



Madhya Pradesh Urja Vikas Nigam Limited

invites

Request for Proposal (RFP)

for

Standardization of rates

for

Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose, etc.

and

Annual Maintenance Contract for Existing Solar Pumps Installed

at

Various locations in the State of Madhya Pradesh.

RFP No. 2759

Date:06-02-2020

Issued by:

Madhya Pradesh Urja Vikas Nigam Limited

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

Telephone No.: +91-755-2553595, 2575670

Fax No: 91-755-2553122

Email: ceuvn@mp.gov.in

Website: <http://www.mprenewable.nic.in>

Request for Proposal for Spare Parts and AMC

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Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL)

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

Telephone No.: +91-755-2553595, 2575670; Fax No: 91-755-2553122

Website: <http://www.mprenewable.nic.in>, Email: ceuvn@mp.gov.in

NOTICE INVITING PROPOSAL

RFP No: MPUVN/Solar Pump/ Spares-AMC/ 2019-20/2759

Date : 06-02-2020

Madhya Pradesh Urja Vikas Nigam Limited (MPUVNL), invites Proposals from eligible Bidder(s) for Standardization of rates For Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose, etc. and Annual Maintenance Contract (AMC) of existing Solar pumps already installed at various locations in the State of Madhya Pradesh in accordance with MNRE/BIS/IEC/CE norms.

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 03/03/2020 up to 1:30 p.m. in the office of MPUVN also known as “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 04/03/2020 at 3:30 p.m. 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.mptenders.gov.in> for online submission.

It may be noted that the costs of preparing the proposal and of negotiating the contract, including visits to MPUVN’s office and elsewhere, are not reimbursable as a direct cost of the proposal and MPUVN is not bound to accept any/ all of the proposals submitted. All Successful Bidder(s) are expected to commence the Work on the Time-schedule specified in the work order as per the Scope of Work, General & Specific Terms and Conditions mentioned herein.

(Chief Engineer)
M.P. Urja Vikas Nigam Ltd.,
Bhopal
Mobile-9425008000
Email: ceuvn@mp.gov.in

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 Bidder(s) 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	Standardization of rates For Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose, etc. and annual maintenance contract (AMC) for existing Solar pumps installed at various locations in the State of Madhya Pradesh.
RFP No. & Date	RFP No:2759, Dated:06.02.2020
RFP Purchase Start Date	11/02/2020 at 6p.m.
Submission of clarifications / suggested amendments by the bidder	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 MPUVNL's office, Urja Bhawan, Link Road No. 2, Shivaji Nagar, Bhopal – 462016, on or before Pre-Bid meeting date.
Pre-bid Meeting	A pre-bid meeting shall be held on 18/02/2020 at 11:00 a.m. at MPUVNL's office, Urja Bhawan, Link Road No. 2, Shivaji Nagar, Bhopal – 462016. Interested Bidder may send their representatives to attend the same.
RFP Purchase End Date	29/02/2020 up to 1:30 p.m.
Last date & Time of Submission of Financial Bid submission (ONLINE only)	29/02/2020 up to 1:30 p.m.
Last date & Time of Submission of technical bid (HARD copies)	03/03/2020 up to 1:30p.m.

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Bid Opening (Technical)	04/03/2020 at 03:30 p.m.
Bid Opening (Financial)	07/03/2020 at 01:30 p.m. (For any modification in Date, time and venue for Financial bid opening shall be updated on our website. Bidder(s) are advised to keep tracking of the same).
Project commissioning timelines	Work specific timelines shall be defined in respective work orders.
Bid Processing Fee (non- refundable)	<p>Bidder shall pay Tender fee of Rupees 5,000/- (Rupees Five Thousand only) online through www.mptenders.gov.in portal via NET BANKING AND NEFT/RTGS .</p> <p>No exemption towards processing fees or E-tendering fees is allowed to any other type of organizations/ agencies including MSME /SSI, any Govt./ semi Govt./ PSUs.</p>
Bid Security	<p>Interested Bidder shall furnish Bid Security of required Token amount of Rs 50,000/- pay through online www.mptenders.gov.in portal via NET BANKING AND NEFT/RTGS .</p> <p>No exemption towards Bid Security fees or E-tendering fees is allowed to any other type of organizations/ agencies including MSME /SSI, any Govt./ semi Govt./ PSUs.</p>
Bank Account details may be used for the purpose of submission of Bid Security, C-PBG and OPBG (If required in any format/Annexure etc.)	NIL
Update on this RFP	<p>Bidder(s) are advised to keep tracking of changes/ updates/ corrigendum regarding this RFP on http://www.mprenewable.nic.in OR http://www.mptenders.gov.in</p>

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Address for Bid submission/ correspondence	Chief Engineer, MP Urja Vikas Nigam “Urja Bhawan” Link Road No. 2, Shivaji Nagar, Bhopal – 462016
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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;
 - controls, or
 - is controlled by, or
 - is under common control witha Bidder or a member (in case of a Consortium) and control means ownership of at least 51% of paid up equity capital. 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 i.e. MPUVNL;
3. **“Annual Maintenance Contract (AMC)”** shall mean minor repair and periodic maintenance, as described in clause no. 5.7 of this RFP, including supply and installation of required spare parts except the items/spares listed (01 to 11) in Section-VI of 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 submitting the Bid. Any reference to the Bidder includes its successors, executors and permitted assigns as the context may require;
7. **“Bid Deadline”** shall mean the last date and time for submission of Bid in response to this RFP as specified in Bid Information Sheet;

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8. **“Bid Security”** shall mean Bid Security of desired value in the form of unconditional and irrevocable bank guarantee (as per Annexure-3) /DD/FDR, in favour of MPUVNL, to be submitted along with the Bid by the Bidder;
9. **“CEA”** shall mean Central Electricity Authority;
10. **“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;
11. **“Commissioning”** shall mean the successful operation of Solar Pump system for a period of 1 hour after installation of the spare (s) and the same is certified by visiting DREO;
12. **“Company”** shall mean a body incorporated in India under the Companies Act, 1956 or Companies Act,2013 including any amendment thereto;
13. **“Competent Authority”** shall mean Managing Director of Nodal Agency, himself and/or a person or group of persons nominated by him for the mentioned purpose herein;
14. **“Contractor”** shall mean the Successful Bidder or Project Company who has accepted the LICA and has signed the Agreement;
15. **“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;
16. **“Eligibility Criteria”** shall mean the Eligibility Criteria as set forth in this RFP;
17. **“Financial Bid”** shall mean online financial Bid, containing the Bidder’s quoted Price as per RFP format;
18. **“LICA”** shall mean Letter Inviting Consent for Agreement;
19. **“MNRE”** shall mean Ministry of New and Renewable Energy, Government of India;
20. **“Nodal Agency”** shall mean the Madhya Pradesh Urja Vikas Nigam Limited, (MPUVNL)Bhopal;

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21. **“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;
22. **“Qualified Bidder(s)”** shall mean, for given scope of work, the Eligible Bidder who has qualified for issue of LICA as per the terms of RFP;
23. **“Rate Validity Period”** shall mean the period between date of signing of Agreement and up to 31st March, 2022, Which may be extended by 1 year. The rates standardised after bidding process under this RFP shall be valid and applicable for Contract(s) awarded on or before the Rate Validity Period;
24. **“RFP”** shall mean Request for Proposal (RFP)/Bid document/Tender document and shall include formats and annexures in it;
25. **“Site”** shall mean the area where it is proposed to install the solar pumping system;
26. **“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;
27. **“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 and accepted by the Bidder;
28. **“Wp”** shall mean Watt Peak;
29. **“Work”** shall mean any work entrusted to the Contractors as mentioned in the scope of work in this RFP and Agreement;

SECTION-I

**INTRODUCTION, BID DETAILS AND INSTRUCTIONS TO THE
BIDDER**

1. INTRODUCTION:

- 1.1. Request for Proposal for inviting Standardization of rates For Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose, etc. in accordance with MNRE/BIS/IEC/CE norms and annual maintenance contract (AMC) for existing Solar pumps installed in different sites/villages located anywhere in Madhya Pradesh. The number of existing solar pumps, for which the work may be allotted under this RFP, is up to 2792 (Annexure-12). Actual quantum of work will be as per the requirement as and when it would arise. The detailed RFP document can be viewed on www.mprenewable.nic.in and purchased & downloaded from the web-site www.mptenders.gov.in.
- 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 the carrying out of the 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 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.

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2. BID DETAILS:

2.1. RFP documents can be downloaded and purchased online from <http://www.mptenders.gov.in>.

For further information, the Bidder(s) are requested to visit website <https://mptenders.gov.in/>

Chief Engineer, M.P. Urja Vikas Nigam Ltd., Bhopal.

2.2. Key Dates :

Sr. No.	MPUVN Stage	Date	Time
1	Purchase of RFP start Date	11/02/2020	6:00 p.m.
2	Pre-bid meeting date & time	18/02/2020	11:00 a.m.
3	Purchase of RFP End Date	29/02/2020	11:00 a.m.
4	Financial proposal online Submission End Date	29/02/2020	1:30 p.m.
5**	Hard Copies of Technical proposal & Bid Security (Envelope- A & B) submission end date	03/03/2020	1:30p.m.
6	Envelope- A & B: Opening Date	04/03/2020	3:30 p.m.
7	Financial bid –on line: Opening Date	07/03/2020	1:30 p.m.

**** Bid Security & Technical proposal documents should be submitted in MP URJA VIKAS NIGAM Head Office on or before 03/03/2020, upto 1:30 p.m.**

3. INSTRUCTIONS TO THE BIDDER:

3.1. A Bidder shall not have a conflict of interest. Bidder(s) shall be disqualified if it has conflict of interest. The Bidder may be considered to have conflict of interest with one or more parties in this bidding process, if:

- a) A Bidder submits more than one Bid in the bidding process [including bid submitted as authorised representative on behalf of one or more Bidder(s)].
- b) They have a relationship with each other, directly or through common third parties, that puts them in position to have access to information about or influence on the

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Bid of another Bidder, or influence the decisions of MPUVNL regarding this bidding process. For purpose of this clause, relationship shall mean direct or indirect ownership of 26% or more equity.

3.2. RFP can be viewed from Nodal Agency's website <http://www.mprenewable.nic.in>

And

RFP document can be downloaded and purchased online from <http://www.mptenders.gov.in>.

3.3. The Bidder(s) 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). Technical bid containing original (downloaded) RFP for relevant document/ certificates etc., duly sealed and signed, and Bid Security should reach office of the undersigned by 03/03/2020 up to 01:30 p.m.

3.4. Online Bidder(s) are required to sign their bids online using only Class III – Digital Certificates; Bidder(s) are advised to obtain the same at the earliest. For further information, Bidder(s) are requested to visit website <https://mptenders.gov.in/> (Note: It may take up to 7 working days to issue Digital certificates).

3.5. MPUVNL shall have full rights to accept or reject any or all the proposals, in part or full, without assigning any reason thereof.

3.6. MPUVNL shall purchase systems /materials as per requirement. Even if MPUVNL does not purchase any of the articles or purchases less than the quantity communicated in the RFP, the Bidder shall not be entitled to claim any compensation / damage.

3.7. ELIGIBILITY CRITERIA:

3.7.1. 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/ Joint Venture having executed partnership deed and registered as per sections 58 & 59 of the

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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 or EPC contractor or akshay urja shops registered with MPUVN. A copy of certificate of incorporation, partnership deed or LLPF/ Sole Proprietor registration, as applicable and relevant, shall be furnished along with the bid in support of the above.

- b) Bidder having been blacklisted by MPUVN or by any Govt./PSU, for whatever reasons, shall not be eligible/ allowed to participate in this RFP.
- c) The bidder should have valid GST/TIN registration certificate in the state of MP. A copy of which should be enclosed. However, if the Bidder is not having above registration in the state of MP, then it shall have to submit an undertaking confirming its submission before issue of any work order, in the event of it being a qualified bidder. It is further clarified that any payment to the Contractor shall be made only on submission of all statutory document(s) (GST/TIN) relating to the state of MP, as applicable, in this regard.

3.7.2. TECHNICAL ELIGIBILITY CRITERIA:

- a) Bidder(s) should have experience in manufacture/ supply/ installation/ commissioning/ PV system integration (contracts executed, completed and handed over) for MNRE supported schemes/programmes, (including projects executed by channel partners availing MNRE support) or any Government organization/Agency/ State Nodal Agency/PSU in India. For meeting technical eligibility criteria, following conditions shall be met :-

For meeting Cumulative Experience requirement as mentioned below, the Bidder should have either:

Cumulative experience of 3 years in executing contracts of off-Grid solar photovoltaic systems/power plants (installed & commissioned, including the systems installed for solar water pumping applications).

OR

Cumulative experience of 3 years in manufacture and supply of Motor-pump sets/solar pump controller/inverter/ SPV modules (Tested & certified by MNRE

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accredited lab).

OR

Cumulative experience of 3 years in annual maintenance of minimum number of 300 solar PV pumping system.

OR

Akshay Urja Shop, registered with MPUVNL, having minimum 3 years' experience of procurement, supply and commissioning of new and renewable energy / energy conservation systems / devices / items.

- b) Further, Bidder should have installed & commissioned minimum number of 100 solar photovoltaic water pumping systems of any size, on or before date of submission of Bid.
- c) 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.

3.7.3. **FINANCIAL ELIGIBILITY CRITERIA:**

- a) Average Annual Turnover during the last three audited (3) financial years, i.e., FY2016-17, 2017-18, FY 2018-19 should be at least 75lacs for eligible Bidder(s). Certified copies of the annual returns submitted to the 'Registrar of companies' (R.O.C.) should be enclosed.

Note:-

All requisite documents, such as balance sheet, P&L account, schedules etc., duly certified by a Chartered Accountant (CA)/ Statutory Auditor (as applicable), in support of meeting the financial eligibility criteria shall be required to be submitted.

3.8. **BID SUBMISSION BY THE BIDDER:**

- 3.8.1. The Bidder(s) are expected to read and examine all terms and conditions included in this document very carefully. MPUVNL reserves the right to seek clarification on the 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). Bidder(s) are also expected to regularly

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- check the RFP inviting authority's website for updates regarding this RFP.
- 3.8.2. The Bidder(s) are required to carefully study all the Condition(s) of the RFP, the Specifications and the relevant Provisions of relevant International/ NABL/BIS / MNRE / BEE/CE Norms as applicable / as the case may be, wherever necessary, before submission of their Proposal. The Technical particulars of the Material(s) & Equipment(s) offered must comply with the relevant Specifications. The Bidder(s) are also required to keep track of amendments / updates of MNRE specifications for concerned systems. SPV Modules, Pumps & BOS should be of required specification and warranties as per Ministry of New & Renewable Energy (MNRE), Govt. of India, latest guidelines/specifications (2019). If any amendments are issued by MNRE in due course of time, in this context, then those shall be applicable under this RFP.
- 3.8.3. The Bid (and any additional information requested subsequently) shall bear the initials of the Authorized Signatory and stamp of the Bidder's entity on each page of the Proposal.
- 3.8.4. All Pages of RFP Document must be returned duly signed with Seal on each page by Authorized Signatory as Token of Acceptance. All formats/annexures of the RFP documents must be completely filled (wherever required), duly signed with Seal, failing which the RFP may not be considered. Certificate of Authorization / Power of Attorney from manufacturer must be enclosed.
- 3.8.5. The Authorized Signatory, as mentioned in the Bid, would be authorized to represent the Bidder in its dealings with MPUVNL. In case the bidder wishes to change the Authorized Signatory from the one identified at the RFP Stage, the Bidder would be required to furnish a fresh Power of Attorney in the name of the new Signatory.
- 3.8.6. The Bidder shall be responsible for all the costs associated with the preparation of the Bid. MPUVNL shall not be responsible in any way for such costs, regardless of the conduct or outcome of this process.
- 3.8.7. Any Conditionality / deviations and variations in RFP shall not be allowed,

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except for in the situations of change in laws.

3.8.8. 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 – A:**

The Bidder shall submit following documents inside Envelope-A of its Bid:-

- (i) **Annexure 3:** Covering Letter
- (ii) Bid Security of requisite amounts as mentioned in the RFP (Bid Security BG Format **Annexure 10**).
- (iii) Bid Processing Fee

b. **ENVELOPE – B:**

- (i) The Bidder shall refer to annexures of this RFP and submit following documents inside Envelope-B of its bid.
 - a. **Annexure 4:** General Information about Bidder. Detailed Company Profile including Balance sheets, Profit & Loss Accounts, Turn-over etc. of last three years should also be submitted.
 - b. **Annexure 5:** Power of Attorney
 - c. **Annexure 6:** Technical Eligibility Criteria Requirement
 - d. **Annexure 7:** Financial Eligibility Criteria Requirement
 - e. **Annexure 8:** Undertaking form
 - f. **Annexure 9:** Declaration
 - g. **Annexure 11 :** Performance Bank Guarantee(PBG)
 - h. Copy of Registration/Certification with relevant Department of the State/ Central Govt.
 - i. Any other document other than prescribed, but which Bidder intends to submit.

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- c. **Financial Bid:**
- i. The financial bid shall cover all costs for this RFP as per Scope of Work given in this document. The financial proposal must take into account all the applicable Taxes. The rates quoted should be inclusive of all applicable taxes and duties.
 - ii. Rates quoted must be firm and fixed inclusive of all costs to be incurred for undertaking works under Scope of Work under this RFP.
 - iii. Rates once accepted shall be valid up to the Rate Validity Period. No deviation in the Terms and Conditions, Specifications of Material, Inspection clause, Terms & Conditions for Payments, etc., will be accepted.
 - iv. No price escalation will be allowed. It shall be essential to quote rates including Warranty and applicable taxes, or else the Proposal shall not be accepted.
 - v. **The financial bid should be prepared considering above and using the formats given at Section-VI, ONLINE only.**
 - vi. Financial Bids 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.
 - vii. Bidder shall quote price against all the spares component and AMC mentioned in the price schedule.

3.8.9. **METHOD OF BID SUBMISSION:**

- a) Envelope- A & B should be marked with RFP reference number.
- b) These Two Envelope(s) shall then be placed in a single outer envelope, which should clearly bear **“RFP Notice - Document Reference No. / Date of Opening / Name & Address of the Bidder”**, and **“DO NOT OPEN EXCEPT IN PRESENCE OF THE RFP COMMITTEE”**.
- c) The Outer envelope must be **firmly sealed and addressed to -**

Chief Engineer

Head Office, MP Urja Vikas Nigam Ltd., Urja Bhavan, Main Road No.2,

Near Bus stop No.5, BHOPAL – 462016

PHONE # 0755-2553595, 2556566, 2575670

FAX # 0755 – 2553122.

Mobile-9425008000

Email: ceuvn@mp.gov.in

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- d) In case any irregularity is observed/found on opening of Main Envelope (Outer Envelope), MPUVNL reserves the right to seek additional information/clarifications from the Bidder(s) , if found necessary. Non-submission or delayed submission of such additional information or clarifications sought by MPUVNL may be a ground for rejecting the Proposal. Strict adherence to the documents required to be submitted in Envelope – A, as specified in the RFP shall be ensured, failure on this account may lead to rejection of Bid.
- e) No Proposal shall be accepted by Fax / E-mail. Proposals received in Unsealed / Open Envelope(s) shall not be considered.
- f) Only properly sealed proposals will be accepted during office hours, on any of the working days in the Office of MPUVNL as mentioned in this RFP document.
- g) The Bidder(s) may submit their Proposals by Registered Post / Courier or in Person, so as to reach MPUVNL by the time and date stipulated by MPUVNL.
- h) No separate acknowledgement of the Bid received / submitted in the office, shall be issued by the MPUVNL.
- i) The last date & time of submission of the technical proposals and other documents / papers is as mentioned in the RFP.
- j) If due to any reason the due date is declared a public holiday, Last date of submission /opening of Bid will be switched on to next working day at the same time.
- k) Proposals received after stipulated date & time shall not be accepted.
- l) Postal delays shall be no excuse for accepting Proposals after stipulated date and time.
- m) MPUVNL shall not be responsible for any delay in submission of the Bid. Any Proposal received by MPUVNL after the deadline shall not be accepted by MPUVNL.
- n) Direct or indirect canvassing on the part of the Bidder or Authorized Representative will lead to disqualification.

3.9. CLARIFICATIONS AND PRE-BID MEETING:

- 3.9.1. 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.
- 3.9.2. 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.
- 3.9.3. 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.
- 3.9.4. Nodal Agency is not under any obligation to entertain/ respond to suggestions made or to incorporate modifications sought for.

3.10. BID DUE DATE:

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

3.11. VALIDITY OF BID:

The bid shall remain valid for a period of 120 days from Bid Deadline. In case, Qualified 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.

3.12. 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.

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3.13. BID SECURITY:

3.13.1. This RFP is for standardization of rates. Actual quantum of work will be as per the requirement as and when it would arise. The Bid Security under this RFP is 2% of the value of the work orders, those would be issued during the contract period.

The Bidder shall furnish the interest free Bid Security of Rs 50,000 (Token Amount) online for participating in this tender. As the requirement would arise, the same will be communicated to the successful bidders (those who would have been issued LICA and have entered in to the contract agreement under this RFP) to furnish the required amount of bid security after which the work orders shall be issued to them.

3.13.2. The successful bidders shall submit the required Bid Security 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 (Annexure-10).

3.13.3. 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 120 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, the 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 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 6 months beyond Rate Validity Period.

3.13.4. Bid Security shall be returned to all other Bidder(s) except Successful Bidder(s), within 15 days from date of acceptance of LICA by Qualified Bidder(s).

3.13.5. 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

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3.13.6. 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 Qualified Bidder fails to unconditionally accept the LICA within 7 days from the date of its issue.

3.14. LIQUIDATED DAMAGES (LD):

3.14.1. In case of natural calamity or any reason beyond the control of Contractor such as site unavailability etc. or unavoidable circumstances, the work is not commissioned within the timelines as mentioned in the work order MPUVNL may consider grant of extension at the sole discretion and approval of Managing Director, MPUVNL after having found the reasons to its satisfaction, submitted by contractor within the scheduled commissioning date as per work order. Delay in supply of any equipment by the related vendors, to whom the Bidder has placed order, shall not be considered as a reason for extension.

3.14.2. If the bidder fails to repair the systems against the complaint of breakdown / Corrective maintenance to ensure 100% working status during AMC period, penalty will be imposed @ 0.5% of the value of the work order (in case of replacement of spares) per complete week of delay or part thereof up till 5 weeks from the schedule date of commissioning or @ 0.5% of the contract value of AMC per system per complete week of delay or part thereof up till 5 weeks from the date of complaint of breakdown of the system. Delay beyond 5 weeks would lead to work order cancellation and bid security shall be forfeited.

3.15. WARRANTY:

3.15.1. The performance of the spares components supplied, installed & Commissioned shall be under Warranty by the Participant for a period of 5 years from the date of Commissioning of the component at site. This Warranty shall be for a period of Five years from the date of Commissioning for the complete system

3.15.2. During the course of aforesaid 5 years Warranty. 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

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item so specified and provide other proper and suitable materials at its own charge and cost if so desired by MPUVNL in writing.

3.16. OPENING OF BID:

3.16.1. Technical bid (Envelope -A and Envelope - B) of the Bidder shall be opened at date and venue as indicated in this RFP, in the presence of one representative from each of the Bidder who wish to be present.

3.16.2. Name of the Bidder, Bid Security shall be read out to all the Bidder at the time of opening of Envelope-A.

3.16.3. Financial Bids 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.

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

3.17.1. 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.

3.17.2. 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.

3.17.3. 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 Bidder(s) , 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 – A,

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shall be ensured, failure on this account may lead to rejection of Bid.

3.17.4. Nodal Agency reserves its right to vary, modify, revise, amend or change any of the terms and conditions of the RFP at least three (3) days prior to the Bid Submission Deadline Except in cases of Extension of Time for Bid submission. The decision regarding acceptance of Bid by Nodal Agency will be full and final.

3.18. ZERO DEVIATION:

3.18.1. 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.

3.19. EXAMINATION OF BID DOCUMENT:

3.19.1. 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.

3.19.2. 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.

3.19.3. 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 whatsoever 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).

3.19.4. 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.

3.20. TAXES AND DUTIES:

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3.20.1. The Financial Bid should include all applicable taxes and duties etc., if any. Contractor shall be entirely responsible for all applicable taxes, duties, license fees, etc. All taxes payable will be payable by the Contractor. However, if any new changes 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.

3.20.2. Bidder shall quote price inclusive of all taxes and duties etc., if any against all the spares component and AMC mentioned in the price schedule.

3.21. PROJECT INSPECTION:

3.21.1. The Nodal Agency may inspect the progress of work, if so required, at any time.

3.21.2. The progress of work(s) will be monitored by Nodal Agency and the work(s) will be inspected for quality at any time till Commissioning or after the commissioning of the Project either by officer(s) from Nodal Agency or any authorized agency/ experts. Nodal Agency may also depute a technical person(s) from its list of empanelled experts for inspection, third party verification, monitoring of work(s) 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.

3.21.3. Nodal Agency shall have the right to inspect the spares of solar water pumping system listed in this RFP such as SPV panels, mounting structure, pumps, controller, cables, pipes etc. to confirm their conformity to the technical specifications and guidelines through approved agencies MNRE / MPUVN at the works of Contractor. Third party inspection of the Projects may be performed by MPUVNL at its own cost. However, in case, any discrepancy is found during inspection, then Contractor shall be liable to incur all costs for removing/rectifying the defects identified as a result of such inspection, and also the cost of inspection.

3.22. FORCE MAJEURE:

3.22.1. For purpose of this RFP, force majeure shall mean an event beyond the

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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, freight embargoes 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.

3.22.2. 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.

3.22.3. 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 one (1) day from the day when communication system will be restored). The Contractor shall notify Nodal Agency not later than three (3) days of cessation of force majeure conditions. After examining the cases and associated facts, Nodal Agency shall decide and grant suitable additional time for the completion of the work, if required.

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

3.23. APPLICABLE LAW:

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

3.24. SETTLEMENT OF DISPUTE:

3.24.1. 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.

3.24.2. 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

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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 MadhyasthaAdhikaranAdhiniyam, 1983”. The decision of MP MadhyasthaAdhikaranAdhiniyam shall be final and binding on the parties. The language of the arbitration proceedings and that of the documents and communications between the parties shall be English. All disputes will be settled in the High Court of MP. No arbitration proceedings will commence unless such notice is given.

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

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

3.25. LANGUAGE:

3.25.1. 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.

3.26. OTHER CONDITIONS:

3.26.1. 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.

3.26.2. 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(s) 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.

3.26.3. 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.

3.26.4. SEVERABILITY:

- a) It is stated that each paragraph, clause, sub-clause, schedule or annexure of this contract shall be deemed severable & 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 & effect.

3.26.5. PRICE PREFERENCE:

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

3.26.6. 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.

3.26.7. FRAUD AND CORRUPTION

- a. The Bidder(s) , 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

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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

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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 Bidder(s) , 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.

3.26.8. 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. BID OPENING

4.1.1. The Envelope A and Envelope B shall be opened on date and time as mentioned in RFP in the Conference Hall of the Head Office of MPUVN at Bhopal by MPUVN, in the presence of such Bidder(s) who wish to remain present at the time of opening.

4.1.2. The procedure for opening of the Proposals shall be as under:

- a) Main Envelope containing two (2) Sealed Envelopes A & B shall be opened and all the contents of the same will be taken out.
- b) Envelope-A bearing RFP No. / Due date & super-scribed as Bid Security shall be opened first at the time and date mentioned in the RFP, in the presence of Bidder(s) who choose to be present. Envelope B shall be opened only if Envelope A is found responsive (i.e., if the envelope contains all the documents as prescribed by this RFP)
- c) Envelope-B bearing RFP No. & super-scribed as "Document for Minimum Eligibility Criteria - TECHNICAL PROPOSAL" shall be opened, at the time and date mentioned in the RFP, only of those Bidder(s) whose above Envelope-A have been found as per Terms & Conditions of RFP, in the presence of Bidder(s) .
- d) FINANCIAL BID shall be opened online only, at the time and date mentioned in the RFP, after establishing / ascertaining that Technical Information(s), Certification(s), Specification(s) and Clarification(s) thereof as received in Envelopes A & B are as per Terms & Conditions of RFP Documents.

4.2. BID EVALUATION

The evaluation process comprises the following four steps:

- a) Step I-Responsiveness check of Technical Bid

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- b) Step II-Evaluation of Bidder' fulfilment of Eligibility Criteria described in Section-I
- c) Step III-Evaluation of Financial Bid
- d) Step IV-Selection of Successful Bidder

4.3. RESPONSIVENESS CHECK OF TECHNICAL BID:

4.3.1. 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 – A as mentioned in the RFP
- 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).

4.3.2. 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.

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

4.4.1. 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 the RFP may cause the Bid to be non-responsive & liable for rejection

4.5. EVALUATION OF FINANCIAL BID:

4.5.1. 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. 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".

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

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

4.5.4. It is mandatory for bidder to quote for all spare items in the price schedule and the AMC for existing solar pumps installed at various locations in Madhya Pradesh. Bids will be rejected if the bidder has not quoted for all the spares as per the price schedule.

4.5.5. The RFP is issued for Standardization of Rates for each category mentioned at Pt. 1 to Pt. 12 in the table given at Section-VI (FINANCIAL BID-SPARES and AMC). The discovered L-1 rate, for a category, will be the standardized rate for the item / work mentioned in that category.

4.5.6. For the allotment of work eligible bidder / contractor will be finalized on the

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basis of the rates quoted by Bidder(s) , for all categories. The L-1,L-2, L-3, L-4 & L-5bidder for Pt. 12 (AMC) and L-1 bidderfor each category (spares) from Pt. 1 to Pt. 11 will be the eligible Bidder(s) for the allotment of work.

The lowest rates (L-1) discovered for replacement of AMC/spares (mentioned at Pt. 1 to Pt. 12 in the table given at Section-VI) will be approved as the standardized rates.

The eligible Bidder(s) thus found will be given the opportunity to enter in to the agreement for the allotment of the work of AMC under this RFP.

4.5.7. The MPUVN's approved rates (Standardized rates) as finalized by MPUVN, which shall be communicated by issuing Letter Inviting Consent for Agreement (LICA) to eligible Bidder(s) found as per point no. 4.5.6.The interested eligible Bidder(s) will furnish un-conditional acceptance to execute the work on the standardized rates, specifications and terms & conditions of this RFP including price validity for placement of work orders up to 31/03/2022.

4.6. Allotment of work:

Theallotment of work will bedistrict wise. Districts will be allotted in equal numbers to eligible Bidders(who will sign the agreement). Preference to choose the districts will be given to the Bidderson the basis ofrates quoted for Pt. 12in the table given at Section-VI (FINANCIAL BID-SPARES and AMC). **This can be changed subject to performance of the bidder, final decision of the Managing Director will prevail without assigning any reason.**The preference in work allotment will be given to the bidder whose registered office will be nearest to the solar pump location.

4.7. Letter Inviting Consent for Agreement (LICA) shall be issued to the eligible Bidder(s) as per the provisions of the RFP.If the eligible Bidder(s) fails to acknowledge the same within 7 days from the issue of LICA, the Nodal Agency reserves the right to annul/cancel the award of the LICA of such Bidder(s) and, in such a situation, the Bid Security would stand cancelled.

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

SECTION-III

SCOPE OF WORK

5. DETAILS OF WORKS:

- 5.1. Contractor will have full responsibility for packaging, forwarding, transportation, supply and any type of breakages / losses etc. thereto. The goods / systems will be delivered at the destination stores, installed and commissioned at site in the perfect conditions as per terms & conditions of Letter of Intent / Work Order.
- 5.2. Contractor will have to Survey (to assess the spare parts' replacement work for non- functioning solar pumping systems), Supply and Installation of Spares & Commissioning of Solar Water Pumping System of any of the Models approved as per MNRE, in line with the prevailing MNRE specifications. The supplied, installed spares/items must be compatible and properly synchronised with the existing solar pumping system to achieve its desired/specified output/performance as per MNRE/RFP specifications.
- 5.3. The supplied materials should be strictly as per MNRE specifications as annexed (Annexure-1) for items provided in Financial Bid and as per undertaking by each of the equipment suppliers as attached in Annexure-8, otherwise it shall be liable for rejection. In case any defective material or any type of substandard material is supplied, the material will be rejected and it will be the responsibility of the Contractor for taking back the rejected materials at its own cost within fifteen days from the date of communication of rejection. MPUVN shall not be responsible for security/safety of the materials rejected. Any type of fittings, accessories, assemblies, essentially required components, which are not described or mentioned in RFP documents, shall have to be supplied by the Contractor as per NABL/MNRE / BIS / BEE Standards & Practices as applicable at his own cost.
- 5.4. Defective materials will not be accepted under any conditions and shall be rejected outright without compensation. The Contractor shall be liable for any loss/damage sustained by MPUVN due to defective work. The Contractor shall replace the defective material at his own expenses to the satisfaction of MPUVN. The

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Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of the materials.

- 5.5. The Contractor shall not assign, sublet or transfer the contract or any part thereof to any party without the prior express consent of the MPUVNL. In the event of Contractor contravening this condition, MPUVNL shall be entitled to place the Contract elsewhere on the Contractor's risk and cost and the Contractor shall be liable for any loss or damage, which MPUVNL may sustain due to the consequences arising out of such replacing of the Contract.
- 5.6. In the event of any of the breach of the conditions of the contract at any time on the part of the Contractor, the contract may be terminated by the competent authority of MPUVNL without any compensation to the Contractor. All Payments due shall be forfeited.
- 5.7. **ANNUAL MAINTENANCE CONTRACT OF ALREADY INSTALLED SOLAR PUMPS**

The contractor will have full responsibility of repair and maintenance of the solar pumping systems already installed at various locations in Madhya Pradesh. This will include all the minor wear and tear of equipment, regular service of the Pump and replacement of spares [excluding the items / spares listed (01to11) in Section-VI of RFP].

Contractor will have to do the periodic check through visiting at least once in a quarter to each pump location and do the routine check-up and maintenance of the pumps. Other than the Periodic visits contractor has to visit the pump location for repair & maintenance purpose as and when required.

To ensure 100% working status during the AMC period, the bidder will have to arrange all required instruments, tools, spares, manpower and other necessary facilities at local service centre.

The maintenance service provided shall ensure proper functioning of the SPV water pumping system as a whole. All preventive / routine maintenance required for ensuring maximum uptime shall have to be provided for a specified period of

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ANNUAL Maintenance Contract.

The bidder will maintain the records of maintenance / quarterly visits in the enclosed format (Annexure- 2).

Replacement of the defective component/ spares (listed as 01 to 11 in Section-VI of RFP) separate work orders shall be issued for supply, installation and commissioning of the same, as and when such requirements would arise. For this a joint assessment / survey report (from 1. Contractor, 2. DREO, MPUVN and 3. Beneficiary) shall have to be submitted by the contractor to the Chief Engineer of MPUVN. After examining the report the Chief Engineer, MPUVN shall issue a work order for the work of replacement (supply, installation and commissioning of the spares). The replacement work shall be carried out within the specified time limit as per the work order. It is mandatory that the contractor shall submit a certificate, about the rectification/replacement work done, from the concerning beneficiary(s) to the DREO, failing which it will be assumed that the contractor has not performed its duties.

For carrying out the maintenance service during AMC effectively, the manufacturer shall establish one local service centre at suitable place (preferable at Bhopal).

5.8. TIMELINE

- 5.8.1. Specific work completion timeline shall be as specified in respective work order(s), depending upon quantity and location of works. If required the Managing Director, MPUVN can extend the timeline so provided in work order to a maximum of 30 days.
- 5.8.2. For execution of works, in case of natural calamity or reason beyond the control of Contractor or unavoidable circumstances supply/work is not completed within the given time frame, the Managing Director, MPUVN may consider grant of extension after having found the reasons to his/her satisfaction, submitted by Contractor within the scheduled time.
- 5.8.3. This time period specified in the work orders shall be deemed to be the essence of the contract for execution of that work order and the Contractor shall arrange to carry out the needful within the stipulated period(s).

5.9. RATES VALIDTY

All Rates discovered through the opening of Financial Bids, under this RFP, shall be valid for up to 31st March 2022, which may further be extended as required and mutually agreed upon up to maximum 2 years.

SECTION-IV

TERMS AND CONDITION FOR PAYMENT

6. PAYMENT TERMS:

6.1. The payment terms for execution of work order issued shall be as below:

6.1.1. 100% payment with applicable taxes & duty within 15 days on successful commissioning of 100% of the work order and submission of 10% Performance Bank Guarantee (PBG), whichever is later.

6.2. For release of payment the Contractor shall present the following:

6.2.1. Appropriate Bills in Triplicate,

6.2.2. Inspection cum Commissioning Report jointly signed by Contractor, concerned Inspecting Authority of the MPUVNL (DREO) and the Beneficiary

6.2.3. Colored photograph (s) of spares supplied & installed & duly certified by DREO.

6.2.4. Handing over Certificate duly signed by beneficiary and concerned Inspecting Authority of the MPUVNL (DREO).

6.2.5. Handing over the documents, for the spare (s) replaced:

a) Submission of certificate signed by DREO, confirming that the spares installed have worked satisfactorily;

b) It shall be the responsibility of the Contractor to deposit the applicable GST towards the contract in the concerned department of Govt. of India. A certificate to this effect shall be required to be submitted to MPUVN.

6.2.6. Yearly payment of AMC shall be released after successful completion of AMC work at the end of the year and on submission of certificates of quarterly visits (Annexure-2) from each beneficiary and signed by DREO, confirming that the solar pump system, installed at the respective beneficiary's place, is working satisfactorily and quarterly visit carried out to each beneficiary (Certificate of quarterly visits will be submitted at the end of every quarter to the DREO). It shall be the responsibility of the bidder to deposit the applicable service tax towards the AMC component of the contract in the concern department of Govt. of India. A certificate to this effect shall be required to be submitted to the Nigam.

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Note:-

- Commercial tax: Contractors shall obtain registration from M.P. Commercial Tax Department (TIN). The details of the same are available at website www.mptax.nic else MPST and any other Tax / Duty if applicable shall be deducted at Source.
 - Income tax shall be deducted at Source.
- 6.3. Nodal Agency shall release Bid Security of the Qualified contractors within 3 month from the date of expiry of rate validity period.
- 6.4. In case any 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 15 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.

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SECTION-V

CHECKLIST

7. Checklist

S.No.	Item / Description	Attached (Yes/No)	Envelope No. (to be submitted in hard copy)
1.	Annexure 1: Covering Letter		A
2.	Bid Security		A
3.	Bid Processing Fee		A
4.	Duly signed with seal affixed, downloaded copy of RFP including amendments & minutes of pre-bid meeting enclosed.		B
5.	Power of Attorney in the name of the Authorized Signatory		B
6.	<p style="text-align: center;">Manufacturer of Mono/Multi crystalline SPV Module(s) (Attach Certificate of manufacturer)</p> <p style="text-align: center;">Or</p> <p style="text-align: center;">Manufacturer of Motor- pump set (Attach Certificate of manufacturer)</p> <p style="text-align: center;">Or</p> <p style="text-align: center;">Manufacturer of solar pump controller/Inverter (Attach Certificate of manufacturer)</p> <p style="text-align: center;">Or</p> <p style="text-align: center;">A PV system integrator (Attach certificate)</p> <p style="text-align: center;">Or</p> <p style="text-align: center;">Akshay Urja Shop registered with MPUVNL</p>		B
7.	Undertaking & Declaration as per RFP Doc. (A Copy of registration/TIN,GST/PAN)		B
8.	General Information about the Bidder & Past Experience		B
9.	Details of Turnover of Bidder- Attach CA certificate positively.		B
10.	Technical Information Duly Filled		B
11.	Availability of service facilities in M.P. – GST registration/electricity bill/telephone bill, etc.		B
12.	Undertaking Form		B
13.	Declaration		B
14.	Financial Bid		Online only

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SECTION- VI

FINANCIAL BID -SPARESand AMC

(To be submitted only with due encryption)

S.No.	Name of Items	Unit	Item Code	Rates in INR including taxes & duties (in figures)	Rates in INR including taxes & duties (in words)
Rates for supply, Installation & commissioning of spares mentioned in point no. 1 to 11					
1	Solar panel as per M.N.R.E. Specifications	Rupees Per Watt Peak	A		
2	Controller suitable for A.C. solar motor- pump set (3H.P. to 7.5 H.P.) as per M.N.R.E. Specifications	3 H.P fitted with 3000 Watt modules	Rupees per Unit	B1	
		5 H.P fitted with 4800/5000 Watt modules	Rupees per Unit	B2	
		7.5 H.P fitted with 7500 watt modules	Rupees per Unit	B3	
3	Motor - Pump Set suitable for A.C. solar motor- pump set (3H.P. to 7.5 H.P.) as per M.N.R.E. Specifications	3 H.P fitted with 3000 Watt modules	Rupees per Unit	C1	
		5 H.P fitted with 4800/5000 Watt modules	Rupees per Unit	C2	
		7.5 H.P fitted with 7500 watt modules	Rupees per Unit	C3	
4	Controller	0.5 HP fitted with 500 / 700 Watt modules	Rupees per Unit	D1	

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	suitable for D.C. solar motor- pump set(0.5 HP to 7.5 HP) as per M.N.R.E. Specifications	0.75 HP fitted with 750 / 500 Watt modules	Rupees per Unit	D2		
		1 H.P. fitted with 900 /975/1000/1050/1125/1200 Watt modules	Rupees per Unit	D3		
		1.5 HP fitted with 1500/1650 Watt modules	Rupees per Unit	D4		
		2 H.P fitted with 1800/1875/2000/2200 Watt modules	Rupees per Unit	D5		
		3 H.P fitted with 3000 Watt modules	Rupees per Unit	D6		
		5 H.P fitted with 4800/5000 Watt modules	Rupees per Unit	D7		
		7.5 H.P fitted with 7500 watt modules	Rupees per Unit	D8		
		5	Motor - Pump Set suitable for D.C. solar motor- pump set (0.5 HP to 7.5 HP) as per M.N.R.E. Specifications	0.5 HP fitted with 500 / 700 Watt modules	Rupees per Unit	E1
0.75 HP fitted with 750 / 500 Watt modules	Rupees per Unit			E2		
1 H.P. fitted with 900 /975/1000/1050/1125/1200 Watt modules	Rupees per Unit			E3		
1.5 HP fitted with 1500/1650 Watt modules	Rupees per Unit			E4		
2 H.P fitted with 1800/1875/2000/2200 Watt modules	Rupees per Unit			E5		
3 H.P fitted with 3000 Watt modules	Rupees per Unit			E6		
5 H.P fitted with 4800/5000 Watt modules	Rupees per Unit			E7		
7.5 H.P fitted with 7500 watt modules	Rupees per Unit			E8		

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6	G.I (ISI) riser Pipe/ suction pipe		32 mm	Rupees per meter	F-1		
			38 mm		F-2		
			50 mm		F-3		
			63 mm		F-4		
7	HDPE (ISI) riser Pipe/suction pipe		32 mm	Rupees per meter	G-1		
			38 mm		G-2		
			50 mm		G-3		
			63 mm		G-4		
8	2.5 sq. mm. X 3 Core Copper Cable as per IS 694 duly ISI marked		Rupees per meter	H-1			
9	4.0 sq.mm x3core Copper cable as per IS 694 duly ISI marked			H-2			
10	4.0 sq. mm. X 4 Core Copper Cable as per IS 694 duly ISI marked		Rupees per meter	I-1			
11	6.0 sq.mm x4 core Copper cable as per IS 694 duly ISI marked			I-2			
12	Annual Maintenance Contract (AMC) All the minor repair & Maintenance work excluding the replacement of the spares as mentioned from Pt. 1 to Pt. 11 in the table.	0.5 HP – 7.5HP (fitted with 500 Watt-7500 Watt modules)	Rupees per system per year	J			

Note:

1. It is mandatory for all the participating vendors to quote for all the items in included in the price schedule. Bid shall be rejected if any of the above items are not quoted for.
2. Rates quoted must be Firm and Fixed for Survey (to assess the spare parts' replacement work for non- functioning solar pumping systems), Supply and Installation of Spares& Commissioning of Solar Water Pumping Systems of any of the Models approved as per MNRE, in line with the prevailing MNRE specifications. The supplied, installed

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spares/items must be compatible and properly synchronised with the existing solar pumping system to achieve its desired/specified output/performance as per MNRE/RFP specifications.

3. All of the above rates shall be inclusive of all applicable taxes & duties.
4. The RFP does not provide for any assurance of quantities for spares. The quantity of procurement shall be as per the work order issued from time to time during the rate validity period.

ANNEXURES

ANNEXURE-1

TECHNICAL SPECIFICATIONS

As per Ministry of New and Renewable Energy, Jawaharlal Nehru National Solar Mission, Specification of Solar water pumping systems (2013-14):

Technical specifications of the existing / installed systems for reference are as follows:

PV ARRAY

The SPV water pumping system should be operated with a PV array capacity as mentioned, measured under Standard Test Conditions (STC).

Sufficient number of modules in series and parallel could be used to ensure optimal efficiency to obtain the required PV array maximum power output. The power output of individual PV modules used in the PV array, under STC, should be a minimum of 75 Watts peak, with adequate provision for measurement tolerances. Use of PV modules with higher power output is preferred.

PV MODULES

a. Indigenously produced PV module (s) containing mono/multi crystalline silicon solar cells with following features should be used in the PV array for the SPV Water Pumping systems:

- Modules supplied with the SPV water pumping systems should have certificate as per IEC 61215 specifications or equivalent National or International/ Standards.
- Modules must qualify to IEC 61730 Part I and II for safety qualification testing.
- The efficiency of the PV modules should be minimum 14% and fill factor should be more than 70%.
- The terminal box on the module should have a provision for “Opening” for replacing the cable, if required.
- The PV modules must conform to the latest edition of any of the following IEC / equivalent BIS Standards for PV module design qualification and type approval

Crystalline Silicon Terrestrial PV Modules	IEC 61215 / IS14286 (Attach Test Certificate)
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- In addition, the modules must conform to IEC 61730 Part 1- requirements for construction & Part 2 - requirements for testing, for safety qualification or Equivalent IS (Under Dev.)
- PV modules to be used in a highly corrosive atmosphere (coastal areas, etc.) must qualify Salt Mist Corrosion Testing as per IEC 61701 / IS 61701.
- Solar Module shall be crystalline type & made of transmissivity glass front surface giving high encapsulation gain, employing lamination technology using established polymer (EVA) & tedlar or polyester back sheet & hot butyl rubber edge sealant for module protection & mechanical support.

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- All materials used have a proven history of reliable & stable operation in external applications. It shall perform satisfactorily with temperatures between -10 deg C & +85 Deg C & with stand gust up to 200 Km/h from back side of the panel.
- Materials which meet the requirement of guidelines and specifications subject to requirement of RFP conditions shall be acceptable only subject to testing / approval from IEC/ BIS/MNRE accredited laboratories.
- Each module shall have low Iron tempered 3mm thick high transmission toughened glass front for strength & superior light transmission. It shall also have tough Tedlar / Polyester back sheet for environment protection against moisture & provide high voltage electrical insulation.
- The module frame is made of light weight anodized aluminium frame with edge sealant around the laminate, which is electrolytically compatible with the structural material used for mounting the module.

TECHNICAL SPECIFICATION SOLAR BASED AC SUBMERSIBLE WATER PUMPING SYSTEMS

MINIMAL TECHNICAL REQUIREMENTS / STANDARDS

DEFINITION

A solar photovoltaic (SPV) water pumping system consists of a PV array, a AC submersible / floating motor pump set, electronics, if any, interconnect cables and an “On-Off” switch. PV array is mounted on a suitable structure with a provision of tracking. Electronics could include Maximum Power Point Tracker (MPPT), Inverter and Controls/Protections. Storage batteries will not constitute a part of the SPV Water Pumping System.

Components and parts used in the SPV water pumping system including the PV modules, pumps, metallic structures, cables, junction box, switch, etc. should conform to the BIS/ IEC/ international specifications, wherever such specifications are available and applicable.

Solar pumping system includes complete turnkey solution for supply, installation, commissioning and Annual maintenance contract (AMC) for FIVE years. The solar pumping system should consist of riser pipes and accessories etc., Solar AC Submersible pump with controller, cables and its accessories, Solar Panels Hot dip galvanized mounting structure.

MOTOR PUMP SET

AC Motor Pump sets SPV water pumping system confirming to the ISI specifications and MNRE guidelines duly amended up to date with BEE certified five star rating.

- AC Submersible motor pump sets three phase shall be having BIS / CE as well as MNRE certification in accordance with the required specifications
- Required Submersible motor pump sets shall have either CE / IS marking
- The overall combined efficiency (Wire to water efficiency should be > 50%) and over all combined efficiency motor pumps sets at 10 meter total head should be 45%.

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- The pump should be provided with specially developed mechanical seals which ensure zero leakage.
- The suction and delivery head will depend on the site specific condition of the field.
- Submersible AC pumps could also be used according to the technical need of the particular case.
- The suction/ delivery pipe (GI as per IS 1239), electric cables, floating assembly, civil work and other fittings required to install the system.
- The following details should be marked indelibly on the motor pump set
 - a. Name of the Manufacturer or Distinctive Logo.
 - b. Model Number
 - c. Serial Number

The manufacturer of the PV pumping system will submit a declaration that the PV array size has been selected for optimal matching with the motor pump sets to give the desired water output performance. They will also report the overall efficiency of the motor pump set used by them.

Solar Submersible Pump

1. Submersible AC Pump models shall be of light weight S.S. grade 304 material suitable for agriculture purpose with installed controller
2. AC Submersible Pumps shall be confirming BIS standards duly amended upto date.
 - A. Submersible Pumps : IS 8034-2002
 - B. Submersible Motors : IS 9283-1995
3. Submersible Pumps Shall be ISI marked
4. BEE certified five star rating
5. Rated rpm – as per ISI/MNRE standards
6. Rated Voltage – Range 200 V to 440 V
7. Rated Current – as per ISI/MNRE standards
8. Protections required
 - a. Dry run protection
 - b. Over and under voltage protection
 - c. Overload Protection
 - d. Temperature Protection
 - e. ISI mark cable 3 core x 4.0 sq mm and above as per requirement with clips
9. Enclosure class shall be in accordance with IP 68 and other relevant standards & specifications.
10. Junction Boxes, AC Distribution boxes as per IP 61 specifications and other relevant standards & specifications.
11. Accessories like valves, pressure gauge etc
12. Installation and safety requirements should be as per IEC 62548 or equivalent BIS standard.
13. Pumps including motor shall have CE conformity certification.
14. Preferably pump should also require working on AC grid power if required. Sufficient length of cable should be provided for inter-connection between the PV array and the motor pump set.
15. Maximum Power point Tracking (MPPT) shall be part of controller inclusive of VFD as norms of IEC guidelines. Max. MPPT efficiency should be 99%. Overall

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Efficiency of MPPT system should be 97%. Degree of MPPT protection shall be of IP 65. Operating temperature range of MPPT shall be in between -25°C to +60°C. Communication of MPPT shall be based on RS 485 / WiFi. MPPT shall meet Compliance guidelines of EN 50178; IEC / EN 62109 - 1; IEC 61800 with latest amendments.

16. Inverter shall be provided in accordance with **IEC 61683 / IS 61683, IEC60068-2 (1,2,14,30), / Equivalent BIS Std. Inverter should consist of DC bus inductor, can operator from DC bus, MOV protection, consist of Microprocessor based inverter logic and IGBT inverter section, low voltage driven function ,with LCD display inclusive of all accessories etc complete. Invertors shall be required to be provided as per power requirement for pump specific. Inverter should have built-in control logic and have necessary control systems as well as appropriate desired protections as per BIS/CE/MNRE/IEC standards.**

TECHNICAL SPECIFICATION FOR AC SOLAR PUMPING SYSTEM FOR AGRICULUTURE PURPOSE

Required Head and Discharge details :

SN	Required Minimum Discharge in Rainy Season in LPD	Total Dynamic Head in (m)						
		30	40	50	60	70	80	90
		Maximum Power Input (Wp)						
01	12000 LPD	700	800	1000	1350	1500	1800	2000
02	18000 LPD	1000	1350	1500	1800	2000	2500	3000
03	27000 LPD	2000	2500	3500	5000	5500	6000	7500
04	36000 LPD	2500	3500	5000	5200	7500	8000	8500
05	45000 LPD	3000	4700	5200	7500	8000	10000	11000
06	60000 LPD	5000	5200	7500	8000	10000	10500	12000

Note : Enclose certified head and discharge curve against said Wp for the proposed Model

- The manufacturer of the PV pumping system will submit a declaration that the PV array size has been selected for optimal matching with the motor-pump set to give the desired water output performance as indicated above.
- Option for variable operating head from 30-90 m
- Battery bank should not be used as a backup system.
- Solar panels will be connected to submersible AC pumps directly.
- The system should be suitable for 100mm and above/onward bore size.
- Riser Pipe / Suction pipe shall have GI pipe confirming to IS 1239 duly ISI Marked.

TECHNICAL SPECIFICATION SOLAR BASED DC SUBMERSIBLE WATER PUMPING SYSTEMS

MINIMAL TECHNICAL REQUIREMENTS / STANDARDS

DEFINITION

A solar photovoltaic (SPV) water pumping system consists of a PV array, a DC submersible / floating motor pump set, electronics, if any, interconnect cables and an “On-Off” switch. PV array is mounted on a suitable structure with a provision of tracking. Electronics could include Maximum Power Point Tracker (MPPT), Inverter and Controls / Protections. Storage batteries will not constitute a part of the SPV Water Pumping System.

Components and parts used in the SPV water pumping system including the PV modules, pumps, metallic structures, cables, junction box, switch, etc. should conform to the BIS / IEC / international specifications, wherever such specifications are available and applicable.

Solar pumping system includes complete turnkey solution for supply, installation, commissioning and Annual maintenance contract (AMC) for FIVE years. The solar pumping system should consist of riser pipes and accessories etc., Solar DC Submersible pump with controller, cables and its accessories, Solar Panels Hot dip galvanized mounting structure,

PERFORMANCE SPECIFICATIONS AND REQUIREMENTS (DUTY CYCLE)

The Solar PV Water Pumping System should provide a minimum of 85 liters of water per watt peak of PV array used per day under average daily solar radiation conditions of 5.5 KWh/sq.m. on a horizontal surface, from a total head of 10 meters (Suction head up to a maximum of 7 meters).

For Deep Well Pumps, the water discharge should be a minimum of 28 liters of water per watt peak of PV array capacity used per day from a total head of 30 meters. In case of High Head, Deep Well Pumps, the water discharge should be a minimum of 17 liters of water per watt peak of PV array capacity used per day from a total head of 50 meters.

Use of a tracking system to enhance the availability of solar radiation to lift desired quantity of water is desirable. It should be specified whether the minimum water output is achieved directly or through tracking of PV Array. The actual duration of pumping of water on a particular day and the quantity of water pumped could vary depending on the location, season, etc.

MOTOR PUMP SET

DC Motor Pump sets SPV water pumping system conforming to the CE specifications & 2006/42/EC standards used EN809-2009

- DC Submersible motor pump sets shall be having CE as well as MNRE certification in accordance with the required specifications
- Required Submersible motor pump sets shall have either CE / IS marking
- The overall combined efficiency (Wire to water efficiency should be > 50%) and over all combined efficiency motor pumps sets at 10 meter total head should be 45%.
- The pump should be provided with specially developed mechanical seals which ensure zero leakage.
- The motor is of 1-3 HP having BLDC in case of D.C. Motor Pump Sets. The suction and delivery head will depend on the site specific condition of the field.

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- Submersible DC pumps could also be used according to the technical need of the particular case.
- The suction/ delivery pipe (GI as per IS 1239), electric cables, floating assembly, civil work and other fittings required to install the system.
- The following details should be marked indelibly on the motor pump set
 - d. Name of the Manufacturer or Distinctive Logo.
 - e. Model Number
 - f. Serial Number

The manufacturer of the PV pumping system will submit a declaration that the PV array size has been selected for optimal matching with the motor pump sets to give the desired water output performance. They will also report the overall efficiency of the motor pump set used by them.

Solar Submersible Pump

1. Submersible DC Pump models shall be of light weight S.S. grade 304 material suitable for agriculture purpose with installed controller
2. Make – Grundfos / Lorentz / Mono
3. Pump type – Helical rotor brush less permanent magnet
4. Rated rpm – 500 to 3600
5. Rated Voltage – Range 30 to 300 V
6. Rated Current – 8.4 amp (max)
7. Built-in Features
 - a. Dry run protection
 - b. Over and under voltage protection
 - c. Overload Protection
 - d. Temperature Protection
 - e. ISI mark cable 3 core x 2.5 sq mm and above as per requirement
8. Enclosure class shall be in accordance with IP 68 and other relevant standards & specifications
9. Junction Boxes, DC Distribution boxes as per IP 61 and other relevant standards & specifications.
10. Accessories like valves, pressure gauge etc.
11. Installation and safety requirements should be as per IEC 62548 or equivalent BIS standard.
12. Pumps including motor shall have CE conformity certification.
13. Preferably pump should also require to work on AC power if required. A good reliable switch suitable for DC / AC use is to be provided with the motor pump set. Sufficient length of cable should be provided for inter-connection between the PV array and the motor pump set.
14. Maximum Power point Tracking (MPPT) shall be part of controller inclusive of VFD as norms of IEC guidelines. Max. MPPT efficiency should be 99%. Overall Efficiency of MPPT system should be 97%. Degree of MPPT protection shall be of IP 65. Operating temperature range of MPPT shall be in between -25°C to +60°C. Communication of MPPT shall be based on RS 485 / WiFi. MPPT shall meet Compliance guidelines of EN 50178; IEC / EN 62109 - 1; IEC 61800 with latest amendments.
15. In accordance with MNRE guidelines up to date amended requirement is “For Deep Well Pumps, the water discharge should be a minimum of 28 liters of water per watt peak of PV array capacity used per day from a total head of 30 meters. In case of High Head, Deep Well Pumps, the water discharge should be a minimum of 17 liters of water per watt peak of PV

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array capacity used per day from a total head of 50 meters.” Manufacturer will also report the wire to water efficiency of the motor-pump set used by them & submit copy of the test report as proof to (MNRE) Solar Energy Centre.

TECHNICAL SPECIFICATION FOR HANDPUMP ATTACHED WITH SOLAR WATER PUMPING SYSTEMS FOR DRINKING WATER SUPPLY

MINIMAL TECHNICAL REQUIREMENTS / STANDARDS

DEFINITION

A solar photovoltaic (SPV) water pumping system consists of a PV array, a DC submersible / floating motor pump set, electronics, if any, interconnect cables and an “On-Off” switch. PV array is mounted on a suitable structure with a provision of tracking. Electronics could include Maximum Power Point Tracker (MPPT), Inverter and Controls / Protections. Storage batteries will not constitute a part of the SPV Water Pumping System.

Components and parts used in the SPV water pumping system including the PV modules, pumps, metallic structures, cables, junction box, switch, etc. should conform to the BIS / IEC / international specifications, wherever such specifications are available and applicable.

Hand Pump attached solar pumping system includes complete turnkey solution for supply, installation, commissioning and Annual maintenance contract (AMC) for FIVE years. The solar hand pump should consist of Modified India Mark II deep well hand pump with force lift arrangement inclusive of riser pipes and accessories etc., Solar DC Submersible pump with controller, cables and its accessories, Solar Panels Hot dip galvanized mounting structure, Hot dip galvanized Tank Tower Structure (6m ht) suitable for 5,000 liters HDPE tank., HDPE water tank (5000 liters), Auto Water Level Controller, Galvanized 1 Stand Post (with 4 taps). Solar DC Submersible Pump and the Hand Pump should share the SAME RISER PIPE

PERFORMANCE SPECIFICATIONS AND REQUIREMENTS (DUTY CYCLE)

The Solar PV Water Pumping System should provide a minimum of 85 liters of water per watt peak of PV array used per day under average daily solar radiation conditions of 5.5 KWh/sq.m. on a horizontal surface, from a total head of 10 metres (Suction head up to a maximum of 7 metres).

For Deep Well Pumps, the water discharge should be a minimum of 28 liters of water per watt peak of PV array capacity used per day from a total head of 30 metres. In case of High Head, Deep Well Pumps, the water discharge should be a minimum of 17 liters of water per watt peak of PV array capacity used per day from a total head of 50 metres.

Use of a tracking system to enhance the availability of solar radiation to lift desired quantity of water is desirable. It should be specified whether the minimum water output is achieved directly or through tracking of PV Array. The actual duration of pumping of water on a particular day and the quantity of water pumped could vary depending on the location, season, etc.

TECHNICAL SPECIFICATION FOR HANDPUMP ATTACHED SOLAR PUMPING SYSTEM FOR DRINKING WATER SUPPLY

Required Head and Discharge details

SN	Required Minimum Discharge in Rainy Season in LPD	Total Dynamic Head in (m)				
		60	75	90	105	120
		Maximum Power Input (Wp)				
01	6000 LPD	600	750	900	1050	1125
02	7500 LPD	700	800	975	1125	1200
03	9000 LPD	800	900	1050	1200	1275
04	12000 LPD	975	1275	1650	1875	2100

Note : Enclose certified head and discharge curve against said Wp for the proposed Model

- The manufacturer of the PV pumping system will submit a declaration that the PV array size has been selected for optimal matching with the motor-pump set to give the desired water out put performance as indicated above.
- Overhead Water Tank capacity -5,000 liters ISI marked.
- Galvanized Overhead Tank Structure height 6 mtr staging in accordance with ISI specification and duly ISI marking with appropriate foundation to withstand dead and live loads.
- Hand Pump Cylinder Depth –45 mtrs.
- Option for variable operating head from 30-120 m
- Hand Pump Yield – 700 lph @ 40 strokes per minute.
- Battery bank should not be used as a backup system.
- Solar panels will be connected to submersible DC pumps directly.
- The system should be suitable for 100mm and above/onward bore size.
- Both the hand pump and solar submersible DC pump should share the same riser pipe.

India Mark II Deep Well Hand Pump

- Head assembly
- Modified tank with force and lift arrangement
- Modified telescopic pedestal
- Modified S.S. cylinder with S.S. components.
- 12mm dia x 3m length MS electro-galvanized Connecting rods as per IS 15500
 - For 45mtr. Solar Hand Pumping System -10nos.
 - For 60mtr. Solar Hand Pumping System -15 nos.
- 32 NB x 3m length GI Riser Pipe as per IS 15500
 - For 45 mtr. Solar Hand Pumping System -10nos.
 - For 60mtr. Solar Hand Pumping System -15 nos.
- Non-Return Valve, Ball Valve and other fittings for plumbing work.
- Riser Pipe Centralizers – 3 nos.
- Minimum expected yield of the hand pump at 40 strokes/min – 700 lph
- To connect submersible pump to handpump cylinder additional required depth 32 mm HDPE pipe as per IS 4984 duly ISI marked along with end nipples and clips.
- Dismantling of existing handpump system

Request for Proposal for Spare Parts and AMC

- All the related civil works related to hand pump, like platform & waste water drainage system shall be the user responsibility

MOTOR PUMP SET

DC Motor Pump sets are permitted to be used in the Handpump attached SPV water pumping system confirming to the CE specifications & 2006/42/EC standards used EN809-2009

- DC Submersible motor pump sets shall be having CE as well as MNRE certification in accordance with the required specifications
- Required Submersible motor pump sets shall have either CE / IS marking
- The over all combined efficiency (Wire to water efficiency should be > 50%) and over all combined efficiency motor pumps sets at 10 meter total head should be 45%.
- The pump should be provided with specially developed mechanical seals which ensure zero leakage.
- The motor is of 1-5 HP having BLDC in case of D.C. Motor Pump Sets. The suction and delivery head will depend on the site specific condition of the field.
- Submersible DC pumps could also be used according to the technical need of the particular case.
- The suction/ delivery pipe (GI/HDPE), electric cables, floating assembly, civil work and other fittings required to install the system.
- The following details should be marked indelibly on the motor pump set
 - a. Name of the Manufacturer or Distinctive Logo.
 - b. Model Number
 - c. Serial Number

The manufacturer of the PV pumping system will submit a declaration that the PV array size has been selected for optimal matching with the motor pump sets to give the desired water output performance. They will also report the overall efficiency of the motor pump set used by them.

Solar Submersible Pump

1. Submersible DC Pump models shall be of light weight S.S. grade 304 material suitable for drinking water with installed controller
2. Make – Grundfos/Lorentz/Mono
3. Pump type – Helical rotor brush less permanent magnet
4. Rated rpm – 500 to 3600
5. Rated Voltage – Range 30 to 300 V
6. Rated Current – 8.4 amp (max)
7. Built-in Features
8. Dry run protection
 - a. Over and under voltage protection
 - b. Overload Protection
 - c. Temperature Protection
 - d. ISI mark cable 3 core x 2.5 sq mm
9. Enclosure class shall be in accordance with IP 68
10. Junction Boxes, DC Distribution boxes as per IP 61 specifications.

Request for Proposal for Spare Parts and AMC

11. Installation and safety requirements should be as per IEC 62548 or equivalent BIS standard.
12. Pumps including motor shall have CE conformity certification.
13. Preferably pump should also require to work on AC power if required. A good reliable switch suitable for DC / AC use is to be provided with the motor pump set. Sufficient length of cable should be provided for inter-connection between the PV array and the motor pump set.
14. Maximum Power point Tracking (MPPT) shall be part of controller.
15. In accordance with MNRE guidelines up to date amended requirement is “For Deep Well Pumps, the water discharge should be a minimum of 28 liters of water per watt peak of PV array capacity used per day from a total head of 30 metres. In case of High Head, Deep Well Pumps, the water discharge should be a minimum of 17 liters of water per watt peak of PV array capacity used per day from a total head of 50 metres.” Manufacturer will also report the wire to water efficiency of the motor-pump set used by them & submit copy of the test report as proof to (MNRE) Solar Energy Centre.

TECHNICAL SPECIFICATION FOR HANDPUMP ATTACHED SOLAR PUMPING SYSTEM FOR DRINKING WATER SUPPLY

Required Head and Discharge details :

SN	Required Minimum Discharge in Rainy Season in LPD	Total Dynamic Head in (m)				
		60	75	90	105	120
		Maximum Power Input (Wp)				
01	6000 LPD	600	750	900	1050	1125
02	7500 LPD	700	800	975	1125	1200
03	9000 LPD	800	900	1050	1200	1275
04	12000 LPD	975	1275	1650	1875	2100

Note : Enclose certified head and discharge curve against said Wp for the proposed Model

- The manufacturer of the PV pumping system will submit a declaration that the PV array size has been selected for optimal matching with the motor-pump set to give the desired water out put performance as indicated above.
- Overhead Water Tank capacity -5,000 liters ISI marked.
- Galvanized Overhead Tank Structure height 6 mtr staging in accordance with ISI specification and duly ISI marking with appropriate foundation to withstand dead and live loads.
- Hand Pump Cylinder Depth –45 mtrs.
- Option for variable operating head from 30-120 m
- Hand Pump Yield – 700 lph @ 40 strokes per minute.
- Battery bank should not be used as a backup system.
- Solar panels will be connected to submersible DC pumps directly.
- The system should be suitable for 100mm and above/onward bore size.
- Both the hand pump and solar submersible DC pump should share the same riser pipe.

Request for Proposal for Spare Parts and AMC

BALANCE OF SYSTEM (BOS) ITEMS/ COMPONENTS for A.C. Solar Pumping Systems

The BOS items / components of the Solar Pumping systems deployed must conform to the latest edition of IEC/ Equivalent BIS Standards/ MNRE Specification as specified in MNRE guidelines.

BoS item/component	Applicable IEC/equivalent BIS Standard	
	Standard Description	Standard Number
Power Conditioners/Inverters*	Efficiency Measurements Environmental Testing	IEC 61683, IEC 60068-2 (1,2,14,30) / Equivalent BIS std
Charge controller/MPPT units*	Design Qualification Environmental Testing	IEC 62093 IEC 60068 2 (6,21,27,30,75,78)
Cables	General Test and Measuring Methods PVC insulated cables for working voltage up to and including 1100V and UV resistant for outdoor installation	IEC 60227 / IS 694 / IEC 60502/IS 1554 (Pt 1 & II) IS/IEC 69947
Switches/ Circuit Breakers/Connectors	General Requirements Connectors safety	IS/IEC 60947 part I,II,III EN 50521
Junction Boxes/Enclosures	General Requirements	IP 54 (for outdoor) as per IEC 529 IP 65 (for outdoor)/IP 21 (for indoor) IEC 62208 and relevant standards
SPV System Design	PV Stand-alone System design verification	IEC 62124
Installation Practices	Electrical installation of buildings Requirements for SPV power supply Systems	IEC 60364-7-712

* Must additionally conform to the relevant national/international Electrical Safety Standards.

BALANCE OF SYSTEM (BOS) ITEMS/ COMPONENTS for D.C. Solar Pumping Systems

BoS item/component	Applicable IEC/equivalent BIS Standard	
	Standard Description	Standard Number
Power Conditioners/Inverters*	Efficiency Measurements Environmental Testing	IEC 61683 IEC 60068 2 (6,21,27,30,75,78)
Charge controller/MPPT units*	Design Qualification Environmental Testing	IEC 62093 IEC 60068 2 (6,21,27,30,75,78)
Storage Batteries	General Requirements & Methods of Test Tubular Lead Acid	IEC 61427 IS 1651/IS 133369
Cables	General Test and Measuring Methods PVC insulated cables for working Voltages up to and including 1100 VDo-, UV resistant for outdoor Installation	IEC 60189 IS 694/ IS 1554 IS/IEC 69947
Switches/ Circuit Breakers/Connectors	General Requirements Connectors safety	IS/IEC 60947 part I,II,III EN 50521
Junction Boxes/Enclosures	General Requirements	IP 65 (for outdoor)/IP 21 (for indoor) IEC 62208 and other relevant standards
SPV System Design	PV Stand-alone System design verification	IEC 62124
Installation Practices	Electrical installation of buildings Requirements for SPV power supply Systems	IEC 60364-7-712

* Must additionally conform to the relevant national/international Electrical Safety Standards.

Request for Proposal for Spare Parts and AMC

TESTING

PV modules must qualify (enclose test reports/ certificate from IEC/NABL accredited laboratory) as per relevant IEC standard. Additionally the performance of PV modules at STC conditions must be tested and approved by one of the IEC / NABL Accredited Testing Laboratories including Solar Energy Centre. For small capacity PV modules up to 50Wp capacity STC performance as above will be sufficient. However, qualification certificate from IEC/NABL accredited laboratory as per relevant standard in accordance with MNRE/BIS/IEC/CE norms / guidelines for any of the higher wattage regular module should be accompanied with the STC report/ certificate. Test report shall comply the MNRE requirement as specified in preceding para in duty cycle.

VALIDITY OF CERTIFICATION

The validity of the existing Certificates/Reports in the old format/procedure shall be valid till March 2013 only. Manufactures are advised to get their samples tested as per the new format/procedure before 31st March 2013, whose validity shall be for five years.

WARRANTY

PV modules used in solar pumping systems must be warranted for their output peak watt capacity, which should not be less than 90% at the end of 10 years and 80% at the end of 25 years.

The mechanical structures, electrical works including power conditioners / inverters / charge controllers / maximum power point tracker units/ distribution boards / digital meters/ switchgear/ storage batteries, etc. and overall workmanship of the SPV power plants / systems must be warranted against any manufacturing / design / installation defects for a minimum period of 5 years.

MICROPROCESSOR CONTROLLED MAXIMUM POWER POINT TRACKING (MPPT)

- Microprocessor controlled maximum power point tracking continuously change the array voltage & monitors the input power level thus following changes in the maximum power point of the array.

ELECTRONICS AND PROTECTIONS

- Use of Maximum Power Point Tracker (MPPT) is encouraged to optimally use the Solar panel and maximize the water discharge.
- Adequate protection should be incorporated against dry operation of motor pump set, protection against lightning and hails and storms. Full protection against open circuit, accidental short circuit and reverse polarity should be provided.
- Junction box with hinged, whether-proof lid, captives screws, three cable glands entry points & one cable gland (standard)

AUTO WATER LEVEL CONTROLLER WITHOUT BATTERY

- Automatic OFF/ON Electronic unit for controlling water level in the tank and MCB switch.

CABLE

1. 3 core x 2.5 sq.mm cable with clips as per IS 694 duly ISI marked
 - a. For 30 mtr. Solar Pumping System – 40 mtrs
 - b. For 40 mtr. Solar Pumping System – 50 mtrs
 - c. For 50 mtr. Solar Pumping System – 60 mtrs
 - d. For 60 mtr. Solar Pumping System – 70 mtrs

Request for Proposal for Spare Parts and AMC

2. 3 core x 4.0 sq.mm cable with clips as per IS 694 duly ISI marked
 - a. For 70 mtr. Solar Pumping System – 80 mtrs
 - b. For 80 mtr. Solar Pumping System – 90 mtrs
 - c. For 90 mtr. Solar Pumping System – 100 mtrs

3. 4 core x 4.0 sq.mm cable with clips as per IS 694 duly ISI marked
 - a. For 30 mtr. Solar Pumping System – 40 mtrs
 - b. For 40 mtr. Solar Pumping System – 50 mtrs
 - c. For 50 mtr. Solar Pumping System – 60 mtrs
 - d. For 60 mtr. Solar Pumping System – 70 mtrs

4. 4 core x 6.0 sq.mm cable with clips as per IS 694 duly ISI marked
 - a. For 70 mtr. Solar Pumping System – 80 mtrs
 - b. For 80 mtr. Solar Pumping System – 90 mtrs
 - c. For 90 mtr. Solar Pumping System – 100 mtrs

5. 3 core x 2.5 sq.mm cable as per IS 694 duly ISI marked
 - a. For 60 mtr. Solar Hand Pumping System – 70 mtrs
 - b. For 75 mtr. Solar Hand Pumping System – 85 mtrs
 - c. For 90 mtr. Solar Hand Pumping System – 100 mtrs
 - d. For 105 mtr. Solar Hand Pumping System – 115 mtrs
 - e. For 120 mtr. Solar Hand Pumping System – 130 mtrs

IDENTIFICATION AND TRACEABILITY

- Each PV module must use a RF identification tag (RFID), which must contain the following information:
 - (i) Name of the manufacturer of PV Module
 - (ii) Model or Type Number
 - (iii) Serial Number
 - (iv) Month and year of the manufacture
 - (v) I-V curve for the module
 - (vi) Peak Wattage of the module at 16.4 volts
 - (vii) I_m , V_m and FF for the module
 - (viii) Unique Serial No and Model No of the module
 - (ix) Specify whether PV modules are based on without or auto tracking system
 - (x) Adequate anti-theft fittings shall be provided for each solar panel.

As per MNRE norms **from 1st April 2013 onwards; RFID is to be mandatorily placed inside the module laminate**

A distinctive serial number starting with NSM will be engraved on the frame of the module or screen printed on the tedlar sheet of the module.

MOUNTING STRUCTURES AND TRACKING SYSTEM

To enhance the performance of SPV water pumping systems, it is desirable to use a tracking system. Manual, passive and auto tracking are permitted. The PV modules will be mounted on metallic structures of adequate strength and appropriate design, which can withstand load of modules and high wind velocities up to 200 km per hour. The support

Request for Proposal for Spare Parts and AMC

structure used in the pumping system will be hot dip galvanized iron (G.I).

Facilities to be provided in the structure

- a. Seasonal tilt angle adjustment and
- b. Three times manual tracking in a day

The G.I. structures for mounting the Solar panels could be so designed, that these can be manually/ auto adjusted for optimal tilt throughout the year. A simple provision is to be provided so that the panel can be manually adjusted three times a day (East-South-West) to face the sun optimally. This adjustment could be done in the early morning, noon time and afternoon to increase the total input solar radiation on the solar panel surface substantially. This provision helps the motor pump set to start early in the morning and function efficiently till late in the afternoon, thereby increasing the total output of the pumping system. The structure is earthed using GI wire & GI Pipe type earthing kit as IS 3043-1987 duly ISI marked.

The “Mounting Structure” should have the following features:

The modules support structure used in pumping systems shall be mild steel, hot dipped galvanized (120 micron) iron for holding the PV modules. The size of angle iron should not be less than 50x50x5 mm with the required height.

Each panel frame structure shall be so fabricated as to be grouted on ground or roof on its legs. It will withstand severe cyclone/ storm with the speed of 200 Km/Hr.

Each panel frame structure shall have provision to adjust its angle of inclination to the horizontal between 10 to 40 degrees with a step of 10 degree, so that the inclination can be adjusted at the specified tilt angle whenever required.

Each panel frame shall be complete with a weatherproof junction box as per the relevant BIS specifications, where the module terminals shall be interconnected and output taken.

All nuts and bolts should be made of very good quality and should be corrosion resistant.

The structure should 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.

Mounting structure for solar panels shall be provided separately in shadow free area as per MNRE guidelines.

Note :

1. The above mentioned technical specifications are pertaining to the existing installed solar pumping systems.
2. The Technical particulars of the Material(s) & Equipment(s) offered must comply with the relevant Specifications. The Bidder(s) are also required to keep track of amendments / updates of MNRE specifications for concerned systems. SPV Modules, Pumps & BOS should be of required specification and warranties as per Ministry of New & Renewable Energy (MNRE), Govt. of India, latest guidelines/specifications (2019). If any amendments are issued by MNRE in due course of time, in this context, then those shall be applicable under this RFP.
3. The supplied, installed spares/items must be compatible and properly synchronised with the existing solar pumping system to achieve its desired/specified output/performance as per MNRE/RFP specifications.

ANNEXURE-2

Certificate of Quarterly Yearly Visits

(To be filled during AMC period)

(From To)

This is to certified that M/s _____ has extended preventive / routine maintenance and breakdown / corrective maintenance services at the beneficiaries' placeat _____ District _____ for the systemsunder AMCagainst the work order no. _____, dated _____ and that the preventive / routine maintenance and breakdown / corrective maintenance work during the period (from _____ to _____) of the year _____ has been done properly to ensure functionality of the systems as specified in the RFP no. 2759, dated 06-02-2020 and the agreement. This is also to certify that all the systems are working satisfactorily. The record of preventive / routine maintenance and breakdown / corrective maintenance work carried out by the contractor is kept in the DREO Office.

Date :

Place :

Signature, Name, Designation and Seal of Contractor

Signature, Name, Designation and Seal of Beneficiary Organisation / Beneficiary

Signature, Name, Designation and Seal of DREO

ANNEXURE-3

COVERING LETTER

Covering Letter

(The covering letter should be on the Letter Head of the Bidder)

Ref.No. _____

Date: _____

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

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

To: _____

Madhya Pradesh UrjaVikas Nigam Limited

(A Government of Madhya Pradesh Enterprise)

UrjaBhawan, Link Road No. 2,

Shivaji Nagar, Bhopal - 462016

Sub: Standardization of rates For Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation,Drinking water purpose,etc. and Annual Maintenance Contract (AMC) of existing Solar pumps already installed at various locations in the State of Madhya Pradesh in accordance with MNRE/BIS/IEC/CE norms.

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 Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation,Drinking water purpose,etc. and

Request for Proposal for Spare Parts and AMC

Annual Maintenance Contract (AMC) of existing Solar pumps already installed at various locations in the State of Madhya Pradesh in accordance with MNRE/BIS/IEC/CE norms, hereby submit our Bid comprising of Financial Bid and Technical Bid. We confirm that neither we nor any of our Affiliate has submitted Bid other than this Bid directly or indirectly in response to the aforesaid RFP.

We give our unconditional acceptance to the RFP No. 2759, dated 06-02-2020 and RFP attached thereto, issued by Madhya Pradesh UrjaVikas 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	Bidder Details
	Company/ LLP/ Partnership Firm/ Sole – Proprietor /Akshay Urja Shop (Fill as applicable)
A	
B (B-1, B-2,B-3)	
C (C-1,C-2,C-3)	
D (D-1 to D-8)	
E (E-1 to E-8)	
F (F-1 to F-4)	
G (G-1 to G-4)	
H (H-1, H-2)	
I (I-1, I-2)	
J	

Request for Proposal for Spare Parts and AMC

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:

Bid Security (INR Lakhs)	Bid Security Details

OR

We have enclosed a Bid Security in form of DD/ FDR/ Bank Guarantee (Bid Security Details) of cumulative amount required, 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 UrjaVikas 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:

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

Request for Proposal for Spare Parts and AMC

We are enclosing herewith the Envelope-A (Covering letter, Processing fee and Bid Security) and Envelope-B (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 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 120 days from Bid Deadline. We confirm that we have not taken any deviation so as to be deemed non-responsive.

Dated the ____ day of _____ 2020

Thanking you,

We remain,

Yours faithfully,

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

Request for Proposal for Spare Parts and AMC

ANNEXURE-4

GENERAL INFORMATION ABOUT BIDDER

	Name of the Company	
	Type of Company	
	Registered Office Address	
	E-mail	
	Web site	
	Authorized Contact Person(s) with name, designation, Address and Mobile Phone No., E-mail address/ Fax No. to whom all references shall be made	
	Year of Incorporation	
	Have the Bidder/Company ever been debarred By any Govt. Dept. / undertaking for undertaking any work.	
	Reference of any documentation format/ annexures attached by the Bidder other than specified in the RFP.	
	Whether the Bidder wishes to form a Project Company for execution of work	Yes/No
	Bidder is listed in India	Yes/No
	TIN No.	
	GST	
	PAN No.	
	Service Tax (ST-2)	
	Certificate of Incorporation of Bidder (as applicable) enclosed	Yes/No
	A copy of partnership deed or LLP/ Sole Proprietor registration, as applicable enclosed	Yes/No
	Annual Turnover in last 3 years	

*Last three years financial documents including balance sheet & P&L account.

(Signature of Authorized Signatory)

With Stamp

Date: _____

ANNEXURE-5

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 Standardization of rates For Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose, etc. and Annual Maintenance Contract (AMC) of existing Solar pumps already installed at various locations in the State of Madhya Pradesh in accordance with MNRE/BIS/IEC/CE norms in accordance with MNRE/BIS/IEC/CE norms in different sites/villages located anywhere in Madhya Pradesh. in response to the RFP 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.

Request for Proposal for Spare Parts and AMC

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

Signed by the within named
(Insert the name of the executants company)
through the hand of
Mr _____

duly authorized by the Board to issue such Power of Attorney

Dated this _____ day of _____

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 _____

ANNEXURE-6

TECHNICAL ELIGIBILITY CRITERIA REQUIREMENT

(To be submitted on the letterhead of Bidder)

To,

Madhya Pradesh Urja Vikas Nigam Limited

Bhopal

Dear Sir,

Sub: Standardization of rates For Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose, etc. and Annual Maintenance Contract (AMC) of existing Solar pumps already installed at various locations in the State of Madhya Pradesh in accordance with MNRE/BIS/IEC/CE norms in response to the RFP No: 2759, Dated 06-02-2020

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

Details of cumulative experience in executing contracts off-grid solar photovoltaic systems/power plants (installed & commissioned)

S.No.	Name & Address of Client	Order no. & date	Value of order	Capacity Installed and commissioned	Year of Installation & commissioning

Request for Proposal for Spare Parts and AMC

OR

Details of Cumulative Manufacturing Experience and supply of motor-pump set/solar pump controller/inverter (tested & certified by MNRE accredited lab)

S.No.	Name & Address of Client	Order no. & date	Value of order	Supplied quantity	Year of supply/ Installation

Or

Details of experience of Annual Maintenance of Solar PV Water pumping system

S.No.	Name & Address of Client	Order no. & date	Value of order	Pump Quantity	Duration

Or

Details of Experience of procurement, supply and commissioning of new and renewable energy / energy conservation systems / devices / items.

S.No.	Name & Address of Client	Item	Order no. & date	Value of order	Supply Quantity	Duration

Request for Proposal for Spare Parts and AMC

And

Supply, installation, commissioning experience of Solar Photovoltaic Water Pumping System

S.No.	Name & Address of Client	Order no. & date	Value of order	Capacity-wise (in HP terms) commissioned	Year of Installation & commissioning

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 (B-1, B-2,B-3)	
C (C-1,C-2,C-3)	
D (D-1 to D-8)	
E (E-1 to E-8)	
F (F-1 to F-4)	
G (G-1 to G-4)	
H (H-1, H-2)	
I (I-1, I-2)	
J	

Yours faithfully

—

(Signature and stamp of Authorized Signatory of Bidder)

Name: _____

Date: _____ Place: _____

ANNEXURE-7

FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT

(To be submitted on the letterhead of Bidder)

To,

Madhya Pradesh UrjaVikas Nigam Limited

Bhopal

Dear Sir,

Sub: Standardization of rates For Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose, etc. and Annual Maintenance Contract (AMC) of existing Solar pumps already installed at various locations in the State of Madhya Pradesh in response to the RFP No: 2759, Dated 06-02-2020.

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

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

Name of Entity being evaluated	Financial Year	Financial Criteria (fill as applicable) to be met as per RFP
		Turnover (INR Lakh)

Yours faithfully

(Signature and stamp of Authorized Signatory of Bidder)

Request for Proposal for Spare Parts and AMC

Name: _____

Date: _____

Place: _____

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

Name: _____

Date: _____

Place: _____

.

ANNEXURE-8

UNDERTAKING FORM

Undertaking from Affiliate

Name: _____

Full Address : _____

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

To,

Subject: Standardization of rates For Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose, etc. and Annual Maintenance Contract (AMC) of existing Solar pumps already installed at various locations in the State of Madhya Pradesh in accordance with MNRE/BIS/IEC/CE norms in response to the RFP No: 2759, Dated 06-02-2020.

Dear Sir,

We have carefully read and examined in detail the RFP regarding submission of an undertaking, as per the prescribed 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 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 51% for period of 1 year from the date of Commissioning of awarded capacity, subject to provisions of Clause 3.8.3(b).

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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 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 _____

ANNEXURE -9

DECLARATION

(On Original Letter head of Bidder)

I / we have carefully read and understood the enclosed Terms and Conditions of the RFP and amendments are agree to abide by them / by me / us would be liable for summarily rejection, and Proposal would be considered on Terms and Conditions finalized by Nigam.

I / we also declare that, we are:

Indigenous Manufacturer of Mono/Multi crystalline silicon Solar Photovoltaic (SPV) Modules of capacity 125Wp (Watt Peak) or more

OR

Manufacturer of AC/DC, Surface / submersible pumps, suitable for SPV water pumping systems.

OR

Manufacturer of solar pumps controller/Inverter

OR

A Solar PV System Integrator.

OR

Maintenance Agency of Solar Power system

AND

I / we have got service centers at our works for the quoted System(s).

AND

I/We undertake to set up service centers as per the terms and conditions of this RFP

I / we declare that we have not been Black listed or otherwise Debarred 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.

I / 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,

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then without prejudice to any other action our Earnest money / Security Deposit may be forfeited in full and the Proposal to the Extent of Acceptance / anytime during Execution of Work may be cancelled. The signature of our Authorized Representative in Madhya Pradesh is attested below.

(Signature of Authorized Signatory)

(Name / Post in block letters)

Signature of Authorized Representative

Name: _____

Address: _____

Attested by

Authorized Signatory

Seal of the Bidder Company

Date:

Annexure-10

FORMAT FOR BANK GUARANTEE FOR BID SECURITY

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

1. Rs. (IN FIGURE) (Rupees (IN WORDS)) Bank Guarantee covers from
2. This Deed of Guarantee made on ____ (Day) ____ of ____ (Month) ____ of
(Year) ____ Between ____ (Here-in-after called the Guarantor) on the One Part /
On behalf of M/s (Herein-after called the Bidder), and in favour of M.P. Urja Vikas
Nigam Ltd., Bhopal (Here-in-after called the MPUVN) on the following Terms, and
Conditions:
3. Whereas, the Bidder having agreed to Deposit Security of Rs.(in figure) (Rupees (in
words) in favour of the MPUVN in the Form of Bank Guarantee, in token towards
Standardization of rates For Supply, Installation & Commissioning of Spares for Solar Photo
Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water
purpose etc. and Annual Maintenance Contract (AMC) of existing Solar pumps already
installed at various locations in the State of Madhya Pradesh to the satisfaction of the
Managing Director of the MPUVN for (Total).....Years / Months/ days against the
said Contract Agreement.
4. Whereas the Guarantor further agree that the Managing Director of the MPUVN is competent to
decide whether the Execution of Rate Contract of Standardization of rates For Supply,
Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/
Surface water Pumping Systems for Irrigation, Drinking water purpose etc. and Annual
Maintenance Contract (AMC) of existing Solar pumps already installed at various locations
in the State of Madhya Pradesh with all required accessories and fittings i.e. Solar PV Module
(with manual – three times a day tracking and with auto tracking system), AC/DC
submersible/Surface pump Motor Sets, Control unit, along-with 5 years (including manpower)
warranty & Annual Maintenance Contract (AMC) in accordance with MNRE norms. The rates
once accepted shall be valid up to the Agreement Period as per Terms & Conditions of the

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Contract Agreement or Not. His decision shall be binding on us.

5. Whereas the Guarantor further agree to pay immediately the amount Guaranteed within a period of one week of the same being demanded by the MPUVN with intimation to the Contractor.
6. This Guarantee shall remain enforced and shall continue to be enforceable till and, shall be extended on receiving instructions from the MPUVN, with intimation to the Contractor. However, the Bank Guarantee shall stand automatically enforceable for a period of further six months, unless discharged by the MPUVN, under intimation to the MPUVN by the Bank immediately.
7. Whereas the Guarantor further agree that their liability under this Guarantee shall not be affected by reason if any change in the agreement or the terms and conditions between the Contractor and the MPUVN or without the consent or knowledge of the Guarantor.
8. Whereas the Guarantor further agrees that Managing Directors decision whether Contractor has committed any breach or non-observance of the terms and conditions of the said contract shall be final and enough for Guarantors to make payment to the MPUVN.
9. Whereas the Guarantor further agree that the amount due or amounts of damage or loss caused to or suffered by the Nigam are binding on us and undertaking to pay the amount Guaranteed hereby or part thereof as required, immediately / within one week of the demand made by the MPUVN.
10. Whereas the Guarantor hereby undertakes not to revoke this Guarantee during its currency period except with the previous consent of the MPUVN in writing. However, unless a demand or claim is made in writing on or before the expiry of this Guarantee as mentioned in Clause No. 4 above, the Guarantor shall be released and discharged from all liabilities there under.
11. Notwithstanding anything contained in foregoing our liability under this Guarantee is restricted to Rs (Rupees only) Our Guarantee shall remain in force up to six months from the date of expiry of currency / extended period of the Bank Guarantee. ***{This Clause is applicable only in case work order is issued to the bidder.}***

For, _____ Bank,

(Signature / Name of Bank Officer / Seal of Authorized Signatory)

ANNEXURE-11

FORMAT FOR PERFORMANCE BANK GUARANTEE

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

This Deed of Guarantee made on _____ (Day) _____ of _____ (Month) _____ of _____ (Year) _____ Between _____ (Here-in-after called the Guarantor) on the One Part / On behalf of M/s _____ (Here-in-after called the Contractor), and in favour of M.P. Urja Vikas Nigam Ltd., Bhopal (Here-in-after called the MPUVN) on the following Terms, and Conditions:

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 Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose etc. and Annual Maintenance Contract (AMC) of existing Solar pumps already installed at various locations in the State of Madhya Pradesh in accordance with MNRE/BIS/IEC/CE norms in response to the RFP No. 2759, dated 06-02-2020 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 LICANo. ____ 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

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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.

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

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security held by Nodal Agency or to exercise, levy or enforce any distress, diligence or other process against the Contractor / Project Company.

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

Signature

Name

Power of Attorney No.

For

[Insert Name of the Bank]

Banker's Stamp and Full Address.

Dated this ____ day of ____, 20__

Witness:

Signature

Name and Address _____

Signature

Name and Address _____

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ANNEXURE-12

NUMBER OF SOLAR PUMPS INSTALLED DISTRICT WISE IN 2013-14

S.No.	Name of District	No. Solar Pumps Installed in 2013-14			Total
		PHED	Agriculture etc.	Forest Nursery	
1	Agar	2	6	2	10
2	Alirajpur	43	1	1	45
3	Anuppur	79	0	0	79
4	Ashoknagar	8	0	0	8
5	Badwani	50	0	2	52
6	Balaghat	105	2	1	108
7	Betul	34	2	6	42
8	Bhind	8	1	1	10
9	Bhopal	5	15	4	24
10	Burhanpur	19	0	2	21
11	Chhatarpur	28	2	2	32
12	Chhindwara	223	1	2	226
13	Damoh	22	1	7	30
14	Datia	12	7	4	23
15	Dewas	22	20	3	45
16	Dhar	52	0	0	52
17	Dindori	160	1	2	163
18	Guna	12	0	0	12
19	Gwalior	12	32	1	45
20	Harda	9	1	1	11
21	Hoshangabad	24	43	4	71
22	Indore	4	8	4	16
23	Jabalpur	14	2	8	24
24	Jhabua	65	2	4	71
25	Katni	16	0	5	21
26	Khandwa	28	1	5	34
27	Khargone	28	3	0	31
28	Mandla	257	26	3	286
29	Mandsour	12	5	3	20
30	Morena	16	7	1	24
31	Narsinghpur	21	1	0	22
32	Neemuch	9	0	0	9
33	Panna	35	0	3	38
34	Raisen	37	10	5	52
35	Rajgarh	17	15	1	33
36	Ratlam	14	1	4	19

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37	Rewa	16	5	4	25
38	Sagar	25	14	11	50
S.No.	Name of District	No. Solar Pumps Installed in 2013-14			Total
		PHED	Agriculture etc.	Forest Nursery	
39	Satna	28	8	0	36
40	Sehore	39	3	2	44
41	Seoni	142	22	2	166
42	Shahdol	112	2	1	115
43	Shajapur	11	0	0	11
44	Sheopur	18	10	2	30
45	Shivpuri	12	3	4	19
46	Sidhi	114	29	1	144
47	Singrauli	120	0	0	120
48	Tikamgarh	32	10	1	43
49	Ujjain	12	1	2	15
50	Umaria	75	46	0	121
51	Vidisha	42	0	2	44
Total		2300	369	123	2792

Annexure - 13

ANNUAL MAINTENANCE CONTRACT (AMC)

1. The AMC will not cover cost of replacement of spares (the items / spares listed as 01 to 11 in Section-VI of RFP), as separate work orders shall be issued for supply, installation and commissioning of the same, as and when such requirements would arise. Thus, the AMC will cover only services, towards tours & travels, minor repairs required for successful operation of the system and any other activity that may be required for proper functioning of the systems as a whole.

2. It is mandatory on the part of successful bidder(s) to enter into an agreement for ANNUAL MAINTENANCE CONTRACT for providing services for maintenance and successful operation of the solar water pumping system for the specified period of the contract/work order under this RFP.

To ensure 100% working status during the AMC period, the bidder will have to arrange all required instruments, tools, spares, manpower and other necessary facilities at local service center.

3. **Breakdown / Corrective maintenance during AMC period:**

Whenever a complaint is lodged by the user / MPUVN during the ANNUAL MAINTENANCE period, the bidder shall attend to the same within a reasonable period of time and in any case the breakdown shall be corrected within a period not exceeding 07 days from the date of information of complaint.

4. *Scope of preventive / routine maintenance work during ANNUAL Maintenance Contract (AMC):*

The maintenance service provided shall ensure proper functioning of the SPV water pumping system as a whole. All preventive / routine maintenance required for ensuring maximum uptime shall have to be provided for a specified period of ANNUAL Maintenance Contract. The bidder will maintain the records of maintenance / quarterly visits in the enclosed format (Annexure- 2).

ANNUAL Maintenance Contract Maintenance service shall have two distinct components as described below.

- i) **Preventive / Routine Maintenance:** This shall be done by the contractor at least once every three month and shall include activities such as cleaning and checking the health of the SPV Pump, **cleaning of module surface fortnightly positively**, tightening of all electrical connections, changing of tilt angle of module mounting structure, and any other activity that may be required for proper functioning of the SPV Pump as a whole.

- ii) **Breakdown / Corrective maintenance:** Whenever a complaint is lodged by the user/MPUVN, the bidder shall attend to the same within a reasonable period of time (not exceeding 07 days from the date of complaint) and rectify the minor defects, period.

Replacement of the defective component/ spares (listed as 01 to 11 in Section-VI of RFP) separate work orders shall be issued for supply, installation and commissioning of the same, as and when such requirements would arise. For this a joint assessment / survey report (from 1. Contractor, 2. DREO, MPUVN and 3. Beneficiary) shall have to be submitted by the contractor to the Chief Engineer of MPUVN. After examining the report the Chief Engineer, MPUVN shall issue a work order for the work of replacement (supply, installation and commissioning of the spares). The replacement work shall be carried out within

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the specified time limit as per the work order. It is mandatory that the contractor shall submit a certificate, about the rectification/replacement work done, from the concerning beneficiary(s) to the DREO, failing which it will be assumed that the contractor has not performed its duties.

For carrying out the maintenance service during AMC effectively, the manufacturer shall establish one local service center at suitable place (preferable at Bhopal).

- iii) **Facilities at the local Service Center:** The bidder shall maintain the following facilities at the Local Service Centre for ensuring highest level of services to the end user:
 - a. Adequate trained manpower specifically trained by the bidder for carrying out the service activities.
 - b. Sufficient spare parts, to extend services at the beneficiary's place / site(s).
- iv. The service center shall send certificates of maintenance / quarterly visits in the enclosed format (Annexure- 2) to respective DREOs on quarterly basis, along with the service reports.
- 5 A detailed methodology stating the plan to undertake the work of Maintenance Contract, proposed network of service centers and deployment of skilled manpower should also be submitted at the time of Contract.
- 6 If the bidder fails to repair the systems against the complaint of breakdown / Corrective maintenance to ensure 100% working status during AMC period, penalty will be imposed @ 0.5% of the value of the work order (in case of replacement of spares) per complete week of delay or part thereof up till 5 weeks from the schedule date of commissioning **or** @ 0.5% of the contract value of AMC per system per complete week of delay or part thereof up till 5 weeks from the date of complaint of breakdown of the system. Delay beyond 5 weeks would lead to work order cancellation and bid security shall be forfeited.

Annexure-14

**(Format for Agreement be submitted on Rs.1000/- Non-judicial Stamp Paper
duly attested by Notary)**

Format for Joint Venture

This agreement is signed on this _____ (day) _____ of _____ (month) _____ of _____ (year) _____ between _____ (here-in-after called as “Partner I”) _____,

and _____ . (here-in-after called as “Partner-II, III etc.”) Address: _____ on the following terms and conditions:

AND WHEREAS, the “Partner I” has agreed to Execute Work of Supply, Installation & Commissioning of Spares for Solar Photo Voltaic AC/DC, Submersible/ Surface water Pumping Systems for Irrigation, Drinking water purpose, etc. and Annual Maintenance Contract (AMC) of existing Solar pumps already installed at various locations in the State of Madhya Pradesh in accordance with MNRE/BIS/IEC/CE norms and as per Scope / Specifications mentioned in Notice for RFP No. 2759, date 06-02-2020 issued by Madhya Pradesh Urja Vikas Nigam Ltd., Bhopal (here-in-after referred as “Nigam”)

AND WHEREAS as per Tender document, this agreement for bid will also be considered by the Owner provided they meet the specific requirements in that regard.

AND WHEREAS the bid is being submitted to the Nigam vide proposal dated _____ based on the Agreement being these presents and the bid with its bid forms and submission documents, in accordance with the requirement of Eligibility criteria conditions should be signed by the Partner- I on behalf of all partners and submitted to the Nigam.

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NOW THIS INDENTURE WITNESSETH AS UNDER:

In consideration of the above conditions and the agreement the terms being followed by all the partners as follows :

1. In consideration of the bid submission by the lead bidder to the Nigam, and the award of contract by the Nigam to this agreement (if selected by the Nigam), we the partners to the , hereby MoU agree that Partner – I shall act as executer & authorised representative for and on behalf of consortium and further declare and confirm that the Partner- I be bound unto the owner for execution of the contract in accordance with the contract terms and shall be liable to the Nigam to perform all contractual obligations including technical guarantees. The warranty, performance guarantee of material, any workmanship defects will be the responsibility of the Partner- I on behalf of consortium.
2. Project Management will be done by Partner- I and although technical assistance shall be provided by Partner-II, III etc as per their scope of work.
3. That, Partner- I will procure the material as per the scope of work from Partner-II, III etc with defined certifications by Nigam in the bid document against the payment to the Partner II, III etc.
4. Consortium partners who are the essential part of eligibility criteria cannot quit from consortium until the validity period of the RFP.

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

1. For..... (Partner - I)
Common Seal of
Name:
Signature.....
2. For..... (Partner - II)
Common Seal of
Name:
Signature.....

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3. For..... (Partner - III)

Common Seal of

Name:

Signature.....

5. For..... (Partner - etc)

Common Seal of

Name:

Signature.....

Witnesses:

1.

2.

Joint Venture Agreement

Joint Venture Agreement must be on Rs.100/- stamp paper and same must be duly notarised. Bidder must submit original copy of Joint Venture Agreement. Joint Venture Agreement must specify the under-mentioned conditions:

1. Joint Venture.
2. Specified share of all the parties entering in the Joint Venture Agreement.
3. Joint Venture Agreement must continue till the completion of projects and same cannot discontinue till the completion of projects according to the terms and conditions of projects.
4. All the parties of Joint Venture Agreement shall be equally responsible to MPUVN.
5. Leader of Joint Venture must comply with all the statutory requirements i.e. Leader of Joint Venture must have PAN, TIN, CST, ST, etc. registration and copy of same must be submitted as required and mentioned at other places of NIT.

The Project Developer / Bidder / Contractor / Supplier must fulfil the following minimum financial requirements of Turnover;

Average Annual Turnover: at least Rs. 75 lakh (on consolidated basis of last three financial years 2016-17, 2017-18 and 2018-19)

The computation of Turnover shall be based on unconsolidated audited annual accounts of the Project Developer/Bidder/Contractor/Supplier. For the purpose of the computation of turnover, the consolidated turnover of all the last three years shall be considered. The Project Developer/Bidder/Contractor/Supplier would thus be required, to submit annual audited accounts for the financial year 2016-17, 2017-18 and 2018-19, which would be considered for evaluation. The Project Developer/Bidder/Contractor/Supplier shall submit a certificate (in the prescribed format) from a Chartered Accountant certifying the aforesaid turnover criteria in original.

If the RFP is submitted by a Joint Venture, the financial requirement shall be met collectively by all the Members in the Bidding Consortium. The financial requirement to

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be made by each member of the Joint Venture shall be computed in proportion to the equity commitment made by each of them in the Joint Venture Company. For the purpose of the computation of turnover in the said cases, the consolidated turnover last three years shall be considered. Each promoter would thus be required, to submit its annual audited accounts for the financial year 2016-17, 2017-18 and 2018-19, which would be considered for evaluation.