. All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- 17.7. Should conform to Indian Electricity Act and rules (till last amendment).
- 17.8. 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

18. PCU/ARRAY SIZE RATIO:

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

19. PCU/ Inverter:

- 19.1. 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: -200 C to 500 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
- c. Three phase PCU/ inverter shall be used as required.
- d. PCU/inverter shall be capable of complete automatic operation including wakeup, synchronization & shutdown.
- e. 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.
- f. Built-in meter and data logger to monitor Project performance retrievable through external computer shall be provided.
- g. 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.
- h. 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.
- i. 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.
- j. 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 9th April 2019.

20. BATTERY BANK:

20.1. LITHIUM FERRO PHOSPHATE (LFP) BATTERY

The battery should be Lithium Ferro Phosphate (LiFePO4) having given capacity. The other feature of battery should be:

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

- a. 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.
- b. sThe self-discharge rate of the battery bank or individual cell shall not exceed three (3) percent per month.
- c. The battery must have a life of more than 2,000 cycles.
- d. 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.
- e. The permitted maximum depth of discharge (DOD), shall not be less than 80%.
- f. The battery should be placed at safe location inside the room and should be placed inside suitable battery enclosure with battery stand.
- g. 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.
- h. All the connectors should be insulated except for the end portions.

21. 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.

22. INTEGRATION OF PV POWER WITH GRID:

- 22.1. 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.

23. DATA ACQUISITION SYSTEM / PROJECT MONITORING:

- 23.1. Data Acquisition System shall be provided for each of the solar PV Project.
- 23.2. 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.
- 23.3. 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.
- 23.4. 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.
- 23.5. 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.
- 23.6. 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.
- 23.7. All instantaneous data should be available through RMS.
- 23.8. Software shall be provided for USB download and analysis of DC and AC parametric data for individual Project.
- 23.9. Provision for Internet monitoring and download of data shall be necessarily incorporated for projects of capacity 5 kW and above.
- 23.10. 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.

24. TRANSFORMER "IF REQUIRED" & METERING:

- 24.1. Dry/oil type appropriate kVA, of transformer Step up along with all protections, switchgears, Vacuum circuit breakers, cables etc. along with required civil work.
- 24.2. 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.
- 24.3. Reverse power relay shall be provided by Contractor (if necessary), as per the local distribution licensee's requirement.
- 24.4. Configuration of Generation Meter and Net Meter should confirm with the specifications provided in the Madhya Pradesh Policy for Decentralised RE Systems, 2016 and its amendments (New & Renewable Energy Department, NRED, Madhya Pradesh)

25. POWER CONSUMPTION:

25.1. 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.

26. PROTECTIONS:

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

26.1.1. **LIGHTNING PROTECTION** (optional in case of residential systems)

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 62305standard. 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.

26.1.2. SURGE PROTECTION:

Internal surge protection shall consist of three MOV type surge-arrestors connected

from +ve and -ve terminals to earth (via Y arrangement).

26.1.3. **EARTHING PROTECTION:**

a. 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.

26.1.4. **GRID ISLANDING:**

a. 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.

27. CABLES:

- 27.1. Cables of appropriate size to be used in the Project shall have the following characteristics:
 - a. Shall meet IEC 60227/IS 694, IEC 60502/IS1554 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%.
- 1. 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 %.
- m. All such external electrical works shall be required to be done as per DISCOMs SOR.

28. CONNECTIVITY:

- 28.1. 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.
- 28.2. The renewable energy system can be interconnected at one or more points within the premise of consumer with the network of Distribution Licensee, at the voltage level as per the provisions of Madhya Pradesh Electricity Supply Code, 2013 and any amendments thereof.
- 28.3. 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.
- 28.4. 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.

29. NET METER AND GENERATION METER

29.1. **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 standards for net meter provided in Annexure II of the first amendment to Madhya Pradesh Policy for Decentralized Renewable Energy Systems, 2016.

29.2. Generation Meter –

29.2.1. For Solar Rooftop capacity less than 15 kW: In case the generation metering arrangement is not provided in the Power Conditioning Unit/ Inverter of the RE System, a separate Generation Meter at the Premises, as per prescribed standards, shall be installed. The generation meter shall conform to the standards as provided in Annexure I of the first amendment to Madhya Pradesh Policy for Decentralized Renewable Energy Systems, 2016 (NRED).

29.2.2. For Solar Rooftop capacity greater than 15 kW: Every solar rooftop consumer under this tender is required to install a separate Generation Meter at the Premises, as per prescribed standards. The generation meter shall conform to the standards as provided in Annexure I of the first amendment to Madhya Pradesh Policy for Decentralized Renewable Energy Systems, 2016 (NRED).

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

30. TOOLS & TACKLES AND SPARES:

- 30.1. 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.
- 30.2. 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.

31. DANGER BOARDS AND SIGNAGES:

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

32. FIRE EXTINGUISHERS:

32.1. 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 confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCUs.

33. DRAWINGS & MANUALS:

- 33.1. 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.
- 33.2. Approved ISI and reputed makes for equipment be used.
- 33.3. For complete electro-mechanical works, Contractor shall supply complete design, details and drawings to Nodal Agency.

34. PLANNING AND DESIGNING:

- 34.1. 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.
- 34.2. 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.
- 34.3. 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.

35. SAFETY MEASURES:

35.1. 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 VII

FORMATS FOR SUBMITTING RFP FORMAT 1: COVERING LETTER

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

Ref. No.:	Date:
From: <u>(Insert name and address of Bidder)</u>	
Геl:	
Fax:	
Email address:	
Го:	

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 eleven (11) 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 work of Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation &Maintenance of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage aggregating to about eleven(11)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. 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 categories

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

			Bidder Details	
Project Category	Participation* (Yes / No)	Company/ LLP/ Partnership Firm/ Sole – Proprietor or Consortium (Fill as applicable)	Name of the Members of Consortium (if applicable)	Participation of member of Consortium as Company/ LLP/ Partnership Firm/ Sole – Proprietor
A1				
A2				
В				
С				
D1				
D2				
E1				
E2				
F1				
F2				
G1				
G2				
H1				
H2				
I1				

*Note: Bidder shall mention 'Yes' corresponding to categories it wants to bid and clearly mention 'No' for categories where it does not intend to bid. Startups should leave the table blank. After the discovery of L1 rate, the startups shall be asked to submit an undertaking stating the categories in which they are willing to work.

Bid Security

Bidder should submit Bid Security/EMD payment online for single bid category or for multiple bid categories. They should clearly mention in the table below about the details of NEFT/RTGS Transaction for each category i.e. if single NEFT/RTGS transaction was done, then the same NEFT/RTGS number should be separately mentioned for each category, otherwise for multiple

Madhya Pradesh Urja Vikas Nigam Limited

NEFT/RTGS number, separately it should be mentioned.

We have enclosed Bid Security in form of RTGS/ NEFT payment/ Bank Guarantee for each category of amount as mentioned in this RFP, details of which are hereunder:

Project Category	Participation* (Yes / No)	Bid Security (INR Lakhs)	Bid Security Details (NEFT/RTGS)
A1			
A2			
В			
С			
D1			
D2			
E1			
E2			
F1			
F2			
G1			
G2			
H1			
H2			
I1			

*Note: Bidder shall mention 'Yes' corresponding to categories it wants to bid and clearly mention 'No' for categories where it does not intend to bid. Above table shall be left blank by the Startups.

OR

We have enclosed a Bid Security of cumulative amount required of Rs. _____, subject to clause 3.12.1, as mentioned in this RFP.

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).

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

Madhya Pradesh Urja Vikas Nigam Limited

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:

Particulars	Description
Name	
Designation	
Company	
Address	
Phone Nos.	
Fax Nos.	
E-mail address	

We are enclosing herewith the documents as per clause 3.8.1 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 _____2022

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

1 Name of the Company 2 **Registered Office Address** 3 E-mail 4 Web site Authorized Contact Person(s) with name, designation, Address and Mobile Phone No., 5 E-mail address/ Fax No. to whom all references shall be made 6 Year of Incorporation Have the Bidder/Company ever been debarred 7 By any Govt. Dept. / undertaking for undertaking any work. Reference of any documentation attached by 8 the Bidder other than specified in the RFP. Whether the Bidder wishes form to а 9 Yes/No Project Company for execution of work 10 Yes/No Bidder is listed in India

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

(Signature of Authorized Signatory)

GSTIN No.(Copy enclosed)

Certificate of Incorporation of Bidder/ Affiliate

Partnership deed or LLPF/ Sole Proprietor

registration (as applicable) enclosed

PAN No.(Copy enclosed)

(as applicable) enclosed

With Stamp

11

12

13

14

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

Yes/No

Yes/No

FORMAT 3: SHAREHOLDING CERTIFICATE

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

Name of the Equity holder	Type and Number of shares owned	% of equity holding	Extent of Voting rights

(Signature of Authorized Signatory) With Stamp

(Signature of Company Secretary/Director/Chartered Accountant

FORMAT 4: PERFORMANCE BANK GUARANTEE

(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 for 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 eleven(11) MW at various locations in the state of MP for capacity 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 LOI 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 Agreement 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.

Madhya Pradesh Urja Vikas Nigam Limited

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.

Dated this _____ day of _____, 20___

Witness:

Signature

Name and Address_____

Signature

Name and Address_____

FORMAT 5: CHECK LIST FOR PBG

S.No.	Details of checks	YES/NO
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 OrderNo. (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

(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 for 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 eleven (11)MW at various locations in the state of MP 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_____

Request for Proposal for Solar Roof top Projects in Madhya Pradesh

duly authorized by the Board to	issue such Power of Attorney
Dated thisday of	
Accepted	
Signature of Attorney	
(Name, designation and address	s of the Attorney)
Attested	
(Signature of the executant)	
(Name, designation and address	s of the executant)
Signature and stamp of Notary	of the place of execution
Common seal ofl	has been affixed in my/our presencepursuant to Board of
Director's Resolution dated	
WITNESS	
(Signature)	
Name	
Designation	
(Signature)	
Name	
Designation	

FORMAT 7: TECHNICAL ELIGIBILITY CRITERIA REQUIREMENT

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

To,

Madhya Pradesh Urja Vikas Nigam Limited

Bhopal

Dear Sir,

Sub: Standardization of rates for Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage capacity of about eleven (11)MW at various locations in the state of MP in response to the RFP No: ______, Dated

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

S.No.	Name of the Project	Name of the Client	Project Capacity (in kW)	Work Order Reference number	Whether Project is Commissioned (Yes/No)

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.

FORMAT 8: FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT

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

To,

Madhya Pradesh UrjaVikas Nigam Limited

Bhopal

Dear Sir,

Sub: Standardization of rates for 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 eleven (11) MW at various locations in the state of MP 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 unconsolidated 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).

Name of the	Name of Affiliate in case its financial strength is being used	Financial Year	Financial Criteria		
Entity being evaluated			Net Worth (INR Lakh)	Turnover (INR Lakh)	

Note:

The bidders shall declare in undertaking (Format-11) 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)

Request for Proposal for Solar Roof top Projects in Madhya Pradesh

Name:	
Date:	
Place:	

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

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.

FORMAT 9: CERTIFICATE OF RELATIONSHIP OF AFFILIATEWITH THE BIDDER

(On the letterhead of the Affiliate)

To,

Dear Sir,

Sub: Request for Proposal (RFP) for Standardization of rates for 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 eleven (11)MW at various locations in the state of MP

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, the same details shall be shared with respect to each member of the Consortium 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)

FORMAT 10: UNDERTAKING FORM

(Undertaking from Affiliate of Bidder/ Lead Member/ Member of Consortium)

Name:	
Full Address:	
Telephone No.: E-mail address: Fax/No.:	_
То,	

Dear Sir,

We refer to the RFP No: ______, Dated ______ for Request for Proposal (RFP) for Standardization of Rates for Grid Connected/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about eleven (11) MW at various locations in the state of MP.

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 awarded capacity, 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

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 b	been affixed in my/our presence pursuant to		
Board of Director's Resolution dated			
WITNESS			
(Signature)			
Name			
Designation			
(Signature)			
Name			

Designation_____

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 Agreement between MPUVNL 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: UNDERTAKING FOR REUSE OF SUBMITTED PBG

To,

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

Dear Sir,

Please refer to the work order Nos. and corresponding Performance Bank Guarantees:

Work Order No.	PBG No.	PBG Value	PBG Validity Until Date	
Hereby, we are submitting a list of PBG (s) that we wish to reuse against a new work order as its O-PBG.				
The validity period for the O-PBG of the new Work Order No should be until (date) as				

per requirement of RFP No: ______, Dated_____, its amendments and subsequent Agreement

between MPUVNL and ______(name of Contractor) dated______

Seal of the company/ Firm

Date

Name, designation & signature of authorized signatory

FORMAT 13: AGREEMENT

(To be stamped in accordance with Stamp Act)

This agreement is signed on this ---- (day)------ of ----(wonth)---- 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, 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 Design, Engineering, Supply, Installation, Testing and Commissioning, including Insurance, Warranty, Spare Parts and Operation & Maintenance of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with energy storage 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 **31**st **January 2024**.

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 Agreement.

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

That, in the event of any dispute or difference whatsoever arising under this Agreement, 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 Principal Secretary, New and Renewable Energy Department, Govt. of Madhya Pradesh / Managing Director, M.P. Urja Vikas Nigam Ltd., Bhopal.

The agreement will be valid up to 31st January 2024. The validity period may be extended further with

the Mutual Consent on unchanged Terms & Condition(s), Specification(s) and Rate(s) up to a maximum of one (1) year.

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

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

Witnesses;

Party No.1

1.	
	Party No.2

2.

FORMAT 14: CONSORTIUM AGREEMENT

Joint Bidding/ Consortium Agreement Format for Participation in "Request for Proposal (RFP)

For

Standardization of Rates and Selection of Eligible Bidders

For

Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation & Maintenance of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage

At

Various Locations in the State of MP

(To be stamped in accordance with Stamp Act)

THIS JOINT BIDDING AGREEMENT is entered into on this [dd] day of[mm] 2022.

AMONGST

{[_____], party on First Part of consortium} and having its registered 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} 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)

AND

{[_____], party on Third Part of consortium} and having its registered office at ______.(Hereinafter referred to as the "Third Part" or "Member" which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above-mentioned parties of the First, Second and Third 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 "MPUVNL" 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 award of the rate contract/ work under "Standardization of Rates and Selection of Eligible Bidders For Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation &Maintenance of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage At Various Locations in the State of MP (hereinafter called "Project") and selection of bidders for the same.
- ii. The Parties are interested in jointly bidding for the Project as members of consortium 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 shall enter into a Consortium 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

The Parties do hereby irrevocably constitute a consortium (the "**Consortium**") for the purposes of jointly participating in the Bidding Process. The Parties hereby undertake to participate in the Bidding Process in a Category of Project as per Table 1 of this RFP, only through this Consortium and not individually and/ or through any other consortium 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:

Project Category	Participation* (Yes / No)
A1	
A2	
В	
С	
D1	
D2	
E1	
E2	
F1	
F2	
G1	
G2	
H1	
H2	
I1	

a) The parties agree to submit bid as Consortium for following categories:

*Note: Bidder shall mention 'Yes' corresponding to categories it wants to bid and clearly mention 'No' for categories where it does not intend to bid. To be left blank in case of a Consortium.

- b) Only First Part shall be evaluated for qualification against technical eligibility criteria as per RFP.
- c) First Part shall have the power of attorney from all Parties for conducting all business for and on behalf of the Consortium during the Bidding Process and after its selection as Successful Bidder.
- d) First Part would be responsible and obligated for successful execution of all work awarded to them by MPUVNL and in no circumstances the same shall be the responsibility of Second Part or Third Part. Pursuant to selection of Successful Bidder as per criteria delineated in the RFP, all obligations as per RFP shall be borne by the First Part.
- e) Second Part and Third Part shall work in accordance with roles and responsibilities assigned to them by First Part as a part of their internal understanding.
- f) Parties have agreed and documented clearly stated roles and responsibilities between First Part, Second Part and Third Part for execution of work awarded by MPUVNL.
- g) Subject to the terms of this agreement, the share of each Member of the Consortium in the "issued equity share capital" shall be in the following proportion: (if applicable)

Name of Member	Proposed % Equity holding (if any SPV is formed)
Lead Member	
Member	
Member	

3. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until the date of Contract Validity Period and further in accordance with the LICA subsequently issued if bid arrives as successful. However, in case the Consortium is either not pre-qualified for the Project or does not get selected for Award of the work, the Agreement will stand terminated in case the Applicant is not pre-qualified.

4. Miscellaneous

This Joint Bidding Agreement shall be governed by laws of India. The Parties acknowledge and accept that this Agreement shall not be amended by Parties without the prior written consent of the MPUVNL. Party of First Part would decide on the representative of Consortium at MPUVNL.

IN WITNESS WHERE OF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

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

Request for Proposal for Solar Roof top Projects in Madhya Pradesh

(Signature)	(Signature)	
(Name & Designation)	(Name & Designation)	
(Address)	(Address)	
In Presence of :	In Presence of :	
Witness -1	Witness -1	
Witness -2	Witness -2	

FORMAT 15: POWER OF ATTORNEY IN FAVOUR OF LEAD MEMBER OF CONSORTIUM

(to be submitted by each member of the Consortium)

Whereas Madhya Pradesh Urja Vikas Nigam Ltd. (MPUVNL) has invited applications (the "Applications") by its RFP No: ______, Dated ______ for award of the rate contract/ work under "Standardization of Rates and Selection of Eligible Bidders For Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation & Maintenance of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage At Various Locations in the State of MP (hereinafter called "Project")

Whereas, it is necessary for the Members of the Consortium to designate one of them as the Lead Member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's bid for the Unit(s) and its execution.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS

registered office We, having our at, and, having our registered office at, (hereinafter collectively referred to as the **Principals**) do hereby irrevocably designate, nominate, constitute, appoint and authorise, being one of the Members of the Consortium, as the Lead Member and true and lawful attorney of the Consortium (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, 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, 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 is awarded the Project Documents for developing the Units, we authorise the Lead Member to submit information/documents, sign and execute contracts and undertakings consequent to acceptance of the Bid of the Consortium in relation to the incorporation of the SPV and generally to represent the Consortium in all its dealings with RUMSL, 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 Bid for the Unit(s) and/or upon award thereof 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 us/Consortium.

For

(Signature)

(Name & Title)

For

(Signature)

(Name & Title)

For

(Signature)

.....

(Name & Title)

(To be executed by authorized signatories of the Members of the Consortium, except 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.

FORMAT 16: DECLARATION

(Required to be submitted by the Bidder on Original Letter Head of company)

We have carefully read and understood the enclosed Terms and Conditions of the RFP and agree to abide by them.

- We declare that we have not been Black listed 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 Agreement 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 17: LETTER FOR INSTALLATION THROUGH A PARTICULAR VENDOR OF CONSUMER'S CHOICE

(To be submitted on letterhead of beneficiary organization) **Date:**

From:

Address:

Tel/Mobile:

Email:

To: Additional Executive Engineer, Madhya Pradesh Urja Vikas Nigam Limited (A Government of Madhya Pradesh Enterprise) Urja Bhawan, Link Road No. 2, Shivaji Nagar, Bhopal – 462016

Sub: Letter stating interest for installation of the Solar Rooftop System through a particular Contractor.

Dear Sir,

M/s _____(name of Organization) is a State Government/Central Government Organization, with premises located at _____(address), in Madhya Pradesh. The organization is interested in installation of solar rooftop system on the rooftop of its premises for a capacity of _____kW.

The organization has willingly selected this Contractor after evaluation of Contractors selected by Nodal Agency and request Nodal Agency to assign this Contractor for installation of solar rooftop system in our premises at the rate discovered under RFP No:______, Dated

M/s_____(name of Organization) hereby gives consent for the installation of rooftop system through this Contractor.

Thanking you.

Yours faithfully,

Name, Designation and Signature of Authorized Person

SECTION VIII

FORMATS FOR SUBMITTING RFP FOR STARTUPS

FORMAT 18: TECHNICAL EXPERIENCE

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

To,

Madhya Pradesh Urja Vikas Nigam Limited

Bhopal

Dear Sir,

Sub: Standardization of rates for Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with Energy Storage capacity of about eleven (11) MW at various locations in the state of MP in response to the RFP No: ______, Dated

We submit our Bid for which details of our Technical Experience are as follows.

S.No.	Name of the Project	Name of the Client	Project Capacity (in kW)	Work Order Reference number	Whether Project is Commissioned (Yes/No)

*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.

Yours faithfully

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

Name:_____

Date:_____

Place: _____

FORMAT 19: TURNOVER

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

To,

Madhya Pradesh Urja Vikas Nigam Limited

Bhopal

Dear Sir,

Sub: Standardization of rates for 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 eleven (11)MW at various locations in the state of MP in response to the RFP No:______, Dated ______

We submit our Bid for which details of our turnover are as follows.

Turnover of Indian Rupees ______ Lakh computed as per instructions provided in this RFP based on unconsolidated audited annual accounts. The relevant financial statement for respective years shall be enclosed, duly signed by authorised signatory.

Name of the Entity being evaluated	Financial Year	Turnover (INR Lakh)

Yours faithfully

(Signature and stamp of Authorized Signatory of Bidder)

Name:_____

Date:_____

Place: _____

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

Request for Proposal for Solar Roof top Projects in Madhya Pradesh

Name:	 	
Date:	 	
Place.		

Notes: Audited consolidated annual accounts of the Bidder may also be used for the purpose of expressing the financials, 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.

SECTION IX

FINANCIAL BID CATEGORY -A1

(To be submitted online only with due encryption)

Particulars	Financial Quote (INR per W)
Off-Grid Solar PV system with 4.8 VAh Lithium Ferro Phosphate battery per W (excluding GST)	

- 1. This category of project includes Off-Grid projects of size from 250 W up to 1 kW, with total available capacity of 200 kW.
- 2. 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).
- 3. Costs of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid at actuals
- 4. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY -A2

(To be submitted online only with due encryption)

Particulars	Financial Quote (INR per kW)
Off-Grid Solar PV system with 4.8 kVAh Lithium Ferro Phosphate battery per kW (excluding GST)	

- 1. This category of project includes Off-Grid projects of size greater than 1 kW and up to 3 kW, with total available capacity of 400 kW.
- 2. 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).
- 3. Costs of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid at actuals
- 4. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY -B

(To be submitted online only with due encryption)

Particulars	Financial Quote (INR per kW)
Off-Grid Solar PV system with 4.8 kVAh Lithium Ferro Phosphate battery per kW	
(excluding GST)	

- 1. This category of project includes Off-Grid projects of size greater than 3 kW and up to 10 kW, with total available capacity of 400 kW.
- 2. 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).
- 3. Costs of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid at actuals
- 4. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY -C

(To be submitted online only with due encryption)

Particulars	Financial Quote (INR per kW)
Off-Grid Solar PV system with 4.8 kVAh Lithium Ferro Phosphate battery per kW (excluding GST)	
(excluding OST)	

- 1. This category of project includes Off-Grid projects of size greater than 10 kW and up to 25 kW, with total available capacity of 400 kW.
- Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Costs of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid at actuals
- 4. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY-D1

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems without battery (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 1 kW and up to 3 kW, with total available capacity of 150 kW.
- 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).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY-D2

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems with 0.8 kVAh battery per kW (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 1 kW and up to 3 kW, with total available capacity of 100 kW.
- Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY-E1

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems without battery (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 3 kW and up to 10 kW, with total available capacity of 500 kW.
- Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be <u>excluded</u> from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY-E2

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems with 0.8 kVAh battery per kW (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 3 kW, up to 10 kW, with total available capacity of 350 kW.
- Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be <u>excluded</u> from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY -F1

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems without battery (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 10 kW and up to 25 kW, with total available capacity of 1500 kW.
- Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY -F2

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems with 0.8 kVAh battery per kW (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 10 kW and up to 25 kW, with total available capacity of 500 kW.
- Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY-G1

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems without battery (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 25 kW and up to 50 kW, with total available capacity of 1250 kW.
- Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY-G2

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems with 0.8 kVAh battery per kW (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 25 kW and up to 50 kW, with total available capacity of 500 kW.
- Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY-H1

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems without battery (INR per kW)
Total Financial Bid	

- This category of project includes Grid-Connected projects of size greater than 50 kW and up to100 kW, with total available capacity of 1000 kW.
- 2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY-H2

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems with 0.8 kVAh battery per kW (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 50 kW and up to100 kW, with total available capacity of 750 kW.
- 2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

FINANCIAL BID CATEGORY-I1

(To be submitted online only with due encryption)

Particulars	Financial Bid for Grid-Connected systems without battery (INR per kW)
Total Financial Bid	

- 1. This category of project includes Grid-Connected projects of size greater than 100 kW and up to 500 kW, with total available capacity of 3000 kW.
- Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (05) years Warranty cum Comprehensive Maintenance all-inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes/duties (excluding only GST).
- 3. Cost of additional electrical and civil works as mentioned in Clause 2.5 of RFP shall be **excluded** from the financial quote, as they would be paid as per SOR rates.
- 4. As mentioned in clause 6.5.1 costs pertaining to net-metering shall be paid at actuals to the Contractor.
- 5. As mentioned in Clause 6.6.2, Insurance Costs for the installed system(s) will be responsibility of beneficiary during O&M Phase.

SECTION X

CERTIFICATE OF QUARTERLY VISITS

(To be filled and submitted during 5 Years' warranty & CMC Period)

maintenance work during the I/II/III/IV quarter (from ______to _____) of the year 20..... has been done properly to ensure 100% 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 during the quarter is kept in the DREO office.

Enclosures: (i) Last three months of online energy generation data.

(ii) CUF, only applicable for projects as mentioned under Clause 3.15 of the RFP

Date:

Place

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

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

Signature, Name and seal of **DREO**