



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/without Energy Storage at Various Locations in the State of Madhya Pradesh

RFP No: MPUVN/SPVPP-NM/1-500 kWp/2016-17/ 3135 dated: 11/11/2016

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

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Request for Proposal for Solar Roof top Projects in Madhya Pradesh

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RFP No: MPUVN/SPVPP-NM/1-500 KWp/2016-17/3135

Dated:11/11/2016

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(5) years from the date of Completion) of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with/without Energy Storage aggregating to about thirty (30) MWp at various locations in the state of MP, India. The Grid connected projects may be under following three configurations- a) Grid connected net metered systems; b) Grid connected systems for consumption within/ outside premises through wheeling and banking; and c) Grid connected systems for consumption within/ outside premises with no export of power.

For the implementation of above mentioned work, Bidder should submit their bid proposal along with non-refundable Bid Processing Fee and all requisite documents complete in all respects on or before 05/12/2016 up to 1.30 PM in the office of “Nodal Agency” in prescribed format. 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 06/12/2016 at 03:00 PM in the presence of authorized representatives of Bidder who wish to be present.

Bid documents which include eligibility criteria, technical specifications, various conditions of Agreement, formats, etc. can be viewed from Nodal Agency’s website <http://www.mprenewable.nic.in> and can be downloaded from <https://www.mpeproc.gov.in> for online submission.

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 at any time before Bid submission date. Interested and eligible Bidders are advised to follow and keep track of Nodal Agency's web-site 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

Document Description	Request for Proposal (RFP) for Standardization of Rates and Selection of Contractors for Grid Connected/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about thirty (30) MWp at various locations in the state of MP
RFP No. & Date	RFP No: MPUVN/SPVPP-NM/1-500 KWp/2016-17/ 3135 Dated:11/11/2016
RFP Purchase Start Date	15/11/2016 at 3:00 PM
RFP Purchase End Date	03/12.2016 at 5:00 PM
Broad Scope	Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation & Maintenance (for five (5) years from the date of Completion of Grid Connected/ Off-Grid Roof Top Solar PV Projects with/without Energy Storage
Pre-bid Meeting	A pre-bid meeting shall be held on 24/11/2016 at 1100 hours at MPUVNL's office, Urja Bhawan, Link Road No. 2, Shivaji Nagar, Bhopal – 462016. Interested Bidder may send their representatives to attend the same.
Last date & Time of Submission of Bid (ONLINE only)	04/12/2016 up to 8:30 PM
Last date & Time of Submission of Technical bid (HARD copies)	05/12/2016 up to 1:30 PM
Bid Opening (Technical)	06/12/2016 at 3:00 PM
Bid Opening (Financial)	14/12/2016 at 3:00 PM (For any modification in Date, time and venue for Financial bid opening shall be updated on our website. Bidders are advised to keep tracking of the same).
Project completion timelines	Contractor would be expected to complete Projects within three(3) – six(6) months of work order. However, Project specific timelines shall be defined in respective work orders.
Bid Processing Fee (non- refundable)	Bidder shall pay Bid processing fee of Rupees 25,000/- (Rupees Twenty Five Thousand only) through Demand Draft (DD) drawn in favour of “Madhya Pradesh Urja Vikas Nigam Limited”, payable at Bhopal along

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	<p>with the Bid. By paying this fee, a Bidder shall be eligible to Bid for one or more Categories of Projects under this RFP.</p> <p>Additionally, Bidder shall pay E-tendering fees of requisite amount to the hosting agency.</p> <p>No exemption towards processing fees or E-tendering fees is allowed to any type of organizations/ agencies including MSMEs or any Govt./ semi Govt./ PSUs.</p>
Bid Security	<p>Interested Bidder shall furnish Bid Security of required amount for each Category for which Bidder is placing Bid. Bidders placing Bid for more than one Category may opt to furnish single Bid Security of total value of Bid Security(s) required for those Categories. The Bid Security as indicated in Clause 3.18 of RFP document, shall be in the form of cross Demand Draft drawn in favour of “M.P. Urja Vikas Nigam Ltd. Bhopal” payable at Bhopal from a nationalized/ scheduled bank, or FDR in favour of M.P. Urja Vikas Nigam Ltd., Bhopal through A/C of bidder or bank guarantee as per prescribed format (FORMAT 4).</p> <p>No exemption towards Bid Security is allowed to any type of organizations/ agencies including MSMEs or any Govt./ semi Govt./ PSUs</p>
Performance Bank Guarantee (“PBG”)	<p>Contractor shall be required to furnish a Construction- Performance Bank Guarantee (“C-PBG”) of value equivalent to 5% of a work order value.</p> <p>Contractor shall furnish Operational Performance Bank Guarantee (“O-PBG”) of 20% of work order value in the form and manner prescribed in this RFP.</p> <p>Further description for the same has been given in the RFP document.</p>
Update on this RfP	<p>Bidders are advised to keep tracking of changes/ updates/ corrigendum regarding this RfP on http://www.mprenewable.nic.in OR http://www.mpeproc.gov.in</p>
Address for Bid submission/ correspondence	<p>Mr. Shrikant Deshmukh Superintending Engineer, Urja Bhawan Link Road No. 2, Shivaji Nagar, Bhopal – 462016</p>

B. DEFINITIONS & ABBREVIATIONS

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

1. **“Affiliate”** shall mean a Company / Limited Liability Partnership (LLP) Firm/ Partnership Firm/ Sole Proprietor that directly or indirectly
 - i. controls, or
 - ii. is controlled by, or
 - iii. is under common control witha Bidder or a member (in case of a Consortium) and control means ownership by one Bidder/member of at least 26% paid up equity capital in any other Bidder/member. Any bank or financial institution shall not be considered as Affiliate.
2. **“Agreement”** shall mean the terms and condition agreed and signed between Contractor and Nodal Agency;
3. **“Awarded Capacity”** shall means the total capacity awarded to the Contractor for implementation of Project under this RFP;
4. **"B.I.S"** shall mean specifications of Bureau of Indian Standards (BIS);
5. **“Bid”** shall mean the Technical and Financial proposal submitted by the Bidder along with all documents/credentials/attachments annexure etc., in response to this RFP, in accordance with the terms and conditions hereof;
6. **“Bidder(s)”** shall mean bidding Company/Limited Liability Partnership (LLP) firm/ Partnership Firm/ Sole Proprietor or Consortium submitting the Bid. Any reference to the Bidder includes its successors, executors and permitted assigns as the context may require;
7. **“Bidding Consortium or Consortium”** shall refer to a group of bidding Company/Limited Liability Partnership (LLP) firm/ Partnership Firm/ Sole Proprietor that has collectively made a Bid, in response to RFP for the project.
8. **“Bid Deadline”** shall mean the last date and time for submission of Bid in response to this RFP as specified in Bid Information Sheet;
9. **“Bid Security”** shall mean Bid Security of desired value in the form of unconditional and irrevocable bank guarantee (as per Format 4) /DD/FDR, in favour of MPUVNL, to be submitted along with the Bid by the Bidder;
10. **“CEA”** shall mean Central Electricity Authority;
11. **“Capacity Utilization Factor”** (CUF) in a year shall mean the ratio of the output of the SPV Power Plant in a year versus installed Project capacity x 365 x 24.

(CUF = Cumulative Project output in kWh / (installed Project capacity in kWp x 24 x 365));

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 3.21.1.

12. **“Category”** shall mean a category of Project(s) as per Clause 2.2 of this RFP;
13. **“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;
14. **“Competent Authority”** shall mean Managing Director of MPUVNL, himself and/or a person or group of persons nominated by him for the mentioned purpose herein;
15. **“Completion”** shall mean supply and erection/installation of the Project and demonstration of CUF as per provisions of 3.21.
16. **“Commissioning”** means demonstration of successful operation of the Grid Connected Project, in accordance with prevailing regulations and Off-Grid Project by the Contractor as defined in RFP;
17. **“Company”** shall mean a body incorporated in India under the Companies Act, 1956 or Companies Act, 2013 including any amendment thereto;
18. **“Comprehensive O&M”** shall mean insurance, warranty, spare parts and operation & maintenance of Projects with / without energy storage for five (5) years from the date of Completion;
19. **“Contract”** shall mean the design, engineering, supply, installation, testing & Commissioning including insurance, warranty, spare parts and operation & maintenance (for five (5) years from the date of Completion) of Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with/without Energy Storage including other related civil and electrical works (as per site requirement) at various locations in the State of M.P.
20. **“Contractor”** shall mean the Successful Bidder or Project Company who has accepted the LICA and has signed the Agreement.
21. **“Eligibility Criteria”** shall mean the Eligibility Criteria as set forth in this RFP;
22. **“Qualified Bidder(s)”** shall mean, for given scope of work, the Eligible Bidder having quoted minimum Financial Bid in a Category or Eligible Bidder matching minimum Financial Bid in a Category
23. **“Financial Bid”** shall mean online financial Bid, containing the Bidder’s quoted Price as per RFP format;

24. "IEC" shall mean specifications of International Electrotechnical Commission;
25. "Inspecting Authority" shall mean the authority designated by the competent authority for the said purpose;
26. "kWp" shall mean KiloWatt Peak;
27. "kWh" shall mean KiloWatt Hour;
28. "LICA" shall mean Letter Inviting Consent for Agreement;
29. "Lead Member" shall mean the member of Bidding Consortium which is designated as leader of the Consortium by other member to represent them as Bidder for this RFP.
30. "MNRE" shall mean Ministry of New and Renewable Energy, Government of India;
31. "MWp" shall mean Mega Watt Peak;
32. "Nodal Agency" shall mean the Madhya Pradesh Urja Vikas Nigam Limited, (MPUVNL)Bhopal;
33. "Performance Test" shall mean such tests which establish successful installation and working of equipment at desired level as per the requirement of issuing authority;
34. "Project(s)" shall mean the Grid Connected/Off-Grid Solar PV Project(s) with/without storage;
35. "Project Capacity" means the capacity of the Projects mentioned in the Agreement. The Project capacity specified is on "DC" Side only;
36. "Project Company" shall mean Company incorporated by the Bidder as per Indian Laws in accordance with 3.11;
37. "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.
38. "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 their Financial Bid;
39. "Rate Validity Period" shall mean the period between date of signing of Agreement and FY 2017-18 (up to 31st March, 2018) during which the rates standardised after bidding process under this RFP shall be valid and applicable for Contract(s) awarded .
40. "RFP" shall mean Request for Proposal (RFP)/Bid document/Tender document and shall include formats and annexures in it;
41. "RFP Capacity" shall means capacity for which bid has been invited by the Nodal

Agency;

42. **“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;
43. **“Successful Bidder(s)”** shall mean the Qualified Bidder(s) selected by MPUVNL 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;

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

SECTION-I

INSTRUCTIONS TO THE BIDDER

1. INTRODUCTION:

- 1.1. Request for Proposal for Standardization of Rates for Design, Engineering, Supply, Installation, Testing and Commissioning Including Insurance, Warranty, Spare Parts and Operation & Maintenance (for five (5) years from the date of Completion) 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 thirty (30) MWp, 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. MPUVNL 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 thirty (30) MWp capacity of Project under EPC with comprehensive O&M mode for Grid Connected Roof Top Solar PV Projects with/without Energy Storage and Off-Grid Roof Top Solar PV Projects with/without 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 MPUVNL. Bidders are advised to note that the Grid connected projects may be under following three categories- a) Grid connected net metered systems; b) Grid connected systems for consumption within/ outside premises through wheeling and banking; and c) Grid connected systems for consumption within/ outside 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.

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2.2. Bidder shall be required to bid in different categories mentioned in below table;

Table 1: Category wise breakup of projects with relevant eligibility requirements

Category	Type of Project	Size of the Projects Available in Category	Indicated Capacity (kWp)	*Technical Eligibility through experience	Financial Eligibility through Networth (INR Lakh)	Financial Eligibility through Turnover (INR Lakh)
A	Off-Grid with battery	Minimum Size: one (1) kWp Maximum Size: up to four (4) kWp	1,500	Min. capacity of project: one (1) kWp; Cumulative capacity of projects four (4) kWp	150	300
B	Off-Grid with battery	Minimum Size: above four (4) kWp Maximum Size: up to ten (10) kWp	1,500	Min. capacity of project: four (4) kWp; Cumulative capacity of projects ten (10) kWp	150	300
C	Grid-Connected	Minimum Size: one (1) kWp Maximum Size: up to four (4) kWp	1,500	Min. capacity of project: one (1) kWp; Cumulative capacity of projects four (4) kWp	150	300
D	Grid-Connected	Minimum Size: above four(4) kWp Maximum	1,500	Min. capacity of project: four (4) kWp; Cumulative size of projects ten(10) kWp	150	300

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Category	Type of Project	Size of the Projects Available in Category	Indicated Capacity (kWp)	*Technical Eligibility through experience	Financial Eligibility through Networth (INR Lakh)	Financial Eligibility through Turnover (INR Lakh)
		Size: up to ten (10) kWp				
E	Grid-Connected	Minimum Size: above ten (10) kWp Maximum Size: up to twenty five (25) kWp	3,000	Min. capacity of project: ten (10) kWp; Cumulative capacity of projects: Hundred (100) kWp	450	900
F	Grid-Connected	Minimum Size: above twenty five (25) kWp Maximum Size: up to fifty (50) kWp	3,000	Min. capacity of project: twenty five (25) kWp; Cumulative capacity of projects: Hundred (100) kWp	450	900
G	Grid-Connected	Minimum Size: above fifty (50) kWp Maximum Size: up to Hundred (100) kWp	9,000	Min. capacity of project: fifty (50) kWp; Cumulative capacity of projects: Five Hundred (500) kWp	1,350	2,700
H	Grid-Connected	Minimum Size: above	9,000	Min. capacity of project: Hundred (100)	1,350	2,700

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Category	Type of Project	Size of the Projects Available in Category	Indicated Capacity (kWp)	*Technical Eligibility through experience	Financial Eligibility through Networth (INR Lakh)	Financial Eligibility through Turnover (INR Lakh)
		Hundred (100) kWp Maximum Size: up to Five Hundred (500) kWp		kWp; Cumulative: capacity of projects: Five Hundred (500) kWp		

**Technical eligibility through experience refers to minimum capacity of any project commissioned by Bidder and cumulative capacity of all projects commissioned by Bidder, 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 any project of 15 kWp and has implemented cumulative capacity of 150 kWp, such Bidder shall be eligible to Bid for Categories A, B, C, D and E but shall not be eligible to Bid for Category F, G and H because such Bidder does not meet the requirement of minimum capacity of any project implemented by such Bidder. Also, for Category G and H, the bidder does not meet cumulative capacity requirement for these Categories. Similarly, if a Bidder has experience of implementing any project of minimum 60 kWp and has implemented total capacity of 250 kWp, such Bidder shall be eligible to Bid for Categories A, B, C, D, E and F but shall not be eligible to Bid for Category G and H because such Bidder does not meet cumulative capacity requirement of these Categories].*

- 2.3. Bidder may opt to Bid for any, some or all of the various Categories and, within each Category, some or all of the requisite type of battery back-ups as mentioned in table below:

Battery Type	Applicable Categories
Without Battery	C, D, E, F, G, H
With 1.2 VAh battery per Wp	C, D, E, F, G, H
With 7.2 VAh battery per Wp	A, B, C, D, E, F

2.4. Broader Principles of Work Allocation

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- 2.4.1. Generally, the Projects in any Category shall be offered to Qualified Bidders, subject to the provisions of Clause 5.
- 2.4.2. In case additional work, over and above that indicated in Table 1 of this RFP, comes up with MPUVNL, these works shall be offered first to the existing Contractor(s), subject to provisions of Clause 5. Accordingly, additional work, remaining if any, shall be offered to other Bidders declared as Qualified Bidders under this RFP, subject to provisions of Clause 5.

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 at par rates of Schedule Of Rates (SOR), for Electrical works, Public Works Department (PIU), Bhopal, Govt. of M.P. in force from 1st August 2014 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 Solar Photovoltaic Power Plants 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 Solar Photovoltaic Power Plants, shall be as per at par the rates of Schedule Of Rates (SOR) for building works, Public Works Department, (PIU), Bhopal, Govt. of M.P., in force from 1st August 2014 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 schedule of rates (SOR), at par, for electrical works, MP Madhya Kshetra Vidhyut Vitran Company Ltd. (MPMKVVCL); this SOR shall be part of this RFP.
- 2.5.4. All amendments made in the above said SOR's of MPPWD 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.

2.6. Key Dates:

Sr. No	MPUVN Stage	Date	Time (Hrs)
1	Purchase of RFP Start	15/11/2016	1500
2	Purchase of RFP End Date	03/12/2016	1700
3	Bid Submission End Date	04/12/2016	2030
4	Mandatory Submission Hard Copy of Bid (except financial bid)	05/12/2016	1330

Sr. No	MPUVN Stage	Date	Time (Hrs)
5	Technical Bid & Bid Security Opening Date	06/12/2016	1500
6	Financial Bid Opening Date	14/12/2016	1500

3. INSTRUCTIONS TO THE BIDDER:

- 3.1. Bidder must meet Eligibility Criteria either independently or as consortium of two 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 Format 14 shall be required to be furnished along with the Bid.
- 3.2. In case Bidder is a Consortium, Technical Eligibility Criteria shall be independently met by Lead Member of Consortium. However, Financial Eligibility Criteria can be met individually or jointly by both members of Consortium.
- 3.3. Further, Bidder must note that for evaluation of qualification against Financial Eligibility Criteria, following conditions shall be applicable:
- In case of Consortium, only Net-worth shall be considered.
 - In all other cases, Bidder shall have option of establishing either net-worth or turnover as required by this RFP.
 - In-case Bidder/any member of Consortium has referred its Affiliate to meet the Financial Eligibility criteria, then ownership by the Affiliate in the Bidder shall not be less than 26% for period of 1 year from the date of Commissioning of awarded capacity, without prior written approval of Nodal Agency. Further, Affiliate of Bidder/ member of Consortium shall furnish information as sought in Format -9 and 10.
- 3.4. 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 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.
 - 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 MPUVNL regarding this bidding process.

- 3.5. The Contractor shall be required to establish its Service Centre(s) at Bhopal and if required, in other districts.
- 3.6. RFP can be downloaded for viewing from Nodal Agency's website <http://www.mprenewable.nic.in>

And

RFP document can be purchased and downloaded online from <http://www.mpeproc.gov.in>. The bid submission shall only take place through <http://www.mpeproc.gov.in>.

- 3.7. 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 Clause 2.6. Technical bid containing original (downloaded) RFP, relevant document/ certificates etc. duly sealed and signed and Bid Security should reach to the office undersigned by the Key Dates.
- 3.8. Online Bidders are required to sign their bids online using Class III – Digital Certificates only, Bidders are advised to obtain the same at the earliest. For further information, Bidders are requested to contact at Tata Consultancy Services, 5th floor, D.B. Mall, M.P. Nagar Bhopal, Toll Free No. 18002588684 (Note: It may take up to 7 working days to issue Digital certificates).

3.9. ELIGIBILITY CRITERIA:

3.9.1. GENERAL:

- a. The Bidder 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 Firm (LLPF) 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 LLPF/ Sole Proprietor registration, as applicable and relevant, shall be enclosed with Format 2.
- b. Bidder should be indigenous manufacturer of a mono/poly crystalline solar photovoltaic module with IEC Certification and test report issued by one of the IEC accredited test centres or with the test certificates from any of the NABL/BIS of MNRE accredited testing calibration laboratories. Qualification test certificates will be as per IEC standard.

OR

Power Conditioning Unit (PCU)/Inverter manufacturer suitable for Projects as per MNRE specification who is empanelled with MNRE;

OR

MNRE registered System Integrator and/or Channel Partner Including channel partner empanelled as entrepreneur.

- c. Bidder or any member of consortium or its Affiliate having been blacklisted by MPUVNL or by any Govt./PSU, for whatever reasons, shall not be eligible/ allowed to participate in this RFP.
- d. 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 MPUVNL, leading to cancellation of Work Order(s) of value more than or equal to twenty five percent (25%) of cumulative value of Work Order(s) awarded in last five (5) years.
 - ii. If it is involved in litigation or arbitration with MPUVNL 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) awarded in last five (5) years.

3.9.2. TECHNICAL ELIGIBILITY CRITERIA:

- a. The Bidder, should have experience in design, engineering, supply, installation, testing and commissioning including Comprehensive O&M for different sizes of project under different Categories as mentioned in 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/ Lead Member of Consortium shall not be considered for qualification against Technical Eligibility Criteria.
- b. All the projects shown to meet 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 commissioning certificate and work order/contract/agreement from the Client/Owner/SNA shall be submitted.
- c. The Contractor shall be required to produce detailed system design and drawing supported with requisite test reports of the system components. However before commencement of work, if any change in the makes & capacities of components is requested by the Contractor, the same may be allowed with prior approval and with the condition that 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.
- d. Battery and Power Conditioning Units of the systems shall only be of those makes which are empanelled with MNRE and shown in the respective lists uploaded on the website of MNRE.

3.9.3. FINANCIAL ELIGIBILITY CRITERIA:

- a. The Bidder should have Net worth for FY 2015-16, as per Table 1: Category wise breakup of projects with relevant eligibility requirements, subject to provisions of clause 3.3.
- b. The Computation of Net worth shall be based on unconsolidated audited annual accounts. Share premium can be included in the Net worth calculation only in case of listed companies in India. The formula of calculation of net-worth shall be as follows:
$$\text{Net-worth} = (\text{Paid up share capital}) + \{(\text{Free reserves} - \text{Share premium}) + \text{Share premium of listed companies}\} - (\text{Revaluation of reserves}) - (\text{Intangible assets}) - (\text{Miscellaneous expenditure to the extent not written off and carry forward losses})$$
- c. In relation to a Partnership Firm/ Limited Liability Partnership Firm, the Net-worth shall be equal to Partner's Capital in case of a Partnership Firm/ Limited Liability Partnership Firm and Proprietor's Capital Account in case of Sole Proprietor (including any reserves)
- d. Bidder should have average turnover in last three (3) years (FY 2013-14, 2014-15 & 2015-16), 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 Table-1: Category wise breakup of projects with relevant eligibility requirements, subject to provisions of clause 3.3.

Note:-

- i. All requisite documents, such as balance sheet, P&L account, schedules etc., duly certified by a Chartered Accountant (CA) and the participants, in support of participants claim for meeting the financial eligibility criteria shall be required to be submitted.
- ii. It is essential to submit financial eligibility criteria requirement and undertaking form as attached in Format – 9, 10 and 11 of this RFP document.
- e. 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 twenty six percent (26%) equity in each company whose accounts are merged in the audited consolidated accounts.
- f. Bidder shall furnish documentary evidence as per the FORMAT 9: FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT, duly certified by Authorized Signatory and the Statutory Auditor / Practicing Chartered Accountant of the Bidder in support of their financial capability”.
- g. Bidder can use the financial strength of its Affiliate to fulfill the Financial Eligibility Criteria mentioned in RFP.

- h. In case of Consortium, Financial Eligibility Criteria can be met individually or jointly by both members of Consortium and/or its Affiliate.
- i. Participants shall have to give a declaration to the effect that they fulfill the terms and conditions of eligibility (Format 15). If the declaration to above effect is found to be false, the eligibility would be considered null and void.

3.10. CHECK-LIST:

3.10.1. To ensure that the online and hard copy submission of RFP is complete in all respects, check-lists for Envelope- I and Envelope- II are required to be duly tick marked/filled for the enclosures which are attached with the RFP document. The main envelope should only contain Envelope-I and Envelop-II in sealed condition. The requisite documents required are indicated in the check-lists. It is essential for the participant to submit check-lists duly sealed and signed with its corresponding envelope. However, this Check-List is indicative and Bidder shall be responsible for meeting all information requirement as per provisions of this RFP.

3.11. INCORPORATION OF A PROJECT COMPANY:

- 3.11.1. In case a Bidder is selected as a Successful Bidder, it can choose to incorporate a Project Company. Bidder shall be responsible to get all clearance required/ obtained in the name of the Bidder transferred in the name of the Project Company.
- 3.11.2. 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%) up to a period of one(1) year from the date of Commissioning of the entire Awarded Capacity of the Successful Bidder.
- 3.11.3. In case of Successful Bidder being a Partnership Firm or a LLP, the equity ownership of the partners in the Successful Bidder or the Project Company shall remain in same proportion as mentioned in the partnership deed submitted alongwith the Bid, up to a period of one (1) year from the date of Commissioning of the entire Awarded Capacity of the Successful Bidder. The equity proportion for ownership of such Successful Bidder shall only be changed on prior written approval of the Nodal Agency.

3.12. BID SUBMISSION BY THE BIDDER:

- 3.12.1. The information and/or documents shall be submitted by the Bidder as per the formats specified in this document.
- 3.12.2. 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, MPUVNL 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 MPUVNL 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 in Envelope – I, as per clause 3.14.1 shall be ensured, failure on this account may lead to rejection of Bid.

3.12.3. The Bidder shall furnish documentary evidence in support of meeting 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.

3.13. CLARIFICATIONS AND PRE-BID MEETING:

3.13.1. The Bidder may seek clarifications or suggest amendments to RFP in writing, through a letter or by fax (and also soft copy by e-mail) to reach Nodal Agency at the address, date and time mentioned in Bid Information Sheet.

3.13.2. 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.

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

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

3.14. BID DOCUMENTS:

3.14.1. **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. **ENVELOPE- I (COVERING LETTER, BID PROCESSING FEE AND BID SECURITY):** The following documents are to be submitted in physical (hard copy):

- i. Covering Letter as per prescribed format (Format-1).
- ii. Bid Processing Fee
- iii. Bid Security of required value as mentioned in Clause 3.18, Format – 4 if applicable
- iv. Checklist for PBG submission (Format 6)

b. **ENVELOPE- II TECHNICAL DOCUMENTS:** The following documents are to be submitted in physical (hard copy):

- i. Original power of attorney (on the stamp value of Rs.1000/-, as per Format-7)

- 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).
- ii. General particulars of Bidder as per Format 2 of this RFP, including Certificate of Incorporation of Bidder/ Affiliate as applicable.
 - iii. Bidder's composition and ownership structure as per prescribed Format-3 as shareholding certificate certified by Director/practicing Chartered Accountant/Company Secretary and authorised signatory of the Bidder (as applicable).
 - iv. Format 8 & 9 for meeting Eligibility Requirements alongwith all supporting documents.
 - v. FORMAT 10, if applicable, supported by Board Resolution of the Affiliate.
 - vi. Undertaking(s) from the member of Consortium or Affiliate of Bidder/ member of Consortium as per FORMAT 11, as applicable.
 - vii. Format -12 for Undertaking for combined O-PBG.
 - viii. Format 14 for Consortium Agreement, if applicable.
 - ix. Format 15 on Declaration for submission of Bid.
 - x. Signed and stamped Copy of RFP including amendments & clarifications by authorised signatory of Company on each page.
 - xi. Signed and stamped copy of minutes of pre-bid meeting

3.14.2.METHOD OF BID SUBMISSION

- a. Bidders are required to submit technical bid, along with all relevant documents as detailed in Clause 3.12 and 3.14 above, in respective envelopes sealed under a single cover envelope. They shall be submitted in physical form on or before the Bid Deadline:-
 - i. Envelope-I (Covering letter, Bid Processing fee and Bid Security)
 - ii. Envelope-II (Technical/Financial eligibility documents)
- b. Additionally the Bidders shall be required to submit scanned copies of following documents online:
 - (i) Bid Security;
 - (ii) Bid Processing Fee;

c. Financial Bid shall be submitted only through online mode with due encryption.

3.14.3. The Bidder has the option of sending technical bid (Envelope I & Envelop II) either by registered post or speed post or by hand delivery, so as to reach Nodal Agency by the Bid Deadline. Nodal Agency shall not be responsible for any delay in receipt of the technical bid (Envelope I & Envelop II). It should be noted that except online Financial Bid, no other envelope/ document shall contain any information/document relating to Financial Bid. Nodal Agency shall not be responsible for premature opening of the Financial Bid in case of non-compliance of above.

3.14.4. 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.

3.15. **BID DEADLINE:**

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

3.16. **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”), 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.

3.17. **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.

3.18. **BID SECURITY:**

3.18.1. The Bidder shall furnish the interest free Bid Security for each Category of Project as prescribed hereunder in this clause.

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Category	Type of Project	Total Capacity Available (kWp)	Required Bid Security value (INR Lakh)
A	Off-Grid with battery	1,500	10
B	Off-Grid with battery	1,500	10
C	Grid-Connected	1,500	10
D	Grid-Connected	1,500	10
E	Grid-Connected	3,000	20
F	Grid-Connected	3,000	20
G	Grid-Connected	9,000	60
H	Grid-Connected	9,000	60

However, Bidders placing Bid for more than one Category may furnish single Bid Security of total value of Bid Security(s) desired for those Categories [*Explanation: A Bidder placing Bids for A, E, F & H categories may furnish separate Bid Securities of INR 10 lakh, INR 20 lakh, INR 20 lakh and INR 60 lakh for Categories A, E, F and H respectively or may furnish single Bid Security of INR 110 lakh of total value of Bid Securities for those Categories*]

3.18.2. The Bid Security shall be from a nationalized/ scheduled bank in the form of Crossed Demand Draft drawn in favour of “M.P. Urja Vikas Nigam Ltd. Bhopal” payable at Bhopal,

OR

FDR in favour of M.P. Urja Vikas Nigam Ltd., Bhopal through account of bidder

OR

Bank guarantee as per prescribed format (FORMAT 4).

3.18.3. Desired Bid Security shall be furnished by every Bidder including MSMEs or any Govt./ semi Govt./ PSU organizations/ agencies. The initial validity of 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 Rate Validity Period of Agreement. Upon acceptance of LICA by Successful Bidder, Successful Bidder shall have to extend the validity of Bid Security (if furnished in the form of BG) till Rate Validity Period with additional claim period of six (6) months beyond Rate Validity Period or furnish new bank guarantee of desired value with validity till Rate Validity Period and additional claim period of six (6) months beyond Rate Validity Period.

3.18.4. Bid Security shall be returned to all other Bidders except Successful Bidders, within 15 days from date of issue of LICA to Successful Bidders.

3.18.5. The Bid Security shall be denominated in Indian Rupees and shall:

- a. Bid Security should be confirmed for payment to MPUVNL by respective banks.
- b. Bid Security shall be submitted in its original form and copies will not be accepted

3.18.6. The Bid Security shall be forfeited without prejudice to the Bidder being liable for any further consequential loss or damage incurred to Nodal Agency under following circumstances:

- a. If a Bidder withdraws/revokes or cancels 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 unconditionally accept the LICA within fifteen (15) days from the date of its issue.

3.19. PERFORMANCE BANK GUARANTEES (PBGs)

3.19.1. The Contractor shall furnish C-PBG from a nationalized/ scheduled bank, of value equivalent to 5% of Work Order value in form of

FDR in favour of M.P. Urja Vikas Nigam Ltd., Bhopal A/C of bidder

OR

Bank guarantee as per prescribed format (FORMAT 5)

3.19.2. Submitted C-PBGs shall be valid till twelve (12) months after the issuance of the work order with a further claim period of six (6) months, or required to be extended as deemed necessary. The Contractor shall furnish C-PBG within 15 days from the date of issue of Work Order for each Work Order separately. Failure to submit C-PBG, as above, without sufficient justification acceptable to the Nodal Agency, shall be considered as refusal to execute the Work Order and provisions of Clause 3.20.3 shall be applicable.

3.19.3. Contractor may submit higher value of C-PBG to take care of future work orders. It must be noted that any point of time, the amount of C-PBGs submitted to MPUVNL shall be more than or equal to 5% of cumulative value of all ongoing Work Orders issued to Contractor.

3.19.4. In case, Contractor has furnished more than one C-PBGs as per requirement, and no amount is blocked in such additional C-PBGs, the Bidder may request MPUVNL to return such additional C-PBGs provided.

3.19.5. Contractor shall be required to furnish O-PBG from a nationalized/ scheduled bank, of value equivalent to 20% of work order value of a Project individually in form of:-

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FDR in favour of M.P. Urja Vikas Nigam Ltd., Bhopal A/C of bidder

OR

Bank guarantee as per prescribed format (FORMAT 5) after completion of the Project.

However, Contractor may plan to submit one O-PBG of desired combined value for all projects getting completed in a month with an undertaking (FORMAT-12) in that behalf. Validity for O-PBG shall be till five (5) years with claim period of six (6) months from the date of successful completion of such Project. The Contractor shall furnish O-PBG within 7 days from the date of Completion.

3.19.6. Nodal Agency shall release C-PBG to Contractor within 7 days from date of receipt of O-PBG.

3.20. LIQUIDATED DAMAGES:

3.20.1. 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, MPUVNL 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.

3.20.2. Progress in the implementation of a Project shall be monitored by MPUVNL for milestone activities defined hereunder. The work order could be cancelled with imposition of LD on Contractor(s), in case of failure of adhering to milestones, as mentioned in table below:

Milestone	Time Duration	Possible Actions
Milestone #1: Submission of Site survey report, layout/drawing and submission of Bill of Materials along with requisite test reports and relevant certifications	Within 45 days of award of work order	Cancellation of Work Order with imposition of LD of 1%
Milestone #2: Submission of proof towards material mobilization to the site	Till 2 weeks before expected date of Completion, as mentioned in work order	Cancellation of Work Order with imposition of LD of 3%

a) Further, in case of delay in achievement of date of Completion as mentioned in Work Order, with or without extension granted as per this RFP, as applicable, LD @0.625% per week shall be levied from the date of completion or extended date of completion, subject to maximum 8 weeks delay.

b) In case, project is not completed even after 8 weeks beyond the date of completion

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as mentioned in work order or extended date of completion, the work order for the Project shall stand cancelled and additional LD of 5% of work order value of the Project shall be levied (*maximum LD in any case shall be 10% of work order value*). MPUVNL shall not be liable to make any payments for such cancelled work order.

3.20.3. In case, Contractor refuses to execute any Work Order, as per Clause 3.19.2, within its allocated capacity, subject to provisions of Clause 5, following clauses shall be applicable:

- a) If Contractor refuses to execute any Work Order and other Contractors in the category are willing to execute that Work Order, then LD @ 0.5% of work order value shall be levied on the Contractor.
- b) If Contractor refuses to execute any Work Order and other Contractors in the category are not willing to execute that Work Order, then it shall be obligatory for Contractor to execute that Work Order. In case Contractor refuses such obligatory work, then LD of 5% of Work Order value shall be levied on the Contractor and the Work shall be executed in accordance with Clause 3.32.3, at risk and cost of the Contractor.

3.20.4. If number of cancelled/refused Work Order(s) under Clause 3.20.2(b) and Clause 3.20.3 are three (3) or more, then the MPUVNL reserves the right to terminate the Agreement as per provisions of Clause 3.32.2 and/or allocate such works to other Contractors as per provisions of Clause 5.9.

3.21. PERFORMANCE MONITORING MECHANISM AND PENALTIES FOR UNDER PERFORMANCE:

3.21.1. The Contractor shall demonstrate that the said project delivers Capacity Utilization Factor (“CUF”) of at least 15%, adjusted for seasonality as tabulated below, for one (1) day on or before successful Completion of the Project.

Month	kWh generation in 1 day per kWp system
January	3.71
February	4.14
March	4.33
April	4.27
May	3.99
June	3.30
July	2.56

Month	kWh generation in 1 day per kWp system
August	2.33
September	3.21
October	3.89
November	3.90
December	3.56

For the purpose of measuring CUF:-

- a. Contractor shall ensure that all Projects with installed capacity 5 kWp or above are SCADA enabled. The data from such SCADA enabled Projects would be monitored or analyzed remotely by MPUVNL, independently or at its Centralized Monitoring Centre, to ensure desired level of performance. The Contractor shall ensure and shall have no objection to provide access to SCADA system for data acquisition and monitoring the performance of Project(s) by MPUVNL. The Contractor shall support MPUVNL in establishing technical handshake between SCADA system and the Centralized Monitoring Centre being established by MPUVNL. The Contractor shall ensure that the connectivity of the Project with the Centralized Monitoring Centre of MPUVNL is uninterrupted at all times during O&M period and shall make all necessary arrangements for the same. 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.
- b. Contractor shall ensure that all Projects with capacity less than 5 kWp shall have a data logger system in place at PCU to record various parameters on half hourly basis and store the same for at least 1 (one) year. CUF for such Projects shall be computed on the basis of data retrieved from the data logger of PCU.

3.21.2. During the Comprehensive O&M period, the Contractor shall maintain a CUF of 15% for each year of the Contract Period, subject to annual derating as per provisions of Clause 3.21.4. In the event of Contractor achieving lower CUF, 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 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 be referred:-

Assuming that a system of 1kW has been installed, normative CUF of 15% would generate 1314.00 kWh. If the project achieves a CUF of 14% in first year of operation then the generation would be 1226.40 kWh. In this case the loss in generation would

be 87.60 kWh (1314.00 – 1226.40). 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.

3.21.3. MPUVNL reserves the right to recover above penalty (ies) as mentioned in Clause 3.21.2 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 other C-PBGs/ O-PBGs/ Bid Security held with MPUVNL.

3.21.4. The CUF for both Off grid and grid connected systems shall be calculated, allowing derating of output of SPV modules of not more than 1% per year, implying shortfall in CUF of not be more than 0.15% per year. This is in accordance with the criteria of degradation of SPV modules, specified in current MNRE guidelines.

3.22. OPERATION AND MAINTENANCE:

3.22.1. 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 Completion of system at site. This Warranty shall be for a period of Five (5) years from the date of Completion for the complete system (In case of Systems / Batteries it may be five (5) years or more as per guarantee / warranty card provided by System / Battery Manufacturer and for the SPV modules - as per MNRE guidelines, from the date of Completion).

3.22.2. During the course of aforesaid five (5) years Warranty cum mandatory maintenance period, the Contractor(s) will service and maintain the systems. 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. It is advisable for the participant to ensure proper arrangements for cleaning of panels in order to maintain the requisite performance expectations.

3.23. CONTRACTOR'S DEFECT LIABILITY:

3.23.1. If it shall appear to the MPUVNL that any supplies have been executed with unsound, imperfect or unskilled 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 MPUVNL in writing.

3.23.2. 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.

3.23.3. 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.

3.24. OPENING OF BID:

3.24.1. Technical bid (Envelope I and Envelope II) of the Bidder shall be opened at the time mentioned in Key Dates at the venue indicated in this RFP, in the presence of one representative from each of the Bidder who wish to be present.

3.24.2. Name of the Bidder, Bid Security and Bid Category(ies) shall be read out to all the Bidder at the time of opening of Envelope-I.

3.25. RIGHT TO WITHDRAW THE RFP AND TO REJECT ANY BID:

3.25.1. This RFP may be withdrawn or cancelled by the Nodal Agency at any time without assigning any reasons thereof. 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.

3.25.2. 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.

3.25.3. 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, MPUVNL 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 MPUVNL may be a ground for rejecting the Bid(s). Strict adherence to the documents required to be submitted in Envelope – I, as per clause 3.14.1 shall be ensured, failure on this account may lead to rejection of Bid.

3.25.4. 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.

3.26. ZERO DEVIATION:

3.26.1. 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.

3.27. EXAMINATION OF BID DOCUMENT:

- 3.27.1. 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.
- 3.27.2. 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 labour involved etc. and as to all supplies he has to complete in accordance with the RFP.
- 3.27.3. 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).
- 3.27.4. 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.
- 3.27.5. The Comprehensive O&M of solar PV system shall include wear, tear, overhauling, machine breakdown, appropriate insurance (if and as required), and replacement of defective modules, invertors / Power Conditioning Unit (PCU), spares, consumables & other parts for a period of five (5) years.

3.28. TAXES AND DUTIES:

- 3.28.1. The Financial Bid should include all taxes and duties etc., if any. Contractor shall be entirely responsible for all taxes, duties, license fees, etc. All taxes payable will be payable by the Contractor. However, if any new change in tax/duty is effected in the period from the Bid Deadline to the Rate Validity Period and/or period of Contract, the same will be passed on by the Contractor to the Nodal Agency,
- 3.28.2. Bidder shall quote price against all the three components identified as per provisions of Clause 5.14, namely (i) Supply of material component; (ii) Erection, installation and commissioning (I&C) component and (iii) O&M component. The Bidder shall ensure that the I&C component and O&M component are quoted for minimum value of 5% and 15% respectively. However, Total Price quoted shall be considered for evaluation of the Financial Bid(s). Further, to evaluate and ascertain impact of any change in taxation laws in future, the rates applicable for each component on the Bid Deadline shall be considered.

3.29. PROGRESS REPORT:

- 3.29.1. Contractor shall have to complete Project within three (3) – six (6) months from the date of work order(s). However, Project specific work completion timeline shall be as specified in respective work order(s), depending upon type, size and location of

Project. The Contractor shall submit monthly progress report to Nodal Agency, in prescribed pro-forma to be designed in discussion with Contractor. 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.

3.30. PROJECT INSPECTION:

3.30.1. 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 empaneled 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.

3.31. FORCE MAJEURE:

3.31.1. 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.

3.31.2. 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.

3.31.3. 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.

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

3.32. VALIDITY & TERMINATION OF AGREEMENT:

3.32.1. MPUVNL reserves the right to extend the validity of Agreement of any Category for execution of works upto fifty percent (50%) of indicated capacity of that Category as per Table 1.

3.32.2. 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 3.20.4.;
- c. If the Contractor fails to furnish or replenish PBG(s) within specified time as per provisions of this RFP;
- d. If in the opinion of Nodal Agency, the Contractor fails to comply with any of the provisions of this Agreement.

3.32.3. 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.

3.32.4. In case of termination of the Agreement, the Contractor shall be responsible for fulfilling all obligations required for operation and maintenance of works having attained Completion.

3.33. APPLICABLE LAW:

3.33.1. The Agreement shall be interpreted in accordance with the laws of India.

3.34. SETTLEMENT OF DISPUTE:

3.34.1. 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.

3.34.2. 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.

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

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

3.35. LANGUAGE:

3.35.1. 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.

3.36. OTHER CONDITIONS:

3.36.1. 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.

3.36.2. 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.

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

3.36.4. AMENDMENT:

- a. Nodal Agency reserves the right to modify, amend or supplement RFP documents including all formats and annexures at any time. Interested and eligible Bidder are advised to follow and keep track of Nodal Agency web-site 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.

3.36.5. SUCCESSORS AND ASSIGNS:

- a. 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.

3.36.6. SEVERABILITY:

- a. 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.

3.36.7. PRICE PREFERENCE:

- a. 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.

3.36.8. TAX EXEMPTIONS:

- a. 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.

3.36.9. 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.

3.36.10. 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 sub-contractors 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.

3.36.11. **DEBARRED FROM PARTICIPATING IN NODAL AGENCY’S TENDER**

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

4.2. RESPONSIVENESS CHECK OF TECHNICAL BID:

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

- a. Bid not submitted in prescribed envelop format.
- b. Bid that are incomplete, i.e. not accompanied by any of the applicable formats;
- c. Bid not accompanied by contents of Envelope – I as mentioned in Clause 3.14.1.
- d. Bid not signed by authorized signatory and /or stamped in the manner indicated in this RFP;
- e. Material inconsistencies in the information /documents submitted by the Bidder affecting the Eligibility Criteria;
- f. Information not submitted in the formats specified in this RFP;
- g. Bid being conditional in nature;
- h. Bid not received by the Bid Deadline;
- i. Bid having conflict of interest;
- j. Bidder makes any misrepresentation;
- k. Any other act of Bidder which may be unlawful for the purpose of this RFP.
- l. Bid submitted is not in requisite format(s).

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

taken up.

4.3. EVALUATION OF BIDDER'S FULFILMENT OF ELIGIBILITY CRITERIA:

- 4.3.1. Evaluation of Bidder's Eligibility will be carried out based on the information furnished by the Bidder as per the prescribed formats and related documentary evidence in support of meeting the Eligibility Criteria as specified in RFP. Non-availability of information and related documentary evidence for the satisfaction of Eligibility Criteria as detailed out in Clause 4.2 along with provisions of Clause 3.12.2 may 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 in presence of the representatives of such Eligible Bidder, who wish to be present, on date as may be intimated by Nodal Agency to the Bidder through 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:

- 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 with or without battery, 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, subject to the provisions of Clauses 5.5 and 5.6.
- 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, 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**. In this process, if MPUVNL does not get three (3) Qualified Bidders, work allocation shall be done as

amongst available Qualified Bidders as per provisions of Clause 5.7. LICA shall be issued to such Qualified Bidders and they would be declared as Successful Bidders.

5.7. The **Qualified Bidder - 1** shall be eligible for 50% of the Category cumulative capacity whereas **Qualified Bidder – 2** and **Qualified Bidder – 3**, shall be eligible for 30% and 20% of Category cumulative capacity respectively, subject to the provisions of Clause 5.8 below. Further, such allotment of works shall also be subject to following provisions:-

- a. In case there are only two Qualified Bidders available, it shall be eligible for 50% and 30% of Category cumulative capacity, respectively. The remaining share of Category capacity may be distributed equally amongst available Qualified Bidders. However, Nodal Agency may seek consent of such Qualified Bidders on allotment of the said remaining share and take appropriate decision accordingly.
- b. In case only one Qualified Bidder is available, it shall be eligible for 50% of Category cumulative capacity. The Nodal Agency may, at its sole discretion, offer remaining share of the Category capacity to the available Qualified Bidder. However, Nodal Agency may seek consent of such Qualified Bidder on allotment of the said remaining share of a Category capacity and take appropriate decision accordingly.

5.8. In case an Eligible Bidder(s) identified subject to provisions of Clauses 5.5 & 5.6 above, is 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 5.7 shall 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 empaneled 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.

5.9. If performance of the Contractor against the work(s) allocated is not found satisfactory, then the MPUVNL reserves the right to cancel the allocation subject to provisions of Clause 3.20.4. In such a case the cancelled work(s) for such Contractor may be offered to other Contractors in particular Category, subject to their consent for this additional work. However, if existing Contractor(s) do not provide consent for these works, then such work shall be offered to Eligible Bidder(s) who agree to match the lowest Financial Bid based on ranks of their Financial Bids. LICA shall be issued to such

Qualified Bidder(s). The offer for works shall be equally distributed among such Qualified Bidder(s). In such case, the other Qualified Bidders shall submit, if required, requisite amount of Bid Security on the date of acceptance of LICA as per provisions of this RFP. Further, such allocation of works to other Qualified Bidders shall be done within the validity of the Bid pursuant to the provisions of Clause 3.16 of the RFP.

5.10. In case, Projects' capacity in any Category exceeds the capacity indicated in Table 1 of this RFP, MPUVNL, at its sole discretion, may offer additional Projects in same proportion as per provisions of Clauses 5.7 to the existing Contractor(s), subject to their consent for full/part additional capacity. However, if existing Contractor(s) do not provide consent for full/part additional capacity, then such additional capacity shall be offered to Eligible Bidder(s) who agree to match the lowest Financial Bid based on ranks of their Financial Bids. LICA shall be issued to such Qualified Bidder(s). The offer for works shall be equally distributed among such Qualified Bidder(s). In such case, the other Qualified Bidders shall submit, if required, requisite amount of Bid Security on the date of acceptance of LICA as per provisions of this RFP. Further, such allocation of works to other Qualified Bidders shall be done within the validity of the Bid pursuant to the provisions of Clause 3.16 of the RFP.

5.11. 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.

5.12. 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.

5.13. Nodal Agency at its own discretion, has the right to reject any or all the Bid without assigning any reason whatsoever.

5.14. The Work Order shall be consist of following components:

- (i) **Supply of Material Component:** For supply of all equipment and materials including applicable taxes and duties.
- (ii) **Erection, Installation & Commissioning (I&C) Component:** For providing all services i.e. inland transportation for delivery at site, insurance, unloading, storage, handling at site, installation, Testing and Commissioning including performance testing in respect of all the equipment supplied under the "Supply of Material Component".
- (iii) **Operation & Maintenance (O&M) Component:** Operation, repair, replacement and maintenance of the equipment supplied.

All three components will contain a cross fall breach clause specifying that breach of one will constitute breach of the other and may lead to cancellation of the work order.

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 (5) years from date of Completion. Contractor would have to take approval for the interfacing the Project with Grid/Electrical Loads of every location from distribution licensee. Comprehensive O &M for five (5) year (for Project with / without energy storage) shall be required for each of the Project from the date of Completion.

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

- 6.2.1. 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 as amended from time to time;
- 6.2.2. Detailed planning of time bound smooth execution of Project;
- 6.2.3. Performance testing of the complete Project;
- 6.2.4. Comprehensive O &M of the Project for five(5) year to assure faultless operation, and inventory maintenance;
- 6.2.5. After sales service through service centers;
- 6.2.6. Coverage of risk liability of all personnel associated with implementation and realization of the Project;
- 6.2.7. 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.
- 6.2.8. The Successful Bidder shall maintain sufficient inventory of the spare parts to ensure that the Project is functional during the period of warranty period.
- 6.2.9. 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.

6.2.10. Comprehensive O &M of the Project at every location, from the date of the completion of Project has to be carried out by the Contractor. Comprehensive O &M of the Project shall be for the five (5) years from the date of completion.

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 completion of the Project to the satisfaction of the MPUVNL;

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 MPUVNL.

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 A & B 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. Nodal Agency may facilitate in the process; however the entire responsibility lies only with the Contractor. (The required meters shall be provided

and their costs shall be borne by User/ MPUVNL).

6.6. INSURANCE:

6.6.1. The Contractor shall also take insurance for third party liability covering loss of human life, engineers and workmen and also covering the risks of damage, theft to the third party/ material/ equipment/ properties after completion of the work(s). Before commencement of the work, the Contractor will 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. Liquidation, Death, Bankruptcy etc., shall be the responsibility of Contractor.

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 (5) years from the date of Completion.

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 (5) years from the date of Completion.

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);

6.10. PROVISION OF SIGN BOARD:

6.10.1. Contractor will have to provide sign board of dimension 8'x4' (M.S. sheet size 4'x3' of 16 gauge, M.S. angle 40x40x5 mm with essential bracing & adequate grouting with PCC 1:3:6 i/c painting & writing) at each site with complete specification & matter will be provided to the Contractor with Agreement.

6.11. REQUISITE CERTIFICATIONS:

6.11.1. **Completion Certificate:** When the Contractor fulfils his obligation under the Agreement, it shall obtain completion certificate from Nodal Agency. For the purpose of obtaining this certificate following documents shall be required:

- a) Inspection Report of the Work(s) as per prescribed format provided by Nodal Agency.
- b) Project completion/satisfaction certificate from User/Beneficiary.
- c) Document in support of performance of the system performance and achievement of CUF of 15% subject to seasonality as per provisions of Clause 3.21.1.

6.11.2. **Commissioning Certificate:** After completion of the Project, the Contractor, in coordination with the Discom, shall submit commissioning certificate of the system completed issued by the concerned Discom, in accordance with all applicable regulations/policies.

SECTION IV

TERMS AND CONDITION FOR PAYMENT

7. PAYMENT TERMS:

- 7.1. The Contractor may opt for mobilization advance of twenty percent (20%) of the work order value upon submission of bank guarantee of equivalent amount valid till date of Completion as mentioned in work order, or extended date with additional claim period of six (6) months (Format 16).
- 7.2. 80% of Work Order value shall be paid to Contractor (after adjusting the mobilization advance, if applicable) on successful Completion of the Project and submission of O-PBG of twenty percent (20%) value of Work Order and submission of documents in support of systems performance criteria.
- 7.3. For release of eighty percent (80%) payment (after adjusting the mobilization advance, if applicable), the Contractor shall present the following:
 - 7.3.1. Completion Certificate as per provisions of Clause 6.11.1 of this RFP;
 - 7.3.2. Self - Certified copy of application submitted to power distribution company for connectivity of Project with grid.
 - 7.3.3. Handing over certificate duly signed by user/end consumer and Inspecting Authority.
 - 7.3.4. Appropriate Bills along with Challan in Triplicate
 - 7.3.5. Inspection Report along with duly signed completion certificate by Contractor and Inspecting Authority.
 - 7.3.6. Colored photograph of SPV Array, Battery Bank, PCU 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.
 - 7.3.7. It is desirable for the Contractor to obtain registration from MP Commercial Tax Department (TIN) else VAT and any other taxes/duties, if applicable, shall be deducted at source.
 - 7.3.8. Applicable Taxes shall be deducted at source.
 - 7.3.9. 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.
 - 7.3.10. Additionally, Contractor may be required to submit to the following, if required:

- a. All the documents related to purchase of Panel, System electronics, Battery (if applicable) components of the Project.
 - b. All documents, premium receipts related to insurance of components of Projects.
- 7.4. Remaining payment of twenty percent (20%) of Work Order value shall be paid to Contractor on successful Commissioning of the Project and submission of Commissioning Certificate as per provisions of Clause 6.11.2. The certificate for commissioning shall not be mandatory for Category A & B.
- 7.5. MPUVNL 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 C-PBG/O-PBG against the work order concerned. Lastly, if recovery/ adjustment of LD/ penalty is not possible against payment due or C-PBG/ O-PBG concerned, it shall be done against any C-PBG/O-PBG of the Contractor with MPUVNL with respect to any other work. If recovery/ adjustment of LD/ penalty is not possible from payments due and C-PBGs/O-PBGs, the same shall be done through Bid Security of the Contractor.
- 7.6. 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 MPUVNL to Contractor, failing which the Contractor shall become ineligible for further work orders being given under this RFP.

SECTION V

S.No.	Particular	Format No.	Copy Attached Yes / No
1	Covering Letter	1	Yes / No
2	Bid processing Fee	-	Yes / No
3	Bid Security (In Bank Guarantee/FDR/DD)	4 (in case of Bank Guarantee)	Yes / No
4	Checklist for PBG submission	6	Yes / No

CHECKLIST**8. Checklist Envelop -I:****9. Checklist Envelop -II:**

S.No.	Particular	Format No.	Copy Attached
1.	Power of Attorney in favour of authorised signatory, on requisite value of stamp paper (Rs. 1000/-).	7	Yes / No
2.	Board Resolution in support of power of attorney in favour of authorized signatory (applicable for companies)	-	Yes / No
3.	General Particulars	2	Yes / No
4.	Bidder's composition and ownership structure (applicable for companies)	3	Yes / No
5.	Declaration for Eligibility Criteria Requirement	8 & 9	
6.	Format For Certificate Of Relationship in case of Affiliate (if applicable)	10	
7.	Certificate of Incorporation	-	Yes / No

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S.No.	Particular	Format No.	Copy Attached
8.	Undertaking	11	Yes / No
9.	Consortium Agreement (If applicable)	14	Yes / No
10.	Declaration	15	
11.	Technical Eligibility (Work order/Contract Agreement)	-	Yes / No
12.	Technical Eligibility (Completion Certificate)	-	Yes / No
13.	MNRE Channel Partner Certificate (if applicable)	-	Yes / No
14.	Board Resolution/power of attorney in favour of lead partner (if applicable)		Yes / No
15.	RFP Document Sealed and Signed along with the corrigenda and addenda (If any)		Yes / No

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 draft guidelines issued by MNRE dated 09-08-2016 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.

10. PARAMETERS:

10.1. A Project consists of SPV array, Module Mounting Structure, Power Conditioning Unit (PCU) consisting of Maximum Power Point Tracker, charge (MPPT), 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 synchronise 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.

10.2. Project shall consist of following equipment/components:

- a. Indigenously manufactured mono/polycrystalline Solar PV modules, as prescribed by MNRE.
- b. 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.
- c. Mounting structures
- d. Battery Bank (if required)
- e. Junction Boxes.
- f. Earthing and lightning protections.
- g. IR/UV protected PVC Cables, pipes and accessories

11. SOLAR PHOTOVOLTAIC MODULES:

11.1. The PV modules used should be made in India.

11.2. 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-2-requirements for construction & Part 2 – requirements for testing, for safety

qualification or equivalent IS.

- 11.3. 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.
- 11.4. Protective devices against surges at the PV module shall be provided. Low voltage drop bypass diodes shall be provided.
- 11.5. 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 Pre-galvanized/ anodized Aluminium or superior material (after approval from MNRE)
- 11.6. The Contractor shall carefully design & accommodate requisite numbers of the modules to achieve the rated power in his Bid.
- 11.7. 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 bypass 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.
- 11.8. Modules deployed must use a RF identification tag. The following information must be mentioned in the RFID used on each modules (This can be inside or outside the laminate, but must be able to withstand harsh environmental conditions).
 - a. Name of the manufacturer of the PV module
 - b. Name of the manufacturer of Solar Cells.
 - c. Month & year of the manufacture (separate for solar cells and modules)
 - d. Country of origin (for solar cells)
 - e. I-V curve for the module Wattage, I_m , V_m and FF for the module
 - f. Unique Serial No and Model No of the module

- g. Date and year of obtaining IEC PV module qualification certificate.
- h. Name of the test lab issuing IEC certificate.
- i. Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001

11.9. 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 completion.

- i. Defects and/or failures due to manufacturing
- ii. Defects and/or failures due to quality of materials
- iii. Non conformity 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.

12. ARRAY STRUCTURE:

- 12.1. 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.
- 12.2. 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.
- 12.3. 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.
- 12.4. 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.

12.5. 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

12.6. 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/m².

12.7. The minimum clearance of the structure from the roof level should be 300 mm.

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

13.1. The junction boxes are to be provided in the PV array for termination of connecting cables. The J. Boxes (JBs) shall be made of GRP/FRP/Powder Coated Aluminium/cast aluminium alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.

13.2. 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.

13.3. 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.

13.4. 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

14. DC DISTRIBUTION BOARD BASED ON SYSTEM DESIGN REQUIREMENTS:

14.1. DC Distribution panel to receive the DC output from the array field.

14.2. 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.

15. AC DISTRIBUTION PANEL BOARD:

- 15.1. 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.
- 15.2. All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III.
- 15.3. The changeover switches, cabling work should be undertaken by the Contractor as part of the project.
- 15.4. 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.
- 15.5. The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- 15.6. All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better.
- 15.7. Should conform to Indian Electricity Act and rules (till last amendment).
- 15.8. 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

16. PCU/ARRAY SIZE RATIO:

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

17. PCU/ Inverter:

- 17.1. 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.If necessary. Inverter output should be compatible with the grid frequency. Typical technical features of the inverter shall be as follows:

- Switching devices: IGBT/MOSFET
 - Control Microprocessor /DSP
 - Nominal AC output voltage and frequency: 415V, 3 Phase, 50 Hz (In case single phase inverters are offered, suitable arrangement for balancing the phases must be made.)
 - Output frequency: 50 Hz
 - Grid Frequency Synchronization range: + 3 Hz or more
 - Ambient temperature considered: -20o C to 50o C
 - Humidity: 95 % Non-condensing
 - Protection of Enclosure: IP-20(Minimum) for indoor: IP-65(Minimum) for outdoor.
 - Grid Frequency Tolerance range: + 3 or more
 - Grid Voltage tolerance: - 20% & + 15 %
 - No-load losses: Less than 1% of rated power
 - Inverter efficiency(minimum): >93% (In case of 10kWp or above)
 - Inverter efficiency (minimum): > 90% (In case of less than 10 kWp)
 - THD: < 3%
 - PF: > 0.9
- a. Three phase PCU/ inverter shall be used as required.
 - b. PCU/inverter shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
 - c. The output of power factor of PCU inverter is suitable for all voltage ranges or sink of reactive power; inverter should have internal protection arrangement against any sustainable fault in feeder line and against the lightning on feeder.
 - d. Built-in meter and data logger to monitor Project performance retrievable through external computer shall be provided.
 - e. The power conditioning units/inverters should comply with applicable IEC/

equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683 and IEC 60068- 2(1,2,14,30)/Equivalent BIS Std.

- f. The charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS standard. The junction boxes/ enclosures should be IP 65(for outdoor)/ IP 54 (indoor) and as per IEC 529 specifications.
- g. The PCU/ inverters should be tested from the MNRE approved test centres/NABL/BIS/IEC accredited testing-calibration laboratories. In case of imported power conditioning units, these should be approved by international test houses.

18. BATTERY BANK:

18.1. TECHNICAL SPECIFICATION OF TUBULAR (LEAD ACID) BATTERY

The batteries must be conforming to the programme of Ministry of New and Renewable Energy. The battery bank capacity shall be of different capacities as specified in the price schedule, of tubular lead acid (Flooded electrolyte type) Battery (2 volt cells). The general specifications shall be as under:

- a. The battery bank shall consist of required number of deep-discharge electrochemical storage cells, suitably interconnected as required. Parallel connections of storage cells will be discouraged.
- b. The cells shall be capable of deep discharge and frequent cycling with long maintenance intervals and high columbic efficiency. Automotive or car batteries shall not be accepted.
- c. The nominal voltage and capacity of the storage bank shall be selected and specified by the supplier in the bid.
- d. The self-discharge rate of the battery bank or individual cell shall not exceed four (4) percent per month.
- e. The permitted maximum depth of discharge (DOD), shall not be more than 80%.
- f. The cells shall include explosion proof safety vents.
- g. The cells shall include the required number or corrosion resistant inter-cell required chemicals electrolyte packed in separate containers. Full instructions and technical details shall be provided for electrolyte filling and battery recharging at site for the first time.
- h. In case of flooded electrolyte Cells, the cells shall preferably be supplied in dry charged condition, complete with all required chemicals electrolyte packed in separate containers. Full instructions and technical details shall be provided for electrolyte filling and battery recharging at site for the first time.

- i. If the cells are supplied in uncharged conditions, then the supplier shall provide full instructions for first time charging including, but not limited to, the following:
- j. Suitable number of corrosion resistant and acid-proof storage racks shall be supplied to accommodate the cells tester and other accessories. The rack design shall be such that minimum space is required, without any way obstructing the maintenance requirements. For metallic racks, standards specified for control panel enclosures and other metallic shall govern.
- k. All the connectors should be insulated except for the end portions.

19. BATTERY RACK:

Battery rack should be of matured treated Salwood (In case of flooded electrolyte Cells) 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. The non-reactive acid proof mat should be provided to cover the entire floor space covering the battery rack. 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.

20. INTEGRATION OF PV POWER WITH GRID:

20.1. 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 Decentralised

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.

21. DATA ACQUISITION SYSTEM / PROJECT MONITORING:

- 21.1. Data Acquisition System shall be provided for each of the solar PV Project.
- 21.2. 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.
- 21.3. 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).
- 21.4. 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.
- 21.5. 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.
- 21.6. 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.

21.7. All instantaneous data should be available through SCADA.

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

21.9. Provision for Internet monitoring and download of data shall be necessarily incorporated for projects above 5 kW.

21.10. 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.

22. TRANSFORMER “IF REQUIRED” & METERING:

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

22.2. 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.

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

23. POWER CONSUMPTION:

23.1. 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.

24. PROTECTIONS:

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

24.1.1. LIGHTNING PROTECTION

- a. 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.

24.1.2. SURGE PROTECTION:

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

24.1.3. 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.
- b. 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.

24.1.4. 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.
- b. A manual disconnect 4pole 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.

25. CABLES:

25.1. 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

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- 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 1%.
- l. The size of each type of AC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 2 %.
- m. All such external electrical works shall be required to be done as per DISCOMs SOR.

26. CONNECTIVITY:

26.1. 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. Following criteria have to be followed for selection of voltage level in the distribution licensee's network for ready reference of the solar suppliers. The work should be done in compliance with respective regulations and policy.

Project Capacity	Connecting Voltage
Up to 10 kWp	240 V- single phase or 415 V- three phase at the option of the Consumer
Above 10 kWp and up to 100	415 V- three phase

kWp	
Above 100 kWp	At HT/EHT level (11/33/66 kV) as per distribution licensee's rule

26.2. 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.

27. TOOLS & TACKLES AND SPARES:

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

27.2. The bidders are advice to ensure a response time of 24 hours and maximum expected turnaround time of 72 hours (under special circumstances, additional time limit may be considered).

27.3. 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.

28. DANGER BOARDS AND SIGNAGES:

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

29. FIRE EXTINGUISHERS:

29.1. The firefighting 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.

30. DRAWINGS & MANUALS:

30.1. 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.

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

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

31. PLANNING AND DESIGNING:

31.1. 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.

31.2. 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.

31.3. 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.

32. SAFETY MEASURES:

32.1. 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 guidelines etc.

SECTION VII

FINANCIAL BID CATEGORY -A

(To be submitted only with due encryption)

Cost Component	Particulars	Type of battery back up		
		Financial Bid for systems without Battery (INR per kWp)	Financial Bid for systems with Battery (INR per kWp)	
			With 1.2 VAh battery per Wp)	With 7.2 VAh battery per Wp)
I.	Supply of Material	Not Applicable	Not Applicable	
II.	Erection, installation and commissioning (I&C)	Not Applicable	Not Applicable	
III.	Operation & Maintenance	Not Applicable	Not Applicable	
Total Financial Bid (I+II+III)		Not Applicable	Not Applicable	

Note:

1. This category of project includes Off-Grid projects of size 1 kWp – 4 kWp, with total available capacity of 1500 kWp.
2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (5) years Warranty cum Comprehensive Maintenance all inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes including Duties FOR Site (s) mentioned in the Document. No price escalation will be allowed
3. For off-grid projects, financial bid shall be quoted for “with battery” only.

SEAL AND SIGN

FINANCIAL BID CATEGORY -B**(To be submitted only with due encryption)**

Cost Component	Particulars	Type of battery back up		
		Financial Bid for systems without Battery (INR per kWp)	Financial Bid for systems with Battery (INR per kWp) With 1.2 VAh battery per Wp)	With 7.2 VAh battery per Wp)
I.	Supply of material	Not Applicable	Not Applicable	
II.	Erection, installation and commissioning (I&C)	Not Applicable	Not Applicable	
III.	Operation & Maintenance	Not Applicable	Not Applicable	
Total Financial Bid (I+II+III)		Not Applicable	Not Applicable	

Note:

1. This category of project includes Off-Grid projects of size 4 kWp – 10 kWp, with total available capacity of 1500 kWp.
2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (5) years Warranty cum Comprehensive Maintenance all inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes including Duties FOR Site (s) mentioned in the Document. No price escalation will be allowed
3. For off-grid projects, financial bid shall be quoted for “with battery” only.

SEAL AND SIGN

AUTHORIZED SIGNATORY

FINANCIAL BID CATEGORY-C

(To be submitted only with due encryption)

Cost Component	Particulars	Type of battery back up		
		Financial Bid for systems without Battery (INR per kWp)	Financial Bid for systems with Battery (INR per kWp) With 1.2 VAh battery per Wp)	Financial Bid for systems with Battery (INR per kWp) With 7.2 VAh battery per Wp)
I.	Supply of capital goods			
II.	Erection, installation and commissioning (I&C)			
III.	Operation & Maintenance			
Total Financial Bid (I+II+III)				

Note:

1. This category of project includes Grid-Connected projects of size 1 kWp – 4 kWp, with total available capacity of 1500 kWp.
2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (5) years Warranty cum Comprehensive Maintenance all inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes including Duties FOR Site (s) mentioned in the Document. No price escalation will be allowed
3. In case, bidder does not intend to submit bid for all the three sub-categories, 'Not Applicable' should be clearly mentioned corresponding to those sub-categories in which the bid is not being submitted, in the above format.

SEAL AND SIGN

AUTHORIZED SIGNATORY

FINANCIAL BID CATEGORY –D

(To be submitted only with due encryption)

Cost Component	Particulars	Type of battery back up		
		Financial Bid for systems without Battery (INR per kWp)	Financial Bid for systems with Battery (INR per kWp)	
			With 1.2 VAh battery per Wp)	With 7.2 VAh battery per Wp)
I.	Supply of capital goods			
II.	Erection, installation and commissioning (I&C)			
III.	Operation & Maintenance			
Total Financial Bid (I+II+III)				

Note:

1. This category of project includes Grid-Connected projects of size 4 kWp – 10 kWp, with total available capacity of 1500 kWp.
2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (5) years Warranty cum Comprehensive Maintenance all inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes including Duties FOR Site (s) mentioned in the Document. No price escalation will be allowed
3. In case, bidder does not intend to submit bid for all the three sub-categories, ‘Not Applicable’ should be clearly mentioned corresponding to those sub-categories in which the bid is not being submitted, in the above format.

SEAL AND SIGN

AUTHORIZED SIGNATORY

FINANCIAL BID CATEGORY-E

(To be submitted only with due encryption)

Cost Component	Particulars	Type of battery back up		
		Financial Bid for systems without Battery (INR per kWp)	Financial Bid for systems with Battery (INR per kWp) With 1.2 VAh battery per Wp)	With 7.2 VAh battery per Wp)
I.	Supply of capital goods			
II.	Erection, installation and commissioning (I&C)			
III.	Operation & Maintenance			
Total Financial Bid (I+II+III)				

Note:

1. This category of project includes Grid-Connected projects of size 10 kWp – 25 kWp, with total available capacity of 3000 kWp.
2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (5) years Warranty cum Comprehensive Maintenance all inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes including Duties FOR Site (s) mentioned in the Document. No price escalation will be allowed
3. In case, bidder does not intend to submit bid for all the three sub-categories, 'Not Applicable' should be clearly mentioned corresponding to those sub-categories in which the bid is not being submitted, in the above format.

SEAL AND SIGN

AUTHORIZED SIGNATORY

FINANCIAL BID CATEGORY-F

(To be submitted only with due encryption)

Cost Component	Particulars	Type of battery back up		
		Financial Bid for systems without Battery (INR per kWp)	Financial Bid for systems with Battery (INR per kWp) With 1.2 VAh battery per Wp)	Financial Bid for systems with Battery (INR per kWp) With 7.2 VAh battery per Wp)
I.	Supply of capital goods			
II.	Erection, installation and commissioning (I&C)			
III.	Operation & Maintenance			
Total Financial Bid (I+II+III)				

Note:

1. This category of project includes Grid-Connected projects of size 25 kWp – 50 kWp, with total available capacity of 3000 kWp.
2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (5) years Warranty cum Comprehensive Maintenance all inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes including Duties FOR Site (s) mentioned in the Document. No price escalation will be allowed
3. In case, bidder does not intend to submit bid for all the three sub-categories, ‘Not Applicable’ should be clearly mentioned corresponding to those sub-categories in which the bid is not being submitted, in the above format.

SEAL AND SIGN

AUTHORIZED SIGNATORY

FINANCIAL BID CATEGORY-G

(To be submitted only with due encryption)

Cost Component	Particulars	Type of battery back up		
		Financial Bid for systems without Battery (INR per kWp)	Financial Bid for systems with Battery (INR per kWp)	
			With 1.2 VAh battery per Wp)	With 7.2 VAh battery per Wp)
I.	Supply of capital goods			Not applicable
II.	Erection, installation and commissioning (I&C)			Not applicable
III.	Operation & Maintenance			Not applicable
Total Financial Bid (I+II+III)				Not applicable

Note :

1. This category of project includes Grid-Connected projects of size 50 kWp – 100 kWp, with total available capacity of 9000 kWp.
2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (5) years Warranty cum Comprehensive Maintenance all inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes including Duties FOR Site (s) mentioned in the Document. No price escalation will be allowed
3. In case, bidder does not intend to submit bid for all the three sub-categories, ‘Not Applicable’ should be clearly mentioned corresponding to those sub-categories in which the bid is not being submitted, in the above format.

SEAL AND SIGN

AUTHORIZED SIGNATORY

FINANCIAL BID CATEGORY-H

(To be submitted only with due encryption)

Cost Component	Particulars	Type of battery back up		
		Financial Bid for systems without Battery (INR per kWp)	Financial Bid for systems with Battery (INR per kWp)	
			With 1.2 VAh battery per Wp)	With 7.2 VAh battery per Wp)
I.	Supply of capital goods			Not applicable
II.	Erection, installation and commissioning (I&C)			Not applicable
III.	Operation & Maintenance			Not applicable
Total Financial Bid (I+II+III)				Not applicable

Note:

1. This category of project includes Grid-Connected projects of size 100 kWp – 500 kWp, with total available capacity of 9000 kWp.
2. Rates quoted must be Firm and Fixed for Design, Engineering, Supply, Installation and Commissioning, five (5) years Warranty cum Comprehensive Maintenance all inclusive of Site Visits, Packaging, Forwarding, Loading-Unloading, Transportation, Spare-parts, Insurance and Taxes including Duties FOR Site (s) mentioned in the Document. No price escalation will be allowed
3. In case, bidder does not intend to submit bid for all the three sub-categories, ‘Not Applicable’ should be clearly mentioned corresponding to those sub-categories in which the bid is not being submitted, in the above format.

SEAL AND SIGN

AUTHORIZED SIGNATORY

SECTION VIII

FORMATS FOR SUBMITTING RFP

FORMAT 1: COVERING LETTER

Covering Letter

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

Ref.No. _____

Date: _____

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

Tel.: _____ **Fax:** _____ **E-mail address:** _____

To: _____

Madhya Pradesh Urja Vikas Nigam Limited
(A Government of Madhya Pradesh Enterprise)
Urja Bhawan, Link Road No. 2,
Shivaji Nagar, Bhopal - 462016

Sub: Request for Proposal (RFP) for Standardization of Rates for work of Grid Connected/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about thirty (30) MWp at various locations in the state of MP with RFP Specification No.....

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/without Energy Storage aggregating to about thirty (30) MWp 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.

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We give our unconditional acceptance to the RFP, 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:

Project Category	Participation* (Yes / No)	Bidder Details		
		Company/ LLP/ Partnership Firm/ Sole – Proprietor or Consortium (Fill as applicable)	Name of Member of Consortium (if applicable)	Participation of member of Consortium as Company/ LLP/ Partnership Firm/ Sole – Proprietor
A				
B				
C				
D				
E				
F				
G				
H				

**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.*

Bid Security

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

Project Category	Bid Security (INR Lakhs)	Participation* (Yes / No)	Bid Security Details
A	10		
B	10		
C	10		
D	10		
E	20		
F	20		
G	60		
H	60		

**Note: Bidder shall mention 'Yes' corresponding to categories it wants to bid and clearly mention*

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'No' for categories where it does not intend to bid

OR

We have enclosed a Bid Security in form of DD/ FDR/ Bank Guarantee (*Bid Security Details*) of cumulative amount required of Rs. _____, subject to clause 3.18.1, 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

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 Envelope-I (Covering letter, Processing fee and Bid Security) and Envelope-II (Technical documents) 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

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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 _____ 2016

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

GENERAL PARTICULARS OF THE BIDDER

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

(Signature of Authorized Signatory)

With Stamp

FORMAT 3: SHAREHOLDING CERTIFICATE

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: FORMAT FOR BANK GUARANTEE FOR BID SECURITY

(To be on non-judicial stamp paper of INR 1000/-)

Ref. _____ Bank Guarantee No. _____

Date: _____

In consideration of the [Insert name of the Bidder] (hereinafter referred to as Bidder) submitting the response to RFP inter alia for selection of the 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 thirty (30) MWp at various locations in the state of MP 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 Bidder] 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 Nodal Agency] forthwith on demand in writing from Nodal Agency or any Officer authorized by it in this behalf, any amount upto and not exceeding Rupees [Insert amount] only, on behalf of M/s. [Insert name of the Bidder].

This guarantee shall be valid and binding on this Bank up to and including [insert date of validity in accordance with this 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 (Rupees _____ only). Our Guarantee shall remain in force until [insert date of Bid Validity in accordance with this RFP]. Only Nodal Agency shall be entitled to revoke this Guarantee till _____ [Insert date which is 30 days after the date in the preceding sentence].

The Guarantor Bank hereby agrees and acknowledges that only the Nodal Agency shall have a right to revoke 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

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the Guarantor Bank, in order to make the said payment to Nodal Agency.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by [Insert name of the Bidder] and/or any other person. The Guarantor Bank shall not require 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 Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder or to enforce any security held by Nodal Agency or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rupees _____ (Rupees _____ only) and it shall remain in force until *[Date to be inserted on the basis of this RFP]* with an additional claim period of thirty (30) days thereafter. 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.

Power of Attorney No.

For [Insert Name of the Bank]

Banker's Stamp and Full Address.

Dated this ____ day of ____, 20__

FORMAT 5: FORMAT FOR PERFORMANCE BANK GUARANTEE

(To be on non-judicial stamp paper of Minimum Rs. 1000/-)

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) for Standardization of Rates for Grid Connected/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about _____ MWp at various locations in the state of MP for capacity in response to the RFP 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 executors, administrators, successors and assignees) and selecting the Project of the Contractor and issuing LICA 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 upto 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 _____ 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

Request for Proposal for Solar Roof top Projects in Madhya Pradesh

address of the Guarantor Bank, in order to make the said payment to Nodal Agency.

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]

Request for Proposal for Solar Roof top Projects in Madhya Pradesh

Banker's Stamp and Full Address.

Dated this ____ day of ____, 20__

Witness:

Signature

Name and Address_____

Signature

Name and Address_____

FORMAT 6: CHECK LIST FOR PBG (C-PBG/ O-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. Also the Stamp Paper should not be older than six (6) months from the date of execution of BG).	
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., / LOI No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG	
7	Whether overwriting/cutting if any on the BG have been properly authenticated under signature & seal of executant?	

FORMAT 7: POWER OF ATTORNEY

(To be on non-judicial stamp paper of Minimum Rs. 1000/-)

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 Standardization of Rates for Grid Connected/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about thirty (30) MWp 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 this _____ day of _____

Accepted

Signature of Attorney

(Name, designation and address of the Attorney)

Attested

(Signature of the executant)

(Name, designation and address of the executant)

Signature and stamp of Notary of the place of execution

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

WITNESS

(Signature)

Name _____

Designation _____

(Signature)

Name _____

Designation _____

FORMAT 8: 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/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about thirty (30) MWp at various locations in the state of MP in response to the RFP No: Dated: _____

We submit our Bid as *Indigenous manufacturer of mono/poly crystalline solar photovoltaic module/Power Conditioning Unit/Inverter/MNRE registered System Integrator and/or Channel Partner (strikeout whichever is not applicable) (as per provisions of Clause 3.9.1(b) of the RFP)* for which details of Technical Eligibility Criteria Requirements are as follows.

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

Based on above projects, we undertake to submit our bid for following Category(ies) as per Table 1 of this RFP:

Project Category	Participation* (Yes / No)
A	
B	
C	
D	
E	

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Project Category	Participation* (Yes / No)
F	
G	
H	

**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. This should be in concurrence with Covering Letter.*

Yours faithfully

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

Name: _____

Date: _____

Place: _____

FORMAT 9: FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT

(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/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about thirty (30) MWp 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.

Name of Entity being evaluated	Financial Year	Financial Criteria (fill as applicable) to be met as per Table 1 (Clause 3.9.3)	
		Networth (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)

Name: _____

Date: _____

Place: _____

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

Name:_____

Date:_____

Place:_____

Notes:

Audited consolidated annual accounts of the Bidder may also be used for the purpose of financial criteria provided the Bidder has at least 26% 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 10: FORMAT FOR CERTIFICATE OF RELATIONSHIP OF AFFILIATE WITH THE BIDDER

To,

Dear Sir,

Sub: 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 thirty (30) MWp 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 equity holding 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:

a) In case of Bidder being Company/ LLP/ Partnership Firm/ Sole – Proprietor:

Name of Company/ LLP/ Partnership Firm/ Sole – Proprietor	Name of the Affiliate	Percentage of Equity Holding of Affiliate in the Bidding Company

OR

b) In case of Bidder being Consortium

Name of Member of Consortium	Name of the Affiliate	Percentage of Equity Holding of Affiliate in the Member of Consortium

Yours Faithfully

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

FORMAT 11: UNDERTAKING FORM

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

Name:_____

Full Address:_____

Telephone No.: E-mail address: Fax/No.:_____

To,

Dear Sir,

We refer to the RFP No: Dated: _____ for Request for Proposal (RFP) for Standardization of Rates for Grid Connected/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about thirty (30) MWp 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 maintain our ownership in M/s_____ (insert name of bidder) at minimum 26% for period of 1 year from the date of Commissioning of awarded capacity, subject to provisions of Clause 3.3(c). (*in case of affiliate*)

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

Request for Proposal for Solar Roof top Projects in Madhya Pradesh

under the RFP.

Signature of Chief Executive Officer/Managing Director

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

Board of Director's Resolution dated _____

WITNESS

(Signature)

Name _____

Designation _____

(Signature)

Name _____

Designation _____

FORMAT 12: 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 _____kWp 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 13: FORMAT FOR AGREEMENT

(To be submitted on non-judicial stamp paper of INR 1000/-)

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

That, the “Party No.1” has agreed to Execute Work as per Scope, 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/without 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 ____-____-20__.

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 (5) 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 ____-____-20__. The validity period may be extended further with the Mutual Consent on unchanged Terms & Condition(s), Specification(s) and Rate(s) up to one year.

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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: FORMAT FOR 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/without Energy Storage
At
Various Locations in the State of MP
(To be executed on Stamp Paper of INR 1000/-)**

THIS JOINT BIDDING AGREEMENT is entered into on this YYYY day of YYY.2016.

BETWEEN

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

AND

YYYYYYYYYY. Having its registered office at YYYYYYYY.(Hereinafter referred to as the “**Second Part**” or “**Member**” which expression shall, unless repugnant to the context include its successors and permitted assigns) The above mentioned parties of the First and Second Part are collectively referred to as the “**Parties**” and each is individually referred as a “**Party**”

WHERE AS,

- i. Madhya Pradesh Urja Vikas Nigam Ltd. (hereinafter referred to as the “**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/without 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:

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

Project Category	Participation* (Yes / No)
A	
B	
C	
D	
E	
F	
G	
H	

**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*

- 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. 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 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 and Second 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)

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Name of Member	Proposed % Equity holding
Lead Member (At least 51%)
Member	

3. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until the date of validity period of Award 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:

(Signature)

(Name & Designation)

(Address)

In Presence of :

Witness -1

Witness -2

SIGNED, SEALED AND DELIVERED

For
and on behalf of Second Part:

(Signature)

(Name & Designation)

(Address)

In Presence of :

Witness -1

Witness -2

FORMAT 15: 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 are (please specify & tick mark the relevant point(s) and cross the others):

- a) Registered Manufacturing Unit in India that has received Valid / Successful Test Report / Approval as per MNRE norms with international qualification certification, for Production of SPV Modules with Appropriate Approval of the MNRE accredited Test Center.

Or

We are MNRE empanelled Indian Manufacturer of Power Conditioning Unit suitable for SPV Power Plants having Test reports of the NABL/BIS/IEC accredited testing – calibration laboratories / MNRE approved Test Center's Test Reports/Self certified Factory Test Report conforming to MNRE guidelines,

Or

We are MNRE's Accredited System Integrator/ Channel Partner (Channel Partner. Accreditation Certificate is enclosed).

And

- b) We have got Test facility at our works/at works of Original Equipment Manufacturer for testing of the balance of system components of the quoted System(s).
1. 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 16: FORMAT FOR BANK GUARANTEE FOR MOBILISATION ADVANCE

(To be on non-judicial stamp paper of Minimum Rs. 1000/-)

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) for Standardization of Rates for Grid Connected/ Off-Grid Roof Top Solar PV Projects (with/without Energy Storage) aggregating to about _____ MWp at various locations in the state of MP for capacity in response to the RFP 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 LICA 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 upto 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 _____ 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.

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

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

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

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

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

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

Signature

Name

Power of Attorney No.

For

[Insert Name of the Bank]

Banker's Stamp and Full Address.

Request for Proposal for Solar Roof top Projects in Madhya Pradesh

Dated this ____ day of ____, 20__

Witness:

Signature

Name and Address _____

Signature

Name and Address _____