

Request for selection (RfS) of Solar Rooftop Power Developers for Setting up of tentative cumulative capacity of 1000 kW Grid connected Rooftop Solar Power Projects (Without battery storage) including 5 years of comprehensive O&M after commissioning at Civil Secretariat Complex, Itanagar and adjacent areas under CAPEX mode through Competitive Bidding under PM Surya Ghar: Muft Bijli Yojana.

RfS No. SJVN/RTS/2025-26/Rooftop Solar-14

Tender Search Code (TSC): SJVN-2025-TN000009



ISSUED BY:

SJVN Limited

(A Joint Venture of Govt. of India & Govt. of Himachal Pradesh)

Contracts Section, RTS, SJVN Limited,

Shakti Sadan, Corporate Head Quarter, Shanan, Shimla, H.P (171006)

Website: www.sjvn.nic.in,

Email Id: sjvnrts.contract@sjvn.nic.in

CIN No. L40101HP1988GOI008409

DISCLAIMER

1. Though adequate care has been taken while preparing the RfS document, the bidder(s) shall satisfy themselves that the document is complete in all respects. Intimation regarding any discrepancy shall be given by the prospective bidders to the office of SJVN Ltd immediately.
2. If no intimation is received from any bidder within 21 (Twenty-one) days from the date of issuance of RfS documents, it shall be considered that the document is complete in all respects and has been received/ acknowledged by the bidder(s).
3. SJVN Ltd. reserves the right to modify, amend or supplement RfS documents including all formats and annexures at any time before the Bid submission date. Interested Bidders are advised to follow and keep track of SJVN's website for updated information. SJVN Ltd. is not obligated to send/ communicate separate notifications for such notices/ amendments/ clarification etc. in the print media or individually. SJVN Ltd. shall not be responsible and accountable for any consequences to any party.
4. This RfS document has been prepared in good faith and on a best endeavor basis. Neither SJVN Ltd. nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of the information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this document, even if any loss or damage is caused by any act or omission on their part.

Place: Shimla

Date: 01.07.2025

SECTION 1:
INVITATION FOR BIDS

SECTION-I: INVITATION FOR BIDS

1.1 INTRODUCTION:

- 1.1.1** SJVN Limited (hereinafter referred to as “SJVN”) is a Joint Venture of Govt. of India & Govt. of Himachal Pradesh and a Navratna CPSE under the administrative control of the Ministry of Power, Govt. of India.
- 1.1.2** This RfS document is in reference to the Guidelines issued vide office memorandum no 318/17/2024-Grid Connected Rooftop (Part 2) dated 03.07.2024 by MNRE for “operational guidelines for saturation of Government buildings with rooftop solar under PM-Surya Ghar: Muft Bijli Yojana in Government Buildings”, including its subsequent changes, necessary amendment(s)/clarification(s), if any. The Ministry of New & Renewable Energy (MNRE), Govt. of India has identified & considered SJVN as a Scheme Implementation Partner (SIP) to facilitate the installation of Grid connected rooftop solar projects for solarization of government buildings/assets pertaining to 18 numbers of Union Ministries/Departments including their autonomous bodies, subordinate offices, CPSEs etc. spread in all over India and 03 states i.e. Himachal Pradesh, Punjab & Arunachal Pradesh in mission under PM Surya Ghar: Muft Bijli Yojana.
- 1.1.3** SJVN intends to implement the mandate for solarization of Government buildings/residences, subordinate offices, autonomous institutions/subordinate offices/Public Sector Enterprises building/location under the administrative control of Government of Arunachal Pradesh under PM Surya Ghar: Muft Bijli Yojana.
- 1.1.4** For solarization of Government buildings belonging to Government of Arunachal Pradesh as conveyed by Arunachal Pradesh Energy Development Agency (APEDA), SJVN hereby invites “**Request for Selection (RfS) of Solar Rooftop Power Developers for Setting up of tentative cumulative capacity of 1000 kW Grid connected Rooftop Solar Power Projects (Without battery storage) including 5 years of comprehensive O&M after commissioning at Civil Secretariat Complex, Itanagar and adjacent areas under CAPEX mode through Competitive Bidding under PM Surya Ghar: Muft Bijli Yojana**”.
- 1.1.5** In this CAPEX mode, the Ministry/Department will undertake to fund the project entirely from its own resources. Accordingly, Arunachal Pradesh Energy Development Agency (APEDA) will undertake to fund the project entirely and payment shall be made by Arunachal Pradesh Energy Development Agency (APEDA) to successful bidder as per payment terms & conditions of RfS. No payment/claim whatsoever during the execution of contract shall be paid by SJVN Limited.
- 1.1.6** The Bidders will be free to avail fiscal incentives like Accelerated Depreciation, Concessional Customs and Excise Duties, Tax Holidays etc. as available for above Roof Top Solar Projects. The same will not have any bearing on the comparison of bids for selection. As equal opportunity is being provided to all bidders at the time of tendering itself, it is up to the bidders to avail various tax and other benefits. No claim shall arise on SJVN for any liability if bidders are not able to avail of fiscal incentives and this will not have any bearing on the project cost. SJVN does not, however, give a representation on the availability of fiscal incentive and submission of bid by the bidder shall be independent of such availability or non-availability as the case may be of the fiscal incentives.

1.1.7 No Central Government Financial Assistance shall be provided under the solar rooftop scheme for Government buildings of State Govt. Ministries / Departments.

1.1.8 Bidder shall be deemed to have examined the RfS, to have obtained information in all matters whatsoever that might affect the carrying out of works in line with the scope of work specified in the RfS at the Bid price and to have satisfied himself of the sufficiency of his Bid. The Bidder shall be deemed to know the scope, nature and magnitude of the works and requirement of materials, equipment, tools and labour involved, wage structures and what all works the Power Producer shall have to complete in accordance with the RfS, irrespective of any defects, omissions or errors that may be found in RfS. It is assumed that Bidder has acquainted himself with the site conditions at the Premises of Client Organisation and has assessed the quantum of work required to comply with the RfS.

1.2 INVITATION FOR BIDS:

1.2.1 ONLINE e-Tender Enquiry under Single Stage Two-Envelope Bidding Process (Envelope 1: Technical Bid & Envelope 2: Financial Bid) are hereby invited from Rooftop Solar Power Developers (SPDs) for Setting up of tentative cumulative **capacity of 1000 kW** Grid connected Rooftop Solar Power Projects (Without battery storage) including 5 years of comprehensive O&M after commissioning at Civil Secretariat Complex, Itanagar and adjacent areas under **CAPEX mode** through Competitive Bidding under PM Surya Ghar: Muft Bijli Yojana.”

1.3 BID INFORMATION SHEET:

Sr. No.	Description	
1.	RfS No.	SJVN/RTS/2025-26/Rooftop Solar-14
2.	RfS Date	01.07.2025
3.	Name of Work	1. Request for selection (RfS) of Solar Rooftop Power Developers for Setting up of tentative cumulative capacity of 1000 kW Grid connected Rooftop Solar Power Projects (Without battery storage) including 5 years of comprehensive O&M after commissioning at Civil Secretariat Complex, Itanagar and adjacent areas under CAPEX mode through Competitive Bidding under PM Surya Ghar: Muft Bijli Yojana. 2. Projects will be set up under CAPEX mode.
4.	Completion time	Six (06) months from the date of LOA

5.	Estimate Amount	Rs. 5,50,00,000/- including GST
6.	Mode of Tender	Open e-Tender (Single Stage- two Envelope system).
7.	Tender Fee/Cost of RFS Document (Non-refundable)	Amount: INR.5,900/- (Five Thousand Nine Hundred Rupees only) including GST @18% to be submitted through NEFT/ RTGS transfer in the account of SJVN, along with the response to RfS.
8.	Earnest Money Deposit (EMD)	Amount: INR 11,00,000/- (Rupees Eleven Lakh only) to be submitted in the form of Bank Guarantee/DD/NEFT/RTGS along with the response to RfS.
9.	Performance Bank Guarantee	As per the RfS document.
10.	Document available for downloading.	As per NIT on ISN-ETS portal.
11.	Date and Venue of Pre-Bid Meeting	11.07.2025 at 15:00 Hrs Venue: Conference Room, SJVN Ltd., Shakti Sadan, Corporate Head Quarter, Shanan, Shimla, H.P (171006). (In case of change in venue, the same shall be intimated separately OR through Video Conferencing (Link to the Pre-bid meeting is mentioned as below.) In case of change in venue, the same shall be intimated separately. MS Team Link: https://teams.microsoft.com/l/meetup-join/19%3ameeting_ODVjNzQvNmItMTU1Mi00NTI5LWFhM2EtOTQwYmYxMTVhNjBl%40thread.v2/0?context=%7b%22Tid%22%3a%22dadf9410-1403-4b2a-b1b7-610589371a39%22%2c%22Oid%22%3a%22bf3cd483-9db2-44fa-a6ae-f64411e3c325%22%7d Meeting ID: 432 808 048 610 4 Passcode: uw3Qn3Nt
12.	Last Date and Time for submission of Online Bids	22.07.2025 till 13:00 Hrs.
13.	Last Date and Time for submission of Hard Copy of Documents	01.08.2025 by 18:00 Hrs.

14.	Date & Time of Opening of Technical Bid	22.07.2025 at 15:00 Hrs
15.	Date & Time of Opening of Price Bids.	Shall be intimated to bidders.
16.	e-Reverse Auction	Not applicable
17.	Period of Bid Validity	12 Months from the last date of submission of online bids.

AVAILABILITY OF RfS DOCUMENT:

- 1.3.1** The detailed RfS Document shall be available on the ISN-ETS Portal (<https://www.bharat-electronictender.com>) and on SJVN's website www.sjvn.nic.in (Home Page » Tender Management (under Quick Links at the Bottom of Home Page) Location: New Delhi). The Notice Inviting RfS shall also be available on CPP portal i.e. <http://eprocure.gov.in/cppp/>.
- 1.3.2** It is mandatory to download official copy of the RfS Document from Electronic Tender System (ISN-ETS) Portal to participate in the RfS.
- 1.3.3** In case of any Clarification (s)/ Amendment(s)/Addendum (s)/Corrigendum (s) to this RfS document, the same shall be issued on the websites www.sjvn.nic.in and ISN-ETS Portal (<https://www.bharat-electronictender.com>). However, in case of any discrepancy, the information available on ISN-ETS website shall prevail.
- 1.3.4** Bidders are requested to remain updated for any notices/ amendments/ clarifications etc. to the RfS document through the above referred websites <https://www.bharat-electronictender.com> and www.sjvn.nic.in. No separate notifications shall be issued for such notices/ amendments/ clarifications etc. in the print media or any other media individually. Intimation regarding notification on the above shall be updated on www.sjvn.nic.in and the details will be available only from <https://www.bharat-electronictender.com>.

1.4 **BID SUBMISSION:**

- 1.4.1** A Single Stage, Two-Envelope Bidding Procedure will be adopted and will proceed as detailed in the RfS Documents. Bidding will be conducted through the competitive bidding procedures as per the provisions of this RfS. The respective rights of SJVN and the Bidder/SPD shall be governed by the RfS Documents.
- 1.4.2** Interested bidders have to necessarily register themselves on the e-tendering portal <https://www.bharat-electronictender.com> ("ETS portal") through M/s Electronic Tender (India) Pvt Ltd to participate in the bidding under this invitation for bids. It shall be the sole responsibility of the interested bidders to get themselves registered at the aforesaid portal for which they are required to contact M/s Electronic Tender (India) Pvt. Limited, New Delhi to

complete the registration formalities. Contact details of ISN-ETS is mentioned on the Bid Information Sheet. All required documents and formalities for registering on ISN- ETS are mentioned in the subsequent RFS documents. The registration & electronic portal fee shall be paid by bidder, as applicable.

- 1.4.3** Any bidder, who meets the Qualification Requirements and wishes to submit bid proposal against this RfS, may download the complete RfS document along with its amendment(s) and clarifications if any, from ISN-ETS Portal (<https://www.bharat-electronictender.com>) and submit its Bid complete in all respect as per terms & conditions of RfS Document on or before the due date/extended date of bid submission.
- 1.4.4** For proper uploading of the bid proposals on the ETS portal, it shall be the sole responsibility of the bidders to apprise themselves adequately regarding all the relevant procedures and provisions as detailed in the portal as well as by contacting M/s Electronic Tender (India) Pvt. Limited (ETI) directly, as and when required, for which contact details are also mentioned on the Bid Information Sheet. SJVN in no case shall be responsible for any issues related to timely or properly uploading/ submission of the bid in accordance with the relevant provisions of the Bidding Documents.
- 1.4.5** Bidders are required to submit their bid proposals strictly as per terms and conditions of the RfS documents and not to stipulate any deviations/ exceptions.
- 1.4.6** Bidders should submit their bid proposal complete in all respect on or before last date and time of Bid Submission as mentioned on ISN-ETS Portal (<https://www.bharat-electronictender.com>), SJVN website <http://www.sjvn.nic.in> and as indicated in the Bid Information Sheet. Bidder shall submit its bid/ proposal along with non-refundable RfS Tender Fees & Earnest Money Deposit (EMD) complete in all respect as per the Bid Information Sheet. Bid proposals received without the prescribed Tender Fees and EMD will be rejected. In the event of any date indicated being declared a holiday, the next working day shall become operative for the respective purpose mentioned herein.
- 1.4.7** SJVN reserves the right to cancel / withdraw / defer this invitation for bid proposal/RfS process at any stage without assigning any reason whatsoever and shall bear no liability whatsoever consequent upon such a decision. No bidder/indenting bidder shall have any claim arising out of such action.

1.5 FOR ANY ENQUIRY/ CLARIFICATION REGARDING THIS TENDER ENQUIRY, THE BIDDER MAY CONTACT:

1. Sh. Bhupinder Kr. Dhiman, (DGM, Contracts), Contact No. +91 9418457513
2. Sh. Rajendra Singh Rawat, (Deputy Manager), Contact No. +91 8894065950
3. Sh. Deepak Kumar, (FE- Mechanical), Contact No. +91 9717025892
4. Sh. Abhyuday Singh (FE- Electrical), Contact No. +91 7629910212

1.6 CONTACT DETAILS OF ISN- ETS PORTAL

M/s Electronic Tender.com (India) Pvt. Ltd. Gurugram Contact Person: ISN-ETS Support Team, Customer Support: +91-124- 4229071, 4229072

(From 10:00 Hrs to 18:00 Hrs on all working Days i.e. Monday to Friday except Govt. Holidays) Email: support@isn-ets.com

1.7 RfS INVITING AUTHORITY

Deputy General Manager,

Contracts RTS Section,

SJVN Ltd., CHQ, Shakti Sadan, Shanan,

Shanan, Shimla, 171006 (H.P.)

E-mail: sjvnrts.contract@sjvn.nic.in

Visit us at: www.sjvn.nic.in

----- **END OF SECTION** -----

SECTION II:

DEFINITIONS

SECTION-II: DEFINITIONS

Following terms used in the documents will carry the meaning and interpretations as described below:

- 2.1 "ACT" or "ELECTRICITY ACT, 2003" shall mean the Electricity Act, 2003 and shall include any modifications, amendments and substitution from time to time.
- 2.2 "AFFILIATE" shall mean a company that, directly or indirectly,
- i) controls, or
 - ii) is controlled by, or
 - iii) is under common control with, a company developing a Project or a Member in a Consortium developing the Project and control means ownership, directly or indirectly, of more than 50% (fifty percent) of the voting shares of such company or right to appoint majority Directors to the Board of Directors.
- 2.3 "B.I.S." shall mean specifications of Bureau of Indian Standards (BIS).
- 2.4 NOT USED
- 2.5 "BID" or "PROPOSAL" shall mean the documents submitted by the Bidder towards meeting the qualifying requirements submitted by the Bidder along with all documents/credentials/attachments/annexures etc. as part of its response to the RfS issued by SJVN.
- 2.6 "BIDDER" shall mean Bidding Company, incorporated in law in India under the Companies Act, 1956/2013 submitting the Bid.
- 2.7 "BIDDING CONSORTIUM" or "CONSORTIUM" Not used.
- 2.8 "CAPACITY UTILIZATION FACTOR (CUF)" shall have the same meaning as provided in CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2017 as amended from time to time. However, for avoidance of any doubt, it is clarified that the CUF shall be calculated on the Contracted Capacity; In any Contract Year, if 'X' MWh of energy has been metered out at the Delivery Point for 'Y' MW Project capacity, $CUF = (X \text{ MWh} / (Y \text{ MW} * 8766)) * 100\%$.
- 2.9 "CAPEX" shall mean Capital Expenditure
- 2.10 "CAPEX MODEL" shall mean a business model where the Project Developer sets up a Solar PV Power Project on the rooftop of a building/land owned by a different entity/client organization. The cost for setting up of solar PV project is paid by the client organization. The Project Developer is responsible for construction, commissioning, and operation of the Project for the agreed term.
- 2.11 "CEA" shall mean Central Electricity Authority.
- 2.12 "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.

For bidders incorporated in countries other than India, “Chartered Accountant” shall mean a person or a firm practicing in the respective country and designated/ registered under the corresponding Statutes/ laws of the respective country.

- 2.13 “CLIENT ORGANIZATION”** shall mean the entity under the administrative control of Central/State/Union Government Ministries/Departments, including autonomous bodies, subordinate offices, CPSEs, other units mentioned in this RfS etc.
- 2.14 “COMPANY”** shall mean a body corporate incorporated in India under the Companies Act, 1956/2013 or any law in India prior thereto relating to Companies, as applicable.
- 2.15 “CONTRACTED CAPACITY”** shall mean the AC capacity in kW/ MW contracted with Client Organization for the Grid connected Rooftop Solar PV Project
- 2.16 “CONTRACT YEAR”** shall mean the period beginning from the Effective Date and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that the last Contract Year of this Agreement shall end on the last day of the Term of this Agreement.
- 2.17 “CONTROL”** shall mean the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such Company or the right to appoint majority Directors.
- 2.18 “CONTROLLING SHAREHOLDING”** shall mean more than 50% of the voting shares of the Company or the right to appoint majority Directors.
- 2.19 “DAY”** shall mean a calendar day.
- 2.20 “DISCOM”** shall mean a Distribution Company, an intermediary company that connects power producers with households and acts as a link between utilities and end-user/consumers.
- 2.21 “EQUITY”** shall mean Net Worth as defined in the Companies Act, 2013.
- 2.22 “ENGINEER-IN-CHARGE (EIC)”** means the Engineering Officer nominated by the Client Organization i.e. APEDA or its duly authorized representative to direct, supervise and be in charge of the works for the purpose of this contract.
- 2.23 “GROUP COMPANY”** of a Company means
- i) a Company which, directly or indirectly, holds 10% (Ten Percent) or more of the share capital of the Company or;
 - ii) a Company in which the Company, directly or indirectly, holds 10% (Ten Percent) or more of the share capital of such Company or;
 - iii) a Company in which the Company, directly or indirectly, has the power to direct or cause to be directed the management and policies of such Company whether through the ownership of securities or agreement or any other arrangement or otherwise or;
 - iv) a Company which, directly or indirectly, has the power to direct or cause to be directed the management and policies of the Company whether through the ownership of securities or agreement or any other arrangement or otherwise or;
 - v) a Company which is under common control with the Company, and control means ownership by one Company of at least 10% (Ten Percent) of the share capital of the other Company or power to direct or cause to be directed the management and policies of such Company whether through the ownership of securities or agreement or any other arrangement or otherwise;

Provided that a financial institution, scheduled bank, foreign institutional investor, Non-Banking Financial Company, and any mutual fund, pension funds and sovereign funds shall not be deemed to be Group Company, and its shareholding and the power to direct or cause to be directed the management and policies of a Company shall not be considered for the purposes of this definition unless it is the Project Company or a Member of the Consortium developing the Project.

- 2.24** “**INSTALLED CAPACITY**” shall mean the maximum installed DC capacity of Grid Connected Rooftop Solar PV Project
- 2.25** **INTER-CONNECTION POINT / DELIVERY/ METERING POINT**” shall be the single point, at a location mutually agreed by the SPD/Vendor and Client Organization / SJVN, in line with the applicable regulation / rules where Solar Power is delivered by the SPD/Vendor from the Project.
- 2.26** “**JOINT CONTROL**” shall mean a situation where a company has multiple promoters (but none of the shareholders has more than 50% of voting rights and paid up share capital).
- 2.27** “**LEAD MEMBER OF THE BIDDING CONSORTIUM**” or “**LEAD MEMBER**”: *Not used.*
- 2.28** “**LETTER OF AWARD**” or “**LoA**” shall mean the letter issued by SJVN to the selected Bidder under this RfS.
- 2.29** “**LIMITED LIABILITY PARTNERSHIP**” or “**LLP**” Not used.
- 2.30** “**LLC**” shall mean Limited Liability Company.
- 2.31** “**MEMBER IN A BIDDING CONSORTIUM**” or “**MEMBER**” : Not used
- 2.32** “**MONTH**” shall mean calendar month.
- 2.33** “**NET METERING**” means an arrangement for measurement of energy in a system under which rooftop solar PV system installed at eligible consumer’s premises as per DISCOM scheme delivers surplus electricity, if any, to the Distribution Licensee after off-setting the electricity supplied by Distribution License during the applicable billing period.
- 2.34** “**NET-WORTH**” shall mean the Net-Worth as defined section 2 of the Companies Act,2013.
- 2.35** “**O&M/ AMC**” shall mean Operation & Maintenance/ Annual Maintenance Contract of the supplied equipment/system.
- 2.36** “**PAID-UP SHARE CAPITAL**” shall mean the paid-up share capital as defined in Section 2 of the Companies Act, 2013.
- 2.37** “**PARENT**” shall mean a Company, which holds more than 50% voting rights and paid up share capital, either directly or indirectly in the Project Company.
- 2.38** “**PROJECT / PLANT**” / “**SOLAR POWER PROJECT**”/ “**POWER PROJECT /**” shall mean Grid connected Rooftop Solar PV Project(s) installed on a single / group of buildings connected to the grid through a single or multiple meters or standalone system. The Project shall include all units / modules, auxiliaries and associated facilities, structures, equipment, plant and machinery, facilities and related assets required for the efficient and economic operation of the rooftop solar project.
- 2.39** “**PROJECT CAPACITY**” shall mean the maximum AC capacity at the Delivery Point that

can be scheduled on which the EPC Agreement shall be signed.

- 2.40 “PROJECT COMMISSIONING”:** The Project will be considered as commissioned if all equipment as per rated project capacity has been installed commissioned and energy has flown into grid, in line with the commissioning procedures defined in this RfS.
- 2.41 “PROJECT DEVELOPER” or “DEVELOPER”** shall mean the entity setting up the Solar Power PV Project.
- 2.42 “PROJECT SITE / SITE”** shall means Roof Top of Civil Secretariat Complex, Itanagar and adjacent areas longing to Government of Arunachal Pradesh (including autonomous bodies, sub ordinate offices, CPSEs, other unit etc.).
- 2.43 “PROMOTER”** shall mean Promoter as defined in the Companies Act, 2013.
- 2.44 “RfS” or “RfS DOCUMENT” or “BIDDING DOCUMENT(S)” or “TENDER DOCUMENTS”** shall mean the “Request for Selections” document issued by SJVN vide RfS No. Datedand its subsequent clarifications and amendments thereof (if any).
- 2.45 “SCHEDULED COMMISSIONING DATE” or “SCD”** shall be the date as indicated in Clause 6.7.1 of the RfS.
- 2.46 “SJVN”** shall mean SJVN Limited.
- 2.47 NOT USED**
- 2.48 “SELECTED BIDDER” or “SUCCESSFUL BIDDER”** shall mean the Bidder selected pursuant to this RfS.
- 2.49 “SIP” or “Scheme Implementation Partner”** shall mean Central Public Sector Undertaking (CPSEs) allocated on nomination basis to State/Central ministries/departments for assisting these ministries/departments in deploying rooftop solar power on their asset under “PM Surya Ghar: Muft Bijli Yojana”.
- 2.50 “SOLAR PV PROJECT”** shall mean the Solar Photo Voltaic Power Project that uses sunlight for direct conversion of solar energy into electricity through Photo Voltaic Technology.
- 2.51 “SOLAR PROJECT DEVELOPER” OR ‘SPD”** shall mean the entity setting up the Solar Power PV Project.
- 2.52 “TOE”** shall mean Tender Opening Event.
- 2.53 “ULTIMATE PARENT”** shall mean a Company, which owns more than 50% (Fifty Percent) voting rights and paid-up share capital, either directly or indirectly in the Parent and Affiliates;
- 2.54 “WEEK”** shall mean calendar week.

----- **END OF SECTION** -----

SECTION - III
INSTRUCTION TO BIDDERS

**SECTION III:
INSTRUCTIONS TO BIDDER**

3.1 OBTAINING RfS DOCUMENTS

Interested bidders can download the RfS Document & other documents after login into the ISN-ETS portal by using the Login ID & Password created on ISN-ETS during registration (Refer Annexure - J). The bidder shall be eligible to submit/upload the bid document only after logging into the ISN-ETS portal and downloading the official copy of RFS. If only free copy of RFS documents are downloaded from ETS portal or RFS documents are downloaded without confirmation or without generating official copy serial number, then the bidders will not be able to submit the bids. For further assistance, please contact ETS help desk at +91 124-4229071, 124-4229072. Transfer of RFS documents downloaded by one intending bidder to another is not permitted.

3.2 COST OF DOCUMENTS:

- 3.2.1** Prospective Bidders interested to participate in the bidding process are required to submit their bid proposals in response to this RfS document along with a non-refundable RFS tender/RFS document fee as mentioned in the Bid Information Sheet. A Bidder will be eligible to participate in the bidding process only on submission of entire financial amounts as per the **Bid Information Sheet**. Payments against RFS tender/document fee shall be done only through NEFT/RTGS/UPI (electronic transfer), and the Bidder shall submit the transaction receipt, as part of the online bid submission.

The bank details of SJVN for deposit of Cost of document and EMD/Bid Security are as follows:

Account Name : SJVN LTD RTS ARUNACHAL PRADESH
Account No : 43165282158
Name of Bank : State Bank of India
Branch : South Ext Part II New Delhi
IFSC Code : SBIN0003219

While carrying out online transfer, Bidders shall ensure to intimate the details of payment of Tender/document fee through email to SJVN's mail id: sjvnrts.contract@sjvn.nic.in in the following format:

Declaration for Payment of Cost of document and EMD/Bid Security

Tender Search Code:
Bidder Name:
Amount :
UTR Reference of tender fee & EMD:
Date of Transfer:
Transferor Bank:
Bank Account No.:
Bank IFSC Code:

(Signature of Bidder with Seal)

- 3.2.2** In case a Bidder chooses to deduct TDS while making the payments against cost of RfS such TDS details shall be submitted by the Bidder along with the transaction details, as part of online bid submission.

3.2.3 Bids submitted without tender/document fee and Earnest Money Deposit (EMD) (including partial submission of any one of the respective amounts), may be liable for rejection by SJVN.

3.3 ***CONTENT OF RfS DOCUMENT:***

The RfS Documents shall comprise the documents listed below along with any Amendment/Addendum/Corrigendum/Clarification/Errata issued in accordance with Clause 3.6, if any.

- i) Section I: Invitation for Bids
- ii) Section II: Definitions
- iii) Section III: Instruction to Bidders
- iv) Section IV: Eligibility Criteria
- v) Section V: Bid Evaluation and Selection of Bidders
- vi) Section VI: Conditions of Contract
- vii) Section VII: Forms & Formats for Bid Submission
- viii) Section VIII: Price Schedule

3.4 ***COST OF BIDDING:***

The Bidder shall be responsible for all the costs associated with the preparation of the response to RfS and participation in discussions and attending pre-bid meeting(s) etc. SJVN shall not be responsible in any way for such costs, regardless of the conduct or outcome of the bid process.

3.5 ***PRE-BID MEETING:***

A Pre-Bid Meeting with prospective bidders will be held on the date and venue mentioned at Clause 1.3 of Section I of this RfS Document. Wherever the bidder finds any discrepancy, omission, ambiguity or conflict in or among the documents issued or be in doubt as to their meaning and interpretation; such matter should be called to the attention of the RfS Inviting Authority, in writing either by email or by post and it must be received to RfS Inviting Authority latest by one day before the scheduled date of pre bid meeting up to 15:00 Hrs. Enquiries/ clarifications may be sought by the Bidder in the following format on email ID: sjvnrts.contract@sjvn.nic.in

Sr. No.	Clause no. of RfS	Provision of RfS	Query of bidder

The bidders are required to submit the queries in MS Word file also.

SJVN will make effort to respond to the same in the Pre-Bid Meeting to be held as mentioned in the Bid Information Sheet. A compiled list of such questionnaire and SJVN's response will be uploaded in the ISN-ETS portal <https://www.bharat-electronictender.com> and www.sjvn.nic.in. Verbal clarifications & information given by SJVN or their employees(s) or their representative(s) shall not be in any way binding on SJVN. Any modification to the RfS Documents that may become necessary as a result of the pre-bid Clarifications shall be made by SJVN through the issue of an Addendum/Corrigendum/Amendment/Clarification pursuant to clause 3.6. SJVN shall not be obliged to respond to any request for clarification received

later than the above period. Further, mere request for clarification from the Bidders shall not be a ground for seeking extension in the deadline for submission of bids.

3.6 *AMENDMENTS TO RfS DOCUMENT:*

3.6.1 At any time prior to the deadline for submission of Bids, SJVN may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder(s), modify the RfS document by issuing Addendum / Corrigendum / Amendment/ Clarification and the same shall be available on the ISN-ETS portal <https://www.bharat-electronictender.com> and SJVN's website www.sjvn.nic.in. No press note will be released in this regard. Therefore, the Bidders are advised to visit the above referred sites regularly before deadline for submission of proposal.

3.6.2 All such Addendum/Corrigendum/Amendment/Clarification shall form integral part of this RfS Document. SJVN shall bear no responsibility or liability arising out of non-receipt of the above in time by the Bidders.

3.6.3 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their Bids, SJVN, at its discretion, may extend the deadline for the submission and opening of Bids.

3.7 *LANGUAGE OF BIDS:*

The Bids prepared by bidders and all correspondences and documents relating to the Bid exchanged by the Bidder(s) and SJVN shall be in English. Supporting documents and printed literature furnished by the Bidders with their bids may be in another language, provided they are accompanied with a certificate of the authorized translator certifying therein an accurate translation of the relevant passages in the above stated language, in which case, for the purposes of interpretation of the Bid, the translation shall prevail.

3.8 *BID CURRENCIES:*

The bidder shall indicate the entire bid price in INDIAN RUPEES only.

3.9 *VALIDITY OF THE RESPONSE TO RfS:*

The Bidder shall submit the response to RfS which shall remain valid up to 12 months from the last date of submission of response to RfS ("Bid Validity"). SJVN reserves the right to reject any response to RfS which does not meet the aforementioned validity requirement.

3.10 *EARNEST MONEY DEPOSIT (EMD):*

3.10.1 Earnest Money Deposit (EMD) of **INR 11,00,000/-** in the form of Bank Guarantee according to Format 7.3A and valid for 12 months from the original last date of bid submission, shall be submitted by the Bidder along with their bid, failing which the bid shall be summarily rejected. The Bank Guarantees, DD/ NEFT/ RTGS towards EMD have to be issued/transferred in the name of the Bidding Company. In the event of encashment of EMD, the encased amount shall include all applicable taxes.

Electronic Bank Guarantee (e-BG) is also acceptable against EMD under this RfS.

3.10.2 The Bidder shall furnish the Bank Guarantees towards EMD from any of the Scheduled Commercial Banks as listed on the website of Reserve Bank of India (RBI) and amended as on the date of issuance of bank guarantee. Bank Guarantee issued by foreign branch of a Scheduled Commercial Bank is to be endorsed by the Indian branch of the same bank or State Bank of India (SBI).

3.10.3 The EMD shall be valid as per the timelines stipulated above. However, shortfall in the EMD validity, if any, up to a period of seven (7) days shall be acceptable. Further, an additional shortfall shall be acceptable only if bidder has submitted the EMD with validity as per original bid submission date or as per any revised submission date and if the deadline for submission of bids has been extended further, the Bid Guarantee shall be acceptable provided, the EMD is submitted in accordance with original bid submission date stipulated above and Bidder submits the EMD extension for the requisite period within seven days from the date of actual bid submission, if required.

3.10.4 SJVN has agreed to accept the EMD in the form of an unconditional and irrevocable Bank Guarantee instead of the cash deposit with the clear position intimated to the bidder that the EMD Bank Guarantee shall be encashable for being appropriated by SJVN in terms of the guarantee as in the case of appropriation of the cash deposit lying with SJVN.

3.10.5 Payment on Order Instrument (POI): NOT USED.

3.10.6 Insurance Surety Bond: NOT USED

3.10.7 The term “Bank Guarantee (BG) towards/ against EMD” occurring in the RfS shall be read as “Bank Guarantee (BG)/ towards/ against EMD”.

3.11 FORFEITURE OF EMD:

The BG/DD/ RTGS/ NEFT towards EMD shall be encashed by SJVN in following cases:

- a. If the bidder withdraws or varies the bid after due date and time of bid submission and during the validity of bid;
- b. If the bidder adopts corrupt and fraudulent practice;
- c. In case, SJVN offers to execute the project with the Selected Bidder and if the Selected Bidder does not submit the requisite documents as per Clause 6.12 of the RfS or does not execute the project within the stipulated time period;
- d. If after issuance of LoA, it is found that the documents furnished by the bidders as part of response to RfS are misleading or misrepresented in any way;
- e. If the bidder fails to furnish required Performance Bank Guarantee in accordance with Clause 6.10 of the RfS.

3.12 INSTRUCTIONS TO BIDDERS FOR STRUCTURING OF BID PROPOSALS IN RESPONSE TO RfS:

The bidder including its Parent, Affiliate or Ultimate Parent shall submit single response to

RfS. Detailed Instructions to be followed by the bidders for online submission of response to RfS are stated at Annexure – J Submission of bid proposals by Bidders in response to RfS shall be in the manner described below:

- i) Covering Letter as per **Format 7.1**.
- ii) Bank Guarantee against Earnest Money Deposit (EMD) as per **Format 7.3 A**.
- iii) Signed copies of original documents defining; written power of attorney of the signatory of the Bid to commit the Bidder;
 - A) In case of a General Power of Attorney, a true copy of the POA shall be duly notarized by Notary Public along with a declaration from the Company Secretary /Corporate Secretary endorsing the validity of the Power of Attorney (To be provided by the bidding Company)

OR

- B) In case of a specific Power of Attorney, Board Resolutions, as per prescribed formats enclosed as per Format 7.4 duly certified by the Company Secretary or the Director of the relevant Bidder, as applicable to the Bidder and mentioned hereunder:
 - a) Board Resolution from the Bidding Company in favour of the person signing the response to RfS and in the event of selection of the Projects and to sign the EPC Agreement with SJVN/Client organization.
 - v) Format for Financial Requirements as per **Format 7.6** along with the certificate from practicing Chartered Accountant/ Statutory Auditors showing details of computation of the financial credentials of the Bidder.
 - vi) Undertaking regarding no willful default and no major litigation pending as per **Format 7.7**
 - vii) A disclosure statement as per **Format 7.8/ 7.8A** regarding participation of any related companies in the bidding process.
 - viii) Signed Integrity Pact between SJVN and the Bidding Company as per **Format 7.9**
 - ix) **Attachments:**
 - a. Only Extract of relevant clause of Memorandum of Association, Article of Association of the Bidder needs to be attached along with the bid. The bidder should also highlight the relevant provision which highlights the objects relating to Power/ Energy/ Renewable Energy/ Solar Power plant development/Electrical Equipment.
In case, there is no mention of the above provisions in the MoA/ AoA of the Bidder, the same has to be amended and submitted prior to signing of the Agreement, if the bidder is selected as Successful bidder.
 - b. If the selected bidder wishes to execute the project through a Special Purpose Vehicle (SPV), the MoA/ AoA of the SPV highlighting the relevant provision which highlights the objects relating to Power/ Energy/ Renewable Energy/ Solar Power plant development/ Electrical Equipment has to be submitted prior to signing of the

Agreement.

- c. Certificate of Incorporation of Bidding Company.
- d. A certificate of shareholding of the bidding company, its Parent and Ultimate Parent (if any) duly certified by a practicing Chartered Accountant/Company Secretary as on a date within 30 days prior to the last date of bid submission. SJVN reserves the right to seek additional information relating to shareholding in promoter companies, their parents/ultimate parents to satisfy themselves that RfS conditions have been complied with and the bidder will ensure submission of the same within the required time lines (if applicable).
- e. Certified copies of annual audited accounts for the last three financial years, ending on 31.03.2025 or provisional accounts duly certified by a practicing Chartered Accountant (as applicable), along with certified copies of Balance Sheet, Profit & Loss Account, Schedules and Cash Flow Statement supported with bank statements as on the date at least 7 days prior to the due date of bid submission (if applicable), shall be required to be submitted.
- f. Details of all types of securities/instruments which are pending conversion into equity whether optionally or mandatorily.
- x) Covering letter of the financial bid as per **Format 7.10**
- xi) Technical Eligibility/ Technical Requirement as per **Format 7.11**
- xii) The bidder shall provide warrantee covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of 5 years from the date of commissioning of projects.

3.13 IMPORTANT NOTES AND INSTRUCTIONS TO BIDDERS:

- i) Wherever information has been sought in specified formats, the Bidders shall fill in the details as per the prescribed formats and shall refrain from any deviations and referring to any other document for providing any information required in the prescribed format.
- ii) The Bidders shall be shortlisted based on the declarations made by them in relevant schedules of RfS. The documents submitted online will be verified before signing of EPC agreement in terms of Clause 3.12 of the RfS.
- iii) If the Bidder conceals any material information or makes a wrong statement or misrepresents facts or makes a misleading statement in its response to RfS, in any manner whatsoever, SJVN reserves the right to reject such response to RfS and/or cancel the Letter of Award, if issued, and the Bank Guarantee/security provided up to that stage shall be encashed. Bidder shall be solely responsible for disqualification based on their declaration in the submission of response to RfS.
- iv) If the event specified at Clause 3.13(iii) is discovered post award of contract, it shall be treated as “SPD Event of Default” under RfS and consequences as specified in RfS shall apply.
- v) Response submitted by the Bidder shall become the property of the SJVN and SJVN shall have no obligation to return the same to the Bidder. However, the EMDs submitted by unsuccessful Bidders shall be returned as specified in **Clause 6.9.10** of the RfS.

- vi) All documents of the response to RfS (including RfS and subsequent Amendments/ Clarifications/ Addenda) submitted online must be digitally signed by the person authorized by the Board as per **Format 7.4**.
- vii) The response to RfS shall be submitted as mentioned in Clause 3.12 of the RfS. No change or supplemental information to a response to RfS will be accepted after the scheduled date and time of submission of response to RfS. However, SJVN reserves the right to seek additional information from the Bidders, if found necessary, during the course of evaluation of the response to RfS.
- viii) The Bidder shall make sure that the correct, valid and operative Pass-Phrase to decrypt the relevant Bid-part is submitted into the 'Time Locked Electronic Key Box (EKB)' after the deadline of Bid submission, and before the commencement of the Online Tender Opening Event (TOE) of technical bid.
- ix) All the information should be submitted in English language only. In case of foreign bidders having documents in other than English language, then the documents shall be translated in English language by certified translator and submitted.
- x) Bidders shall mention the name of the contact person and complete address and contact details of the Bidder in the covering letter.
- xi) Response to RfS that are incomplete, which do not substantially meet the requirements prescribed in this RfS, will be liable for rejection by SJVN.
- xii) Response to RfS not submitted in the specified formats will be liable for rejection by SJVN.
- xiii) Bidders delaying in submission of additional information or clarifications sought will be liable for rejection.
- xiv) Non-submission and/ or submission of incomplete data/ information required under the provisions of RfS shall not be construed as waiver on the part of SJVN of the obligation of the Bidder to furnish the said data/information unless the waiver is in writing.
- xv) The Central/State Electricity Regulatory Commission shall be the appropriate commission to exercise the regulatory and adjudicatory jurisdiction in regard to matters between SPD and SJVN as well as SJVN and Client organization. Subject to the above, only the Honorable Gauhati High Court, Itanagar Bench shall have exclusive jurisdiction in all matters pertaining to this RfS.
- xvi) All the financial transactions to be made with SJVN including service charges and any additional charges (if required), shall attract applicable GST on each transaction, irrespective of the same being mentioned in the RfS/ EPC Agreement.
- xvii) The bid shall be signed by a person duly authorized to sign on behalf of the Bidder. The bid should be serially numbered and properly indexed mentioning all constituents of bid including any enclosures/attachments etc. and their location page numbers in the bid. Failure to submit the bid in systematic manner as above may result oversight of any important information provided by the bidder for which SJVN shall not be responsible.

- xviii) The Bid shall contain no overwriting, alterations, omissions, or additions, unless such corrections are initiated by the person(s) signing the Bid. Corrections if any shall only be made by scoring out the cancelled portion, writing the correction, initiating and dating it by the person(s) signing the Bid.
- xix) All witnesses and sureties shall be persons of status and their full names, occupations and addresses shall be stated below their signatures.
- xx) Please note that bids in any other mode including Email shall not be entertained under any circumstances.
- xxi) Copy of Contract/Award Letter, Completion Certificate, plant Operational Certificate from utility or any other suitable/related documents shall also be submitted to establish the fact that the mentioned contract had been awarded, executed and operational.

3.14 METHOD OF SUBMISSION OF RESPONSE TO RfS BY THE BIDDER:

3.14.1 Documents to be Submitted Offline (in Original):

- i) The bidder has to submit original of following documents offline.
 - a) Bank Guarantee towards EMD as mentioned in the Bid Information Sheet (as per Format 7.3A).
 - b) DD towards EMD.
 - c) UTR Reference number in case of NEFT/RTGS transfer of EMD & Tender fee
 - d) Duly Signed Integrity Pact between SJVN and the Bidding Company (Scanned version of the format, duly signed by SJVN’s authorized signatory, is attached in RfS).
 - e) Pass-phrases for Technical bids and Financial bids submitted on the ETS portal.
- ii) Bank Guarantee against EMD/ DD against EMD needs to be submitted in both online and offline modes. The bidders will be required to submit the bank guarantee, either in person or through post, at the office of SJVN, Shimla until the last date and time for submission of hard copy of document as mentioned at Clause 1.3 of RfS and extensions of dates, if any.

Note: In all cases, the EMD (if applicable), shall be issued on or before the bid submission deadline. These instruments issued after the expiry of the deadline will be summarily rejected.

- iii) The bidding envelope shall contain the following sticker:

Request for selection (RfS) of Solar Rooftop Power Developers for Setting up of tentative cumulative capacity of 1000 kW Grid connected Rooftop Solar Power Projects (Without battery storage including 5 years of comprehensive O&M after commissioning) at Civil Secretariat Complex, Itanagar and adjacent areas under CAPEX mode through Competitive Bidding under PM Surya Ghar: Muft Bijli Yojana.	
<i>RfS Reference No.</i>	
<i>Submitted by</i>	<i>(Enter Full name and address of the Bidder)</i>

<i>Organization ID</i>	<i>(Enter the OID through which the Bid has been submitted online on ETS portal)</i>
<i>Authorized Signatory</i>	<i>(Signature of the Authorized Signatory) (Name of the Authorized Signatory) (Stamp of the Bidder)</i>
<i>Bid Submitted to</i>	<i>Deputy General Manager (Contracts), RTS SJVN Limited Shakti Sadan, Corporate Head Quarter, Shanan, Shimla, H.P (171006) Tel No. 011-61901906 Email – sjvnrts.contract@sjvn.nic.in</i>

3.14.2 Documents to be Submitted Online

Detailed instructions to be followed by the Bidders for online submission of response to RfS are stated at Annexure-J. The bidders shall strictly follow the instructions mentioned in the electronic form in respective Technical Bid while filling the forms.

If the Bidder has submitted bid online and fails to submit the Bank Guarantee/DD/ against EMD for requisite amount offline, until the last date and time for submission of hard copy of document as mentioned at Cl. 1.3 of RfS and extensions of dates, if any, then the same shall be treated as incomplete bid and Tender Fee/Cost of RfS Document, submitted at this stage will be encashed and the EMD(s) shall be returned and the submitted bid will stand cancelled.

All documents of the response to RfS submitted online must be digitally signed and uploaded on the website, <https://www.bharat-electronictender.com> which should contain the following:

I. Technical Bid (First Envelope)

The Bidder shall upload single Technical Bid containing **scanned copies** of the following documents duly signed and stamped on each page by the authorized signatory as mentioned below.

- a) Formats - 7.1, 7.2 (if applicable), 7.3 A, 7.4 (if applicable), 7.6, 7.7, 7.8/7.8A, 7.9, 7.10 and 7.11 elaborated in Clause 3.12 of the RfS.
- b) All attachments elaborated in Clause 3.12 of the RfS, under the sub-clause viii: Attachments, with proper file names.
- c) All supporting documents regarding meeting the eligibility criteria.
- d) Scanned Copies of NEFT/RTGS details towards Tender Fee/Cost of RfS Document as mentioned in Bid Information Sheet.
- e) Scanned copies of requisite amount of Bank Guarantee towards EMD as mentioned in the Bid Information Sheet.
- f) The Bidder will have to fill the Electronic Form provided at the ISN-ETS portal as

part of Technical Bid.

- g) Submission of Pass-phrases: In line with Clause 3.13 (viii) and **Annexure-J**, the Bidder shall be required to submit the Pass-Phrase to decrypt the relevant Bid-part is submitted into the 'Time Locked Electronic Key Box (EKB)' after the deadline of Bid submission, and before the commencement of the Online Tender Opening Event (TOE) of Techno- commercial bid.

II. Financial Bid (Second Envelope)

- 1) Bidders shall submit the scanned copy of Covering letter for Submission of Financial Bid as per Format – 7.10 of the RfS
- 2) The Financial Bid submitted by the Bidder shall comprise the Price Schedule. The bidders are required to submit their quoted rate in Price Envelope as per Section-VIII of the RfS through e-Tender Portal.
- 3) Bidders may note that Attachments to Financial Bid together with BOQ/Price-Schedules should NOT be uploaded in Techno-Commercial Bid/Envelope at the e-Tender Portal.
- 4) The bidders are required to submit their quoted rate through e-Tender Portal for each Schedule as defined in Price Schedule under Price Envelope as per Section-VIII.
- 5) Bidders shall give a breakup of the prices in the manner and detail called as per Section - VIII: Price Break up of Price Schedule in Price Envelope.

VI) Important Note:

- (a) The Bidders shall not deviate from the naming and the numbering formats of envelop(s) mentioned above, in any manner.
- (b) All the documents enclosed shall be indexed and flagged appropriately, with the index list indicating the name of the document against each flag.
- (c) All the envelopes shall be properly sealed with the signature of the Authorized Signatory running across the sealing of the envelopes.
- (d) In case the Bidder submits the online documents on ISN-ETS within the bid submission deadlines and fails to submit the offline documents in the office of SJVN within the bid submission deadlines, the online bid of the Bidder shall not be opened and shall be 'archived' on the ISN-ETS portal. Similarly, bids submitted offline but without any online submission on ISN-ETS portal shall not be opened and the EMD shall be returned to the respective bidder.
- (e) **In case of submission of Bank Guarantee/ DD/ against EMD on or before the bid submission deadline, and non-submission of the hard copy of the Bank Guarantee/ DD to SJVN within the timeline specified for submission of hardcopy of the documents, its bid shall be rejected and not considered for further evaluation.**

3.15 DEADLINE FOR SUBMISSION OF BIDS:

3.15.1 Complete Bid must be uploaded at the ISN-ETS portal. The documents to be submitted offline

as per Clause 3.14.1 must be received by SJVN at the address of RfS Inviting Authority not later than the last date and time for submission of hardcopy of documents offline as stipulated in the RfS document/ ISN-ETS portal. The date and time for online submission of the bids shall continue to be the date and time as specified in the RfS document or any subsequent amendment for the same. In the event of the specified date for the submission of bids being declared a holiday for SJVN, the hard copy of documents/offline submission will be received up to the specified time on the next working day.

3.15.2 SJVN may, in exceptional circumstances and at its discretion, extend the deadline for submission of bids by issuing an Addendum in accordance with Clause 3.6, in such case all rights and obligations of SJVN and the bidders previously subject to the original deadline will thereafter be subject to the deadline as extended.

3.16 LATE BIDS:

Online submission of the bid will not be permitted on the portal after expiry of submission time and the bidder shall not be permitted to submit the same by any other mode. Similarly, hard copies of the OFFLINE documents, if received by SJVN Ltd after the deadline for submission as prescribed in RfS document/ ISN-ETS portal, then it will be considered as 'Late Bid' and shall be considered non-responsive and shall be summarily rejected notwithstanding the fact that the bidder has uploaded the bid online within the stipulated deadline.

3.17 MODIFICATION, SUBSTITUTION AND WITHDRAWAL OF BIDS:

3.17.1 The Bidder may modify, substitute, or withdraw his bid after its submission but in any case, before the deadline for submission of bids.

3.17.2 Any alteration/ modification in the Bid or additional information supplied unless solicited by SJVN subsequent to expiry of last date and time of submission of bids shall be disregarded.

3.17.3 Withdrawal of a Price Bid during the interval between the deadline for submission of Bids and expiration of the period of Bid validity specified in Clause 3.9 shall not be permitted and appropriate action may be taken by SJVN as per provisions mentioned in the Bid Security Declaration submitted by the Bidder.

3.18 BID OPENING:

3.18.1 The Technical Bids shall be opened on the scheduled date, time and location stipulated in the RfS Document.

3.18.2 The Price Bid shall be opened only of those bidders whose Techno-Commercial Bid are found Techno-Commercially qualified. Financial Bids of the Bidders whose Bids not found Technically qualified shall not be opened and shall not be considered at all any further.

3.18.3 If it happens to be a holiday or due to any other technical reasons like non-availability of the Committee Members etc. on the day of opening of the tender, the Bids shall be opened on next working day at the same time.

3.18.4 SJVN Ltd shall not be responsible if online bid could not be opened within reasonable time for whatsoever reason. In such a case, the bid shall remain unopened on the portal and shall

not be considered at all any further.

3.19 CLARIFICATION ON BIDS:

To assist in the examination, evaluation, and comparison of bids, SJVN may, at its discretion, ask any bidder for clarification of its Bid. The request for clarification and the response shall be through e-mail but no change in the price or substance of the bid shall be sought, offered, or permitted except as required to confirm the correction of arithmetical errors discovered by the SJVN in the evaluation of the Bids. All such responses submitted by the Bidder shall form part of their bid.

3.20 EVALUATION OF BIDS AND SELECTION OF BIDDER:

The evaluation of Bids and selection of successful Bidders shall be carried out as per the procedure and methodology stipulated in Section V of this RfS Document.

3.21 RIGHT OF SJVN TO REJECT A BID:

SJVN reserves the right to reject any or all of the responses to RfS or cancel the RfS or annul the bidding process for any project at any stage without assigning any reasons whatsoever and without thereby any liability. In the event of the tender being cancelled at any stage, EMD submitted by the Bidders shall be returned to the respective Bidders.

3.22 POST AWARD COMPLIANCES:

Post award compliance such as Timely completion of work i.e. Supply & installation of Rooftop Solar Power Plant, Commissioning etc., Operation & Maintenance for five years after commissioning of installed Rooftop Solar Power Plant as per RfS will be the sole responsibility of SPD.

Any checklist shared with SPD by Client Organization APEDA/SJVN for compliance of above-mentioned milestones to be considered for the purpose of facilitation only. Any additional documents required as per the conditions of Guidelines, RfS must be timely submitted by the SPD.

3.23 PRE-CONTRACT INTEGRITY PACT:

To improve transparency and fairness in the tendering process, SJVN is implementing Integrity Pact. Integrity Pact is deemed as part of the contract so that the prospective bidders are bound by its provisions.

The Integrity Pact, signed by all the prospective Bidders and SJVN, shall commit the persons/officials of both the parties, not to exercise any corrupt /fraudulent/collusive/coercive practices in the Tendering process and also during implementation of the Contract. Only those Bidders who have entered into Integrity Pact with SJVN shall be eligible to participate in the bidding process. Bidders signing Integrity Pact shall not approach the Courts while representing the matters to IEMs and he/she will await their decision in the matter. Entering into Integrity Pact as per Performa enclosed in the Tender Document is a basic qualifying requirement.

To oversee the compliance of obligation under the Integrity Pact, Independent External Monitor(s) (IEMs) have been appointed by SJVN. The details are as under:

Sl. No.	Name of IEMs	Address of IEMs
1	Sh. Manoj Pant, IFoS (Retd.)	House no. 70, Usha Colony, Sahastradhara Road, Dehradun-248013 (Uttarakhand), Email-mpant2007@gmail.com
2	Sh. Davendra Verma, ISS (Retd.)	604, Tower-14, Purvanchal Royal City, Chi V, Greater Noida, G.B. Nagar-201310, Uttar Pradesh Email-verma.davendra@gmail.com

The Integrity Pact duly signed on behalf of SJVN is given in Section VII: Forms & Format.

The Integrity Pact along with its Annexure -A (Guidelines on banning of business dealings) and Undertaking (FORM OF DECLARATION OF ELIGIBILITY) enclosed in the RfS Document shall be downloaded, printed and signed by the bidder and the same will be submitted with Bid.

The successful bidder shall submit duly executed Integrity Pact on Non-Judicial stamp paper of appropriate value prior to signing of Contract Agreement

3.24 CORRUPT OR FRAUDULENT PRACTICES:

It is expected from the Bidders that they will observe the high standard of ethics during the bidding process and Construction of such Contracts. In pursuance of this policy:

1. For the purpose of this provision, the terms set-forth below shall mean as under:
 - a. “corrupt practice” is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party
 - b. “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
 - c. “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;
 - d. “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;
 - e. “obstructive practice” is deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a 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.

2. A Bid shall be rejected by SJVN if it is determined at any stage that respective Bidder has

engaged in corrupt or fraudulent or Collusive or Coercive practices or obstructive practice in executing the Contract in question and his Bid Security shall be forfeited. The Bidder shall not be entitled for any compensation whatsoever under this clause.

3. SJVN may declare a bidder ineligible, either indefinitely or for a stated period of time, to be awarded a Contract if it at any time determines that the bidder has engaged in corrupt or fraudulent or collusive or coercive practices in competing for, or in executing a Contract.
4. The documents/information submitted by Bidder/Contractor may be verified by the officials of SJVN for its authenticity at any time and the Bidder/Contractor shall provide all facilities/co-operation in this regard. If it is found that any of the documents/information submitted by the Bidder/Contractor is not genuine, SJVN shall have full rights to cancel his Bid, forfeit the bid security/EMD and terminate the Contract, at any stage.

-----END OF SECTION-----

SECTION IV: **ELIGIBILITY CRITERIA**

SECTION IV:

ELIGIBILITY CRITERIA

4.0 BIDDER MUST MEET THE FOLLOWING QUALIFICATION REQUIREMENTS:

4.1 GENERAL ELIGIBILITY CRITERIA:

4.1.1 For SJVN Empaneled Vendors

- a. All SJVN empaneled vendors (except those who participated as consortium) irrespective of State(s) opted/empaneled under RESCO/CAPEX mode in SJVN vide EOI No. SJVN/RTS/2024-25/Rooftop Solar-1 dated: 18.07.2024 Tender Search Code (TSC): SJVN-2024-TN000007 shall be treated as “General Eligibility Criteria Qualified” and only “Financial Eligibility” criteria of those vendors shall be evaluated.
- b. The terms and conditions for empaneled vendor(s) vide EOI no. SJVN/RTS/2024-25/Rooftop Solar-1 dated 18.07.2024 shall remain unchanged, if empaneled vendor selected under this RfS, they shall have to comply with the same terms.

4.1.2 For other than SJVN empaneled Vendors

Bidders participating in the RfS will be required to meet the following general eligibility criteria along with technical eligibility criteria as per clause 4.2:

- i. The Bidder shall be a Company as defined in definitions section-II.
- ii. A Bidder which has been selected as Successful Bidder based on this RfS can also execute the Project through a Special Purpose Vehicle (SPV) i.e. a Project Company especially incorporated/acquired as a subsidiary Company of the successful bidder for setting up of the Project, with at least 51% shareholding in the SPV which has to be registered under the Indian Companies Act, 2013, before signing of Contract Agreement. Multiple SPVs may also be utilized for executing more than one Project.
- iii. The Bidder or any of its Affiliates should not be a willful defaulter to any lender, and the Bidder & any of its Affiliate, their directors should not have been barred or included in the blacklist by any government agency or authority in India, the government of the jurisdiction of the Bidder where they are incorporated or the jurisdiction of their principal place of business, any international financial institution such as the World Bank Group, Asian Development Bank, African Development Bank, Inter-American Development Bank, Asian Infrastructure Investment Bank etc. or the United Nations or any of its agencies. The Bidder shall submit an undertaking to this effect.
- iv. For avoidance of doubt, it is clarified that the fully owned subsidiary should be an immediate subsidiary of the bidder, without any intermediaries involved. The following illustrations are provided to clarify the same.

Scenario 1

Bidder

Min. 51 % shareholding



Entity A (Project Company / SPV)

Scenario 2

Bidder

Min. 51 % (or any other %) shareholding



Entity A (Intermediary)



Min. 51 % shareholding

Entity B (Project Company / SPV)

As per the RfS, only Scenario 1 is permissible in case of projects being implemented by SPVs.

4.2 TECHNICAL ELIGIBILITY CRITERIA:

4.2.1 For SJVN empaneled Vendors

- (a) All SJVN empaneled vendors (except those who participated as consortium) irrespective of State(s) opted/empaneled under RESCO/CAPEX mode vide EOI No. SJVN/RTS/2024-25/Rooftop Solar-1 dated: 18.07.2024 Tender Search Code (TSC): SJVN-2024-TN000007 shall be treated as “Technically Qualified” and only “Financial Eligibility” criteria of those vendors shall be evaluated.
- (b) The terms and conditions for empaneled vendor(s) vide EOI no. SJVN/RTS/2024-25/Rooftop Solar-1 dated 18.07.2024 shall remain unchanged, if empaneled vendor selected under this RfS, they shall have to comply with the same terms.

4.2.2 For bidders other than SJVN empaneled vendors

4.2.2.1 The bidder must have experience in “**Similar Works**” as defined below: -

- a) The Bidder must have experience in Design, Supply, Installation and Commissioning of Grid Connected Rooftop/Ground mounted/Floating Solar Photo Voltic (SPV) Power Plants in India of cumulative Installed Capacity of 500kWp or higher in the last 07 (Seven) Years prior to the last day of month, previous to the one in which the RfS is invited. **(As per Format no.7.11 Table – A)**

AND

Out of the above stated cumulative installed capacity, at least 01 Nos. Grid Connected Rooftop/Ground mounted/Floating Solar Photo Voltic (SPV) Power Plants should have been of 100 kWp or higher capacity. These reference plant must have been in successful operation for atleast 06 (six) months ending prior to last day of month previous to the one in which the RfS is invited. **(As per Format no.7.11 Table –B)**

Note: Capacity below 10 kWp at single installation shall not be considered in qualifying cumulative installed Capacity.

OR

- b) The Bidder must have experience in Design, Supply, Installation and Commissioning of Grid Connected Rooftop/Ground mounted/Floating Solar Photo Voltic (SPV) Power Plants having cumulative Installed Capacity of 100kWp or higher in any of the following states: Himachal Pradesh, Jammu & Kashmir, Uttarakhand, Sikkim, Andaman & Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu, Arunachal Pradesh, Nagaland, Tripura, Mizoram, Manipur, Assam and Meghalaya, in the last 07 (Seven) Years prior to the last day of month previous to the one in which the RfS is invited **(As per Format no.7.11 Table –C).**

Note:

- 1) All SJVN empaneled vendors (except vendors who participated as consortium) irrespective of State(s) opted/empaneled under RESCO/CAPEX mode in SJVN vide EOI No. SJVN/RTS/2024-25/Rooftop Solar-1 dated: 18.07.2024 can bid in this tender.
- 2) Bidders other than SJVN empaneled vendors have to meet either of criteria **a)** or **b)** mentioned above.
- 3) **The Bidder shall submit applicable Letter of award/contract(s)/ Project completion certificate(s) for the respective project(s).**
- 4) Commissioned installed capacity as per completion certificate of respective project (s) will be considered qualifying towards above requirement.
- 5) Grid Connected Rooftop/Ground mounted/ Floating SPV Power plant should be at a single location and must be connected with **DISCOM** distribution network.
- 6) The bidder shall submit a certificate from the respective client(s)/Electricity bill indicating export of Energy/any other supporting documents certifying satisfactory operation of the reference plant(s) as per Table-B.
- 7) In case evidence of work experience against Technical Eligibility Criteria is issued by non-governmental organization/ Private company; copy of TDS issued by employer/ 26AS certificate against the said work is required to be submitted by the bidder.
- 8) The experience of a holding company will be considered as experience of affiliate or vice-versa. CA certificate confirming the relationship between affiliate entity and the bidding entity along with attested shareholding certificate is to be submitted in this regard.
- 9) Single utility meter shall be considered as one installation.

4.3 TECHNICAL ELIGIBILITY CRITERIA: (For Bidding Consortium/ Joint Venture)

Not Applicable

4.4 FINANCIAL ELIGIBILITY CRITERIA:

4.4.1 NET-WORTH: Not Applicable

4.4.2 MINIMUM AVERAGE ANNUAL TURNOVER (MAAT)

The Bidder shall demonstrate a Minimum Average Annual Turnover of Rs. 1,65,00,000/- (One Crore Sixty-Five Lakh Rupees Only) during the three immediately preceding financial years ending on 31.03.2025 i.e. FY: 2022-23,2023-24, 2024-25 which should be evidenced by Audited Balance Sheet along with Profit & Loss account or a certificate issued by a practicing Chartered Accountant. In case the audited Annual accounts for FY: 2024-25 is not available, bidders shall submit Annual turnover certificate for FY: 2024-25 from a practicing Chartered accountant/Statutory Auditor to demonstrate fulfilment of above criteria. It is hereby clarified that "Other Income" as indicated in the annual accounts of the Bidder shall not be considered for arriving at the annual turnover.

- a) The Bidder may seek qualification on the basis of financial capability of its Affiliate(s) for the purpose of meeting the qualification requirements as per Clauses 4.4.2 above. In such cases, the Bidder shall be required to submit Board Resolutions from the respective Affiliate(s), undertaking to contribute the required equity funding and Performance Bank Guarantees/POI in case the Bidder(s) fail to do so in accordance with the RfS. In case of non-availability of the Board Resolution as required above, a letter from the CEO/Managing Director of the respective Affiliate(s), undertaking the above, shall be required to be submitted and the requisite Board Resolution from the Affiliate(s) shall be required to be submitted prior to signing of EPC Agreement.
- b) For the purposes of meeting financial requirements, only the latest unconsolidated audited annual accounts shall be used. However, audited consolidated annual accounts of the Bidder may be used for the purpose of financial requirements provided the Bidder has at least twenty six percent (26%) equity in each Company whose accounts are merged in the audited consolidated account and provided further that the financial capability of such Companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for the purpose of evaluation of any other response to this RfS.
- c) A Company would be required to submit annual audited accounts for the last financial years ending on 2024-25, along with annual turnover from a practicing Chartered Accountant/Statutory Auditor to demonstrate fulfilment of the criteria.

4.4.3 LIQUID ASSETS/WORKING CAPITAL: Not Applicable

4.4.4 CONSORTIUM BIDDERS:

Not Applicable

-----END OF SECTION-----

SECTION: V

BID EVALUATION AND SELECTION OF BIDDERS

SECTION V
BID EVALUATION AND SELECTION OF BIDDERS

5.0 *BID EVALUATION AND SELECTION OF SUCCESSFUL BIDDERS:*

Bid evaluation will be carried out considering the information furnished by Bidders as per provisions of this RfS. The detailed evaluation procedure and selection of bidders are described in subsequent clauses in this Section.

5.1 *EVALUATION OF TECHNICAL-COMMERCIAL BIDS (STEP – I):*

5.1.1 The first envelope (Technical-Commercial Bid submitted online) of only those bidders will be opened whose required documents as mentioned in the RfS are received by SJVN. Bid opening (online) will be done only after the deadline for submission of bid.

5.1.2 Documents (as mentioned in the previous clause) received after the bid submission deadline specified in the Bid Information Sheet shall be rejected and returned unopened, if super- scribed properly with address, to the bidder.

5.1.3 SJVN will examine all the documents submitted by the Bidders and ascertain meeting of eligibility conditions prescribed in the RfS. During the examination of the bids, SJVN may seek clarifications/additional documents from the Bidders if required to satisfy themselves for meeting the eligibility conditions by the Bidders. Bidders shall be required to respond to any clarifications/additional documents sought by SJVN within 07 (seven) days from the date of such intimation from SJVN. All correspondence in this regard shall be made through email/ ISN-ETS portal–only. It shall be the responsibility of the Bidder to ensure that the email id of the authorized signatory of the Bidder is functional. The Bidder may provide an additional email id of the authorized signatory in the covering letter. No reminders in this case shall be sent. It shall be the sole responsibility of the Bidders to remove all the discrepancies and furnish additional documents as requested. SJVN shall not be responsible for rejection of any bid on account of the above.

5.1.4 The response to RfS submitted by the Bidder shall be scrutinized to establish Techno-Commercial eligibility as per the RfS.

5.1.5 DETERMINATION OF RESPONSIVENESS:

i) SJVN will examine the Techno-commercial Bids to determine whether they are complete, whether EMD/Bid Security Declaration, RfS tender/Document Fee (if required) have been furnished, whether the bidder has submitted supporting certificates/documents justifying the qualifications/requirements, whether the documents have been properly signed, whether all the requisite declaration, undertakings have been furnished and whether the Technical bids are in order. SJVN may waive-off any minor informality, non-conformity or irregularity in a bid that does not constitute a material deviation and that does not prejudice or affect the relative ranking of any Bidder as a result of the evaluation of Bids, pursuant to these Clauses.

ii) Prior to the detailed evaluation, the SJVN will determine whether each Bid is of acceptable

quality, is complete and is substantially responsive to the RfS Document. For purposes of this determination, a substantially responsive Bid is one that conforms to all the terms, conditions and specifications of the RfS Document without material deviations, objections, conditionality or reservations. A material deviation, objection, conditionality or reservation is one (i) that affects in any substantial way the scope, quality or performance of the Contract; (ii) that limits in any substantial way, inconsistent with the RfS Document, SJVN's rights or the successful Bidder's obligations under the Contract; or (iii) whose rectification would unfairly affect the competitive position of other Bidders who are presenting substantially responsive bids.

- iii) If a Bid is not substantially responsive, it will be rejected by the SJVN, and may not subsequently be made responsive by correction or withdrawal of the nonconforming deviation or reservation.

5.1.6 NON-RESPONSIVE BID:

The electronic response to RfS submitted by the bidder along with the documents submitted online to SJVN shall be scrutinized to establish "Responsiveness of the bid". Each bidder's response to RfS shall be checked for compliance with the submission requirements set forth in this RfS. Any of the following conditions shall cause the Bid to be "Non-responsive".

- (a) Non-submission of the requisite Tender Fee/Cost of RfS Document as mentioned in the Bid Information Sheet.
- (b) Response to RfS not received by the due date and time of bid submission.
- (c) Non-submission of correct, valid and operative Pass-Phrases for both Technical and Financial Bid (Price Bid) Parts after the deadline of Bid Submission, and before the commencement of the Online Tender Opening Event (TOE) of Technical Bid.
- (d) Any indication of quoted price in any part of response to the RfS, other than in the financial bid.
- (e) Data filled in the Electronic Form of Financial Bid (Second Envelope), not in line with the instructions mentioned in the same electronic form.
- (f) Except for the scenario as per Clause 5.1 above, in case it is found that the Bidding Company including Ultimate Parent Company/ Parent Company/Affiliate/Group Companies have submitted more than one response to this RfS, then all these bids submitted shall be treated as non-responsive and rejected.
- (g) Non-submission or partial submission of EMD in acceptable form along with response to RfS.
- (h) In any of the above cases, the bid shall not be considered for bid opening and evaluation process.

5.2 The Bidder(s) shall be declared as technically qualified provided that their bids are substantially responsive and meet the requirements mentioned at Section-IV: Eligibility Criteria and other

terms and conditions as specified in this tender document. The Financial Bids of only those Bidders will be opened who are Techno-Commercially qualified as per the criteria mentioned above.

5.3 FINANCIAL BID EVALUATION (STEP 2):

- 5.3.1 In this step evaluations of Techno-Commercially Qualified Bids shall be done based on the “Total price” (in INR) quoted by the Bidder in the Electronic Form of Financial Bid for Supply, Installation & commissioning and further O&M for a period of 5 years after commissioning for 1000 kW Capacity Rooftop Solar power plant”. The total price quoted by bidder shall be inclusive of GST.
- 5.3.2 Price bid of only those bidders shall be opened whose technical bids are found to be qualified as per the RfS.
- 5.3.3 The Bidder including its Parent, Affiliate or Ultimate Parent or any Group Company will have to submit a single bid (single application) quoting the price in Indian Rupee for the offered quantum of power which shall be inclusive of Supply, Installation & O&M for 05 years after commissioning of 1000 kW Capacity Rooftop Solar project as per scope of work defined in RfS clause 6.1. In addition to that, the bidder has to upload the duly filled & signed detailed price breakup on ISN-ETS portal. In price breakup, the bidder has to mention the breakup of quoted price and applicable GST percentage & amount for each item. The price breakup uploaded by bidder shall be signed by his authorized signatory. The format for detailed price breakup in the Microsoft excel file available with the RfS document ISN-ETS portal-
- 5.3.4 Evaluation will be carried out based on consolidated price (inclusive of Supply & Installation of Rooftop Solar Power Plant and O&M of Installed Rooftop Solar Power plant) quoted by bidders.
- 5.3.5 On completion of technical bid evaluation, if it is found that only one or two Bidder(s) is/are eligible for the next stage, opening of the financial bid of the Bidder(s) will be at the discretion of SJVN. Thereafter, SJVN will take appropriate action as deemed fit.

5.4 SELECTION OF SUCCESSFUL BIDDERS:

- 5.4.1 The Bidder quoting the lowest cost (L1 cost) will be identified and shall be declared as the Successful Bidder. In case of multiple Bidders quoting the same L1 cost, then the ranking among these Bidders shall be done as follow:
- 5.4.2 The Bidder who has the highest Minimum Average Annual Turnover as per the documents submitted as a part of their bid, shall be considered as L-1.
- 5.4.3 If there is also a tie among any of these Bidders, then L-1 will be the Bidder who has quoted the highest CUF as per the **Format 7.1** submitted as a part of their bid submission.
- 5.4.4 There shall be no negotiation on the quoted fixed cost between SJVN/client Organization and the Bidder(s) during the process of evaluation/capacity allocation.

5.5 ISSUANCE OF LETTERS OF AWARD (LoAs) :

- 5.5.1 At the end of selection process, Letters of Award (LoAs) will be issued to the Successful Bidder discovered as above. The LoAs shall be awarded for the Tentative Capacity as quoted by the respective successful bidder, or the partial capacity, as the case may be.
- 5.5.2 In case SJVN is unable to find buyers/off-takers for the cost as discovered after the bidding process, SJVN reserves the right to annul the bid process without any financial implications to any of the parties concerned. SJVN reserves the right to cancel any or all of the bids in view of higher cost discovered or otherwise. In all cases, SJVN's decision regarding selection of Bidder based on cost or annulment of tender process shall be final and binding on all participating bidders.

-----**END OF SECTION**-----

SECTION VI: **CONDITIONS OF CONTRACT**

SECTION VI

CONDITIONS OF CONTRACT

6.1 Scope of Work

- (i) Under this RfS, the selected SPD shall be required to prepare Site Survey, Feasibility Report, Access, Design, Supply, Storage, Civil works (inclusive of construction material & water) Installation, Testing and Commissioning including Warranty, Comprehensive Operation & Maintenance of Solar PV Projects of various capacities of Rooftop Solar on Civil Secretariat Complex, Itanagar and adjacent areas as per building defined in **Annexure-D** under PM Surya Ghar: Muft Bijli Yojana. The O&M of the Project during tenure (5 years) include wear, tear, overhauling, machine breakdown, insurance, and replacement of defective modules, inverters/ Power Conditioning Unit (PCU), spares, consumables & other parts etc.
- (ii) The scope of work of the SPD, inter alia, includes obtaining No Objection Certificate (NOC) from the state Distribution Company (DISCOM) i.e. Department of Power, Arunachal Pradesh for grid connectivity/metering (as applicable).
- (iii) The work of Rooftop Solar PV Plant will be implemented in CAPEX mode.
- (iv) Obtaining Net-metering and grid connectivity of the Project would be the responsibility of the SPD in accordance with the prevailing guidelines of the respective State Regulators (SERC) or Central Electricity Authority (CEA) or the DISCOM, as applicable. The respective Client could facilitate connectivity and necessary approvals; however, the entire responsibility lies with the SPD/vendor itself.
- (v) The SPD shall take all necessary permits, approvals and licenses, insurance etc., and such other items and services required to complete the scope of work mentioned above. The appropriate insurances shall be taken by SPD at his own expenses for Solar PV Plant, shall have coverage during construction period and O&M of 5 years. The insurance shall be for the replacement value of the project.
- (vi) The SPD shall ensure safety line cable during the execution and operation & maintenance of the rooftop solar system (if required).
- (vii) The SPD shall provide handrail/guardrail for fall protection & pathway on the rooftop during the execution and operation & maintenance of the rooftop solar system (if required).
- (viii) Detailed technical parameters for Solar PV project to be met by SPDs are at **Annexure-B**. The Bidders shall strictly comply with the technical parameters detailed in the **Annexure-B**. The provisions as contained in the O.M. dated 10.03.2021 issued by MNRE on the subject “Approved Models and Manufacturers of Solar Photovoltaic Modules (Requirement of compulsory Registration) Order, 2019- Implementation – Reg.” and its subsequent amendments and clarifications issued shall be applicable. The Modules used in the project should have included in the List – I (Manufactures and Models of Solar PV Modules) and List-II (for Solar PV Cell) of the ALMM MNRE Order applicable under the above Order, valid as on the date of invoicing of such modules. The Net Metering RE Power Projects which are mandated to use ALMM enlisted modules, will stand exempted from the

requirement of using solar PV cells from ALMM List-II if such projects get commissioned prior to 1st June 2026. All the Net-Metering Projects RE Power Projects which get commissioned on or after 1st June 2026, shall have to mandatorily source their solar PV modules from ALMM List-1 and solar PV cells from ALMM List-II.

Rest of the components can be procured from any source. However, these items should meet the Technical specification and standards mentioned in RfS Annexure-B and Annexure-C.

- (ix) The Roof Top Solar Plant will be developed as per the Guidelines issued by the Government of India from time to time for development of grid connected rooftop Solar PV systems and MNRE guidelines for PM Surya Ghar: Muft Bijli Yojana for Government Buildings.
- (x) The bidders are advised to take cognizance of the O.M. dated 09.03.2021 issued by MNRE, on the subject of “Imposition of Basic Customs Duty (BCD) on Solar Cells & Modules/Panels”, while preparation of their response to this RfS. The above O.M. and its associated orders issued by the Ministry of Finance will be applicable on this tender and imposition of taxes/duties as laid out in the above OM, will not be considered under “Change in Law” under the RfS/ EPC Agreement.
- (xi) Under this RfS, it is proposed to promote only commercially established and operational technologies to minimize the technology risk and to achieve timely commissioning of the Projects. The Bidder may indicate regarding the selection of technology and its details at the time of submission of bids in the prescribed **Format 7.8**

6.2 TOTAL CAPACITY OFFERED & CONTRACT AMOUNT

6.2.1 The quantity of estimated cumulative Project capacity envisaged for Civil Secretariat Complex. Itanagar and adjacent areas are around **1000 kW**. The project wise buildings details under the Client Organizations have been annexed at **Annexure-D**. The quantity of Rooftop solar capacity may vary and shall be finalized after finalization/approval of prefeasibility report by Client organization/APEDA.

The contract price/project cost shall be derived on the basis of finalized capacity of rooftop solar project and rate quoted by bidder for per kW capacity of rooftop solar in price breakup of price schedule. Rate quoted by bidder for per kW capacity of rooftop solar project in price breakup of price schedule shall be firm and final during currency of contract. The bidder shall consider all expenses towards supply, installation, O&M for 05 year after Schedule commissioning of Rooftop Solar project and payable service charge (i.e. 3% of project cost +GST) to SJVN in his quoted price. The quoted price shall be the inclusive of GST. The Project cost shall be determined on the basis of finalized/approved capacity of Rooftop Solar Project.

The selected SPD shall submit the documentary evidence/project feasibility report distinctly furnishing site wise/location wise capacities within **10 Days** from issuance of LOA. The acceptance of final project capacity shall be on SJVN / Client organization discretion.

Note: The estimated cumulative project capacity may increase or decrease based on project

feasibility report submitted by SPD and thereafter approved/finalized by APEDA.

6.3 PROJECT LOCATIONS

- 6.3.1** The Project shall be installed on the buildings of Civil Secretariat Complex, Itanagar and adjacent areas belonging to Government of Arunachal Pradesh.
- 6.3.2** To facilitate the Bidders, an indicative list of possible rooftop location and capacities has been enclosed at **Annexure-D**.
- 6.3.3** If required, for setting up RTS Projects, the prospective bidders/developers may visit to the respective sites and assess the feasibility of Rooftop space, building structure etc. including installation capacity in consultation with respective rooftop owner/APEDA. **SJVN shall not bear any responsibility in this regard.**

6.4 PROJECT CONFIGURATION:

- 6.4.1** The term “Project” shall have the meaning as defined in Section II of the RfS. A single Project shall refer to one or multiple Rooftop Solar Plant (s) installed on a single/group of buildings connected to the grid through a single or multiple meters or standalone system at **one premises**.
- 6.4.2** The SPD shall be responsible for obtaining Connectivity/Net-metering for each Project.
- 6.4.3** Configuration of each project shall be decided mutually between Client organization/SJVN and Successful bidder.

6.5 MAXIMUM ELIGIBILITY FOR CONTRACTED CAPACITY ALLOCATION FOR A BIDDER:

Following conditions shall be applicable to the Bidders for submission of bids against this RfS:

- 6.5.1** A Bidder, including its Parent, Affiliate or Ultimate Parent or any Group Company shall submit a single bid for all projects offering a total quantum for the Capacity of **1000 kW**. Bid for split or part capacity is not permitted.
- 6.5.2** The total capacity to be allocated to a Bidder including its Parent, Affiliate or Ultimate Parent or any Group Company shall be **1000 kW**. However, the quantity of Rooftop solar capacity may vary and shall be finalized after finalization/approval of prefeasibility report by Client organization/APEDA.
- 6.5.3** The evaluation of bids shall be carried out as described in Section-V of the RfS. The methodology for Allocation of Project is elaborated in Section-V of the RfS.

6.6 Connectivity with the Grid:

- 6.6.1** The Project should be designed for interconnection with the grid in accordance with prevailing CERC/SERC/DISCOM regulations in this regard. For interconnection with the grid and metering, the SPD shall abide by applicable Grid Code, Grid Connectivity Standards, Regulations on Communication System for transmission of electricity and other regulations/procedures (as amended from time to time) issued by Appropriate Commissions and Central Electricity Authority (CEA), and any other regulations of the concerned DISCOM i.e. Department of Power, Arunachal Pradesh. Minimum voltage level for interconnection with

the grid shall be as determined by the DISCOM.

6.6.2 The responsibility of getting connectivity and necessary approvals for grid connection and net metering shall entirely be with the SPD and shall be at the risk and cost of the SPD. The transmission of power up to, and including at the point(s) of interconnection where metering is done for energy accounting, shall be the responsibility of the SPD at its own cost. The maintenance of transmission system up to and including the Interconnection Point shall be the responsibility of the SPD, to be undertaken entirely at its risk and cost.

6.6.3 Metering arrangement of each Project shall have to be adhered to in line with relevant clauses of the RfS. The entire cost of transmission (if applicable) and any other charges from the Project up to and including at the Interconnection Point (net -metering point) will be borne by the SPD.

6.7 Commissioning of Projects

When the SPD fulfils its obligation under the RfS, he shall be eligible to apply for completion/commissioning certificate. SJVN and /or Client organization shall issue the completion certificate to the SPD within one month after receiving any application therefore from the SPD, subject to verification of the documents as per the RfS. For the issuance of commissioning/completion certificate, the following documents will be deemed to form the completion documents.

- (a) At least Two week (14 days) prior intimation to SJVN and the Client Organization for witnessing the Project's inspection/performance.
- (b) Project Completion Report (PCR) containing the detailed checklist for inspection of Roof top SPV power plants as per SJVN's format. (**Annexure-H**)
- (c) Photographs of the Project.

6.7.1 Commissioning Schedule and Penalty for Delay in Commissioning

- a. The Scheduled Commissioning Date (SCD) for commissioning of full capacity of each Projects shall be the date as on **06 Months** from the effective date of LOA (for e.g. if Effective Date of the LOA is 01.03.2025, then SCD shall be 31.08.2025). The project completion schedule of each Project shall be submitted to SJVN within 30 days of issuance of LOA.
- b. If the contractor fails to execute the work within the stipulated time frame, the cause of which is attributed to them, then APEDA shall without prejudice to other remedies under the contract, deduct from the contractor as liquidated damage, a sum equivalent to 1% of the contract amount per week up-to a maximum of 10 % of the contract amount. In case, the contractor fails to execute the said work within the stipulated time even after imposing of penalty up to 10% of the contract amount, the APEDA will be at liberty to get the work executed from the open market without calling any tender and without any notice to the contractor, at the risk and cost of the contractor. Any additional cost incurred by APEDA shall be recovered from the contractor. If the cost of execution of the work as aforesaid exceeds the balance due to the contractor, and the contractor fails to make good the additional cost, APEDA will recover it from the contractors' pending claims against any other work already executed or being executed by the party in APEDA or in any lawful manner as may be applicable.

6.7.2 FORCE MAJEURE

- a. The term "Force Majeure" shall herein mean riots (other than among the Contractor's employees), Civil Commotion (to the extent not insurable), war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power, damage from aircraft, nuclear fission, acts of God, such as earthquake (above 7 magnitude on Richter Scale), lightning, unprecedented floods, fires not caused by Contractor's negligence and other such causes over which the Contractor has no control and are accepted as such by the Engineer-in-Charge (APEDA), whose decision shall be final and binding. In the event of either party being rendered unable by Force Majeure to perform any obligation required to be performed by them under this contract, the relative obligation of the party affected by such Force Majeure shall be treated as suspended for the period during which such Force Majeure cause lasts, provided the party alleging that it has been rendered unable as aforesaid, thereby shall notify within 10 days of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of such cause.
- b. On occurrence of Force Majeure, the liability of either party shall be dealt with, in accordance with the provisions of Insurance Policy for the project.
- c. Should there be a request for extension of time arising out of "Force Majeure" the same shall be considered in accordance with clause 6.7.2.

6.7.3 TIME FOR COMPLETION AND EXTENSIONS:

- a. Time for Completion allowed for execution of the Works is as specified in Cl. 6.7 Section VI Conditions of Contract.
- b. However, if the work is delayed on account of:
 - i) Delay in handing over of site to the Contractor; or
 - ii) Increase in the quantity of work beyond approved/finalized capacity to be done under the Contract or
 - iii) Suspension of work not attributable to contractor; or
 - iv) Rebuilding of work on occurrence of force majeure; or
 - v) "Force Majeure" as per clause 6.7.2 or
 - vi) Any other cause which, in the opinion of the Engineer-in-Charge (APEDA) is beyond the Contractor's control;
- c. Immediately upon the happening of any such event as aforesaid, the Contractor shall inform the Engineer-in-Charge (APEDA) accordingly, but the Contractor shall nevertheless use constantly his best endeavors to prevent and/or make good the delay and shall do all that may be required in this regard. The Contractor shall request, in writing, for extension of time, to which he may consider himself eligible under the Contract, within fourteen days of the date of happening of any such events as indicated above. Provided further that no monetary claims shall be admissible to the Contractor for such extension of Time for Completion.
- d. In any such case as may have arisen due to any of the events, as aforesaid, and which shall be brought out by the Contractor in writing, the Engineer-in-Charge may give a fair and reasonable extension of Time for Completion, after taking into consideration the nature of the work delayed and practicability of its execution during the period of extension. Provided in the event of non-receipt of a request for such extensions from the Contractor for reasons whatsoever, the Engineer-in-Charge may, at his sole discretion and with due regard to the event, grant fair and reasonable extension of time sue motto.

Such extensions, if admissible, shall be communicated to the Contractor by the Engineer-in-Charge in writing.

Provided that Engineer-in-Charge is not bound to make any determination unless the Contractor has;

- a) within 14 days after such event has first arisen notified the Engineer-in-Charge and
- b) within 28 days or such other reasonable time as may be agreed by the Engineer-in-Charge detailed particulars of any extension of Time for Completion to which the Contractor may consider himself entitled.

6.8 POWER SUPPLY BY THE SOLAR POWER DEVELOPER:

6.8.1 Criteria for Energy Supply

The Bidders will declare the annual CUF of the Project at the time of submission of response to RfS, and the SPDs will be allowed to revise the same once within first year after SCD. Thereafter, the CUF for the Project shall remain unchanged for the entire term of O&M. The declared annual CUF shall be in the range of **12-15%** for Project to be set up. It shall be the responsibility of the SPD, entirely at its cost and expense to install such number of Solar panels and associated equipment as may be necessary to achieve the required CUF. The SPD shall ensure that Solar PV module shall maintain generation so as to achieve annual energy supply corresponding to CUF within + 10% and -15% of the declared value till the end of 10 years from SCD, subject to the annual CUF remaining between **12-15%** and within +10% and -20% of the declared value of the annual CUF thereafter till the end of the EPC Agreement term. The lower limit will, however, be relaxable to the extent of Force Majeure events and non-availability of grid during solar generation hours, for evacuation which is beyond the control of the SPD. The annual CUF will be calculated every year from 1st April of the year to 31st March next year. Relaxation to the non-availability of grid beyond the control of SPD need to be certified by Client. Further, duly signed hindrance register shall be maintained during the time of execution and O&M.

6.9 Operation & Maintenance (O&M)

6.9.1 The SPD shall be responsible for all the required activities for successful O&M of the Rooftop Solar PV systems for 5 years starting from the Schedule commissioning date (SCD).

6.9.2 Following guidelines shall be followed in this regard. In addition, following O&M practices shall be strictly followed.

- a) O&M of the Project shall be compliant with grid requirements to achieve committed energy generation//CUF.
- b) Deputation of qualified and experienced engineer/ technicians till the O&M period at project site as & when required as per site conditions.
- c) Periodic cleaning of solar modules. The modules shall be cleaned with a periodic interval of 15 days or as and when required as per actual site conditions. It's the responsibility of the SPD to get the modules cleaned during O&M Period.
- d) A "hindrance register" shall be maintained to record any issues affecting Project O&M. The same shall be duly signed by both parties of the Contract Agreement.
- e) Periodic checks of the Modules, PCUs and BoS shall be carried out as a part of routine, preventive and breakdown maintenance.

- f) Replacement of defective Modules, Inverters/PCUs and other equipment, as and when required, will be carried out within 15 working days from the date of reporting of defect which can be extended based on the site accessibility, etc. as mutually agreed by the two parties.
- g) Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for all associated equipment and materials as per manufacturer's /supplier's recommendations.
- h) All the testing instruments required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by the SPD. The testing equipment must be calibrated once in a year from NABL accredited labs and the certificate of calibration must be kept for reference as required.
- i) If negligence/ mal-operation on part of the SPD's operator results in failure of equipment, such equipment should be repaired/ replaced by the SPD free of cost.
- j) Co-ordination with Owner/ DISCOM/ CEIG as per the requirement for Joint Meter Reading (JMR) Report:-The Site-in-charge present at site from the SPD's side shall take a joint meter reading in the presence of representative of rooftop owner/client organization on a monthly basis.
- k) Online Performance Monitoring, controlling, troubleshooting, maintaining of logs & records. A maintenance record register is to be maintained by the SPD with effect from Commissioning to record the daily generation, regular maintenance work carried out as well as any preventive and breakdown maintenance along with the date of maintenance, reasons for the breakdown, duration of the breakdown, steps taken to attend the breakdown, etc.
- l) For any issues related to operation & maintenance, a toll-free number shall be made available to the rooftop owner/client organization to resolve the same within 72 hours.
- m) If any jobs covered in O&M Scope as per RfS are not carried out by the SPD during the O&M period, the Client Organization/SJVN shall take appropriate action as per terms & conditions of this RfS. SJVN/Client organization reserves the right to make surprise checks/ inspection visits at its own or through authorized representative to verify the O&M activities being carried out by the SPD. Failure to adhere to above guidelines may result in penal action including debarment from participation in next tender.
- n) It is up to SPD and Client organization to mutually decide on the source and amount of water to be supplied for module cleaning during O&M period.

6.10 Performance Bank Guarantee (PBG)

6.10.1 Bidders selected by SJVN based on this RfS shall submit Performance Guarantee for a value **@5% of project cost as per finalized project capacity**, within 28 days from issuance of LOA in favour of Client organization i.e. APEDA. The PBG shall be submitted based on the final capacity of project. It may be noted that successful Bidders shall submit the Performance Guarantee according to the Format 7.3C with a validity period up to (& including) the date as on 60 days beyond the completion of contract. After successful verification of the Performance Bank Guarantee in the acceptable form by the client organization i.e. APEDA, the BG submitted towards EMD shall be returned by SJVN to the successful Bidder. If any extension of the Scheduled Commissioning Date (SCD) is granted to the project, the PBG shall also be extended in such a way that it remains valid for **60 days beyond actual completion of contract as per extension granted**. It may be noted that contract Agreement will be signed only upon successful verification of the PBG submitted by the SPD.

Electronic Bank Guarantee (e-BG) is also acceptable against PBG under this RfS.

- 6.10.2** The PBG is required to be submitted in the name of the Client organization before signing the contract Agreement. In case of contract Agreement being eventually signed with the SPV incorporated/utilized by the successful bidder, the PBG may be submitted in the name of the successful bidder at an earlier date, if the bidder chooses to do so, and the same shall be replaced by the PBG issued in the name of the SPV, prior to signing of contract Agreement.
- 6.10.3** The SPD shall furnish the PBG from any of the Scheduled Commercial Banks as listed on the website of Reserve Bank of India (RBI) and amended as on the date of issuance of bank guarantee. Bank Guarantee issued by foreign branch of a Scheduled Commercial Bank is to be endorsed by the Indian branch of the same bank or State Bank of India (SBI). In case of the Project being implemented through a SPV incorporated by the successful bidder, the PBG shall be furnished in the name of the SPV.
- 6.10.4** The format of the Bank Guarantees prescribed in the Format 7.3 A (EMD), / 7.3 C (PBG) shall be strictly adhered to and any deviation from the above Formats shall result in rejection of the EMD/PBG and consequently, the bid. In case of deviations in the formats of the Bank Guarantees, the corresponding contract Agreement shall not be signed.
- 6.10.5** Client Organization i.e. APEDA has agreed to accept the PBG in the form of an unconditional and irrevocable Bank Guarantee instead of the cash deposit with the clear position intimated to the bidder that the PBG shall be encashable for being appropriated by Client Organization i.e. APEDA in terms of the guarantee as in the case of appropriation of the cash deposit lying with SJVN.
- 6.10.6** The selected Bidder for the Project selected based on this RfS is required to sign EPC Agreement with Client Organization/SJVN within the timeline as stipulated in Clause 6.12 of the RfS. In case, Client Organization/SJVN offers to execute the contract Agreement with the Selected Bidder and if the Selected Bidder does not submit the requisite documents as per Clause 6.12 (contract Agreement of the RfS, or does not meet eligibility criteria upon submission of documents, or does not execute the contract Agreement within the stipulated time period, then the Bank Guarantee equivalent/security to the amount of the EMD shall be encashed by SJVN from the Bank Guarantee/security available with SJVN (i.e. EMD or PBG) as liquidated damages not amounting to penalty, the selected Project shall stand cancelled and the selected Bidder expressly waives off its rights and objections, if any, in that respect.
- 6.10.7** The Bank Guarantees have to be executed on non-judicial stamp paper of appropriate value as per Stamp Act relevant to the place of execution.
- 6.10.8** All expenditure towards execution of Bank Guarantees such as stamp duty etc. shall be borne by the Bidders/SPDs. Any Bank Guarantee or amendment if any, submitted as part of the bidding process / contract execution, shall be effective only when the BG issuance message is transmitted by the issuing bank through SFMS (in case of BGs issued from within India) to the following branch;

i	Bank Name	State Bank of India, CAG Branch
ii	Branch	CAG Branch
iii	Bank Address	5th Floor, Parswanath Capital Tower, Bhai Veer Singh Marg, Gol Market, New Delhi-110001,

iv	IFSC Code	IFSC code: SBIN0017313
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Note: The BG verification Bank address may vary and shall be intimated at the time issuance of LOA as per intimation from client organization i.e. APEDA.

6.10.9 After the bidding process is over, SJVN shall release the EMD of the unsuccessful Bidders within **30 days** from issuance of letter of award to successful bidders. The PBG of SPDs shall be returned to them, within **30 days** from the date of expiration of validity of PBG as per Terms of contract Agreement, after taking into account any liquidated damages due to delays in commencement of supply of power etc as per Clause 6.8.2 of the RfS.

6.10.10 PAYMENT ON ORDER INSTRUMENT (POI): Not Used.

6.10.11 Insurance Surety Bond: Not used.

6.11 SERVICE CHARGE

6.11.1 The Selected Bidder shall pay service charge to SJVN i.e. **3% of total project cost + GST** of the total accepted capacity.

6.11.2 The contract price/project cost shall be derived on the basis of finalized capacity of rooftop solar project and rate quoted by bidder for per kW capacity of rooftop solar in price breakup of price schedule. Rate quoted by bidder for per kW capacity of rooftop solar project in price breakup of price schedule shall be firm and final during currency of contract. The bidder shall consider all expenses towards supply, installation, O&M for 05 year after Schedule commissioning of Rooftop Solar project and payable service charge (i.e. 3% of project cost +GST) to SJVN in his quoted price. The quoted price shall be the inclusive of GST. The Project cost shall be determined on the basis of finalized/approved capacity of Rooftop Solar Project.

6.11.3 The service charge will be calculated on the total project cost which arrive after finalization of Project capacity as per accepted prefeasibility report and accordingly EPC agreement on final project capacity shall be signed between SPD and client organisation. This full charge will be paid to SJVN within **30 days** from issuance of LOA. The service charge paid to SJVN is non-refundable.

6.11.4 The EPC agreement between SPD and Client organization shall be signed only after receipt of full-service charge (100%) & PBG.

6.11.3 Service charge is to be paid by the SPD in the form of DD/ Pay Order/ NEFT/ RTGS. In case of delay in submission of service charge by SPD within 30 days from issuance of LOA or mutually agreed extended date, the awarded capacity shall stand cancelled and BG against EMD will be forfeited/encashed by SJVN.

Bidder shall consider the financial implication of service charge in his quoted price during submission of bid.

6.12 EPC AGREEMENT

6.12.1 The Client Organization shall enter into EPC Agreement with Successful bidder selected based on this RfS. A copy of standard EPC Agreement to be executed between the two parties is available RfS Document at Format 7.12. The EPC Agreement shall be signed within **30 days**

from the date of issue of Letter of Award (LoA), if not extended by SJVN/Client Organization. (for e.g. If the LoA is dated 01-09-2024, then the last date of signing of Contract Agreement shall be 30-09-2024). Subsequent extension in this timeline shall be finalized as mutually agreed by the Client Organization/SJVN and the SPD. Contract Agreement will be executed between Client Organization/SJVN and selected bidder, or its SPV, separately for each Project. The EPC Agreement shall be valid for a period of 5 years from actual/extended date of commissioning of the Project.

6.12.2 In case, the client organization fails/deny to convey its acceptance towards the final project capacity submitted by SPD (refer clause 6.2.1 above) which in turn is required to conclude the EPC Agreement; then in such case(s) the EMD of the successful bidder shall be refunded without any bearing interest or other charges. Further, in case(s), where the Client Organization deny/fails to sign the EPC Agreement even after conveying its acceptance towards final project capacity submitted by SPD; then only EMD & PBG submitted by the SPD shall be refunded without any interest or other charges.

6.12.3 Bidder has to make the complete and careful examinations of feasibility of grid connected rooftop capacity estimation as per the load study of buildings and respective State Electricity regulation of net metering. The selected SPD shall submit the documentary evidence/project feasibility report for finalization of project capacity for Contract Agreement within **10 days** from issuance of LOA. The acceptance of final project capacity shall be on SJVN / Client organization discretion.

6.12.4 Under this RfS, it is proposed to promote only the commercially established and operational technologies to minimize the technology risk and to achieve timely commissioning of the Projects. The bidder is required to meeting the criteria as mentioned in section 4 in line with provisions of the RfS.

7.0 Source of Funds:

The funds for the rooftop solar projects on the buildings at Civil Secretariat Complex, Itanagar and adjacent areas belonging to Government of Arunachal Pradesh under CAPEX mode shall be released by Arunachal Pradesh Energy Development Authority (APEDA). APEDA will make direct payment to the vendor/SPD as per the payment terms mentioned at Clause 8.0 section VI of Conditions of Contract.

8.0 Payment Terms

Payment shall be done on stage wise after completion of activity and further verification of Engineer-in-Charge (APEDA) at site as under:

Payment Schedule for Rooftop Solar Power Plant as per Scope of Work: (CAPEX-1 MW)			
A	Supply & Installation of Rooftop Solar Power Plant	X (Component/ Equipment Cost) + Y (Installation Cost)	Remarks
I	Supply of Solar Panel Module, Inverter & Other Equipments/Components (Excluding Installation Cost) after verification & assessment by Engineer-in-Charge (APEDA) (X).	40% of X	Payment to Vendor by APEDA.

II	Successful installation, Net Metering, Testing, Commissioning and Trial Run Site Cleaning and Other Balance Works of the Project after verification & assessment by Engineer-in-Charge (APEDA) (Y)	50% of X + 90% of Y	
B	Comprehensive O&M of Installed Rooftop Solar power plant for 5 years	Z	
I	After successful completion of O&M of 1 st year	2% of (X+Y) + 20% of Z	Payment to Vendor by APEDA.
II	After successful completion of O&M of 2 nd year	2% of (X+Y) +20% of Z	Payment to Vendor by APEDA.
iii	After successful completion of O&M of 3 rd year	2% of (X+Y) +20 % of Z	Payment to Vendor by APEDA.
iv	After successful completion of O&M of 4 th year	2% of (X+Y) +20 % of Z	Payment to Vendor by APEDA.
V	After successful completion of O&M of 5 th year	2% of (X+Y) +20 % of Z	Payment to Vendor by APEDA.
Total Contract Price (Part A+ Part B)		X+Y+Z	

Note: The bidder shall submit GST invoice to the client organization i.e. APEDA for respective payment as above.

-----END OF SECTION-----

SECTION VII:
FORMS & FORMATS FOR BID

FORMAT 7.1

COVERING LETTER

(The Covering Letter should be submitted on the Letter Head of the Bidding Company)

Ref.No.....

Date:

From..... *(Insert name and address of Bidding Company)*

.....
.....

Tel.#:

Fax#:

E-mail #

To,

SJVN Limited

Shakti Sadan, Corporate Head Quarter, Shanan, Shimla, H.P (171006)

Subject: Response to RfS No. dated for (Insert title of the RfS)

Dear Sir/ Madam,

We, the undersigned... [Insert name of the 'Bidder'] having read, examined and understood in detail the RfS including Qualification Requirements in particular, terms and conditions of the standard Contract Agreement for execution of contract as scope of work for the Term of the Contract Agreement to SJVN/client organization, hereby submit our response to RfS.

We confirm that in response to the aforesaid RfS, neither we nor any of our Ultimate Parent Company/ Parent Company/ Affiliate/ Group Company has submitted response to RfS other than this response to RfS, directly or indirectly, in response to the aforesaid RfS(as mentioned in Format 7.8 under Disclosure).

We also confirm that we including our Ultimate Parent Company/ Parent Company/ Affiliate/ Group Companies directly or indirectly have not submitted response to the RfS for cumulative capacity of **1000 kW in the state of Arunachal Pradesh**, including this response to RfS. We are submitting application for the development of following Project(s)/state(s): -

Sr. No.	Project Capacity as per tender (in kW)	Proposed CUF
1.	1000.00	

1. We give our unconditional acceptance to the RfS, dated/[Insert date in dd/mm/yyyy], and standard Contract Agreement, issued by SJVN. In token of our acceptance to the RfS, Contract Agreement documents along with the amendments and clarifications issued by SJVN, the same have been digitally signed by us and enclosed with the response to RfS. We shall ensure that the Contract Agreement is executed as per the provisions of the RfS and provisions of Contract Agreement and shall be binding on us. Further, we confirm that the

Project shall be commissioned within the deadline as per Clause 6.7 of the RfS.

2. Single Earnest Money Deposit (EMD):- (Please read Clause 3.10 carefully before filling)

We have enclosed EMD of INR.....(Insert Amount), in the form of Bank Guarantee/DD/NEFT/RTGS..... [Insert bank guarantee/Bank name/UTR] dated.....Insert date of bank guarantee/ Bank name/UTR] as per Format 7.3A from..... [Insert name of bank providing bank guarantee issuing agency] and valid up to..... in terms of Clause No. 3.10 of this RfS. The total quoted Project capacity offered by us is 1000 kW [Estimated capacity].

3. We hereby declare that in the event our Project(s) get selected and we are not able to submit Bank Guarantee of the requisite value(s) towards PBG, Services charge for the selected Projects, within due time as mentioned in Clause Nos. 6.10 & 6.11 of this RfS on issue of LoA by SJVN for the selected Projects and/ or we are not able to sign Contract Agreement with SJVN/client organisation within the timeline as stipulated in the RfS for the selected Projects, SJVN shall have the right to encash the EMD submitted by us and return the balance amount(if any) for the value of EMD pertaining to unsuccessful capacity.
4. We have submitted our response to RfS strictly as per Section VII (Forms and Formats for bid submission) of this RfS, without any deviations, conditions and without mentioning any assumptions or notes in the said Formats.
5. **Acceptance:** - We hereby unconditionally and irrevocably agree and accept that the decision made by SJVN in respect of any matter regarding or arising out of the RfS shall be binding on us. We hereby expressly waive and withdraw any deviations from the provisions of the RfS and all claims in respect of this process.

We also unconditionally and irrevocably agree and accept that the decision made by SJVN in respect of award of Projects according to our preference order as above and in line with the provisions of the RfS, shall be binding on us.

6. 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 response to RfS and execute the Contract Agreement, in the event of our selection as Successful Bidder.

In case of our selection as the Successful bidder under the scheme and the project being executed by a Special Purpose Vehicle (SPV) incorporated by us which shall be our subsidiary we shall infuse necessary equity to the requirements of RfS. Further we will submit a Board Resolution prior to signing of Contract Agreement with SJVN/client organization, committing total equity infusion in the SPV as per the provisions of RfS.

7. We are submitting our response to the RfS with formats duly signed as desired by you in the RfS online for your consideration.
8. It is confirmed that our response to the RfS is consistent with all the requirements of submission as stated in the RfS, including all clarifications and amendments and subsequent communications from SJVN.
9. We undertake that the onus of locating the buildings/ rooftops and completing the other documentation like finalizing the Detailed Project report and entering into agreements with the buildings/ rooftops owners lies with us and that SJVN does not bear any responsibility in this

regard.

10. The information submitted in our response to the RfS is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our response to the RfS.
11. We confirm that all the terms and conditions of our Bid are valid up to.....(Insert date in dd/mm/yyyy) for acceptance [i.e. a period of 12 months from the last date of submission of response to RfS].
12. Contact Person:

Details of the representative to be contacted by SJVN are furnished as under:

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

13. We have neither made any statement nor provided any information in this Bid, which to the best of our knowledge is materially inaccurate or misleading. Further, all the confirmations, declarations and representations made in our Bid are true and accurate. In case this is found to be incorrect after our selection as Successful Bidder, we agree that the same would be treated as a seller's event of default under Contract Agreement and consequent provisions of Contract Agreement shall apply.

Dated the _____ day of _____, 20....

Thanking you,
Yours faithfully,

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

FORMAT 7.2

DELETED

FORMAT 7.3A

FORMAT FOR BANK GUARANTEE TOWARDS EARNEST MONEY DEPOSIT(EMD)
(TO BE SUBMITTED SINGLE EMD FOR CUMMULATIVE QUOTED BID CAPACITY)

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

Reference:

Bank Guarantee No.:

Date:

In consideration of the [*Insert name of the Bidder*] (hereinafter referred to as 'Bidder') submitting the response to RfS inter alia for **“Request for selection (RfS) of Solar Rooftop Power Developers for Setting up of cumulative capacity of 1000 kW Grid connected Rooftop Solar Power Projects (Without battery storage) at Civil Secretariat Complex, Itanagar and adjacent areas in the state of Arunachal Pradesh under CAPEX mode through Competitive Bidding under PM Surya Ghar: Muft Bijli Yojana.”** for execution of contract as per scope of work, in response to the RfS No.....dated..... issued by SJVN Limited (hereinafter referred to as SJVN) and SJVN considering such response to the RfS of.....[*Insert the name of the Bidder*] as per the terms of the RfS, the [*Insert name & address of bank*] hereby agrees unequivocally, irrevocably and unconditionally to pay to SJVN at [*Insert Name of the Place from the address of SJVN*] forthwith without demur on demand in writing from SJVN or any Officer authorized by it in this behalf, any amount upto and not exceeding Rupees [*Insert amount not less than Rs. 11,00,000/- on behalf of M/s [Insert name of the Bidder]*].

This guarantee shall be valid and binding on this Bank up to and including [*insert date of validity in accordance with Clause No. 3.10 of this RfS*] and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to INR (Indian Rupees only). Our Guarantee shall remain in force until.....[*insert date of validity in accordance with Clause No. 3.10 of this RfS*]. SJVN shall be entitled to invoke this Guarantee till.....[*insert date of validity in accordance with Clause No. 3.10 of this RfS*].

The Guarantor Bank hereby agrees and acknowledges that the SJVN 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 SJVN, made in any format, raised at the above-mentioned address of the Guarantor Bank, in order to make the said payment to SJVN.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions

and notwithstanding any objection by [Insert name of the Bidder] and/ or any other person. The Guarantor Bank shall not require SJVN to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against SJVN in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at New Delhi 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 SJVN shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder or to enforce any security held by SJVN or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

This BANK GUARANTEE shall be effective only when the Bank Guarantee issuance message is transmitted by the issuing Bank through SFMS to State Bank of India, CAG Branch, 5th Floor, Parswanath Capital Tower, Bhai Veer Singh Marg, Gol Market, New Delhi-110001 IFSC code: SBIN0017313, Client Name: SJVN Ltd.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to INR (Indian Rupees Only) and it shall remain in force until[Date to be inserted on the basis of Clause No. 3.10 of this RfS].

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

Signature:
Name:
Power of Attorney No.:.....

For
.....[Insert Name and Address of the Bank]

Contact Details of the Bank:

E-mail ID of the Bank:

Banker's Stamp and Full Address.

Dated this day of, 20

FORMAT 7.3 B

DELETED

FORMAT 7.3 C

FORMAT FOR PERFORMANCE BANK GUARANTEE (PBG)

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

Reference:
Bank Guarantee No.:
Date:

In consideration of the[Insert name of the Bidder] (hereinafter referred to as 'selected Solar Power Developer' or 'SPD') submitting the response to RfS inter alia for [Insert title of the RfS] of the capacity of kW, at [Insert name of the place], for supply of power there from on long term basis, in response to the RfS dated issued by SJVN Limited (hereinafter referred to as SJVN) and SJVN considering such response to the RfS of[Insert name of the Bidder] (which expression shall unless repugnant to the context or meaning thereof include its executors, administrators, successors and assignees) and selecting the Project of the SOLAR Power Developer and issuing Letter of Award No.datedto.....(Insert Name of selected SOLAR Power Developer) as per terms of RfS and the same having been accepted by the selected SPD resulting in a Contract Agreement to be entered into, for setting up ofkW Rooftop Solar including O&M of 05 year after Schedule Commissioning-[from selected SOLAR Power Developer or a Project Company, M/s..... {a Special Purpose Vehicle (SPV) formed for this purpose}, if applicable].

As per the terms of the RfS, the..... [Insert name & address of Bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to Client organization/SJVN at [Insert Name of the Place from the address of the Client organization/SJVN] without demure forthwith on demand in writing from Client organization/SJVN or any Officer authorized by it in this behalf, any amount up to and not exceeding Indian Rupees.....[Total Value] only, on behalf of M/s [Insert name of the selected Solar Power Developer/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 contractor by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to INR (Indian RupeesOnly).

Our Guarantee shall remain in force until Client organization/SJVN shall be entitled to invoke this

Guarantee till

The Guarantor Bank hereby agrees and acknowledges that Client organization/SJVN 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 Client organization/SJVN, made in any format, raised at the above-mentioned address of the Guarantor Bank, in order to make the said payment to Client organization/SJVN.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by [Insert name of the selected SOLAR Power Developer/ Project Company as applicable] and/ or any other person. The Guarantor Bank shall not require Client organization/SJVN to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against Client organization/SJVN in respect of any payment made hereunder

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at New Delhi 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 Client organization/SJVN shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the selected SOLAR Power Developer/ Project Company, to make any claim against or any demand on the selected SOLAR Power Developer/ Project Company or to give any notice to the selected SOLAR Power Developer/ Project Company or to enforce any security held by Client organization/SJVN or to exercise, levy or enforce any distress, diligence or other process against the selected SOLAR Power Developer/ Project Company, diligence or other process against the selected Solar Power Developer / Project Company.

This BANK GUARANTEE shall be effective only when the Bank Guarantee issuance message is transmitted by the issuing Bank through SFMS to State Bank of India, CAG Branch, 5th Floor, Parswanath Capital Tower, Bhai Veer Singh Marg, Gol Market, New Delhi-110001 IFSC code: SBIN0017313, Client Name: SJVN Ltd.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to Client organisation and may be assigned, in whole or in part, (whether absolutely or by way of security) by Client organization/SJVN to any entity to whom Client organization/SJVN is entitled to assign its rights and obligations under the CONTRACT AGREEMENT.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to INR

..... (Indian Rupees Only) and it shall remain in force until
(Provide for two additional months after the period of Guarantee for invoking the process of encashment).
We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if Client organization/SJVN serves upon us a written claim or demand.

Signature:

Name:

Power of Attorney No.:

For

.....[Insert Name and Address of the Bank]

Contact Details of the Bank

E-mail ID of the Bank:

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

Witness:

1.

.....Signature

Name and Address

2.....Signature

Name and Address

Notes:

1. The Stamp Paper should be in the name of the Executing Bank and of appropriate value.
2. The Performance Bank Guarantee shall be executed by any of the Scheduled Commercial Banks as listed on the website of Reserve Bank of India (RBI) and amended as on the date of issuance of Bank Guarantee.
3. The above prescribed format for PBG for performance security may vary as per intimation from Client organization i.e. APEDA & same may be provided at the time of issuance of LOA.

FORMAT 7.3 D

DELETED

Format 7.4

FORMAT FOR BOARD RESOLUTIONS

The Board, after discussion, at the duly convened Meeting on [*Insert date*], with the consent of all the Directors present and in compliance of the provisions of the Companies Act,1956 or Companies Act 2013, as applicable, passed the following Resolution:

- 1) **RESOLVED THAT** Mr/ Ms....., be and is hereby authorized to do on our behalf, all such acts, deeds and things necessary in connection with or incidental to our response to RfS vide RfS No.for..... (insert title of the RfS), including signing and submission of all documents and providing information/ response to RfS to SJVN Limited (SJVN), representing us in all matters before SJVN, and generally dealing with SJVN in all matters in connection with our bid for the said Project. **(To be provided by the Bidding Company)**

Certified True Copy

.....

(Signature, Name and Stamp of Company Secretary)

Notes:

- 1) This certified true copy should be submitted on the letterhead of the Company, signed by the Company Secretary/ Director.
- 2) The contents of the format may be suitably re-worded indicating the identity of the entity passing the resolution.

Format 7.5

DELETED

FORMAT 7.6

FORMAT FOR FINANCIAL REQUIREMENT

(This should be submitted on the Letter Head of the Bidding Company)

Ref. No.....

Date:.....

From *(Insert name and address of Bidding Company)*

Tel.#:

Fax#:.....

E-mail address#.....

To

SJVN Limited

Shakti Sadan, Corporate Head Quarter,
Shanan, Shimla, H.P (171006)

Sub: Response to RfS No..... dated..... for.....

Dear Sir/ Madam,

We certify that the Bidding Company is meeting the financial eligibility requirements as per the provisions of the RfS. Accordingly, the Bidder, with the support of its Affiliates, (strike out if not applicable) is fulfilling the minimum Average Annual Turnover criteria, by demonstrating Turnover of Rs..... Cr. (..... in words) as on the last date of Financial Year 2024-25 or as on the date at least 7 days prior to the bid submission deadline (Strike out wherever not applicable).

This Turnover has been calculated in accordance with instructions provided in Clause 4.4 of the RfS.

Exhibit (i): Applicable in case of Bidding Company

For the above calculations, we have considered the Annual Turnover by Bidding Company and/ or its Affiliate(s) as per following details:

Name of Bidding Company	Name of Affiliate(s) whose Annual Turnover is to be considered	Relationship with Bidding Company*	Annual Turnover (In Rs. Crore)
Company Name			FY 2022-23: FY 2023-24: FY 2024-25:
Total			

**The column for "Relationship with Bidding Company" is to be filled only in case the financial capability of Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by a practicing company secretary/chartered accountant is required to be attached with the format.*

Further, we certify that the Bidding Company, with the support of its Affiliates, (strike out if not

applicable) is fulfilling the minimum Average Annual Turnover Criteria of INR_(in words) as on the end of Financial Year 2024-25.

(Signature & Name of the Authorized Signatory)

Date:

(Signature and Stamp of CA)

Membership No.

Regn. No. of the CA's Firm:

Note:

- a. Along with the above format, in a separate sheet on the letterhead of the Chartered Accountant's Firm, provide details of computation of Annual Turnover duly certified by the Chartered Accountant.
- b. Certified copies of Balance sheet, Profit & Loss Account, Schedules are to be enclosed in complete form along with all the Notes to Accounts.

Format 7.7

UNDERTAKING

(To be submitted on the letterhead of the Bidder)

We, hereby provide this undertaking to SJVN Limited, in respect to our response to RfS vide RfS No.....dated....., that M/s (insert name of the Bidder), or any of its Affiliates is not a wilful defaulter to any lender, and that there is no major litigation pending or threatened against M/s..... (insert name of the Bidder) or any of its Affiliates which are of a nature that could cast a doubt on the ability or the suitability of the Bidder to undertake the Project.

(Name and Signature of the Authorized Signatory)

FORMAT 7.8

FORMAT FOR DISCLOSURE

(To be submitted on the Letter Head of the Bidding Company)

DISCLOSURE

Ref. No.....

Date:

From..... *(Insert name and address of Bidding Company)*

.....

.....

Tel.#:

Fax#:

E-mail address#

To

SJVN Limited
Shakti Sadan, Corporate Head Quarter,
Shanan, Shimla, H.P (171006)

Sub: Response to RfS No.....dated..... for

Dear Sir/ Madam,

We hereby declare and confirm that only we are participating in the RfS Selection process for the RfS No.....dated.....and that our Parent, Affiliate or Ultimate Parent or any Group Company with which we have direct or indirect relationship are not separately participating in this selection process.

We further declare and confirm that in terms of the definitions of the RfS, M/s.....(enter name of the Promoter/Promoters) is/are our Promoter(s), and has/have a direct/indirect Control in the bidding company as per the Companies Act 2013. No other entity has a direct/indirect control in the bidding company except the entity(ies) mentioned above.

We further declare that the above statement is true & correct. We undertake that if at any stage it is found to be incorrect, in addition to actions applicable under the RfS including but not limited to cancellation of our response to this RfS and LoA/LOE as applicable, we, i.e. M/s.....(enter name of the bidding company), including our Parent, Ultimate Parent, and our Affiliates shall be suspended/debarred from participating in any of the upcoming tenders issued by SJVN for a period of 2 years from the date of default as notified by SJVN.

We also understand that the above is in addition to the penal consequences that may follow from the relevant laws for the time being in force.

We further declare that we have read the provisions of Clause 4.1.7 of the RfS, and are complying with the requirements as per the referred OM dated 23.02.2023 except Sl.17 of the OM, including subsequent amendments and clarifications thereto. Accordingly, we are also enclosing necessary certificates (Annexure to this format) in support of the above compliance under the RfS. We understand that in case of us being selected under this RfS, any of the above certificates is found false, SJVN shall take appropriate action as deemed necessary.

We further declare that we are fully aware of the of the Approved Models and Manufactures of Solar PV modules (Requirement of Compulsory Registration) Order,2019' issued by MNRE on 02.01.2019 and various clarifications/amendments thereto issued time to time along with the procedural guidelines dated 28.03.2019 including clarifications/amendments thereto , issued under the subject order and the Lists(s) thereunder.

We further understand that the List-I (Solar PV Modules) of ALMM Order, Annexure-I of the OM, issued by MNRE on 10th March, 2021 will be updated by MNRE from time to time. We also understand that the Modules to be procured for this project, shall be from the List-I (for Solar PV modules) and List-II (for Solar PV Cell) of the ALMM MNRE Order applicable on the date of invoicing of such modules.

We also further understand and accept that we shall be liable for penal action, including but not limited to blacklisting and invocation of Performance Bank Guarantee, if we are found not complying with the provisions of ALMM Order issued by MNRE, GoI, including those mentioned above.

Note: The Net Metering RE Power Projects which are mandated to use ALMM enlisted modules, will stand exempted from the requirement of using solar PV cells from ALMM List-II if such projects get commissioned prior to 1st June 2026. All the Net-Metering Projects RE Power Projects which get commissioned on or after 1st June 2026, shall have to mandatorily source their solar PV modules from ALMM List-I and solar PV cells from ALMM List-II.

Thanking you,

We remain, Yours faithfully,

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

FORMAT 7.8 A

DELETED

Format 7.9

PRE-CONTRACT INTEGRITY PACT

Between

SJVN Limited, a company incorporated under the relevant law in the matter and having its registered office at SHAKTI SADAN, SHANAN, P.O. SANJAULI, SHIMLA, HP-171006, hereinafter referred to as "The Employer" which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns of the First Part.

And

M/s _____, a company/ firm/ individual (status of the company) constituted in accordance with the relevant law in the matter and having its registered office _____ at _____

_____ represented by Shri _____, hereinafter referred to as "The Bidder/Contractor" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns of the Second Part.

WHEREAS the Employer proposes to procure under laid down organizational procedures, contract/s for "Request for selection (RfS) of Solar Rooftop Power Developers (among SJVN Vendors Emplaned for Arunachal Pradesh only) for Setting up of cumulative capacity of 1000 kW Grid connected Rooftop Solar Power Projects (Without battery storage)) at Civil Secretariat Complex, Itanagar and adjacent areas under CAPEX mode through Competitive Bidding under PM Surya Ghar: Muft Bijli Yojana." and the Bidder/Contractor is willing to offer against NIT/RfS No. SJVN/RTS/2025-26/Rooftop Solar-14.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

Enabling the Employer to obtain the desired said (work/ goods/ services) at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling the Bidder(s)/Contractor(s) to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the Employer will commit to prevent corruption, in any form, by its officials by following transparent procedures.

1.0 Commitments of the Employer

1.1 The Employer undertakes that no official of the Employer, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the Bidder/Contractor, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contact.

1.2 The Employer will, during the pre-contract stage, treat all the Bidders/Contractors alike, and

will provide to all the Bidders/Contractors the same information and will not provide any such information to any particular Bidder/Contractor which could afford an advantage to that particular Bidder/Contractor in comparison to other Bidders/Contractors.

1.3 All the officials of the Employer will report to the appropriate Authority any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

1.4 In case any such preceding misconduct on the part of such official(s) is reported by the Bidder to the Employer with full and verifiable facts and the same is prima facie found to be correct by the Employer, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the Employer or Independent External Monitor and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the Employer the proceedings under the contract would not be stalled.

2.0 Commitments of the Bidder(s)/Contractor(s)

The Bidder(s)/Contractor(s) commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following :-

2.1 The Bidder(s)/Contractor(s) will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Employer, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

2.2 The Bidder/Contractor further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Employer or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with Employer for showing or forbearing to show favour or disfavour to any person in relation to the contract or any other contract with Employer.

2.3 The Bidder(s)/Contractor(s) shall disclose the name and address of agents and representatives and Indian Bidder(s)/Contractor(s) shall disclose their foreign principals or associates.

2.4 The Bidder(s)/Contractor(s) shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract

2.5 The Bidder, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the Employer or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.

2.6 The Bidder/Contractor will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.

- 2.7 The Bidder/Contractor will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 2.8 The Bidder/Contractor shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the Employer as part of the business relationship, regarding plans, technical proposals and business details, including information contained in electronic data carrier. The Bidder/Contractor also undertakes to exercise due and adequate care lest any such information is divulged.
- 2.9 The Bidder(s)/Contractor(s) commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 2.10 The Bidder(s)/Contractor(s) shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 2.11 If the Bidder/Contractor or any employee of the Bidder/Contractor or any person acting on behalf of the Bidder/Contractor, either directly or indirectly, is a relative of any of the officers of the Employer, or alternatively, if any relative of an officer of the Employer has financial interest/stake in the Bidder(s)/Contractor(s) firm(excluding Public Ltd. Company listed on Stock Exchange), the same shall be disclosed by the Bidder/Contractor at the time of filling of tender.

The term 'relative' for this purpose would be as defined in Section 2(77) of the Companies Act 2013.

- 2.12 The Bidder(s)/Contractor(s) shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Employer.
- 2.13. The Bidder/supplier shall follow all rules and regulations of India including statutory requirements like minimum wages, ESIC and EPF.

3.0 Previous Transgression

- 3.1 Bidders to disclose any transgressions with any other company that may impinge on the anti-corruption principle. The date of such transgression, for the purpose of disclosure by the bidders in this regard, would be the date on which cognizance of the said transgression was taken by the competent authority. The period for which such transgression(s) is/are to be reported by the bidders shall be the last **three years** to be reckoned from date of bid submission. The transgression(s), for which cognizance was taken before the said period of three years, but are pending conclusion, shall also be reported by the bidders.
- 3.2 The Bidder agrees that if it makes incorrect statement on this subject, Bidder can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

4.0 Earnest Money (Security Deposit)

The provision regarding Earnest Money/Security Deposit as detailed in the Notice Inviting Tender (NIT) and Instruction to Bidders (ITB) section of the Bid Document is to be referred.

5.0 Sanctions for Violations

5.1 Any breach of the aforesaid provisions by the Bidder/Contractor or any one employed by it or acting on its behalf shall entitle the Employer to take action as per the procedure mentioned in the “**Guidelines on Banning of Business Dealings**” attached as **Annex- A** and initiate all or any one of the following actions, wherever required:-

- (i) To immediately disqualify the bidder and call off the pre contract proceedings without assigning any reason or giving any compensation to the Bidder/Contractor. However, the proceedings with the other Bidder(s)/Contractor(s) would continue.
- (ii) The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is Signed) shall stand forfeited either fully or partially, as decided by the Employer and the Employer shall not be required to assign any reason thereof.
- (iii) To immediately cancel the contract, if already signed, without giving any compensation to the Contractor. The Bidder/Contractor shall be liable to pay compensation for any loss or damage to the Employer resulting from such cancellation/rescission and the Employer shall be entitled to deduct the amount so payable from the money(s) due to the Bidder/Contractor.
- (iv) To encash the Bank guarantee, in order to recover the dues if any by the Employer, along with interest as per the provision of contract.
- (v) To debar the Bidder/Contractor from participating in future bidding processes of Employer, as per provisions of “Guidelines on Banning of Business Dealings” (**Annex-A**), which may be further extended at the discretion of the Employer.
- (vi) To recover all sums paid in violation of this Pact by Bidder(s)/Contractor(s) to any middleman or agent or broker with a view to securing the contract.
- (vii) In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the Employer with the Bidder/ Contractor, the same shall not be opened/operated.
- (viii) Forfeiture of Performance Security in case of a decision by the Employer to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.

5.2 The Employer will be entitled to take all or any of the actions mentioned at para 5.1 (i) to (viii) of this Pact also on the Commission by the Bidder/Contractor or any one employed by it or acting on its behalf (whether with or without the knowledge of the Bidder/Contractor), of an offence as defined in GFR, Chapter IX of the Indian Penal Code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption in Employer’s country.

5.3 The decision of the Employer to the effect that a breach of the provisions of this Pact has been committed by the Bidder / Contractor shall be final and conclusive on the Bidder / Contractor. However, the Bidder/Contractor can approach the Independent External Monitor(s) appointed for the purposes of this Pact.

6.0 Independent External Monitor(s)

6.1 The Employer has appointed Independent External Monitor(s) (hereinafter referred to as Monitors) for this Pact.

6.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.

- 6.3 The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 6.4 Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement for which a complaint or issue is raised before them, including minutes of meetings. The right to access records should only be limited to the extent absolutely necessary to investigate the issue related to the subject tender/contract.
- 6.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform CMD/CEO/MD of Employer and request Employer to discontinue or take corrective action, or to take other relevant action. The Monitor can in this regard submit non-binding recommendations. Beyond this the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- 6.6 The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction, to all Project documentation of the Employer including that provided by the Bidder/Contractor. The Bidder/Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractor(s). The Monitor shall be under contractual obligation to treat the information and documents of the Bidder/Contractor/Subcontractor(s) with confidentiality.
- 6.7 The Employer will provide to the Monitor sufficient information about all meetings among the parties related to the project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings as and when required.
- 6.8 The Monitor will submit a written report to the CMD/CEO/MD of Employer within 30 days from the date of reference or intimation to him by the Employer/Bidder and should the occasion arise, submit proposals for correcting problematic situations.
- 6.9 The word 'Monitor' would include both singular and plural.
- 6.10 In the event of a dispute between the management and the contractor related to those contracts where integrity pact is applicable, in case both the parties agree, they may try to settle the dispute through mediation before the panel of IEMs in a time bound manner. In case the dispute remains unresolved even after mediation by the panel of IEMs, SJVN may take further action as per the terms and conditions of Contract. Expenses on dispute resolution shall be equally shared by both the parties.

7.0 Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, the Employer or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder/Contractor and the Bidder/Contractor shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

8.0 Law and Place of Jurisdiction

This Pact is subject to _____ (Employer's Country) Law. The place of performance and jurisdiction is the Registered Office of the Employer. The arbitration clause provided in the tender document/contract shall not be applicable for any issue/dispute arising under Integrity Pact.

9.0 Other Legal Actions

9.1 The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

9.2 Changes and supplements as well as termination notice need to be made in writing.

9.3 If the Contractor is a partnership or a consortium or a joint venture, this pact must be signed by all partners of the consortium/joint venture.

10.0 Validity

10.1 Integrity Pact, in respect of particular contract shall be operative from the date Integrity Pact is signed by both the parties.

10.2 Should one or several provisions of this Pact turn out to be invalid, the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intention.

11.0 The Parties hereby sign this Integrity Pact at _____ on _____.

Employer Bhiman
 Name of the Officer Bhupinder Kr. Dhiman.
 Designation DGM (RTS)
 Place Shimla.
 Date 01/07/25.
 Witness 1. Shivam
 (Name and address) Shivam Jhas
FE (RTS)
 2. Amandeep
 (Name and address) Amandeep Dhiman; FE (RTS)

Bidder
 (Authorised Person) (Name of the Person) Designation
 Place-----
 Date-----
 Witness 1. _____
 (Name and address)
 2. _____
 (Name and address)

Guidelines on Banning of Business Dealings

1.0 Introduction

- 1.1 Employer deals with Agencies viz. parties/ contractors/ suppliers/ bidders, who are expected to adopt ethics of highest standards and a very high degree of integrity, commitments and sincerity towards the work undertaken. It is not in the interest of Employer to deal with Agencies who commit deception, fraud or other misconduct in the tendering process.
- 1.2 Since banning of business dealings involves civil consequences for an Agency concerned, it is incumbent that adequate opportunity of hearing is provided and the explanation, if tendered, is considered before passing any order in this regard keeping in view the facts and circumstances of the case.

2.0 Scope

- 2.1 The Information for Bidders/ Instruction to Bidders and even the General Conditions of Contract (GCC) of Employer generally provide that Employer shall have the rights to remove from list of approved suppliers / contractors or to ban business dealings if any Agency has been found to have committed misconduct or fraud or anything unethical not expected from a reputed contractor.
- 2.2 The procedure of (i) Removal of Agency from the List of approved suppliers / contractors; (ii) Suspension and (iii) Banning of Business Dealing with Agencies, has been laid down in these guidelines.
- 2.3 These guidelines shall apply to all the Projects/ Power Stations/ Regional Offices/ Liaison Offices of SJVN including its subsidiaries and JVs.
- 2.4 It is clarified that these guidelines do not deal with the poor performance of the contractors/ Agencies.
- 2.5 The banning shall be with prospective effect, i.e. future business dealings.

3.0 Definitions

In these Guidelines, unless the context otherwise requires:

- i) **“Party / Contractor / Supplier / Bidders”** shall mean and include a public limited company or a private limited company, a joint Venture, Consortium, HUF, a firm whether registered or not, an individual, cooperative society or an association or a group of persons engaged in any commerce, trade, industry, etc. “Party / Contractor/ Supplier / Bidder’ in the context of these guidelines is indicated as ‘Agency’.
- ii) **“Unit”** shall mean the Project/ Power Station/ Regional Office/ Liaison Office.
- iii) **“Competent Authority”** and **‘Appellate Authority’** shall mean the following:

The concerned Director shall be the ‘Competent Authority’ for the purpose of these guidelines.

CMD shall be the 'Appellate Authority' in respect of such cases.

iv) "Investigating Committee" shall mean any Officer/Committee appointed by Competent Authority to conduct investigation.

v) "List of approved Agencies viz Parties / Contractors / Suppliers/Bidders" shall mean and include list of Parties/ Contractors / Suppliers / Bidders etc if registered with Employer.

4.0 Initiation of Banning / Suspension

Action for banning /suspension business dealings with any Agency shall be initiated by the department responsible for invitation of bids after noticing the irregularities or misconduct on the part of Agency concerned. Besides the concerned department, Vigilance Department of each Unit/ Corporate Vigilance may also be competent to initiate such action.

5.0 Suspension of Business Dealings.

5.1 If the conduct of any Agency dealing with Employer is under investigation, the Competent Authority may consider whether the allegations (under investigation) are of a serious nature and whether pending investigation, it would be advisable to continue business dealing with the Agency. If the Competent Authority, after consideration of the matter including the recommendation of the Investigating Committee, if any, decides that it would not be in the interest to continue business dealings pending investigation, it may suspend business dealings with the Agency. The order of suspension would operate for a period not more than six months and may be communicated to the Agency as also to the Investigating Committee. The Investigating Committee may ensure that their investigation is completed and whole process of final order is over within such period. However, if investigations are not completed in six months time, the Competent Authority may extend the period of suspension by another three months, during which period the investigations must be completed.

5.2 The order of suspension shall be communicated to all Departmental Heads of SJVN (including its subsidiaries and JVs) and Heads of the Units. During the period of suspension, no business dealing may be held with the Agency.

5.3 As far as possible, the existing contract(s) with the Agency may continue unless the Competent Authority, having regard to the circumstances of the case, decides otherwise.

5.4 If the Agency concerned asks for detailed reasons of suspension, the Agency may be informed that its conduct is under investigation. It is not necessary to enter into correspondence or argument with the Agency at this stage.

5.5 It is not necessary to give any show-cause notice or personal hearing to the Agency before issuing the order of suspension.

6.0 Ground on which Banning of Business Dealings can be initiated:

6.1 If the security consideration, including questions of loyalty of the Agency to Employer so warrants;

- 6.2 If the director /owner of the Agency, proprietor or partner of the firm, is convicted by a Court of Law for offences involving moral turpitude in relation to its business dealings with the Government or any other public sector enterprises, during the last three years.
- 6.3 If business dealings with the Agency have been banned by the Department of Power, Government of India and the relevant government department of Employer's Country.
- 6.4 If the Agency has resorted to corrupt, fraudulent practices including misrepresentation of facts;
- 6.5 If the Agency uses intimidation / threatening or brings undue outside pressure on Employer or its official for acceptance / performances of the job under the contract;
- 6.6 If the Agency misuses the premises or facilities of Employer, forcefully occupies or damages Employer's properties including land, water resources, forests / trees or tampers with documents/records etc. (Note: The examples given above are only illustrative and not exhaustive. The Competent Authority may decide to ban business dealing for any good and sufficient reason).

7.0 Banning of Business Dealings

- 7.1 A decision to ban business dealings with any Agency shall apply throughout SJVN including its subsidiaries/JVs.
- 7.2 There will be an Investigating Committee consisting of officers not below the rank of AGM/DGM from Indenting Division, Finance, Law and Contracts.
Member from department responsible for invitation of bids shall be the convener of the committee. The functions of the committee shall, inter-alia include:
- i) To study the report of the unit/division responsible for invitation of bids and decide if a prima-facie case for banning exists, if not, send back the case to the Competent Authority.
 - ii) To recommend for issue of show-cause notice to the Agency by the concerned unit/division as per clause 9.1.
 - iii) To examine the reply to show-cause notice and call the Agency for personal hearing, if required.
 - iv) To submit final recommendations to the Competent Authority for banning or otherwise.

8.0 Removal from List of Approved Agencies - Suppliers/ Contractors, etc.

- 8.1 If the Competent Authority decides that the charge against the Agency is of a minor nature, it may issue a show-cause notice as to why the name of the Agency should not be removed from the list of approved Agencies - Suppliers / Contractors, etc.

8.2 The effect of such an order would be that the Agency would not be qualified for competing in Open Tender Enquiries or Limited Tender Enquiries till the period mentioned in the order.

8.3 Past performance of the Agency may be taken into account while processing approval of the Competent Authority for award of the contract.

9.0 Show-cause Notice

9.1 In case where the Competent Authority decides that action against an Agency is called for, a show-cause notice has to be issued to the Agency, Statement containing the imputation of misconduct or misbehavior may be appended to the show-cause notice and the Agency should be asked to submit within 15 days a written statement in its defense.

9.2 If the Agency requests for inspection of any relevant document in possession of Employer, necessary facility for inspection of documents may be provided.

9.3 The Competent Authority may consider and pass an appropriate speaking order:

- a) For exonerating the Agency if the charges are not established;
- b) For removing the Agency from the list of approved Suppliers / Contactors, etc.
- c) For banning the business dealing with the Agency.

9.4 If it decides to ban business dealings, the period for which the ban would be operative may be mentioned.

10.0 Appeal against the Decision of the Competent Authority

10.1 The Agency may file an appeal against the order of the Competent Authority banning business dealing etc. The appeal shall be filed to Appellate Authority. Such an appeal shall be preferred within one month from the date of receipt of the order banning business dealing, etc.

10.2 Appellate Authority would consider the appeal and pass appropriate order which shall be communicated to the Agency as well as the Competent Authority.

11.0 Circulation of the names of Agencies with whom Business Dealings have been banned

- i) The concerned unit shall forward the name and details of the Agency(ies) banned to IT&SE Division of SJVN's Corporate Office for displaying the same on SJVN website.
- ii) Corporate Contracts Department shall also forward the name and details of the Agency(ies) banned to the Ministry of Power, GoI besides forwarding the name and details to the contracts/procurement group of all CPSUs of power sector.

BS

**FORM OF DECLARATION OF ELIGIBILITY
UNDERTAKING**

I / We, M/s(Name of Bidder) hereby certify that I / we have not been banned /de-listed/ black listed / debarred from business by any PSU / Govt. Department during last 03 (three) years on the grounds mentioned in para 6 of Guidelines on banning of Business dealing (Annex-A to Pre-Contract Integrity Pact) of Tender Document.

(Seal & signature of the Bidder)

FORMAT 7.10

FORMAT FOR SUBMISSION OF FINANCIAL BID

(The Covering Letter should be submitted on the Letter Head of the Bidding Company)

Ref. No.

Date:

From..... *(Insert name and address of Bidding Company/ Lead Member of Consortium)*

.....
.....

Tel.#:

Fax#:

E-mail address#

To

SJVN Limited
Shakti Sadan, Corporate Head Quarter,
Shanan, Shimla, H.P (171006)

Sub: Response to RfS No..... dated.....for.....

Dear Sir/ Madam,

I/ We,..... *(Insert Name of the Bidder)* enclose herewith the Financial Proposal for selection of my/ our firm for.....) Arunachal Pradesh State for a quoted capacity of 1000 kW in India as Bidder for the above.

I/We agree that this offer shall remain valid for a period of 12 months from the due date of submission of the response to RfS and such further period as may be mutually agreed upon.

Dated the_day of, 20....

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

Notes:

- 1) *If the bidder submits the financial bid in the Electronic Form at ETS portal not in line with the instructions mentioned therein, then the bid shall be considered as non- responsive.*
- 2) *In the event of any discrepancy between the values entered in figures and in words, the values entered in words shall be considered.*
- 3) *Cost should be in Indian Rupee only.*

FORMAT 7.11

Request for Selection (RfS) of Solar Rooftop Power Developers (among SJVN Vendors Empaneled for Arunachal Pradesh only) for Setting up of cumulative capacity of 1000 kW Grid connected Rooftop Solar Power Projects (Without battery storage)) at Civil Secretariat Complex, Itanagar and adjacent areas under CAPEX mode through Competitive Bidding under PM Surya Ghar: Muft Bijli Yojana.

Format no.7.11 Table – A: Detail of Grid Connected Rooftop/Ground mounted Solar Photo Voltic (SPV) Power Plants/Floating Solar Photo Voltic (SPV) Power Plants in India claimed towards cumulative installation Capacity of 500kWp or higher in the last 07 (Seven) Years prior to the last day of month previous to the one in which the RFS is invited.

Sl. No.	Client Name & Address	Details of Letter of Award (LOA)	Awarded Capacity as per Letter of Award (in kWp)	Commissioned Installed Capacity (in kWp)	Actual Date of Commissioning	Remarks

Format no.7.11 Table – B: Out of above cumulative capacity, detail of Grid Connected Rooftop/Ground mounted Solar Photo Voltic (SPV) Power Plants/Floating Solar Photo Voltic (SPV) Power Plants in India claimed towards successful operation for atleast 06 (six) months ending prior to last day of month previous to the one in which the RfS is invited.(For reference plant)

Sl. No.	Client Name & Address	Details of Letter of Award (LOA)	Awarded Capacity as per Letter of Award (in kWp)	Commissioned Installed Capacity (in kWp)	Actual Date of Commissioning	Plants in successful operation for atleast 06 months ending prior to last day of month previous to the one in which the RFS is invited (YES/NO)	Remarks

Note:

1. The above Attachment shall be filled up by the bidder for himself, being proposed by the bidder in his bid.
2. Continuation sheets of like size & format may be used if required and annexed to this Attachment.
3. Commissioned installed capacity as per completion certificate of project (s) will be considered qualifying towards above technical qualifying requirement.
- 4.

Place:

(Signature).....
(Printed Name)
(Designation).....
(Company Seal).....

Format no.7.11 Table – C: Detail of Roof Top Solar Plant/ Ground mounted Solar Photo Voltic (SPV) Power Plants/Floating Solar Photo Voltic (SPV) Power Plants in any of **Himachal Pradesh, Jammu & Kashmir, Ladakh, Uttarakhand, Lakshadweep, Sikkim, Andman & Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu, Arunachal Pradesh, Nagaland, Tripura, Mizoram, Manipur, Assam and Meghalaya** state claimed towards cumulative installation Capacity of 100kWp or higher in the last 07 (Seven) Years prior to the last day of month previous to the one in which the RfS is invited.

Sl.No.	Client Name & Address	Project Execution State	Details of Letter of Award (LOA)	Awarded Capacity as per Letter of Award (in kWp)	Commissioned Installed Capacity (in kWp)	Actual Date of Commissioning	Remarks

- Note:**
1. The above Attachment shall be filled up by the bidder for himself, being proposed by the bidder in his bid.
 2. Continuation sheets of like size & format may be used if required and annexed to this Attachment.
 3. Commissioned installed capacity as per completion certificate of project (s) will be considered qualifying towards above requirement.

Place :

(Signature).....
 (Printed Name)
 (Designation)
 (Company Seal).....

FORMAT 7.12

**ENGINEERING, PROCUREMENT & CONSTRUCTION (EPC) AGREEMENT BETWEEN
SOLAR POWER DEVELOPER (SPD)**

AND

**GOVERNMENT ORGANIZATION, PSU AND OFFICES FOR
DESIGN, MANUFACTURE, SUPPLY, ERECTION, TESTING AND COMMISSIONING
INCLUDING WARRANTY, OPERATION & MAINTENANCE OF GRID CONNECTED ROOF-
TOP SOLAR PV POWER PLANTS IN CAPEX MODEL**

ENGINEERING, PROCUREMENT & CONSTRUCTION AGREEMENT

This Engineering, Procurement & Construction Agreement (hereinafter referred to as the "**Agreement**") is entered into on this _____ (date), at _____ (Location) **BY** and **BETWEEN** _____ a company incorporated under the Companies Act, 1956/2013 and having its registered office _____ (hereinafter referred to as the "**SOLAR POWER DEVELOPER/SPD**" which expression shall where the context so admits be deemed to include its executors, administrators, representatives and permitted assigns) of the ONE PART;

AND _____ legal owner of the premises (address of the customer who he/she intends to get installed the Grid-connected Roof-Top Solar PV system, say **Government Organization, PSU and Offices**), (hereinafter referred to as the "**CUSTOMER/BENEFICIARY**" which expression shall where the context so admits be deemed to include its heirs, executors, administrators, representatives and permitted assigns) of the OTHER PART;

The expressions "**SPD**" and "**CUSTOMER/BENEFICIARY**", wherever the context so permits or requires shall collectively be referred to as "**Parties**" and individually as the "**Party**".

WHEREAS:

- A. SPD shall mean the entity setting up the Solar Power PV Project.
- B. CUSTOMER/BENEFICIARY is a <Government Organization, PSU/ Office>
- C. SPD has been notified as successful bidder by (<**IMPLEMENTING AGENCY/EXPERT PSU**>) vide its Letter of Allocation dated _____ for design, manufacture, supply, erection, testing and commissioning including warranty, operation and maintenance for a period of _____ years of roof-top Solar PV System and has been awarded _____ kW capacity in _____ (location address of site).
- D. SPD and CUSTOMER/BENEFICIARY enter into this Agreement for engineering, procurement & construction of a roof-top Solar PV Power System.

NOW, this Agreement witnessed as follows:

1. PURPOSE & SCOPE OF THE AGREEMENT

- 1.1 The purpose of this Agreement includes design, manufacture, supply, erection, testing and commissioning including warranty, operation & maintenance for a period of 5 years of _____ kW roof-top Solar PV Power System (hereinafter referred to as the "**Solar Power System**") for the CUSTOMER/BENEFICIARY, (hereinafter cumulatively referred to as the "**Works**"), for which the

CUSTOMER/BENEFICIARY has handed over the premises, which is with a clear title and is encumbrance free, to the SPD, along with required approvals from concerned authorities, and the CUSTOMER/BENEFICIARY's entering into this Agreement is proof enough of its consent to start work thereon.

- 1.2 The technical specifications (hereinafter referred to as the "**Technical Specifications**") that need to be adhered to by the SPD in implementing the roof-top Solar PV Plant for the CUSTOMER/BENEFICIARY shall be in accordance with the ones issued by <IMPLEMENTING AGENCY/EXPERT PSU> vide RfS/Tender No. _____ dated _____ and the performance parameters (hereinafter referred to as the "**Performance Parameters**") that shall govern the Scope of Duty of the SPD regarding the Works for the CUSTOMER/BENEFICIARY are mentioned in detail in **Schedule 1** to this Agreement.
- 1.3 All the pedestals meant for mounting the modules must be casted on the roof by removing the tiles and other loose material in the area where the pedestals are to be casted. The surface of the roof should be thoroughly cleaned and an adhesive should be applied on the roof surface before casting the pedestals in order to have strong bonding with the lintel. After casting of the pedestals the water proofing material should be applied surrounding the pedestals in order to avoid any water seepage during rainfall.
- 1.4 SPD shall ensure that SPV modules, parts of MS structures, other hardware like nuts, bolts and grouting hardware etc., are not loosely scattered over the terrace of a building. These items must be securely stored in an enclosed room where they cannot be affected by winds or such loose materials must be tied properly. Further, Successful bidder shall ensure that rooftop Solar PV system should be designed and installed in such a way that its performance should not be affected due to the problem of water logging at site etc.
- 1.5 The design, engineering, manufacture, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/Indian Standards as detailed in the relevant MNRE's scheme. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE shall be used.
- 1.6 Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, manufacture, supply & performance or completeness of the project shall be provided by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant.

2. EFFECTIVE DATE

The Agreement will enter into effect from the date of its execution (the "**Effective Date**") for all contractual obligations under this Agreement.

3. NON DISCLOSURE & CONFIDENTIALITY

Any information (whether oral, written, visual or otherwise, hard or soft copy as may be provided by either Parties, provided the same is reduced in writing immediately and marked and identified as confidential information) disclosed or made known by the Parties to each other, shall be considered "**Confidential Information**" unless otherwise specified. Both the Parties commit to a strict maintenance of confidentiality, of any information shared by either of the Parties. Any confidential information shared as a result of this Agreement shall remain in force until that particular Confidential Information falls into the public domain through no act or omission on part of the Parties or for a period of two (2) years from the last disclosure, whichever is later.

4. COMPLETION PERIOD

The completion period of the project shall be 06 Months from issuance of Letter of Award (LoA) from <IMPLEMENTING AGENCY/EXPERT PSU>

5. PAYMENT TERMS

- 5.1 In consideration of the completion of Works, the CUSTOMER/BENEFICIARY shall pay to SPD the Contract Price in Indian Rupee (INR). The "**Price**" shall mean the total of the Price for completion of Works including the price for operation and maintenance of the Solar Power System, as per payment terms mentioned in detail in the **RfS document**.
- 5.2 For any extra work beyond SPD's scope, the same is payable additionally by the CUSTOMER/BENEFICIARY.
- 5.3 In case of any statutory variations in the rate of applicable taxes and duties or imposition of new taxes & duties, including, but not limited to anti-dumping duties, during the tenure of the Agreement, which will impact the Contract Price, the same shall be borne by the CUSTOMER/BENEFICIARY.

6. WARRANTIES

- 6.1 In case of CUSTOMER/BENEFICIARY being a company, it warrants to the SPD as follows:
- (a) it is a company duly incorporated under the laws of India, and it has all corporate powers and has applicable governmental approvals, if any, required to own the Site and to carry on its business as now conducted and is duly qualified to do business in the jurisdiction where it operates;
 - (b) It has the full legal right, capacity and authority to enter into this Agreement and this Agreement constitutes a legal, valid and binding obligation on it; and,

- (c) It has the corporate power and authority to execute and deliver the terms and provisions of this Agreement and has taken all necessary corporate action to authorize the execution and delivery by it of this Agreement and the transactions contemplated hereby.
- 6.2 The SPD hereby warrants to the CUSTOMER/BENEFICIARY that the Scope of Work as executed by the SPD shall be of good workmanship for a period of 5 years from Acceptance. During the period of 5 years from the date of completion of work ("**Warranty Period**") the SPD shall rectify any part of the Works done found defective due to faulty materials and workmanship, for reasons solely attributable to the SPD.
- 6.3 The SPD will obtain manufacturers' warranties on the PV modules, inverters, as well as other components of the Power System for which manufacturer's warranties are available, in the name of the CUSTOMER/BENEFICIARY. Up until Acceptance, the SPD will exercise any rights under the manufacturers' warranties on behalf of the CUSTOMER/BENEFICIARY.

7. **FORCE MAJEURE**

- a. The term "Force Majeure" shall herein mean riots (other than among the Contractor's employees), Civil Commotion (to the extent not insurable), war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection, military or usurped power, damage from aircraft, nuclear fission, acts of God, such as earthquake (above 7 magnitude on Richter Scale), lightning, unprecedented floods, fires not caused by Contractor's negligence and other such causes over which the Contractor has no control and are accepted as such by the Engineer-in-Charge (APEDA), whose decision shall be final and binding. In the event of either party being rendered unable by Force Majeure to perform any obligation required to be performed by them under this contract, the relative obligation of the party affected by such Force Majeure shall be treated as suspended for the period during which such Force Majeure cause lasts, provided the party alleging that it has been rendered unable as aforesaid, thereby shall notify within 10 days of the alleged beginning and ending thereof giving full particulars and satisfactory evidence in support of such cause.
- b. On occurrence of Force Majeure, the liability of either party shall be dealt with, in accordance with the provisions of Insurance Policy for the project.
- c. Should there be a request for extension of time arising out of "Force Majeure" the same shall be considered in accordance with clause 6.7.2 of RfS document.

8. INSURANCE

8.1 SPD shall at its expense take out and maintain in effect or cause to be taken out and maintained in effect, during the construction period and O&M of 5 years, the appropriate insurances shall be taken by SPD for Solar PV Plant. The insurance shall be for the replacement value of the project.

9. SITE ACCESS

9.1 The CUSTOMER/BENEFICIARY shall ensure the accuracy of all information and/or data to be supplied by the CUSTOMER/BENEFICIARY and shall be responsible for acquiring and providing legal and physical possession of the Site and access thereto, for preparation and maintenance of proper access roads to, and provide the right of way for, the Site, and for providing possession of and access to all other areas reasonably required for the proper execution of the Agreement, including all requisite rights of way, on or before the Effective Date.

9.2 The CUSTOMER/BENEFICIARY is under an obligation to provide access to Site at all times to the SPD and to<IMPLEMENTING AGENCY/EXPERT PSU> officials, for the entire life of the Power System.

9.3 The progress of Works will be monitored by <IMPLEMENTING AGENCY/EXPERT PSU> and the Power System will be inspected for quality at any time during commissioning or after the completion of the Power System either by officer(s) from <IMPLEMENTING AGENCY/EXPERT PSU> or a team comprising of officers from <IMPLEMENTING AGENCY/EXPERT PSU>, and State Nodal Agency (SNA).

10. CUSTOMER/BENEFICIARY OBLIGATIONS

10.1 The CUSTOMER/BENEFICIARY must not interrupt the Works, and/or shall abstain from any act or omission of which it can reasonably be expected that it may delay the Works or make the Works more difficult and or expensive for SPD. In addition to this, the CUSTOMER/BENEFICIARY alone shall be responsible, at his cost and expenses, for:

- a) Necessary statutory declaration forms, certificates, way bills, etc. on timely basis as may be required by the SPD for movement of the goods to the Site and for claiming the tax or duty benefits on the imported, inter-state and local supplies and the services provided under this Agreement in line with policies in vogue.
- b) The CUSTOMER/BENEFICIARY & SPD shall obtain in a timely and expeditious manner No Objection certificate from the DISCOM

11. SITE ADDRESS

The Site address where Works need to be performed to construct/install the Solar Power System is:.....

12. PROVISION OF DATA

The SPD shall be under an obligation to provide all data pertaining to Works and Power System for 5 years to <IMPLEMENTING AGENCY/EXPERT PSU>, *inter alia*, about PV array energy production, solar irradiance, wind speed, temperature, etc. The customer/beneficiary as such will allow the SPD to install a data logging system for power system monitoring.

12.1 The parameters of Works, and/or Power System shall be measured by using solar monitoring system to maintain and to study the performance of Power System.

12.2 For access to real-time data, the CUSTOMER/BENEFICIARY agrees to provide <IMPLEMENTING AGENCY/EXPERT PSU> with the right to install any additional online monitoring equipment(s) on the Power System.

13. INDEMNITY

Both Parties shall fully Indemnify and hold harmless both parties and its affiliates, associates, directors and employees from and against, any and all losses, costs, damages, injuries, liabilities, claims and causes of action, including without limitation arising out of or resulting from claims by third Parties, acts, omissions or breach of any of the both parties affiliates, suppliers, employees, agents or SPDs in the performance of both parties obligations under this Agreement or otherwise arising out of the Power System or its usage

14. NOTICES

Any notice through facsimile/e-mail/post and other communication provided for in this Agreement shall be in writing and sent to the address mentioned on the first page of the agreement

15. DISPUTE RESOLUTION

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

If the parties fail to resolve, such a dispute or difference by mutual consent, within 45 days of its arising, then the dispute shall be referred by either party by giving notice to the other party in writing of its intention to refer to arbitration as hereafter provided regarding matter under dispute. No arbitration proceedings will commence unless such notice is given. Any dispute in respect of which a notice of intention to commence arbitration has been given in accordance with Sub Clause either 15.1 or 15.2, shall be finally settled by arbitration.

15.1 In case the SPD is a Public Sector Enterprise or a government department.

In case the parties are not able to resolve the dispute within Thirty (30) days of its being raised, the same shall be referred for resolution to the Administrative Mechanism for Resolution of CPSEs Disputes (AMRCD) of the Department of Public Enterprises, Government of India as per Office Memorandum F. No.4(1)/2013-DPE(GM)/FTS-1835 dated 22.05.2018 issued by Government of India, Ministry of Heavy Industries and Public Enterprises. Department of Public Enterprises and its further guidelines, modifications and amendments on the subject issued from time to time.

15.2 In all other cases, any dispute submitted by a party to arbitration shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions set forth below.

The Customer and the SPD shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within Thirty (30) days after the later of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for third arbitrator which shall be the President, Institution of Engineers.

If one party fails to appoint its arbitrator within thirty (30) days after the other party has named its arbitrator, the party which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.

If for any reason an arbitrator is unable to perform its function for a period of 45 days or more, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws as mentioned in Clause 16 (Governing Law) and a substitute shall be appointed in the same manner as the original arbitrator.

Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue or arbitration shall be Arunachal Pradesh.

The decision of a majority of the arbitrators shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court.

The arbitrator(s) shall give reasoned award. Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless they otherwise agree.

Cost of arbitration shall be equally shared between the SPD and Customer.

16. GOVERNING LAW

All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of India, and the courts at Arunachal Pradesh, India shall have exclusive jurisdiction with respect to any Dispute that occurs according to, or in relation to, the Agreement.

17. SEVERABILITY

If any provision of this Agreement is deemed or held by a court of competent jurisdiction, to be contrary to law or otherwise unenforceable, the provisions of this Agreement shall be enforced to the extent legally permissible and unenforceability of any of the provisions of this Agreement shall not affect the remaining provisions of this Agreement, which shall remain in full force and effect.

18. LIMITATION OF LIABILITY

- 18.1 Subject to Clause 13 of this Agreement, but notwithstanding anything contained anywhere else in this Agreement, in no event shall a Party be liable, whether in contract, tort or otherwise, to the other Party for special, indirect or consequential loss or damages (such as, not exclusively, loss of production, loss of reputation, loss of income, loss of profit), except in case of fraud, wilful default or reckless misconduct by the defaulting Party.
- 18.2 The maximum aggregate liability of the SPD to the CUSTOMER/BENEFICIARY, arising out of or in connection with this Agreement or any breach, non-performance or performance of any provisions hereof, after Acceptance, and till up to the period of operation and maintenance, cannot amount to more than 10% (ten per cent) of the Price for the Power System.

19. BINDING AGREEMENT

- 19.1 This Agreement, along with its Schedules, in and of itself is an enforceable binding contract and constitutes the entire agreement between the Parties with respect to the subject matter hereof to the exclusion of all other understandings and assurances, either written or oral. The clauses contained in this Agreement shall not be construed as creating a partnership or joint venture, agency or employment relationship among the Parties. The relationship between the Parties under this Agreement is as principal to principal basis.

IN WITNESS WHEREOF the authorized signatories of the Parties hereto have signed this Agreement on the day, month and year first above written:

FOR AND ON BEHALF OF
<Name of SPD>

FOR AND ON BEHALF OF
<Name of Customer/beneficiary, i.e.
Government Organization, PSU and Offices>

M/s _____

AUTHORISED SIGNATORY

AUTHORISED SIGNATORY
(Of Government Deptt./PSU/Office)

NAME:
DESIGNATION:

NAME:
DESIGNATION:

WITNESS NAME:

WITNESS NAME:

SCHEDULE 1: PERFORMANCE PARAMETERS

Project-

Site Location- (Latitude & Longitude)

Total Rooftop Area (m²)

Total Usable Rooftop Area for solar installation (m²)

Type of Roof & Tilt

Radiation data reference:

Energy Simulation:

Power evacuation:

Energy in Thousand kWp

End Of year	Global Horizontal (kWh/m2/year)	Global Inclined (kWh/m2/year)	Net Energy at Metering point ((kWh/kWp/year))	PR (%) at the meteringpoint

SCHEDULE 2: PAYMENT TERMS

Price including shall remain fixed and will not be subject to revision during the Agreement duration subject to the conditions mentioned within this Agreement.

Total Price of Rooftop Solar Project: (In INR)

Total project capacity is _____ kWp.

Payment Schedule for Rooftop Solar Power Plant as per Scope of Work: (CAPEX-1 MW)			
A	Supply & Installation of Rooftop Solar Power Plant	X (Component/ Equipment Cost) + Y (Installation Cost)	Remarks
I	Supply of Solar Panel Module, Inverter & Other Equipments/Components (Excluding Installation Cost after verification & assessment by Engineer-in-Charge (APEDA) (X).	40% of X	Payment to Vendor by APEDA.
II	Successful installation, Net Metering, Testing, Commissioning and Trial Run Site Cleaning and Other Balance Works of the Project after verification & assessment by Engineer-in-Charge (APEDA) (Y)	50% of X + 90% of Y	
B	Comprehensive O&M of Installed Rooftop Solar power plant for 5 years	Z	
I	After successful completion of O&M of 1 st year	2% of (X+Y) + 20% of Z	Payment to Vendor by APEDA.
II	After successful completion of O&M of 2 nd year	2% of (X+Y) +20% of Z	Payment to Vendor by APEDA.
iii	After successful completion of O&M of 3 rd year	2% of (X+Y) +20 % of Z	Payment to Vendor by APEDA.
iv	After successful completion of O&M of 4 th year	2% of (X+Y) +20 % of Z	Payment to Vendor by APEDA.
V	After successful completion of O&M of 5 th year	2% of (X+Y) +20 % of Z	Payment to Vendor by APEDA.
Total Contract Price (Part A+ Part B)		X+Y+Z	

Note: The bidder shall submit GST invoice to the client organization i.e. APEDA for respective payment as above.

TAXES:

The pricing given is inclusive of all taxes

Section-VIII

Price Schedule

The Price Schedule is available on e-tender Portal at Financial Part of RfS Document. The Price Schedule is to be filled by bidder online at Financial Part of bid document and Break up of Price schedule shall be uploaded as per format provided in separate excel file at only Price/Financial Part of bid document.

Annexure-B

TECHNICAL SPECIFICATIONS FOR GRID CONNECTED ROOFTOP SOLAR PLANTS INSTALLED UNDER THE COMPONENT OF "CENTRAL / STATE GOVERNEMENT OFFICES / BUILDINGS" OF PM-SURYA GHAR: MUFT BIJLI YOJANA

The projects under PM-Surya Ghar: Muft Bijli Yojana shall be commissioned as per the technical specifications given below. All component of the PV plant, design & commissioning shall be in accordance with technical specification given in latest IS/IEC standards. The SPD/Vendor will be solely responsible for any shortcomings or negligence/malpractice, which may lead to the delisting/blacklisting of the firm/vendor from participation in any program of the SJVN.

A Roof Top Solar (RTS) Photovoltaic (PV) System shall consist of following equipment / components:

1. Solar Photo Voltaic (SPV) modules consisting of required number of SPV modules
2. Inverter/PCU
3. Module. Mounting structures
4. Net Meter/Smart Meter
5. Array Junction Boxes
6. DC Distribution Box
7. AC Distribution Box
8. Protections - Earthing, Lightning, Surge
9. Cables
10. Drawing & Manuals
11. Miscellaneous

Components/Package of Grid Connected Rooftop Solar PV System: The components of a Grid Connected Rooftop Solar PV System shall essentially comprise but not be limited to solar PV Panels/modules of required number, Inverters/PCU, module mounting structures, total Cable/wiring of suitable length, cable conduits, required array junction boxes, DC distribution box, AC distribution box, various connectors, nut- bolts, civil and mechanical works, Protection - Earthing, lightning, surges, drawing & manual, 5 years of comprehensive operation & maintenance of grid-connected rooftop solar PV plant and other miscellaneous works.

1. Solar PV Modules

- 1.1 **The PV Module and solar cell used should be MADE IN INDIA.**
- 1.2 A single **Mono crystalline** Solar PV Module of minimum capacity shall be **equal to or more than 545 Wp.**
- 1.3 The PV modules used must qualify to the latest edition of IEC standards or equivalent BIS standards, i.e. IEC 61215/IS 14286, IEC 61853-Part I or IS 16170-Part I, IS/IEC 61730 Part-1 & Part 2 and IS 17210(part 1) or IEC 62804-1 (PID). For the PV modules to be used in a highly corrosive atmosphere throughout their lifetime, they must qualify to IEC 61701/15 61701. Thin - Film terrestrial photovoltaic (PV) modules must qualify to IS 16077: 2013 / IEC 61646: 2008.
- 1.4 The rated power of solar PV module shall have maximum tolerance up to +3%.
- 1.5 The peak-power point current of any supplied module string (series connected modules) shall not vary by +1% from the respective arithmetic means for all modules and/or for all module strings (connected to the same MPPT), as the case may be.

- 1.6 The peak-power point voltage of any supplied module string (series connected modules) shall not vary by + 2% from the respective arithmetic means for all modules and/or for all module strings (connected to the same MPPT), as the case may be.
- 1.7 The temperature co-efficient power of the PV module shall be equal to or better than -0.4%/°C for crystalline modules and -0.3 %/°C for thin films modules.
- 1.8 Solar PV modules capacity to be used should adhere to the Approved List of Models and Manufacturers (ALMM) of Solar Photovoltaic Modules list -1 (Requirement for Compulsory Registration) Order 2019 - Implementation issued vide OM NO. 283/54/2018-GRI D SOLAR - Part (I) Dated 10th March 2021 and subsequent amendments/clarifications thereto, issued under the subject order. **Solar PV modules and solar PV cells used in Rooftop solar project shall be from the models and manufacturers included in ALMM list -I (for Solar PV modules) and ALMM List -II (for solar PV cells).** The Net Metering RE Power Projects which are mandated to use ALMM enlisted modules, will stand exempted from the requirement of using solar PV cells from ALMM List-II if such projects get commissioned prior to 1st June 2026. All the Net-Metering Projects RE Power Projects which get commissioned on or after 1st June 2026, shall have to mandatorily source their solar PV modules from ALMM List-1 and solar PV cells from ALMM List-II.
- 1.9 Thin Film Technology based Solar PV Modules enlisted in ALMM List-I and manufactured in Integrated Solar PV Modules Manufacturing units enlisted in ALMM List-I, shall be considered to be in deemed compliance to the requirement of using solar PV cells from ALMM List-II.
- 1.10 Solar PV modules of minimum fill factor 75%, to be used.
- 1.11 All PV modules should have a nominal power output of >90% at STC during the first 10 years, and >80% during the next 15 years. Further, module shall have nominal power output of >97% during the first year of installation-degradation of the module below 0.5 % per annum
- 1.12 The SPD/Vendor should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than Ten (10) years
 - i. Defects and/or failures due to manufacturing.
 - ii. Defects and/or failures due to quality of materials.
 - iii. Nonconformity to specifications due to faulty manufacturing and/or inspection processes. If the solar Module(s) fails to conform to this warranty, the vendor will repair or replace the solar module(s), his own cost. The PV modules shall be replaced by SPD/Vendor, without charging any cost to the end consumer during the specified period of warranty & term of Contract Agreement.
- 1.13 Modules deployed must use a RF identification tag laminated inside the glass. The following information must be mentioned in the RFID used on each module:
 - i. Name of the manufacturer of the PV module
 - ii. Name of the manufacturer of Solar Cells.
 - iii. Month & year of the manufacture (separate for solar cells and modules)
 - iv. Country of origin (separately for solar cells and module)
 - v. I-V curve for the module Wattage, I_m , V_m and FF for the module
 - vi. Unique Serial No and Model No of the module
 - vii. Date and year of obtaining IEC PV module qualification certificate.
 - viii. Name of the test lab issuing IEC certificate.
 - ix. Other relevant information on traceability of solar cells and module as per ISO 9001 and ISO 14001.
 - x. Nominal wattage +3%.
 - xi. Name, if applicable.

- 1.14 Other details as per IS/IEC 61730-1 clause 11 should be provided at appropriate place. In addition to the above, the following information should also be provided:
- i. The actual Power Output Pmax shall be mentioned on the label pasted on the back side of PV Module.
 - ii. The Maximum system voltage for which the module is suitable to be provided on the back sheet of the module.
 - iii. Polarity of terminals or leads (colour coding is permissible) on junction Box housing near cable entry or cable and connector.
- 1.15 Unique Serial No, Model No, Name of Manufacturer, Manufacturing year, Make in India logo and module wattage details should be displayed inside the laminated glass.

2 Inverter /PCU

- 2.1 The Solar Photovoltaic Inverters must comply with the Quality Control Ord.er dated 30.08.2017 for Solar Photovoltaic Inverters and its amendments thereof. The warranty shall be till tenure of Contract Agreement.
- 2.2 Inverters/PCU should comply with applicable IEC/equivalent BIS standard for efficiency measurements and environmental tests as per standard codes IEC 61683/IS 61683, IS 16221 (Part 2), IS 16169 and IEC 60068-2(1,2,14,30) /Equivalent BIS Std.
- 2.3 Maximum Power Point Tracker (MPPT) shall be integrated in the inverter/PCU to maximize energy drawn from the array. Charge controller (if any) / MPPT units environmental testing should qualify IEC 60068-2(1, 2, 14, 30)/Equivalent BIS standard. The junction boxes/enclosures should be IP 65 or better (for outdoor)/ IP 54 or better (indoor) and as per IEC 529 Specifications.
- 2.4 All inverters/PCUs shall be IEC 61000 compliant for electromagnetic compatibility, harmonics, Surge, etc.
- 2.5 The PCU/ inverter shall have overloading capacity of minimum 20%.
- 2.6 Typical technical features of the inverter shall be as follows-
- i. Nominal AC output voltage and frequency: as per CEA/State regulations
 - ii. Output frequency: 50 Hz
 - iii. Grid Frequency Synchronization range: as per CEA/State Regulations
 - iv. Ambient temperature considered: -20°C to 60°C
 - v. Protection of Enclosure: IP-54 (Minimum) for indoor and IP-65(Minimum) for outdoor.
 - vi. Grid Frequency Tolerance range: as per CEA/State regulations
 - vii. Grid Voltage tolerance: as per CEA/State Regulations
 - viii. No-load losses: Less than 1% of rated power
 - ix. Inverter efficiency (Min.):
 - a. >90% (In case of 10 kW or below with in-built galvanic isolation).
 - b. >97% (in case of 10kW & above without inbuilt galvanic isolation)
 - c. >93% (in case of 10kW or above with inbuilt galvanic isolation)
 - x. The minimum overall Efficiency (11t) as per IS 17980 for Solar Inverters should adhere to the following:
 - a. THD: < 3%
 - b. PF:> 0.9 (lag or lead)
 - c. Should not inject DC power more than 0.5% of full rated output at the interconnection point and comply to IEEE 519.
 - d. The inverter should have the inbuilt facility to communicate system related data through SIM/dongle. The inverter may also be enabled for Wi-Fi based communication.
- 2.7 All the Inverters should contain the following clear and indelible Marking Label & Warning Label as per 1516221 Part 11, clause 5. The equipment shall, as a minimum, be permanently marked with:

- i. The name or trademark of the manufacturer or supplier;
 - ii. A model number, name or other means to identify the equipment,
 - iii. A serial number, code or other marking allowing identification of manufacturing location and the manufacturing batch or date within a twelve-month time period.
 - iv. Input voltage, type of voltage (a.c. or d.c.), frequency, and maximum continuous current for each input.
 - v. The Ingress Protection (IP) rating.
- 2.8 In case the consumer is having a 3-phase connection, 1-phase/3-phase inverter shall be provided by the SPD/Vendor as per the consumer's requirement and regulations of the State.
- 2.9 Inverter/PCU shall be capable of complete automatic operation including wake-up, synchronization & shutdown.
- 2.10 Integration of PV Power with Grid & Grid Islanding:
- i. In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "islands." Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided, if not available in inverter.
- 3. Module Mounting Structure (MMS):**
- 3.1 Supply, installation, erection and acceptance of module mounting structure (MMS) with all necessary accessories, auxiliaries and spare part shall be in the scope of the work.
- 3.2 Module mounting structures can be made from three types of materials. They are Hot Dip Galvanized Iron, Aluminium and Hot Dip Galvanized Mild Steel (MS). However, MS will be preferred for raised structure.
- 3.3 MMS Steel shall be as per latest IS 2062:2011 and galvanization of the mounting structure shall be in compliance of latest IS 4759. MMS Aluminium shall be as per AA6063 T6. For Aluminium structures, necessary protection towards rusting need to be provided either by coating or anodization.
- 3.4 All bolts, nuts, fasteners shall be of stainless steel of grade SS 304 or hot dip galvanized, panel mounting clamps shall be of aluminium and must sustain the adverse climatic conditions. Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.
- 3.5 The module mounting structures should have angle of inclination as per the site conditions to take maximum insolation and complete shadow-free operation during generation hours. However, to accommodate more capacity the angle of inclination may be reduced until the plant meets the specified performance ratio requirements.
- 3.6 The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed. The PV array structure design shall be appropriate with a factor of safety of minimum 1.5.
- 3.7 The upper edge of the module must be covered with wind shield so as to avoid build air ingress below the module. Slight clearance must be provided on both edges (upper & lower) to allow air for cooling.
- 3.8 Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed. The SPD/Vendor shall be fully responsible for any damages to SPV System caused due to high wind velocity within guarantee period & term of Contract Agreement as per technical specification.
- 3.9 The structures shall be designed to allow easy replacement, repairing and cleaning of any module. The array structure shall be so designed that it will occupy minimum space without sacrificing the

output from the SPV panels. Necessary testing provision for MMS to be made available at site.

3.10 Adequate spacing shall be provided between two panel frames and rows of panels to facilitate personnel protection, ease of installation, replacement, cleaning of panels and electrical maintenance.

3.11 The structure shall be designed to withstand operating environmental conditions for a period of minimum 25 years.

3.12 The Rooftop Structures maybe classified in three broad categories as follows:

3.12.1 Ballast Structure

a. The mounting structure must be Non-invasive ballast type and any sort of penetration of roof to be avoided.

b. The minimum clearance of the structure from the roof level should be in between 70- 150 mm to allow ventilation for cooling, also ease of cleaning and maintenance of panels as well as cleaning of terrace.

c. The structures should be suitably loaded with reinforced concrete blocks of appropriate weight made out of M25 concrete mixture.

3.12.2 Tin Shed

a. The structure design should be as per the slope of the tin shed.

b. The inclination angle of structure can be done in two ways-

c. Parallel to the tin shed (flat keeping zero-degree tiling angle), if the slope of shed in Proper south direction

d. With same tilt angle based on the slope of tin shed to get the maximum output.

e. The minimum clearance of the lowest point from the tin shade should be more then 100mm.

f. The base of structure should be connected on the Purlin of tin shed with the proper riveting.

g. All structure member should be of minimum 2 mm thickness.

3.12.3 RCC Elevated structure: It can be divided into further three categories:

A) Minimum clearance from roof (upto 1000 MM) (for reference only)

a. The structure shall be designed to allow easy replacement of any module and shall be in line with site requirement. The gap between module should be minimum 30MM.

b. Base Plate-Base plate thickness of the Structure should be 5 MM for this segment.

c. Column -Structure Column should be minimum 2MM in Lip section/ 3MM in C-Channel section. The minimum section should be 70MM in Web side and 40 MM in flange side in Lip section.

d. Rafter -Structure rafter should be minimum 2MM in Lip section / 3MM in C-Channel section. The minimum section should be 70MM in Web side (y-axis) and 40 MM in flange side (x-axis).

e. Purlin -Structure purlin should be minimum 2MM in Lip section. The minimum section should be 60MM in Web side and 40MM in flange side in Lip section.

f. Front/back bracing -The section for bracing part should be minimum 2MM thickness.

g. Connection -The structure connection should be bolted completely. Leg to rafter should be connected with minimum 12 diameter bolt. Rafter and purlin should be connected with minimum 10 diameter bolt. Module mounting fasteners should be SS-304 only and remaining fasteners either SS-304 or HDG 8.8 Grade,

h. For single portrait structure the minimum ground clearance should be 500 MM.

B) Medium clearance from roof (1000MM - 2000 MM) (for reference only)

a. Base Plate - Base plate thickness of the Structure should be Minimum 6MM for this segment.

b. Column-Structure Column should be minimum 2MM in Lip section /3MM in C-Channel section. The minimum section should be 80MM in Web side and 50 MM in flange side in Lip section.

c: Rafter - Structure rafter should be minimum 2MM in Lip section/ 3MM in C-Channel section. The minimum section should be 70MM in Web side and 40MM in flange side in Lip section.

d. Purlin - Structure purlin should be minimum 2MM in Lip section. The minimum section should be 70MM in Web side and 40MM in flange side in Lip section.

e. Front/back bracing - The section for bracing part should be minimum 2MM thickness.

f. Connection - The structure connection should be bolted completely. Leg to rafter should be

connected with minimum 12 diameter bolt. Rafter and purlin should be connected with minimum 10 diameter bolt. Module mounting fasteners should be SS- 304 only and remaining fasteners either SS-304 or HOG 8.8 Grade.

C) Maximum clearance from roof (2000MM - 3000 MM) (for reference only)

- a. Base Plate - Base plate thickness of the Structure should be minimum 8 MM for this segment.
- b. Column - Structure Column thickness should be minimum 2.6MM in square hollow section (minimum 50x50) or rectangular hollow section (minimum 60x40) or 3MM in C-Channel section.
- c. Rafter - Structure rafter should be minimum 2MM in Lip section / 3MM in Channel section. The minimum section should be 80MM in Web side and 50MM in flange side in Lip section.
- d. Purlin - Structure purlin should be minimum 2MM in Lip section. The minimum section should be 80MM in Web side and 50MM in flange side in Lip section.
- e. Front/back bracing - The section for bracing part should be minimum 3MM thickness.
- f. Connection - The structure connection should be bolted completely. Leg to rafter should be connected with minimum 12 diameter bolt. Rafter and purlin should be connected with minimum 10 diameter bolt. Module mounting fasteners should be SS- 304 only and remaining fasteners either SS-304 or HOG 8.8 Grade.

D) Super elevated structure (More than 3000 MM clearance from roof) (for reference only)

A. Base structure

- a. Base Plate - Base plate thickness of the Structure should be 10MM for this segment.
- b. Column - Structure Column minimum thickness should be minimum 2.9MM in square hollow section (minimum 60x60) or rectangular hollow section (minimum 80x40).
- c. Rafter - Structure Rafter minimum thickness should be minimum 2.9MM in square hollow section (minimum 60x60) or rectangular hollow section (minimum 80x40).
- d. Cross bracing- Bracing for the connection of rafter and column should be of minimum thickness of 4mm L-angle with the help of minimum bolt diameter of 10mm.

B. Upper Structure of Super Elevated Structure -

- a. Base Plate - Base plate thickness of the Structure should be minimum 5MM for this segment.
- b. Column - Structure Column should be minimum 2MM in Lip section / 3MM in Channel section. The minimum section should be 70MM in Web side and 40MM in flange side in Lip section.
- c. Rafter - Structure rafter should be minimum 2MM in Lip section / 3MM in Channel section. The minimum section should be 70MM in Web side and 40MM in flange side in Lip section.
- d. Purlin - Structure purlin should be minimum 2MM in Lip section. The minimum section should be 60 MM in Web side and 40MM in flange side in Lip section.
- e. Front/back bracing - The section for bracing part should be minimum 2MM thickness.
- f. Connection - The structure connection should be bolted completely. Leg to rafter should be connected with minimum 12 diameter bolt.
- g. Rafter and purlin should be connected with minimum 10 diameter bolt. Module mounting fasteners should be SS-304 only and remaining fasteners either SS-304 or HDG 8.8 Grade.

C. If distance between two legs in X-Direction is more than 3M than sag angle/Bar should be provide for purlin to avoid deflection failure. The sag angle should be minimum 2MM thick, and bar should be minimum 12Dia.

D. Degree - The Module alignment and tilt angle shell be calculated to provide the maximum annual energy output. This shall be decided on the location of array installation.

E. Foundation - Foundation should be as per the roof condition; two types of the foundation can be done- either penetrating the roof or without penetrating the roof.

- a. If penetration on the roof is allowed (based on the client requirement) then minimum 12MM diameter anchor fasteners with minimum length 100MM can be used with proper chipping. The minimum RCC size should be 400x400x300 cubic mm. Material grade of foundation should be minimum M20.
- b. If penetration on roof is not allowed, then foundation can be done with the help of 'J Bolt' (refer IS 5624 for foundation hardware). Proper Neto bond solution should be used to adhere the Foundation

block with the RCC roof. Foundation J - bolt length should be minimum 12MM diameter and length should be minimum 300MM.

F. Material Standards:

- a. Design of foundation for mounting the structure should be as per defined standards which clearly states the Load Bearing Capacity & other relevant parameters for foundation design (As per IS 6403 / 456 / 4091 / 875).
- b. Grade of raw material to be used for mounting the structures so that it complies the defined wind loading conditions (As per IS 875 - III) should be referred as follows (IS 2062 -for angles and channels, IS 1079 -for sheet, IS 1161 & 1239 for round pipes, IS 4923 for rectangular and square hollow section)
- c. Test reports for the raw material should be as per IS 1852 / 808 / 2062 / 1079 / 811.
- d. In process inspection report as per approved drawing & tolerance should be as per IS 7215.
- e. For ascertaining proper welding of structure part following should be referred:
- f. D.P. Test (Pin Hole/ Crack) (IS 822)
- g. Weld wire grade should be of grade (ER 70 S - 6)
- h. For ascertaining hot dip galvanizing of fabricated structure following should be referred:-
- i. Min coating required should be as per IS 4759 & EN 1461.
- j. Testing of galvanized material:
 - a) Pierce Test (IS 2633)
 - b) Mass of Zinc (IS 6745)
 - c) Adhesion Test (IS 2629)
 - d) CuSO4 Test (IS 2633)
 - e) Superior High-Grade Zinc Ingot should be of 99.999% purity (IS 209) (Preferably Hindustan Zinc limited or Equivalent).
- k. Foundation Hardware - If using foundation bolt in foundation then it should be as per IS 5624.

4. Metering

- 4.1 The specifications net meter/smart meter shall be as per the latest technical specifications issued by the Central Electricity Authority (CEA) and its amendment thereof.
- 4.2 A Roof Top Solar (RTS) Photo Voltaic (PV) system shall consist of following energy meter's:
 - a) Net meter/ smart meter: To record import and export units.
 - b) Generation meter (if required as per the state regulations): To keep record for total generation of the plant.
- 4.3 The installation of meters including CTs & PTs, wherever applicable, shall be carried out by the respective Discoms as per the terms, conditions and procedures laid down by the concerned SERCs/DISCOMs.

5. Array Junction Boxes

- 5.1 The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction Boxes (JBs) shall be made of GRP/FRP/Powder Coated aluminum /cast aluminum alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination call be made through suitable cable glands. Suitable markings shall be provided on the bus-bars for easy identification and cable ferrules will be fitted at the cable termination points for identification.
- 5.2 Copper bus bars/terminal blocks housed in the junction box with suitable termination threads Conforming to IP 65 or better standard and IEC 62208 Hinged door with EPDM rubber gasket to prevent water entry, Single /double compression cable glands should be provided.
- 5.3 Polyamide glands and MC4 Connectors may also be provided. The rating of the junction box shall

be suitable with adequate safety factor to interconnect the Solar PV array.

- 5.4 Suitable markings shall be provided on the bus bar for easy identification and the cable ferrules must be fitted at the cable termination points for identification.
- 5.5 Junction boxes shall be mounted on the MMS such that they are easily accessible and are protected from direct sunlight and harsh weather.

6. DC Distribution Box (DCDB)

- 6.1 May not be required for small plants, if suitable arrangement is available in the inverter.
- 6.2 DC Distribution Box are to be provided to receive the DC output from the PV array field.
- 6.3 DCDBs shall be dust & vermin proof conform having IP 65 or better protection, as per site conditions.
- 6.4 The bus bars are made of EC grade copper of required size. Suitable capacity MCBs/MCCB shall be provided for controlling the DC power output to the inverter along with necessary surge arrestors. MCB shall be used for currents up to 63 Amperes, and MCCB shall be used for currents greater than 63 Amperes.

7. AC Distribution Box (ACDB)

- 7.1 AC Distribution Panel Board (DPB) shall control the AC power from inverter, and should have necessary surge arrestors, if required. There is interconnection from ACDB to mains at LT Bus bar while in grid tied mode.
- 7.2 All switches and the circuit breakers, connectors should conform to IEC 60947:2019, part I, II and III/ IS 60947 part I, II and III.
- 7.3 The isolators, cabling work should be undertaken as part of the project.
- 7.4 All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air -insulated, cubical type suitable for operation on 1-phase/3-phase, 415 or 230 volts, 50 Hz (or voltage levels as per CEA/State regulations).
- 7.5 The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- 7.6 All indoor panels will have protection of IP 54 or better, as per site conditions. All outdoor panels will have protection of IP 65 or better, as per site conditions.
- 7.7 Should conform to Indian Electricity Act and CEA safety regulations (till last amendment).
- 7.8 All the 415 or 230 volts (or voltage levels as per CEA/State regulations) AC devices / equipment like bus support insulators, circuit breakers, SPDs, Voltage Transformers (VTs) etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following supply conditions.
 - a. Variation in supply voltage: as per CEA/State regulations
 - b. Variation in supply frequency: as per CEA/State regulations
- 7.9 The inverter output shall have the necessary rated AC surge arrestors, if required and MCB/MCCB. RCCB shall be used for successful operation of the PV system, if inverter does not have required earth fault/residual current protection.

8. Protections

The system should be provided with all necessary protections like earthing, Lightning, and Surge Protection, as described below:

- 8.1 Earthing Protection
 - 8.1.1 The earthing shall be done in accordance with latest Standards.
 - 8.1.2 Each array structure of the PV yard, Low Tension (LT) power system, earthing grid for switchyard,

all electrical equipment, inverter, all junction boxes, etc. shall be grounded properly as per IS 3043-2018.

- 8.1.3 All metal casing/ shielding of the plant shall be thoroughly grounded in accordance with CEA Safety Regulation 2010. In addition, the lightning arrester/masts should also be earthed inside the array field.
- 8.1.4 Earth resistance should be as low as possible and shall never be higher than 5 ohms.
- 8.1.5 For 10 kW and above systems, separate three earth pits shall be provided for individual three earthing viz.: DC side earthing, AC side earthing and lightning arrester earthing.

8.2 Lightning Protection

- 8.2.1 The SPV power plants shall be provided with lightning & over voltage protection, if required. The main aim in this protection shall be to reduce the overvoltage to a tolerable value before it reaches the PV or other sub system components. The source of over voltage can be lightning, atmosphere disturbances etc. Lightning arrester shall not be installed on the mounting structure.
- 8.2.2 The entire space occupying the SPV array shall be suitably protected against Lightning by deploying required number of Lightning Arrestors (LAs). Lightning protection should be provided as per NFC17-102:2011/IEC 62305 standard.
- 8.2.3 The protection against induced high-voltages shall be provided by the use of Metal Oxide Varistors (MOVs)/Franklin Rod type LA/Early streamer type LA.
- 8.2.4 The current carrying cable from lightning arrester to the earth pit should have sufficient current carrying capacity according to IEC 62305. According to standard, the minimum requirement for a lightning protection system designed for class of LPS III is a 6 mm² copper/ 16 mm² aluminum or GI strip bearing size 25*3 mm thick). Separate pipe for running earth wires of Lightning Arrester shall be used.

8.3 Surge Protection

- 8.3.1 Internal surge protection, wherever required, shall be provided. It will consist of three SPD type-II/MOV type surge arrestors connected from +ve and -ve terminals to earth.

9 Cables

- 9.1 All cables should conform to latest edition of IEC/equivalent BIS Standards along with IEC 60227/IS 694, IEC 60502/IS 1554 standards.
- 9.2 Cables should be flexible and should have good resistance to heat, cold, water, oil, abrasion etc.
- 9.3 Armored cable should be used and overall PVC type 'A' pressure extruded insulation or XLPE insulation should be there for UV protection.
- 9.4 Cables should have Multi Strand, annealed high conductivity copper conductor on DC side and copper/FRLS type Aluminum conductor on AC side. For DC cabling, multi- core cables shall not be used.
- 9.5 Cables should have operating temperature range of -10°C to +80°C and voltage rating of 660/1000 V.
- 9.6 Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop less than 2% (DC Cable losses).
- 9.7 The size of each type of AC cable selected shall be based on minimum voltage drop. However; the maximum drop shall be limited to 2%.
- 9.8 The electric cables for DC systems for rated voltage of 1500 V shall conform to IS 17293:2020.
- 9.9 All cable/wires are to be routed in a RPVC pipe/ GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable is easily identified.
- 9.10 All cable trays including covers to be provided.
- 9.11 Thermo-plastic clamps to be used to clamp the cables and conduits, at intervals not exceeding 50 cm.

- 9.12 Size of neutral wire shall be equal to the size of phase wires, in a three phase system.
- 9.13 The Cable should be so selected that It should be compatible up to the life of the solar PV panels i.e. 25 years.

10 Drawings & Manuals:

- 10.1 Operation & Maintenance manual/user manual, Engineering and Electrical Drawings shall be supplied along with the power plant.
- 10.2 The manual shall include complete system details such as array lay out, schematic of the system, inverter details, working principle etc.
- 10.3 The Manual should also include all the Dos & Don'ts of Power Plant along with Graphical Representation with indication of proper methodology for cleaning, Operation and Maintenance etc.
- 10.4 Step by step maintenance and troubleshooting procedures shall also be given in the manuals.
- 10.5 SPD/Vendors should also educate the consumers during their AMC period.

11 Miscellaneous:

- 11.1 Connectivity: The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the SERC regulation for Grid connectivity and norms of DISCOM and amended from time to time.
- 11.2 Safety measures: Electrical safety of the installation(s) including connectivity with the grid must be taken into account and all the safety rules & regulations applicable as per Electricity Act, 2003 and CEA Safety Regulation 2010 etc. must be followed.
- 11.3 Shadow analysis: The shadow analysis report with the instrument such as Solar Pathfinder or professional shadow analysis software of each site should be provided and the consumer should be educated to install the system only in shadow free space. Lower performance of the system due to shadow effect shall be liable for penalty for lower performance.

12 INTEGRATION OF PV POWER WITH GRID:

The output power from SPV would be fed to the inverters which converts DC produced by SPV array to AC and feeds it into the main electricity grid after synchronization. In case of grid failure, or low or high voltage, solar PV System shall be out of synchronization and shall be disconnected from the grid. Once the DG set come into service, PV system shall again be synchronized with DG supply and load requirement would be met to the extent of availability of power. 4 pole isolation of inverter output with respect to the grid / DG power connection need to be provided.

13 MONITORING:

- i) Remote Monitoring and data acquisition through Remote Monitoring System software / APP at the owner / SJVN location with latest software hardware configuration and service connectivity for online / real time data monitoring / control complete to be supplied and operation and maintenance / control to be ensured by the bidder.
- ii) The bidder shall be obligated to push real-time plant monitoring data through open protocol at receiver location (cloud server) in XML/JSON format, preferably. Suitable provision in this regard will be intimated to bidders.

14 TRANSFORMER "IF REQUIRED" & METERING:

- a) Dry type for In Door/oil type (outdoor) relevant kVA, 11k/415 V, 50 Hz step up along with all protections, switchgears, Vacuum circuit breakers, cables etc. along with required civil works, as per applicable IS or IE standard (if applicable).
- b) The bidirectional electronic energy meter (0.2 S class) shall be installed for the measurement of import / Export of energy.

- c) The bidder must take approval / NOC from the concerned DISCOM for the connectivity, technical feasibility, and synchronization of SPV plant with distribution network and submit the same to SJVN before commissioning of SPV plant.
- d) Reverse power relay shall be provided to bidder (if necessary), as per the local DISCOM requirement.

15 POWER CONSUMPTION

Regarding the generated power consumption, priority need to give the internal consumption first and thereafter any excess power can be exported to grid. Decisions of appropriate authority like DISCOM, state regulator may be followed.

16 CONNECTIVITY :

The maximum capacity for interconnection with the grid at a specific voltage level shall be as specified in the Distribution Code / Supply Code of the State and amended from time to time.

- a) **The maximum permissible capacity for roof top shall be as per SERC / DISCOM rules & regulations for a single net/gross metering point.**
- b) Utilities may be voltage levels other than above, DISCOMS may be consulted before finalization of the voltage level and specifications be made accordingly,
- c) For large PV system for commercial installation having large load, the solar power can be generated at low voltage level and stepped up to 11 kV level through the step – up transformer. The transformers and associated switchgear would require to be provided by the SPV bidders (if applicable).

17 TOOLS & TACKLES AND SPARES:

- a) After completion of installation & commissioning of the power plant, necessary tools & tackles are to be provided free of cost by the bidder for maintenance purpose at site
- b) A lot of requisite spares in case of PCU / inverter comprising of a set of control logic cards, IGBT driver cards etc. Junction Box. Fuses, MOVs / arrestors, MCCBs etc. along with spare set of PV modules be indicated, which shall be supplied along with the equipment, if required. A minimum set of spares shall be maintained in the plant itself for the entire period of warranty and operation & Maintenance which upon its use shall be replenished.

18 DANGER BOARDS AND SIGNAGES:

Danger boards should be provided as and where necessary as per IE Act. IE rules as amended up to date. Three signage shall be provided one each at control room, solar array area and main entry. Text of the signage may be finalized in consultation with SJVN / owner.

19 FIRE EXTINGUISHERS:

The firefighting system for the proposed power plant for fire protection shall be consisting of:

- a) Portable fire extinguishers in the control room for fire caused by electrical short circuits.
- b) Stand buckets in the control room.
- c) The installation of Fire Extinguishers shall confirm to TAC regulations and BIS standards. The fire extinguishers shall be provided in the control room housing PCU as well as on the Roof or site where the PV arrays have been installed.

20 DRAWINGS & MANUALS:

- a) Two sets of Engineering, electrical drawings and Installation and O&M manuals are to be supplied. Bidders shall provide complete technical data sheets for each equipment giving details of the

specifications along with make / makes alongwith basic design of the power plant and power evacuation, synchronization alongwith protection equipment.

- b) Approval ISI and reputed makes for equipment be used.
- c) For complete electro – mechanical works, bidders shall supply complete design, details and drawings to SJVN / owners before progressing with the installation work.

21 PLANNING AND DESIGNING:

- a) The bidder should carry out Shadow Analysis at the site and accordingly design strings and arrays layout considering optimal usage of space, material and labour. The bidder should submit the array layout drawings along with Shadow Analysis Report to SJVN / entity.
- b) SJVN reserves the right to modify the landscaping design, Layout and Specification of sub-systems and components at any stage as per local site conditions / requirements.
- c) The bidder shall submit preliminary drawing modification or recommendation, if any. The bidder submit three sets and soft copy of CD of final drawing before proceed with construction work.

22 DRAWINGS TO BE FURNISHED BY BIDDER AFTER AWARD OF CONTRACT:

- a) The SPD/Vendor shall furnish the following drawing after award / Intent of work:
- b) General Arrangement and dimensions layout.
- c) Schematic drawing showing the requirement of SV panel, Power conditioning Unit (s) / inverter, Junction Boxes, AC and DC distribution Board, meters etc.
- d) Itemized bill of material for complete SV plant covering all the components and associated accessories.
- e) Layout of solar Power Array.
- f) Shadow analysis of the roof.

23 SAFETY MEASURES:

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

24 Display Board:

The bidder has to display a board at the project site mentioning the following:

- a) Plant Name, Capacity, Location, Date of Commissioning, Estimated Power Generation, Name of SIP, Funding Financial Institute.

Please refer **Annexure-C** for IEC standards to be mandatorily adhered.

25 The developers will comply with the requirements under Hazardous & other Waste (Management and Transboundary Movement) Rules, 2016, as amended from time to time.

26. Developer shall be responsible for safety of man, material and machines at site.

**Quality Certification, Standards and Testing for
Grid – Connected Rooftop Solar PV System / Power Plants**

Solar PV Modules / Panels

IEC 61215 / IS 14286	Design Qualification and Type Approval for Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
IEC 61646	Thin Film modules
IEC 62108	Concentrator PV modules
IS/IEC 61701	Salt Mist Corrosion Testing of Photovoltaic (PV) Modules
IEC 61853-1 / IS 16170-1	Photovoltaic (PV) Module Performance Testing and energy rating – Irradiance and temperature performance measurements, and power Rating.
IEC 62716 / IS 16664	Photovoltaic (PV) Module – Ammonia (NH ₃) Corrosion Testing (As per the site condition like dairies, toilets etc.)
IS 16077: 2013 / IEC 61646 : 2008	Thin – Film terrestrial Photovoltaic (PV) Module – Design Qualification and type approval.
IS / IEC 61730 – 1,2	Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, Part – 2 : Requirements for Testing
IS 17210 (part1) or IEC TS 62804-1	Photovoltaic (PV) Module – Test method for detection of potential – induced degradation. IEC 62804 – 1: Part : Crystalline Silicon

SOLAR PV INVERTERS

IEC 62109 or IS : 16221	Safety of power converters for use of photovoltaic power systems – Part 1: general requirements, and safety of power converters for use in photovoltaic power system. Part 2 : Particular requirements for inverters. Safety compliance (Protection degree IP 65 or better for outdoor mounting, IP 54 or better for indoor mounting)
IS / IEC 61683 latest (as applicable)	Photovoltaic System – Power Conditioners : Procedure for Measuring Efficiency (10%, 25%, 50%, 75% & 90% Loading Conditions)
IEC 60068-2 / IEC 62093 (as applicable)	Environmental Testing of PV System – Power Conditions and Inverters
IEC 62116:2014 / IS 16169	Utility – interconnected photovoltaic inverters – Testing procedure of islanding prevention measures.
IEC 62103/62109-1 &2	Electrical Safety
IEC 6100-6-2,IEC 61000-6-4 and other relevant part of IEC 61000	Electromagnetic Compatibility(EMC)

FUSES

IS / IEC 60947 (Part1, 2 & 3), EN 50521	General Safety requirements for connectors, switches, circuit breakers (AC/DC): <ol style="list-style-type: none"> 1) Low – voltage Switchgear and Control – gear, Part 1: General rules 2) Low – Voltage – Switchgear and Control – gear, Part : 2 Circuit Breakers. 3) Low – Voltage – Switchgear and Control – gear, Part : 3 Switches disconnectors switch – disconnectors and fuse – combinations units. 4) EN 50521 : Connectors for photovoltaic system – Safety requirements and tests
IS / IEC 60269 - 6	Lo – voltage fuse – Part 6 : Supplementary requirements for fuse Links for the protection of Solar photovoltaic energy system
Solar PV Roof Mounting Structure	
IS 2062 / IS 4759 / AA6063 T6	Material for the Structure mounting
Surge Arrestors	
BFC 17-102:2011 / NFC 102:2011 / IEC 62305	Lightening Protection Standard
IEC 60364-5-53 / IS 15086-5 (SPD) IEC 61643 – 11: 2011	Electrical installations of Buildings – Part 5-53: Selection and erection of electric equipment – Isolation, Switching and control Low –voltage surge protective devices – Part 11: Surge protective devices connected to low – voltage power systems – Requirements and test methods.
Cables	
IEC 60227 / IS 694, IEC 60502 / IS 1554 (Part 1 & 2) / IEC 69947 (as applicable)	General test and measuring method for PVC (Polyvinyl Chloride) insulated cables (for working voltage up to and including 1100 V, and resistant for outdoor installation)
IS 17293:2020	Electric Cable for Photovoltaic Systems for Rated Voltage 1500 V DC
Earthing / Lightning	
IEC 62561 / IEC 60634 / IEC 60634 Series	IEC 62561-1: Lightning protection system components (LPSC) – Part : Requirements for connection components

(Chemical earthing) as applicable)	<p>IEC 62561-2: Lightning protection system components (LPSC) – Part 2 : Requirements conductors and earth electrodes.</p> <p>IEC 62561-7: Lightning protection system components (LPSC) – Part 7: Requirements for earthing enhancing compounds</p>
Junction Boxes	
IEC 60529	Junction Boxes and solar panel terminal boxes shall be of the thermos – plastic type with IP 65 or better protection for outdoor use, and IP 54 or better protection for indoor use.

CHECKLIST FOR COMPLETION

Name of successful bidder: _____

Contracted Capacity (in AC): _____ kW

:: _____

Letter of Award letter No.and dt : _____

Name of Beneficiary/Entity: _____

Name of Ministry : -----

Installed Capacity (in DC):kWp

Sl. No	Documents	Yes/No	Page No.
1	Copy of Project Inspection report along with the required documents as per SJVN format		
2	Copy of CEIG Certificate		
3	Copy of Beneficiary/client Completion certificate as per Annexure (Mandatory when date of inspection is after date of commissioning)		
4	Solar PV plant Insurance Cover		
5	Net Metering Installation report/Intimation to DISCOM /NOC from DISCOM regarding plant connectivity approval		
6	JMR (Generation Data Certificate) from the date of Commissioning as certified by the client organization/ rooftop owner till the date inspection will also be needed for declaring the commissioning of the Rooftop Solar Power Plant if the inspection of the plant is carried out after the SCD.		

Signature(Authorized Signatory)

ANNEXURE - F

**BENEFICIARY COMMISSIONING/COMPLETION REPORT FOR GRID
CONNECTED SOLAR PHOTOVOLTAIC POWER PLANT**

Certified that a Grid Connected SPV Power Plant of kWp capacity has been installed and commissioned at the site District of which has been installed and commissioned by M/s on The system is as per SJVN RfS No:dt. and its subsequent amendment and clarifications specifications. The system has been checked for its performance onand the plant made operational.

Signature of client's

SJVN/Representative,

Date & Seal

ANNEXURE-G

**INTIMATION TO DISCOM FOR IMPLEMENTATION OF GRID CONNECTED
ROOFTOP SOLAR PV PLANT UNDER PM SURYA GHAR: MUFT BIJLI YOGANA**

To,

Date:

(Designated Officer, DISCOM)

1.	Name of SPD/Implementing Agency	
2	Name of the Consumer*	
Site Details*		
3	Address of the Rooftop Project Site:*	H No:
		Street Name:
		Village Name:
		District Name:
		State:
	Pin Code:	
4	Phone / Mobile no. *	
5	Email Id:	
6	Electricity Consumer K. No. *	<input type="checkbox"/>
7	Categor y) *	<input type="radio"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="radio"/> Educational <input type="checkbox"/> Government <input type="checkbox"/> Others, Specify
8	Installed Plant Capacity DC (kWp)*	
9	Contracted capacity AC (kW)	
10	Connected load (kW)*	
11	Voltage level at interconnection*	<input type="radio"/> 415 V <input type="radio"/> 11 kV <input type="radio"/> above 11 kV <input type="checkbox"/>
12	Nearest Transformer Details	Location: Capacity:
13	Details of Inverter with Anti-Islanding Protection* Phase (Φ): Galvanic Isolation	Make:
		Capacity:
		<input type="radio"/> Single phase <input type="radio"/> 3-Phase <input type="radio"/> Inside Inverter <input type="radio"/> Outside Inverter

14	Both AC and DC components of the SPV power plants Earthed*: <input type="checkbox"/>	
15	CEIG Inspection required*	<input type="radio"/> Yes <input type="radio"/> No
16	If, Yes, Inspection date * (Attach copy of CEIG Certificate)	

17	Bank Account details	Account No. Bank	Branch
18	Date of Grid Synchronization*		
19.	Net metering and gridconnectivity (Attach acknowledgment From DISCOM, if received)	Applied on:	
		Fees Deposited On:	

***To be provided mandatorily**

It is certified that the information furnished above is true to the best of my knowledge.

Consumer / Authorized Signatory of
Implementing Agency on behalf of consumer

Copy To:

Engineer In-charge, SJVN

Project Inspection Report under RfS No: Dated:			
Date of Inspection:			
A	Name of the Solar Power Developer:		
B	Name of the Building Department / Organization:		
C	Name of the Ministry:		
D	Address of SPV power plant installed:		
E	Contracted Capacity AC(kW)		
F	Meter Consumer Number:(Electricity bill copy to be attached)		
S. No	Component	Details	Page No.
1	Installed Project capacity in (kWp)		
2	Whether the system is installed in shadow free area or not? If not mention the details.	YES /NO	
3	PV modules	1- Attach Invoice copy of modules 2- Attach Delivery challan of modules	
4	Type, Make and year of manufacturing of Modules		
5	Flash Test Report for all modules (rated output power of any supplied module shall have positive tolerance in range of 5 watt)	YES/NO (Documents attached)	
6	PV module qualification test standard (IEC 61215/IS14286 / IEC 61730 / IEC 61701/IS 61701 (for highly corrosive atmosphere)	Certificate Number: Certificate issued by: Certificate issued on: Certificate valid up to:	
7	Wattage of each module and Total No. of modules		
8	Integrated bypass diodes	YES/NO	
9	Representative I-V curve of modules @STC	Documents attached	
(Signature – SPD’s Representative)		(Signature- client’s representative)	(Signature - SJVN’s representative /Inspector)

10	Module RF identification tag (Inside /outside lamination)	YES/NO	
11	Whether the modules contain information about company name, serial no and year manufacturing etc.	YES/NO (RFID information attached)	
12	Warranty Certificates (Material Warranty/ Performance Warranty) signed and stamped by bidders	Signed and Stamped copy by bidder (Documents attached)	
13	Protection class of Junction box of modules (IP- 65)	YES/NO	
ARRAY STRUCTURE			
14	Material of structure	Hot dip galvanized MS / Steel (IS 2062: 1992) / Aluminium (Check Material test report as per IS)	
15	Galvanisation of mounting structure as per IS 4759	YES/NO (check test report as per IS)	
16	Galvanisation thickness of mounting structure	1. _____mm 2. Galvanisation test report as per IS – YES/NO	
17	Wind load calculation sheet for wind zone of the location	Designed to sustain wind speed up to _____ kmph	
18	MMS Design certified by a recognized Lab/ Institution	1. YES/NO 2. Attach Document	
19	Material of fasteners (Stainless steel)	YES/NO	
20	Load bearing capacity of the roof	OK / Not OK (visual observation)	
21	Minimum clearance of the structure from the roofmm	
(Signature – Bidder's Representative)		(Signature- client's representative)	(Signature - SJVN's Inspector)

PCU/ Inverter			
22	Guaranteed Technical Particulars for PCU/ Inverter as per RfS	YES/NO	
23	Make, rating of each inverter & No. of Inverters (AC capacity of inverter)		
24	Combined Rated wattage of all inverters in Plant (Total AC rating)		
25	MPPT is integrated in the PCU/inverter	YES/NO	
26	Year(s) of manufacturing of inverters		
27	Switching devices, inverter data sheet as per RfS	YES/NO	
28	Protection of Enclosure (IP) and Location of Inverters (outdoor/indoor)		
29	Phase of inverter	3 phase / 1 phase	
30	Whether solar PV plant is synchronized with grid	YES/NO	
31	Inverter standard codes IEC 61683/IS 61683, IEC60068-2(1, 2, 14, 30) /Equivalent BIS Std.	Certificate Number: Certificate issued by: Certificate issued on: Certificate valid up to:	
32	Anti- Islanding (IEEE 1547/UL1741/IEC 62116)	Certificate Number: Certificate issued by: Certificate issued on: Certificate valid up to:	
33	Serial Numbers of installed inverters		
DCDB /Junction Boxes (if required)			
34	GTP of JB as per RfS	YES/NO	
35	IP protection level	IP - (Check Test report as perIS)	
36	Bus bar material of DCDB	Copper, YES/NO,	
37	MCB/MCCB installed	YES/NO, Rating, Data sheet attached	
38	Surge arrester, SPDS	YES/NO, Rating, Data sheet attached	
(Signature – Bidder's Representative)		(Signature- client's representative)	(Signature - SJVN's Inspector)

39	Material of sheet and thickness	GRP/FRP/Power coated aluminium /Cast Aluminium alloy	
40	Test report of DCDB	Attached (As per IS)	
41	Height of junction box	5 feet or more (YES/NO)	
42	Glands type	Single / Double compression gland	
43	JB Earthing provision	YES/NO	
AC DISTRIBUTION PANEL BOARD/ LT Panel			
44	All switches and the circuit breakers, connectors standards IEC 60947, part I, II and III/ IS60947 part I, II and III)	YES/NO , (check Rating , Data sheet)	
45	IP protection (Minimum 54 or better)	YES/No	
46	Material of LT panel and its details		
47	Change over switch	YES/NO,	
48	Proper Earthing of ACDB (As per IS 3043-1987)	YES/NO	
49	Surge protections	YES/NO (check Rating, Datasheet)	
50	Height of LT panel form groundMeters	
51	Test report of ACDB as per IE Rules	YES/NO	
Lightening arrester			
52	Proper Lighting arrester installed (As per NFC 17-102:2011/ IEC 62561)	YES /NO	
Cables			
53	Meets IEC 60227/IS 694, IEC 60502/IS1554 standards (or other as applicable)	YES/NO, Certificate Number: Certificate issued by: Certificate issued on: Certificate valid up to:	
54	Cable dimension and Material 1- Modules to inverters, Inverter to LT panels,	1Sq mm Material - 2Sq mm, Material -	
55	Voltage drop in DC cable (Modules to inverters)	_____%,	
56	Voltage drop in AC cable (inverter to LT panel or T/F)	_____%,	
(Signature – Bidder’s Representative)		(Signature- client’s representative)	(Signature -SJVN’s Inspector)

57	Cable Routing/ Marking (GI cable tray and suitably tagged and marked with proper manner by good quality ferrule)	YES/NO	
Solar Plant Monitoring			
58	Solar Irradiance sensor mounted on Plane of the array.	YES/NO	
59	Irradiance Sensor calibration certificate	Certificate Number: Certificate issued by: Certificate issued on: Certificate valid up to:	
60	Temperature sensor	YES/NO,	
61	Online Monitoring mechanism for the installed system	YES/NO	
Transformer (If required)			
62	Transformer rating, Type etc.		
Miscellaneous			
63	Earthing and protections (Array Structure, PCU, ACDB and DCDB) IS:3043-1987	OK/Not OK	
64	Earthing Resistance less than 5 ohms	YES/NO, values..... ohms	
65	NOC from the Concerned DISCOM for the connectivity, technical feasibility, and synchronization of SPV plant	YES/NO, attached (not mandatory)	
66	Bidirectional meters installed (for net metering)	YES/NO, Rating, Data sheet	
67	Accuracy and burden of Meters		
68	Danger boards and signages	YES/NO	
69	Fire extinguishers & Sand Buckets	YES/NO	
70	Tools & Tackles and spares	OK/Not OK	
71	O&M manual available at site	YES/NO	
72	Display Board	YES/NO	
(Signature – Bidder’s Representative)		(Signature- client’s representative)	(Signature - SJVN’s Inspector)

Drawings at Site			
73	Layout of solar Power Array As built drawing (A3 Sheet)	Check and Attach	
74	Shadow analysis of the roof	Check and Attach	
75	Single line diagram of plant (SLD) A 3 sheet	Check and Attach	
76	Structural drawing along with foundation details for the structure (A3 Sheet)	Check and Attach	
77	Itemized bill of material for complete SPV plant covering all the components and associated accessories. The country of manufacturing needs to be mentioned for all major components like modules, inverters, cables, mounting structure, switchgear, SCADA system etc.	Check and Attach	
78	Soft copy in CD of final drawing	Check and Attach	
79	Photo Graphs of sites	Check and Attach	
80	Any specific problem(s)		
81	Recommendations		
(Signature – Bidder’s Representative)		(Signature- client’s representative)	(Signature - SJVN’s Inspector)

Format for Performance Ratio (PR)

“Performance Ratio” (PR) means the ratio of Actual plant output versus installed plant capacity at any instance with respect to the Solar Irradiance measured.

$$PR = \frac{\text{Energy Measured (kWh)}}{\text{Installed capacity in kWp} \times \text{Measured Solar irradiance(kWh/m}^2\text{)}}$$

Parameters	Input value	Remarks, if any
Date and Time for PR measurement		
A) Installed Plant Capacity in kWp		
B) Energy Measured output in kWh		
C) Measured Solar irradiance in kW/m ²		
Performance Ratio (%): (B/AxC)x100		
Date of Installation/ Completion of the Rooftop Solar PV Project to be certified by client 's Representative		

Declaration:

It is to certify that all the information given above is true and correct to best of our knowledge. The plant is found to be installed as per the technical specifications mentioned in SJVN's RfS No.:

Signature of Inspecting Officer, Date & Name

Signature of Representative of Solar Power Developer (SPD), Date & Seal

Signature of client's Representative,

Date & Seal – Conforming installation of rooftop solar plant at their building and its satisfactory operation

SPECIAL INSTRUCTIONS TO BIDDERS FOR e-TENDERING

GENERAL

The Special Instructions (for e-Tendering) supplement 'Instructions to Bidders', as given in these RfS Documents. Submission of Online Bids is mandatory for this RfS.

e-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Now, the Government of India has made e-Tendering mandatory. Suppliers/ SPD/Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, *SJVN Limited (SJVN)* has adopted a secured and user friendly e-tender system enabling bidders to Search, View, Download tender document(s) directly from the e-tendering portal of M/s Electronic Tender (India) Pvt. Limited <https://www.bharat-electronictender.com> through ISN-ETS. This portal is based on the world's most 'secure' and 'user friendly' software from Electronic Tender®. A portal built using Electronic Tender's software is also referred to as Electronic Tender System® (ETS). **The bidder shall require to pay annual registration and Electronic Tender Service Fee as applicable.** Benefits to Suppliers are outlined on the Home-page of the portal.

INSTRUCTIONS

Tender Bidding Methodology:

Sealed Bid System

Single Stage Two Envelope

Auction

The sealed bid system would be followed by an 'e-Reverse Auction' (if applicable)

Broad Outline of Activities from Bidder's Perspective:

- 1) Procure a Class III Digital Signing Certificate (DSC).
- 2) Register on Electronic Tender System® (ETS)
- 3) Create Marketing Authorities (MAs), Users and assign roles on ETS. It is mandatory to create at least one MA
- 4) View Notice Inviting Tender (NIT) on ETS
- 5) For this tender -- Assign Tender Search Code (TSC) to a MA

Download Official Copy of Tender Documents from ETS.

Note: Official copy of Tender Documents is distinct from downloading 'Free Copy of Tender Documents'. To participate in a tender, **it is mandatory to procure official copy of Tender Documents for that tender**

- 6) Clarification to Tender Documents on ETS
 - a. Query to SJVN (Optional)
 - b. View response to queries posted by SJVN
- 7) Bid-Submission on ETS
- 8) Respond to SJVN Post-TOE queries
- 9) Participate in e-Reverse Auction if invited

For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the ETS.

Digital Certificates

For integrity of data and authenticity/ non-repudiation of electronic records, and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC), also referred to as Digital Signature Certificate (DSC), of Class III, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <http://www.cca.gov.in>].

Registration

To use the Electronic Tender® portal <https://www.bharat-electronictender.com>, vendors need to register on the portal. Registration of each organization is to be done by one of its senior persons who will be the main person coordinating for the e-tendering activities. In ETS terminology, this person will be referred to as the Super User (SU) of that organization. For further details, please visit the website/ portal, and click on the ‘Supplier Organization’ link under ‘Registration’ (on the Home Page), and follow further instructions as given on the site. **Pay Annual Registration and Electronic Tender Service Fee as applicable.**

After successful submission of Registration details and payment of Annual Registration Fee, please contact ISN-ETS Helpdesk (as given below), to get your registration accepted/ activated.

Important Note:

- 1) Interested bidders have to download official copy of the RfS & other documents after login into the e-tendering Portal of ISN-ETS <https://www.bharat-electronictender.com>. If the official copy of the documents is not downloaded from e-tendering Portal of ISN-ETS within the specified period of downloading of RfS and other documents, bidder will not be able to participate in the tender.
- 2) To minimize teething problems during the use of ETS (including the Registration process), it is recommended that the user should peruse the instructions given under ‘ETS User- Guidance Centre’ located on ETS Home Page, including instructions for timely registration on ETS. The instructions relating to ‘Essential Computer Security Settings for Use of ETS’ and ‘Important Functionality Checks’ should be especially taken into cognizance.

Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation

of users, assigning roles to them, etc.

ISN-ETS/ Helpdesk	
Telephone/ Mobile	<i>Customer Support: +91-124-4229071, 4229072 (From 1000 HRS to 1800 HRS on all Working Days i.e. Monday to Friday except Government Holidays)</i>
Email-ID	<i>support@isn-ets.com [Please mark CC: support@electronictender.com]</i>

Some Bidding Related Information for this Tender (Sealed Bid)

The entire bid-submission would be online on ETS (unless specified for Offline Submissions).
Broad outline of submissions are as follows:

- Submission of Bid-Parts as applicable
 - Envelope I (Technical-Bid)
 - Envelope II (Financial-Bid)

- *Submission of digitally signed copy of Tender Documents/ Addendum*

In addition to the above, the bidders are required to submit certain documents physically offline also as per Clause 3.14.1 of the RfS, failing which the technical bids will not be opened.

Note: The Bidder should also upload the scanned copies of all the above mentioned original documents as Bid-Annexures during Online Bid-Submission.

Internet Connectivity

If bidders are unable to access ISN-ETS's e-tender portal or Bid Documents, the bidders may please check whether they are using proxy to connect to internet or their PC is behind any firewall and may contact their system administrator to enable connectivity. Please note that Port SSL/ 443 should be enabled on proxy/firewall for HTTPS connectivity. Dial-up/ Broad and internet connectivity without Proxy settings is another option.

SPECIAL NOTE ON SECURITY AND TRANSPARENCY OF BIDS

Security related functionality has been rigorously implemented in ETS in a multidimensional manner. Starting with 'Acceptance of Registration by the Service Provider', provision for security has been made at various stages in Electronic Tender's software. Specifically, for Bid Submission, some security related aspects are outlined below:

As part of the Electronic Encrypted[®] functionality, the contents of both the 'Electronic Forms[®]' and the 'Main-Bid' are securely encrypted using a Pass-Phrase created by the Bidder himself. Unlike a 'password', a Pass-Phrase can be a multi-word sentence with spaces between words (e.g. I love this World). A Pass-Phrase is easier to remember, and more difficult to break. It is mandatory that a separate Pass-Phrase be created for each Bid-Part. This method of bid- encryption does not have the security and data-integrity related vulnerabilities which are inherent in e-tendering systems which use Public-Key of the specified officer of a Buyer organization for bid-encryption. Bid-encryption in ETS is such that the Bids cannot be decrypted before the Public Online Tender Opening Event (TOE), even if there is connivance between the concerned tender-opening officers of the Buyer organization and

the personnel of e-tendering service provider.

CAUTION: All bidders must fill Electronic Forms[®] for each bid-part sincerely and carefully, and avoid any discrepancy between information given in the Electronic Forms[®] and the corresponding Main-Bid. For transparency, the information submitted by a bidder in the Electronic Forms[®] is made available to other bidders during the Online Public TOE. If it is found during the Online Public TOE that a bidder has not filled in the complete information in the Electronic Forms[®], the TOE officer may make available for downloading the corresponding Main-Bid of that bidder at the risk of the bidder.

If variation is noted between the information contained in the Electronic Forms[®] and the ‘Main-Bid’, the contents of the Electronic Forms[®] shall prevail.

In case of any discrepancy between the values mentioned in figures and in words, the value mentioned in words will prevail.

The bidder shall make sure that the Pass-Phrase to decrypt the relevant Bid-Part is submitted into the ‘Time Locked Electronic Key Box (EKB)’ after the deadline of Bid Submission, and before the commencement of the Online TOE of Technical Bid. The process of submission of this Pass-Phrase in the ‘Time Locked Electronic Key Box’ is done in a secure manner by first encrypting this Pass-Phrase with the designated keys provided by SJVN.

Additionally, the bidder shall make sure that the Pass-Phrase to decrypt the relevant Bid-Part is submitted to SJVN in a sealed envelope before the start date and time of the Tender Opening Event (TOE).

There is an additional protection with SSL Encryption during transit from the client-end computer of a Supplier organization to the e-Tendering Server/ Portal

PUBLIC ONLINE TENDER OPENING EVENT (TOE)

ETS offers a unique facility for ‘Public Online Tender Opening Event (TOE)’. Tender Opening Officers, as well as, authorized representatives of bidders can simultaneously attend the Public Online Tender Opening Event (TOE) from the comfort of their offices.

Alternatively, one/ two duly authorized representative(s) of bidders (i.e., Supplier organization) are requested to carry a Laptop with Wireless Internet Connectivity, if they wish to come to SJVN’s office for the Public Online TOE, if applicable for the RfS.

Every legal requirement for a transparent and secure ‘Public Online Tender Opening Event (TOE)’, including digital counter-signing of each opened bid by the authorized TOE- officer(s) in the simultaneous online presence of the participating bidders’ representatives, has been implemented on ETS.

As soon as a Bid is decrypted with the corresponding ‘Pass-Phrase’ as submitted by the bidder himself during the TOE itself, or as per alternative methods prescribed in the Tender Documents, salient points of the Bids (as identified by the Buyer organization) are simultaneously made available for downloading by all participating bidders. The tedium of taking notes during a manual ‘Tender Opening Event’ is therefore replaced with this superior and convenient form of ‘Public Online Tender Opening Event (TOE)’.

ETS has a unique facility of ‘Online Comparison Chart’ which is dynamically updated as each online bid is opened. The format of the chart is based on inputs provided by the Buyer for each Bid-Part of a tender. The information in the Comparison Chart is based on the data submitted by the Bidders. A detailed Technical and/ or Financial Comparison Chart enhances Transparency. Detailed instructions are given on relevant screens.

ETS has a unique facility of a detailed report titled ‘Minutes of Online Tender Opening Event (TOE)’ covering all important activities of the ‘Online Tender Opening Event (TOE)’. This is available to all participating bidders for ‘Viewing/ Downloading’, as per the NIT configured by the bidding agency.

There are many more facilities and features on ETS. For a particular tender, the screens viewed by a Supplier will depend upon the options selected by the concerned Buyer.

OTHER INSTRUCTIONS

For further instructions, the SPD/Vendor should visit the home-page of the portal <https://www.bharat-electronictender.com>, and go to the **User-Guidance Center**

The help information provided through ‘ETS User-Guidance Center’ is available in three categories – Users intending to Register/ First-Time Users, Logged-in users of Buyer organizations, and Logged-in users of Supplier organizations. Various links (including links for User Manuals) are provided under each of the three categories.

Important Note: It is strongly recommended that all authorized users of Supplier organizations should thoroughly peruse the information provided under the relevant links, and take appropriate action. This will prevent hiccups, and minimize teething problems during the use of ETS.

SEVEN CRITICAL DO’S AND DON’T S FOR BIDDERS

Specifically, for Supplier organizations, the following '**SEVEN KEY INSTRUCTIONS for BIDDERS**' must be assiduously adhered to:

- 1) Obtain individual Digital Signing Certificate (DSC or DC) of Class III well in advance of your tender submission deadline on ETS.
- 2) Register your organization on ETS well in advance of the important deadlines for your first tender on ETS viz ‘Date and Time of Closure of Procurement of Tender Documents’ and ‘Last Date and Time of Receipt of Bids’. Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of -- Marketing Authority (MA) [i.e a department within the Supplier/ Bidder Organization responsible for responding to tenders], users for one or more such MAs, assigning roles to them, etc. It is mandatory to create at least one MA. This unique feature of creating an MA enhances security and accountability within the Supplier/ Bidder Organization
- 3) Get your organization's concerned executives trained on ETS well in advance of your first tender submission deadline on ETS.
- 4) For responding to any particular tender, the tender (i.e. its Tender Search Code or TSC) has to be assigned to an MA. Further, an ‘Official Copy of Tender Documents’ should be procured/ downloaded before the expiry of Date and Time of Closure of Procurement of Tender Documents.

Note: Official copy of Tender Documents is distinct from downloading ‘Free Copy of Tender Documents’. Official copy of Tender Documents is the equivalent of procuring physical copy of Tender Documents with official receipt in the paper-based manual tendering system.

- 5) Submit your bids well in advance of tender submission deadline on ETS (There could be last minute problems due to internet timeout, breakdown, etc.)

Note: Bid-submission in ETS can consist of submission of multiple bid- components, which vary depending upon the situation and requirements of the Buyer. Successful receipt of a bid in an e-tendering scenario takes place if all the required bid- components are successfully ‘received and validated’ in the system (ETS) within the scheduled date and time of closure of bidding (On some ETS screens, this is also referred to as ‘Last Date and Time of Receipt of Bids’). ETS/ Service Provider is not responsible for what happens at an end-user’s end, or while a submission made by an end-user is in transit, until the submission is successfully ‘received and validated’ in ETS. When a bid-component receipt and validation is successful, it is recorded in the ETS Audit Trail Report, which is generated by ETS. In case of any uncertainty, the application audit trail generated by ETS (ETS Audit Trail Report) shall be the final record/evidence for reference regarding the ‘successful bid receipt’.

- 6) It is the responsibility of each bidder to remember and securely store the Pass-Phrase for each Bid-Part submitted by that bidder. In the event of a bidder forgetting the Pass-Phrase before the expiry of deadline for Bid-Submission, facility is provided to the bidder to ‘Annul Previous Submission’ from the Bid- Submission Overview page and start afresh with new Pass-Phrase(s) and if the bids are not opened with the pass-phrase submitted by bidder, SJVN may ask for re- submission/ clarification for correct pass-phrase. If bidder fails to submit correct pass- phrase immediately as requested by SJVN, the Document Fee, if applicable, shall be forfeited and bid shall not be opened, and EMD shall be refunded. No request on this account shall be entertained by SJVN.
- 7) ETS will make your bid available for opening during the Online Public Tender Opening Event (TOE) ‘ONLY IF’ the status pertaining Overall Bid-Submission is ‘COMPLETE’. For the purpose of record, the bidder can generate and save a copy of ‘Final Submission Receipt’. This receipt can be generated from 'Bid- Submission Overview Page' only if the status pertaining overall Bid-Submission’is ‘COMPLETE’

NOTE:

While the first three instructions mentioned above are especially relevant to first-time users of ETS, the fourth, fifth, sixth and seventh instructions are relevant at all times.