

# **JAMMU POWER DISTRIBUTION CORPORATION LIMITED**

Corporate Office, JPDCL BR Ambedkar Chowk Jammu



## **Request for Proposal (RFP)**

### **For**

“Discovery of Tariff and Selection of RESCO-Renewable Energy Service Company for Design, Engineering, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for 2 kW Grid Connected Roof Top Solar Plant for AAY Households in Jurisdiction of JPDCL through RESCO Mode of Utility Led Aggregation Implementation under PM - Surya Ghar: Muft Bijli Yojana”

***e-NIT NO: CE (D)/ JPDCL/01 of 2026 Dated:03/06/2026***

**JPDCL**

# **INVITATION FOR e-BID**

## **Introduction**

The Government of India has approved the “PM Surya Ghar: Muft Bijli Yojana” on 29.02.2024 with a financial outlay of over INR 75,000 Crore, aimed at increasing the share of solar rooftop capacity and empower residential households to generate their own electricity.

The scheme promotes the Grid Connected Rooftop Solar PV Systems.

Further, vide Office Memorandum dated 28.12.2024, MNRE has issued Operational Guidelines for implementation of “Payment Security Mechanism” Component and “Central Finance Assistance” Component for RESCO Models/ Utility Led Aggregation Model under PM Surya Ghar: Muft Bijli Yojana.

In line with these guidelines issued by MNRE, JPDCL as implementing agency of the programme intends to select RESCO for setting up of Grid Connected Rooftop Solar systems (RTS) on the roof top of registered AAY Households in the jurisdiction of JPDCL.

The RESCO shall bear full investment of 2 kW solar roof top systems including procurement, installation and maintenance for the contract period. It will be paid central financial assistance upon successful installation of RTS and as per MNRE guidelines. It will recover its remaining investment through levelized tariff to be paid by the J&K Govt through DISCOM / JPDCL.

The RTS shall be transferred to the AAY household/consumer after the contract period is over.

There are approximately 77,333 AAY Households in Jammu Division within the jurisdictional area of JPDCL amounting to an aggregate potential capacity of about 154 MW generation of solar power.

**SECTION I:**  
**INSTRUCTIONS TO BIDDERS**

Jammu Power Distribution Corporation Limited JPDCL invites Bids from eligible Bidders to participate through this Request for Proposal (RFP) for *“Discovery of Tariff along with Selection of RESCO for Design, Engineering, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for 2 kW Grid Connected RTS for AAY Households in the jurisdiction of JPDCL under Utility Led Aggregation Implementation of PM - Surya Ghar: Muft Bijli Yojana”*

**Disclaimer**

1. Though adequate care has been taken while preparing this RFP document (inclusive of Formats and Annexures), the Bidders shall satisfy themselves that the document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from a prospective Bidder at least ten (10) days prior to Bid Submission deadline, whichever is later, it shall be considered that the RFP document is complete in all respects and has been received by the Bidder.
2. The Bidder shall be deemed to know the scope, nature and magnitude of the works and requirement of materials, equipment, tools and labour involved, wage structures and as to what all works RESCO shall have to complete in accordance with the RFP. It is assumed that Bidder has satisfied himself with the site conditions at the Premises at which RTS will installed and has assessed the quantum of work required to comply with the RFP.

## **A. General Instructions**

- a) 1. The interested bidder can download the bidding document from the website <http://jktenders.gov.in>.
2. Bidders are advised to download bid submission manual for the help of Bid Submission process from the “Downloads” option as well as from “Bidders Manual Kit” on website <http://jktenders.gov.in>.
- b) To participate in bidding process, bidders have to get ‘Digital Signature Certificate (DSC)’ class III(b) as per Information Technology Act-2000, to participate in online bidding. The bidders have to submit their bids online in electronic format with digital Signature. This certificate will be required for digital signing the bid. Bidders can get above mention digital certificate from any approved vendors. The Bidders, who already possess valid Digital Certificates, need not to procure new Digital Certificate. The bids proposed without digital signature will not be accepted. No proposal will be accepted in physical form.
- c) Bids will be opened online as per time schedule mentioned in table below.

A	Date & Time of downloading of Standard Bidding Document	<a href="http://jktenders.gov.in">The Standard Bidding Document can be downloaded over http://jktenders.gov.in</a> from 04/06/2026 : 1400 Hours
B	Clarifications start date	<a href="#">09/06/2026</a> : 1000 Hours
C	Clarifications end date	<a href="#">13/06/2026</a> : 1400 Hours
D	Pre Bid Conference Date & Venue	<a href="#">15/06/2026</a> : Office of Chief Engineer Distribution, JPDCL, 1400 Hours
E	e-Bid submission (start) date & time (Submission of bid processing fee, EMD and other supporting documents in PDF/XLS format)	<a href="#">10/06/2026</a> : 1000 Hours
F	e-Bid submission (end) date & Time	<a href="#">26/06/2026</a> : 1600 Hours
G	Online Commercial and Technical e-Bid opening date & Time	<a href="#">30/06/2026</a> : 1400 Hours
H	Online financial e-Bid opening date & time	Will be communicated to the Technically Qualified Bidders
I	Venue of opening of technical & Financial e-Bids	Office of the Chief Engineer (Distribution), JPDCL, Jammu
J	Bid Processing Fee	In the form of DD pledged to Chief Accounts Officer, Office of the Chief

		Engineer (Distribution), JPDCL and payable at Jammu. The required amount of bid processing fee for each of the 10 administrative districts is given in Annexure G.
K	Earnest Money deposit (EMD)	Interested Bidder shall furnish EMD / Bid Security of required amount for each administrative district under the jurisdiction of JPDCL for which Bidder is placing Bid. The EMD shall be in the form of Bank Guarantee/FDR/CDR from a scheduled commercial bank pledged to Chief Accounts Officer, Office of the Chief Engineer (Distribution), JPDCL and payable at Jammu. The required amount of Bid Security for each of the 10 administrative districts is given in Annexure G.

- d) Before submission of online bids, bidders must ensure that legible scanned copy of all the necessary documents have been attached with bid.
- e) The DISCOM/JPDCL will not be responsible for delay in online submission due to any reasons.
- f) All the required information for bid must be filled and submitted online.
- g) There are a total of ten (10) administrative districts under the jurisdiction of JPDCL and each of these districts is put to bid separately for selection of RESCO and discovery of Tariff Rate for that district.
- h) Bidders besides other details will also upload the scanned copies of DD or any other form as specified in the bidding document. The bid processing fee and **EMD** must be submitted to the office of Chief Engineer (Distribution), JPDCL, Jammu by Registered post/courier/By Hand and should reach by or before the scheduled date of technical e-bid opening or its extension if any.
- i) The complete SBD document including qualifying documents and Schedules duly signed and stamped by the authorized person representing the bidder must be uploaded by or before the scheduled end date of e-bid submission. No hard copy of the technical bid is required to be submitted. Only the commercial instruments i.e cost of tender and EMD are required to be submitted in hard copy as stated in clause g above.
- j) **Tariff Rates Per kWh shall be quoted in FIRM manner for both contract**

**periods namely, 10 years and 25 years post COD FOR all the RTS installations within the district for which the bid is made.**

- k) The details of cost of documents, EMD specified in the SBD should be the same as submitted online (scanned copies); otherwise tender will summarily be rejected.
- l) The guidelines regarding submission of bid online can be downloaded from website "<http://jktenders.gov.in>".

## **B. BID Document**

### **1. Bid Processing Fee: -**

- a. The bidder shall bear all costs associated with the preparation and submission of its e-Bid and tender inviting authority JPDCL hereinafter referred to as "the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the e-Bid process.

This SBD is available on the web site <http://jktenders.gov.in> to enable the bidders to view, download the e-Bid document and submit e-Bids online up to the last date and time mentioned in e-Tender notice/e-tender document against this e-Tender. The bidders shall have to pay the bid processing fee for an amount as specified in Annexure G through a Demand Draft pledged to **Chief Accounts Officer, Office of the Chief Engineer (Distribution), JPDCL and payable at Jammu**. The scanned copy of the Demand Draft must be enclosed along with the e-Bid but the original Demand Draft should reach the office of **Chief Engineer (Distribution), JPDCL, Bhagwatinagar, Jammu by or** before the scheduled date of technical e-bid opening.

### **2. Contents of Standard Bidding Document(SBD):**

#### **2.1 The e-Bid document includes:**

- (a) Section I: Instruction to bidders (ITB);
- (b) Section II: Commercial Details;
- (c) Section III: Technical Details;
- (d) Section IV: Financial e-Bid;
- (e) Section V: Conditions of Contract (CC);
- (f) Section VI: Scope of Work



(g) Section VII: Annexures

- 2.2 The bidder is expected to examine all instructions, forms, terms and specifications in the e-Bid document. Failure to furnish all information required as per the e-Bid document or submission of e-Bid not responsive to the e-Bid document in every respect will be at the bidder's risk and may result in rejection of the said e-Bid.

**3. Amendment of e-Bid Document**

- 3.1 At any time prior to the deadline for submission of e-Bid, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the e-Bid document by amendments. Such amendments shall be uploaded on the website <http://jktenders.gov.in> through corrigendum and shall form an integral part of e-Bid document. The relevant clauses of the e- Bid document shall be treated as amended accordingly.

- 3.2 It shall be the sole responsibility of the prospective bidders to check the web site <http://jktenders.gov.in> from time to time for any amendment in the e-tender document.

In case of failure to get the amendments, if any, the Purchaser shall not be responsible for it.

- 3.3 In order to allow prospective e-Bidders a reasonable time to take the amendment into account in preparing their e-Bids, the Purchaser, at his discretion, may extend the deadline for the submission of e-Bids. Such extensions shall be uploaded on the e-Procurement website <http://jktenders.gov.in>.

**C. PREPARATION OF e-Bid**

**4. Language of e-Bid**

The e-Bid prepared by the bidder, as well as all correspondence and documents relating to the e-Bid exchanged by the bidder and the Purchaser shall be written in English language. Only English numerals shall be used in the e-Bid.

## 5. Documents Constituting the e-Bid

5.1 The e-Bid prepared by the bidder shall comprise the following components:

### (A1) Commercial e-bid–

- i) The bidder has to submit all the documents and to fulfill all the requirements as defined in Section-II, Commercial e-bid in pdf format.

### (A2) Technical e-bid:

- i) The bidder has to submit all the documents and to fulfill all the requirements as defined in Section-III of this standard bidding document (SBD).
- ii) **Annexures-** Annexures have to be furnished along with e-bid in PDF format.
- iii) **SBD-** The complete SBD should be duly signed and stamped by the bidder giving his acceptance to the terms and conditions as specified in the SBD.

### (B) Financial e-bid –

- i) **Price Schedule/BOQ:** The bidder has to fill in and submit the same BOQ (xls) sheet forming part of this RFP and to fulfill all the requirements as defined in Section-IV of this document. No hard copy of the BOQ is required to be submitted.

## 6. e-Bid Price

- 7. In the BOQ, the bidder shall be required to quote Tariff (“Quoted Tariff”) in the Financial Bid. The Quoted Tariff shall be in (INR / kWh) up to two (02) decimal places and shall be filled for the respective administrative district being bid.
- 8. Bidder shall be required to submit the tariff rates for both the contract periods namely, 10 years period and 25 years period as per Annexure-J.
- 8.1 Tariff Rate quoted by the bidder shall be “**FIRM**” and incl of all Taxes and Duties for all the installations within the district for which the bidder has bid.

## 9. e-Bid Currency

- 9.1 The rate price must be quoted in Indian currency alone.

## 10. Earnest Money Deposit (EMD)

- 8.1. Each Bidder shall submit Bid Security / Earnest Money Deposit (EMD) for an amount as specified in Annexure G corresponding to each administrative district under the jurisdiction of JPDCL for which he is making the bid, separately. The EMD shall be in the form of a Bank Guarantee/FDR/CDR drawn on a Nationalized bank/Schedule Commercial Bank, pledged to **Chief Accounts Officer, Office of the Chief Engineer (Distribution), JPDCL and payable at Jammu.**
- 8.2 While the scanned copy of the EMD shall be submitted online along with the Technical Proposal, the original instrument shall be submitted in a sealed envelope to the Office of **Chief Accounts Officer, Office of the Chief Engineer (Distribution), JPDCL** before the due date and time.
- 8.3 Proposals, which are not accompanied by the above EMD, shall be rejected by JPDCL as nonresponsive.
- 8.4 For unsuccessful Bidders, the EMD shall be refunded after finalization of Tender. **For successful Bidder, EMD shall be released on the payment of the performance security** as per the terms of this document.
- 8.5 The following shall cause the forfeiture of EMD.
- (i) If the Bidder modifies/ withdraws its Bid proposal except as per the provisions specified in the Tender document;
  - (ii) If the Bidder withdraws its Bid proposal before the expiry of the validity period of the Bid proposal;
  - (iii) If the successful Bidder fails to provide the performance security and execute the agreement within the stipulated time or any extension thereof provided by JPDCL;
  - (iv) If any information or document furnished by the Bidder turns out to be misleading or untrue in any material respect;
  - (v) If the selected Bidder does not accept the Letter of Intent unconditionally within twenty-one (21) days of issue of Letter of Intent or the period as extended by JPDCL.
- 8.6 No exemption towards EMD / Bid Security is allowed to any type of

organizations/ agencies including MSMEs or any Govt./ Semi Govt./ PSUs.

## **11. Format and Signing of e-Bid**

- 11.1 The bidder shall prepare one electronic copy each of the Commercial e-bid & Technical e-Bid and Financial e-Bid separately.
- 11.2 The e-Bid document shall be digitally signed, at the time of uploading, by the bidder or a person or persons duly authorized to bind the bidder to the Contract. The authorization shall be indicated by a scanned copy of written power-of- attorney accompanying the e-Bid. All the pages/ documents of the e-Bid that are to be uploaded shall be digitally signed by the person authorized to sign the e- Bid.

## **12. Submission of e-Bid**

The Bid Submission module of website <http://jktenders.gov.in> enables the bidders to submit the e-Bid online in response to this e-tender published by the Purchaser. Bid Submission can be done only from the Bid Submission start date and time till the Bid Submission end date and time given in the e-tender. Bidders should start the Bid Submission process well in advance so that they can submit their e-Bid in time. The bidders should submit their e-Bid considering the server time displayed in the website. This server time is the time by which the e-Bid submission activity will be allowed till the permissible time on the last/end date of submission indicated in the e-tender schedule. Once the e-Bid submission date and time is over, the bidders cannot submit their e-Bid. For delay in submission of e-Bid due to any reasons, the bidders shall only be held responsible. The bidders have to follow the following instructions for submission of their e-Bid:

- 12.1 To participate in bidding process, bidders have to get 'Digital Signature Certificate (DSC)' class III(b) as per Information Technology Act-2000.
- 12.2 After login to their account, the bidder has to fill up the e-bid document fee detail and the EMD details. Next the bidder should upload the documents as

prescribed in Clause 5.1 (A & B). The components of bid processing fee and EMD should be same as filled by the bidder previously and any deviation from those shall result in rejection of the tender. During the above process, the e-Bid documents should be digitally signed using the DSC of the bidder.

12.3 Purchaser reserves the right to cancel any or all e-Bids without assigning any reason.

12.4 The e-bid must be complete in all respects. All the terms and conditions of SBD including technical specifications should be carefully studied for the sake of submitting complete and comprehensive e-bid. Failure to comply with any of the SBD conditions may lead to rejection even if otherwise it is competitive offer.

### **13. Deadline for Submission of e-Bid**

13.1 e-Bid (Commercial, Technical and Financial) must be uploaded by the bidders at website <http://jktenders.gov.in> not later than the time as prescribed in the NIT (as per the server time displayed on the website).

13.2 The Purchaser may, at its discretion, extend this deadline for submission of e-Bid by amending the e-Bid document, in which case all rights and obligations of the Purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

### **14. Late e-Bid**

14.1 The server time indicated in the window on the website <http://jktenders.gov.in> will be the time by which the e-Bid submission activity will be allowed till the permissible date and time scheduled in the e-tender. Once the e-Bid submission date and time is over, the bidder cannot submit his/her e-Bid. Bidder has to start the Bid Submission well in advance so that the submission process passes off smoothly. The bidder will only be held responsible if his/her e-Bid is not submitted in time due to any of his/her problems/faults, for whatsoever reason, during e-Bid submission process.

### **15. Qualification of tenders**

15.1 No specific prior experience criteria has been prescribed. However, bidders

shall demonstrate adequate technical and financial capability to undertake the work to the satisfaction of the Purchaser.

- 15.2 Notwithstanding anything stated above, the purchaser reserves the right to assess the Bidder's capability and capacity to perform the work, should the circumstances warrant such assessment in the overall interest of the purchaser.

### **OPENING AND EVALUATION OF e-BID**

#### **16. Opening of Commercial & Technical e-Bid by the Purchaser**

- 14.1 The Purchaser will open all commercial & technical e-Bids, in the presence of bidders who choose to attend at time specified in the table above at the Office of Chief Engineer (Distribution), JPDCL, Bhagwatinagar, Jammu. In the event of the specified date of e-Bid opening being declared a holiday for the Purchaser, the e-Bids shall be opened at the appointed time and place on the next working day.
- 14.2 The bidder's names and the presence or absence of requisite e-Bid EMD and such other details as the Purchaser at its discretion may consider appropriate, will be announced at the opening. The name of such bidders not meeting the Commercial, Technical Specifications and qualification requirement shall be notified subsequently.

#### **Opening of Financial e-Bid**

- 14.3 After evaluation of Commercial and Technical e-Bids, the Purchaser shall notify those bidders whose Commercial & Technical e-Bids were considered non-responsive to the Conditions of the Contract and not meeting the technical specifications and Qualification Requirements indicating that their financial e-Bids will not be opened. The Purchaser will simultaneously notify the bidders, whose technical e-Bids were considered responsive to the Purchaser. The notification shall be uploaded on the tendering website <http://jktenders.gov.in>.
- 14.4 The financial e-Bids of technically qualified bidders shall be opened in the presence of bidders who choose to attend, and date for opening of financial bids will be communicated to the Commercial & Technically Qualified Bidders

subsequently after completion of technical bids evaluation. The name of bidders, price quoted etc will be uploaded on the tendering website and can be also announced at the meeting subject to the discretion of the purchaser.

- 14.5 In the BOQ, bidders shall quote their Tariff rates (INR / kWh) for the respective administrative district for which they are bidding in the same BOQ as uploaded with this RfP for both the contract periods namely 10 Years and 25 Years. In case of any other BOQ being created by the bidder, **their bid shall be rejected.**

- 14.6 The bidders are advised not to mix financial e-bid documents (BOQ) with the PDF documents submitted for commercial and technical e-bid. **The e-Bids of the bidders having financial bid document in the technical bid will outrightly be rejected.**

## **16. Clarification of e-Bid**

- 16.1 During technical evaluation of e-Bid, the Purchaser may, at its discretion, ask the bidder for a clarification of his/her e-Bid. The request for clarification and the response shall be in writing. For seeking clarification, the purchaser reserves the right to ask for certain documentation from the bidders which have not been uploaded by the bidder as part of their e-bid. Such documentation if asked for, shall be treated as part of the online e-bid submitted by the bidder and be taken into consideration while technically evaluating the e-bids.

## **17. Evaluation of Commercial & Technical e-Bid and Evaluation Criteria**

- 17.1 The Purchaser will examine the e-Bid to determine whether they are complete, whether they meet all the conditions of the Contract, whether required bid processing fee, EMD and other required technical and financial qualifying documents have been furnished, whether the documents have been properly digitally signed, and whether the e-Bids are generally in order. Any e-Bid or e-Bids not fulfilling these requirements shall be rejected.

The bidders shall submit the scanned copies as prescribed in Section II (Commercial Details) and Section III (Technical Details) as documentary proof for evaluation of their commercial and technical e-Bids.

17.2 Each Bid shall be checked for compliance with the submission requirements set forth in this RFP and the decision of JPDCL in this matter shall be final and binding on the bidders.

17.3 Each Bid shall be checked for compliance with the submission requirements set forth in this RFP. It shall be the discretion of the Purchaser to decide as to whether an e-Bid fulfils the evaluation criterion mentioned in this e-tender or not.

## **18. Financial Evaluation and Comparison of e-Bid**

18.1 Financial Bids of only those bidders shall be opened whose commercial and technical e-Bids are found responsive as per the conditions of this RfP.

18.2 Bidders must quote the tariff rate (INR Per kWh) from the RTS installations within the administrative district they intend to bid for as per the list given in the BOQ. For those districts, in which the bidder is not bidding, he shall quote value of zero (0) and his bid will not be evaluated for that particular district. Bidder shall also fill Annexure I indicating the districts he is bidding for and this Annexure is to be submitted along with his technical Bid. The e-Bids found to be not responsive to and not meeting Technical Specifications and Qualification Requirements to the satisfaction of Purchaser shall be rejected and may not subsequently be made responsive by the bidder by correction of the non-conformity. The e-Bids of bidders mentioning any of their conditions which are not mentioned in the SBD document or are not in conformity with the conditions of the contract shall be rejected.

18.3 The Purchaser will evaluate and compare the tariff rates for each district as quoted in the BOQ. The Purchaser's evaluation of a financial bid shall be based on lowest tariff rate as quoted by the bidder for a given district including all the taxes and duties.

18.4 No weightage/preference shall be given to the bidder quoting any higher technical specifications against the technical specifications of the items asked in the e-bid.

## **19. Contacting the Purchaser**

19.1 No bidder shall contact the Purchaser on any matter relating to his/her e-Bid,



from the time of the e-Bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the Purchaser, he/she can do so in writing.

- 19.2 Any effort by a bidder to influence the Purchaser in its decisions on e-Bid evaluation, e-Bid comparison or contract award may result in rejection of the bidder's e-Bid.

**E     AWARD OF CONTRACT: -**

20. The Purchaser shall not be bound to accept the lowest or any tender and reserves to itself the right of accepting and awarding the whole bid (All the Installations within district) for which the bidder has bid or any portion of the district as the purchaser may deem fit, without assigning any reason thereof. The L1 bidder of any district cannot claim the award of all the installations within that district in his favour. In case of refusal to acceptance of these terms by the bidder, the EMD or the performance guarantee of the bidder shall be forfeited.
21. Any approach/canvassing etc. official or otherwise by the bidder or his/their representative/agent to influence the consideration of their tender shall render the tender liable to summary rejection.
22. The Purchaser reserves the right to reject all or any of the tenders without assigning any reason.
23. In the case of there being a number of bidders quoting same rates thereby forming a cartel to jack up the prices, the e-bids of such bidders shall be summarily rejected.
24. In order to avoid delay caused by postal correspondence after submission of e- bid and to expedite the process of technical/commercial clarifications the Purchaser may require the successful bidder to depute his/their authorized representative along with necessary documents to the **Chief Engineer (Distribution), JPDCL, Jammu** for sorting out the connected matters thus enabling speedy issue of formal award of contract.

The representative thus deputed shall have to be competent enough to hold technical and commercial clarification and convey the decision/acceptance on behalf of the bidder.

25. The purchaser shall determine L-1 bidder and the contract period for a district as follows. Lowest levelized tariffs for each of districts shall be arrived at for both the contract periods namely, contract period 10 years as well as for contract period 25 years. If the lowest levelized tariff quoted for 25 years for a district is less than or equal to that for 10 years for that district, such lowest levelized tariff for 25 years will be the L-1 tariff for that district and the bidder quoting such L-1 levelized tariff shall be declared L-1 bidder for that district and the contract period will be 25 years for that district. On the other hand, if the lowest levelized tariff quoted for 25 years for a district is more than that for 10 years for that district, such lowest levelized tariff for 10 years will be L-1 tariff for that district and the bidder quoting such L-1 levelized tariff shall be declared L-1 bidder for that district and the contract period will be 10 years for that district. This L-1 Levelized Tariff shall remain FIRM for entire contract period and shall include all the costs related to entire Scope of Work as specified in this RfP. Bidder shall quote for the entire facilities on a "single responsibility" basis such that the Tariff rate covers all the obligations mentioned in the Bidding Documents in respect of Design, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for the entire contract period, goods and services including spares required if any during O&M period along with taxes, duties, licenses, Insurance, permits, approvals if so required.
26. No additional payments shall be made for completion of any contractual obligation beyond the quoted tariff rates.
27. After completion of contract period, the RTS shall be handed over to the AAY households/consumers in operating condition with the power output as per MNRE specifications.
25. In compliance with statutory requirements of **Section 86(1)(b)** of the **Electricity Act, 2003**, the tariff rates so discovered in each of the administrative districts shall be submitted for regulatory approval from the Joint Electricity Regulatory Commission (JERC) of UT of J&K and Ladakh. The levelized tariff so approved by the JERC shall be final and binding on the bidder. Refusal of bidder to accept the JERC approved levelized tariff shall forfeit his right to award of tender and JPDCL also reserves the right to en-cash his EMD.

26. Subsequent to the approval of JERC, Letter of Intent (LoI) shall be issued in favour of L1 bidder acceptance of which should be submitted by L1 within 21 days of its issuance along with the required Performance Bank Guarantee (PBG). Failure to submit the acceptance within the time line or failure in submission of PBG shall forfeit the rights of L1 for award of contract.
27. It is to clarify that if the Successful Bidder is selected to execute the Project in more than one district, then the PBG shall be submitted separately for each district.
28. After receipt of acceptance of LoI, formal Letter of Award (LoA) shall be issued to L1, following which the contract agreement shall be signed. The date of signing of contract shall be considered as the Zero Date for the start of contractual obligations.
29. The risk, title and ownership of the RTS supplied by the contractor shall be transferred to the consumer/AAY households upon successful completion of the contract period in all respects as per the scope of work defined in Section VI of the SBD.
30. Notwithstanding anything contained herein, Purchaser shall not be liable for any indirect, punitive, consequential or incidental loss, damage, claims, liabilities, charges, costs, expense or injury (including, without limitation, loss of use, data, revenue, profits, business and for any claims of any third party claiming through the contractor) that may arise out of or result from the contract agreement between the contractor and the purchaser.

# **SECTION II:**

# **COMMERCIAL DETAILS**

**Commercial details:** Commercial e-Bid for **NIT No: CE(D)/ JPDCL/ 01 of 2026**  
**Dated 03/06/2026** shall contain the following documents digital signed by the authorized signatory of the bidder in the scanned form and pdf format only:

- a. Demand Draft as Bid Processing Fee.
- b. Earnest Money Deposit for an amount as per the terms of this RfP. In case the bidder is bidding for more than one district, he could either furnish separate bid securities for each district in which Bidder is participating.

**The Hard copy of these documents must reach the office of the Chief Engineer (Distribution), JPDCL, Bhagwatinagar, Jammu, in sealed cover before the scheduled end date of technical e-bid opening.**

**Purchaser reserves the right to out rightly reject the bids received without these commercial instruments or with insufficient EMD and the technical bid of such bidders shall not be evaluated.**

# **SECTION III:** **TECHNICAL DETAILS**

**Technical Details:** The Bidder shall be a Company / Limited Liability Partnership (LLP) Firm / Partnership Firm / Proprietorship Firm in any form submitting the Bid. Bids from joint ventures / consortiums of maximum two partners shall also be acceptable with one of the consortium partners as the Lead Member.

It is clarified that in case of Consortium, each of the Consortium members shall have a non-zero equity participation in the Consortium, i.e. a Consortium of 2 members with a 100:0 arrangement of equity commitment will not be eligible as a bidder under this RfF document.

Any reference to the Bidder includes its successors, executors and permitted assignees.

A foreign company cannot participate on a standalone basis or as a member of consortium under this RfP document.

Bidders fulfilling the eligibility criteria defined herewith shall be required to upload the following documents digitally signed by the authorized signatory of the bidder in the scanned form and pdf format only as part of their Technical e-Bid for **NIT No: CE(D)/ JPDCL/01 of 2026 Dated 03/06/2026.**

- a. A general Power of attorney to designate an authorized signatory to sign the documents and submit the bid on behalf of the bidder together with a copy of resolution of Board of Directors (in case of Company) when the tender is signed by a person other than proprietor/parties/MD/Director as the case may be.
- b. In case of Joint Venture (JV) or a consortium, a JV or consortium agreement as per given Annexure.
- c. In case of JV / consortium, power of attorney in favor of lead member of the consortium as per given Annexure.
- d. Tender Submission Form as per given Annexure.
- e. Signed and Stamped tender document. It shall be an acknowledgement by the bidder of the acceptance of all the terms and conditions given in this SBD.
- f. Techno-Commercial Questionnaire as per given Annexure.
- g. No Deviation Certificate as per format as per given Annexure.
- h. List of Districts for which the bidder is bidding as per given Annexure.

- i. Proof of Permanent Registration. The Bidder must be registered in India with the competent authority and should submit a copy of GST Registration Number. A copy of certificate of incorporation, Partnership Deed or LLP/ Sole Proprietor registration, as applicable and relevant, shall be enclosed.
- j. PAN Card.
- k. The declaration by the firm in the form of a notarized affidavit that it is not blacklisted as on date of submission of the bid by any State/UT Govt. or any Agency under them and shall be liable for the consequences of wrong declaration. Alternatively, the bidder shall submit the details of its blacklisting including the agency which blacklisted the bidder, reasons of blacklisting and the dates of imposition and revocation of such blacklisting.

*Note: In case of bidder being a JV, both the partners shall be required to submit this declaration.*

- l. Declaration by the firm that there is no litigation, action, proceeding or investigation pending before any court or other Governmental Authority, affecting or involving any of its business or assets that could adversely affect its ability to carry out the transactions contemplated herein and shall be liable for the consequences of wrong declaration. Alternatively, the bidder shall submit the list of such litigations or proceedings it is involved in with regard to any work order or contract that have been issued to the bidder along with its details.

*Note: In case of bidder being a JV, both the partners shall be required to submit this declaration.*

**m. ELIGIBILITY CRITERIA**

Under this RfP document, it is proposed to promote only commercially established and operational technologies to minimize the technology risk and to achieve timely commissioning of the Project.

Detailed technical parameters for RTS projects to be met by RESCO's are defined in Section VI of this document.



### Technical Eligibility Criteria

- i) The bidder must be registered vendor with MNRE portal under PM Surya Ghar: Muft Bijli Yojana, PM\_KUSUM, National Solar Mission or any other solar scheme launched by MNRE, Government of India. In case of JV / consortium, at least one partner must be a registered vendor on the MNRE portal for being eligible to participate in the RFP.

Documentary evidence such as confirmation letter of registration shall be submitted in this regard.

- ii) The Net Worth of the Bidder should be equal to or greater than the value as per the table given below, on the last date of previous Financial Year, i.e., FY 2024-25. In case of bidder being a JV or consortium, the sum of net worth of both the members shall be considered for determining the financial eligibility.

### Financial Eligibility Criteria Table 1

(For JPDCL)

S.No.	Name of District	Total AAY Ration Card Holders as per FCS&CA List	Potential Scope of Work (kW)	Qualifying Net-Worth in Rs Crore (@ INR 9000 / kW)
		(a)	(b=ax2)	C= bx9000
1	Jammu (021)	8872	17744	15.97
2	Samba (022)	2071	4142	3.73
3	Kathua (007)	7271	14542	13.09
4	Reasi(020)	9451	18902	17.01
5	Udhampur (019)	4970	9940	8.95
6	Ramban(017)	4558	9116	8.2
7	Doda (016)	9293	18586	16.73
8	Kishtwar (018)	6469	12938	11.64
9	Rajouri (006)	13756	27512	24.76
10	Poonch (005)	10622	21244	19.12

**Total 77,333**

- iii) In case the bidder is bidding for more than one district, his Net-Worth shall be equal to or more than the cumulative Net-Worths for the districts for which bidder is submitting the bids .
- iv) Bidders shall furnish documentary evidence (Audited balance sheet and profit & loss account for the years 2022-23,2023-24 and 2024-25) duly certified by Authorized Signatory and the Statutory Auditor / Practicing Chartered Accountant of the Bidding Company in support of their financial capability along with CA certificate for Net-Worth.

Only the entities meeting the above criteria should bid and the submitted Technical bid should include documentary proof in respect of each of the above points of Technical & Financial conditions.

**The e-Bids of the bidders not uploading certified copies of documents in scanned form mentioned above from (a) to (m) as documentary proof shall be liable to be rejected.**

No Hard copy of the technical bid is required to be submitted by the bidder.

# **SECTION IV:**

# **FINANCIAL e-BID**

1. **Financial e-bid:** The bidder shall quote his Tariff Rate (INR Per kWh) for each of the district for which he is bidding in the same BOQ sheet which has been uploaded with the SBD (Standard Bidding document).
2. The price quoted shall be rounded to two decimal points. Price quoted after second decimal point, if any, shall not be considered.
3. The bidder is required to quote rates for both the contract periods viz. 10 years and 25 years. The Tariff Rates quoted shall remain FIRM for the contract period.
4. It is mandatory for all the bidders to quote for both the periods (10 years and 25 years) in the BOQ.
5. For the districts for which the bidder is not quoting, he shall put a value of '0' in the respective column and his bid for the respective districts shall not be evaluated.
6. The bidder shall quote his basic Tariff Rate in relevant Columns of the BOQ as in Annexure J. Basic tariff rates shall be quoted on a "Single Responsibility" basis such that the Tariff Rate covers all the obligations under the contract as per the Scope of Work defined in Section VI of this document.
7. Comparison of quoted tariff rates shall be done on the basis of "Tariff rate quoted in Indian Rupees per kWh (INR per kWh)".
8. Reverse Auction: Purchaser shall undertake a reverse auction process for discovery of lowest levelized tariff.
  - 8.1 The reverse auction shall be conducted either in person in presence of the financially qualified bidders or through an online electronic platform to be notified by the Purchaser.
  - 8.2 The reverse auction shall be based on the tariff (₹/kWh) quoted by the bidders.
  - 8.3 The starting price for the reverse auction shall be the lowest tariff (L1) discovered through the initial financial bids
  - 8.4 Bidders shall be required to reduce their tariffs in decrements of minimum bid decrement value of 1 paise per kWh or as specified by the purchaser at the time of auction.

- 8.5 The auction shall remain open for an initial period of 60 minutes, with an automatic extension of 10 minutes for each valid bid received within the last minute.
- 8.6 The bidder quoting the lowest tariff at the conclusion of the reverse auction shall be declared the Successful Bidder (L1).
- 8.7 The final tariff discovered through the reverse auction shall be binding and shall form the basis for submission to JERC for approval and subsequent issuance of Letter of Award (LoA)
- 8.8 In case two or more bidders quote the same lowest tariff at the conclusion of the reverse auction, then draw of lots will be conducted to determining the successful bidder.
- 8.9 The Purchaser reserves the right to accept or reject any or all bids, cancel the reverse auction process, or annul the bidding process at any stage without assigning any reason thereof.
9. The Bidders are advised not to make any change in BOQ (Bill of Quantities) contents or its name. In no case they should attempt to create similar BOQ manually, otherwise the bid is liable to be rejected. The BOQ downloaded should be used for filling the tariff rate as per columns mentioned in BOQ and it should be saved with the same name as it contains.
10. The bidders should upload the BOQ on the e-tendering website ONLY and NOT submit the hard copy of the uploaded BOQ along with the hard copy of the Commercial (Cost of tender document and EMD) & Technical bid otherwise **the bid is liable to be rejected.**

**SECTION V**  
**CONDITIONS**  
**OF**  
**CONTRACT**

## **1. Scope of work**

- 1.1 The scope of work covers Design, Engineering, Finance, Supply, Erection, Testing and Commissioning including warranty, operation & maintenance for the contract period for 2 kW capacity Grid Connected RTS to be installed on the roofs of AAY households in the administrative districts under the jurisdiction of JPDCL having a registered domestic category electrical connection. The implementation shall be under RESCO Mode of ULA implementation and in compliance with the technical specifications defined in this document and MNRE Regulations, as amended from time to time.
- 1.2 Providing roof top or elevated structure is responsibility of AAY household if it wants to take benefit under the scheme. However, in case AAY households do not have proper roof for installing the RTS, DISCOM with the help of district administration may identify suitable public /govt building in the same habitation/village or nearby habitation/village or nearby town, on the roof of which a combined RTS will be installed by aggregating the demand of such AAY households, to an extent possible, and benefit will extend through virtual metering. This is an option to cover as many AAY households as possible. However, it shall not amount as necessary mandate on DISCOM to necessarily identify suitable public/govt buildings, which may or may not possible due to competing requirements of the govt and its agency owning the building.
- 1.3 RESCO contract period shall be determined at the time of issuance of award as prescribed in this RFP. Bidders are required to quote rates for both the periods in the BOQ and the purchaser shall select the RESCO and contract period as prescribed in this RFP.
- 1.4 In case of such consumers who are identified as AAY households but do not have a registered domestic connection, RESCO shall ensure that RTS is installed on their rooftops only when they register their electricity connection with JPDCL. Otherwise, no payment on account of Solar Power Generation from such RTS's shall be made in favour of RESCO.

1.5 The detailed scope of work is mentioned in Section VI of this document.

**2. Modification prior to date of tender opening**

2.1 The Chief Engineer (Distribution), JPDCL may revise or amend the specifications and other conditions prior to the date notified for receiving the bids. Such revision or amendments, if any, will be communicated to all prospective bidders as an addendum/corrigendum to this invitation for tenders through the media used for original NIT. In such case, if considered necessary, the date of receiving the tenders may also be extended at the discretion of the Chief Engineer (Distribution), JPDCL.

**3. Period of validity of bids**

Validity of the offer should be 6 months from the proposed date of opening of the Technical Bid. Bids without this validity will be rejected.

**4. Implementation Platform**

The implementation of this RESCO mode under ULA Model shall be done through the National Portal as per the provisions stipulated in the guidelines dated 28/12/2024 issued by MNRE and as amended from time to time.

All implementation activities shall be undertaken strictly as per the process flow defined on the National Portal.

The RESCO shall also ensure the establishment of robust remote generation monitoring system, to enable real – time tracking of solar energy generation data of the installed RTS on the National Portal of PM Surya Ghar and on the billing system of the DISCOM.

**5. Evaluation Criterion**

5.1 The whole work shall be done under RESCO (Renewable Energy Service Company) mode of ULA Model.

5.2 Under RESCO Mode, the premises owner or DISCOM does not fund the initial investment into the rooftop solar system. Instead, the entire RTS system will be financed, procured installed, commissioned and run by the selected RESCO including the responsibility of its O&M for the entire contract period.



- 5.3 The electricity generated shall be made available to the consumer and/or injected into the grid. The payment shall be made to the RESCO for the electricity generated, subject to a ceiling of 200 units per month, at the levelized tariff (INR/kWh) discovered through competitive bidding and approved by JERC.
- 5.4 The installation of RTS shall be carried out as per laid out MNRE guidelines by qualified personnel with sufficient experience to undertake such installations.
- 5.5 The RTS ownership on the roof top of AAY households will stand transferred to the AAY households concerned after the contract period.

## **6. Performance Security**

- 6.1 The successful bidder shall have to furnish a performance security in the form of a Bank Guarantee (BG) issued by a scheduled commercial bank which should be valid for 30 days beyond the scheduled date of completion of contract period. The performance security shall be submitted by the bidder within 25 days from the date of issuance of Lol along with the acceptance of Letter of Intent Lol.
- 6.2 No interest shall be paid by DISCOM on the amount of the performance security.
- 6.3 The amount of Performance Security to be submitted by the RESCO of each district is given in Annexure H.
- 6.4 In case the successful bidder fails to submit the PBG within the stipulated time, following provisions shall stand:
- i) For delay up to 1 month from due date of submission of PBG: Delay charges @1% on per day basis of the PBG amount shall be paid by the Bidder to JPDCL in addition to the PBG amount.
  - ii) For Delay beyond 1 month from the due date of submission of PBG: The purchaser reserves the right to cancel the Lol and forfeit the EMD.

- 6.5 The Contract Performance Security is intended to secure the execution/performance of the RESCO for the scheduled commissioning period including supply, design, engineering, installation, testing and commissioning of all the eligible installations as well as Operation & Maintenance for the entire contract period.
- 6.6 The Performance Security shall additionally cover the following guarantees to the Purchaser:
- The Successful Bidder guarantees the successful and satisfactory operation of any equipment furnished and commissioned under the Contract, as per the specifications and documents.
  - The successful Bidder guarantees that any equipment or upgrade is provided, installed and commissioned by him shall be free from all defects in design, material and Workmanship, and shall provide O&M for entire contract period.
- 6.7 In case the bidder has bid for more than one administrative districts and emerges successful in more than one district, then he shall have to submit Performance Security separately for each district as per given Annexure H.
- 6.8 50% of the performance security shall be released to the RESCO within 60 days after the commissioning of all the installations within the district after taking into account any penalty or liquidated damages incurred during this tenure.

In case of RESCO period of 10 years, remaining 50% of performance security shall be released within 60 days from the date of completion of O&M period of 10 Years after taking into account any penalty or liquidated damages incurred during this tenure.

However, in case of RESCO period of 25 years, 25% of the performance security shall be returned to the RESCO within 60 days from the date of completion of O&M period of 10 Years after taking into account any penalty or liquidated damages incurred during this tenure. The remaining 25% of the performance security shall be returned to the RESCO within 60 days from the date of completion of O&M period of 25 Years after taking into account any penalty or liquidated damages incurred during this tenure.

## **7. Right to alter BOQ**

As per the records of Directorate of Food Civil Supplies and Consumer Affairs, Jammu & Kashmir (FCS&CA) there are a total of 77,333 AAY households in Jammu region distributed across the 20 districts with district wise distribution given in Table 1 above. At the time of the award of works or even during the installation of RTS, JPDCL retains the right to decrease the BOQ (Number of AAY households for which RTS is to be installed by selected RESCO) as a result of verification of AAY the beneficiary list. The district wise number of households given in the table shall define the upper ceiling of the number of RTS installations in that respective district. However, as the list is updated, the number of households in each district under this contract for which RTS is to be installed may be reduced by a maximum of 20 % of the number of households given in the table in this RFP.

During the execution of the project, no variation in Tariff rate shall be entertained on account of variation due to downward revision of 20% in BOQ.

## **8. Installation & Completion Schedule**

The entire work involving Supply, Installation, Testing and Commissioning of each Grid connected Rooftop Solar system shall be completed within 180 days (6 months) for all beneficiaries within the district from the date of issuance the LOA / signing of the contract.

Individual commissioning report of each RTS shall have to submitted by the RESCO which shall have to signed by the authorized signatory of the purchaser.

## **9. Extension in Time**

- 9.1 Time period for the delivery, installation and commissioning of the RTS System shall commence immediately after the issue of LOA/signing of the contract. Extension of time will be allowed for justified/ valid reasons only, which are not attributable to the bidder. A Committee constituted by JPDCL shall be the competent authority for condonation of the delay, if any, in supply of equipment and commissioning of the project, on justified / valid reasons only. The maximum time period allowed for commissioning of the full awarded capacity with applicable liquidated damages, shall be limited to the date as

on 6 months from the Scheduled completion date.

- 9.2 Except in case of Force Majeure, as provided in this document, any extension granted under this clause shall make the RESCO liable for liquidated damages.

#### **10. Locations of RTS plants**

Providing roof top or elevated structure is responsibility of AAY household if it wants to take benefit under the scheme. However, in case AAY households do not have proper roof for installing the RTS, DISCOM concerned with the help of district administration may identify suitable public /govt building in the same habitation/village or nearby habitation/village or nearby town, on the roof of which a combined RTS may be installed by aggregating the demand of such AAY households, to an extent possible, and benefit will extend through virtual metering. If such govt/public buildings are identified, RESCO will be mandated to install RTS against aggregated households. Further, Purchaser DISCOM reserves the right to downward revise the BOQ by maximum 20% to care of non-availability of roof top or non-availability of alternate buildings or non-availability of AAY beneficiary.

#### **11. Commercial Operation date (COD)**

Each RTS installation under this contract shall have a specific Commercial Operation Date (COD) which shall mean the date on which the Installation & Commissioning Certificate is issued by authorized signatory of the purchaser upon the successful commissioning of the Grid connected rooftop solar systems on the rooftop of an individual AAY beneficiary as per the technical specifications defined in this RfP.

Installation and Commissioning certificate shall be issued to the RESCO for a particular installation only when it conforms to requirements as specified in Clause 14 below.

Each RTS plant should be able to generate annual average of 2400 units. If the specified performance ratio is not achieved, RESCO / RTS Vendor shall improve the plant by replacement of module/other components with all suitable modification requirements at his own cost to achieve the performance ratio.

The bidder shall have to provide the O&M activities for the contract period with the activities carried out but not limited to supply and storage of all spare parts, consumables, repairs / replacement of any defective equipment, etc., that have to be performed by RESCO free of cost as per PM Surya Ghar Scheme guidelines.

The format of the Installation & Commissioning certificate shall be as given in the Annexure “..”.

## **12. Inspection by JPDCL**

All the Rooftop Solar systems installed by the vendor will be inspected by the representatives of JPDCL prior to issuance of Installation & Commissioning Certificate. During the Inspection, if the system installed is found faulty (or) not in compliance to the technical specification, RESCO shall have to repair or replace the equipment and any cost for re-inspection by JPDCL after rectification/replacement shall be borne by the RESCO. Further, JPDCL also reserves the right to send its representatives or any third party for inspection to the manufacturing facilities for pre-dispatch inspection of the equipment being installed under this contract and all the cost including lodging and boarding of the inspecting personal so incurred shall be borne by RESCO.

## **13. SIGNING OF POWER PURCHASE AGREEMENT (PPA)**

- 13.1 Post award of LOA / Signing of contract agreement, Successful Bidder(s) / RESCO for each administrative district shall sign a Power Purchase Agreement (PPA) with JPDCL. The copy of the draft PPA is at Annexure “ ”.
- 13.2 RESCO shall ascertain the Project Capacity through actual on-ground survey of the installation sites within the awarded district.
- 13.3 The PPA shall be signed within 60 days from the date of issue of Letter Award (LoA)/Signing of contract, if not extended by JPDCL. Subsequent extension in this timeline shall be finalized as mutually agreed by JKPCCL and the successful Bidder.

13.4 The PPA shall be valid for the contract period.

13.5 In case of any delay beyond sixty (60) Days in signing of PPA, following procedure shall be adopted:

- ii) In case the delay is on part of RESCO, he shall pay a penalty of Rs 2000.00 per day of delay to JPDCL for a maximum of 30 days. In case of further delay in signing a PPA with JKPCCL beyond 30 days, JPDCL shall forfeit PBG and reserves the right to annul/cancel the LOA. If RESCO doesn't pay penalty amount, then JPDCL shall have every right to recover/ adjust any unpaid penalty by forfeiting performance security.
- iii) Any request of extension by RESCO/Vendor in signing of PPA beyond 60 days may be accepted only if RESCO gives its proper justification in writing and the DISCOM accepts the same.

#### **14. RTS Performance Ratio (PR) and Capacity Utilization Factor (CUF)**

14.1 The successful bidder shall be required to meet average generation 200 units per month. Accounting of generation of 200 units per month will be on annual basis to take care of seasonal variations in the year. Any shortfall in the generation of stipulated 200 units through RTS on average over the year will invite penalty on the RESCO. DISCOM will make payment to the RESCO for actual solar energy generated, limited to 200 units/month, at the levelized tariff.

14.2 If average generation of 200 units per month over a year is not achieved, RESCO will be penalized. RESCO / RTS Vendor shall expected to timely enhance the module capacity of solar plant / improve the quality of the plant by replacement of module/other components with all suitable modification requirements at his own cost to achieve the performance.

14.3 The RESCO shall send the generation details to JPDCL billing system online on real time basis through a suitable IT interface as mandated by the JPDCL. The JPDCL will make arrangements for receipt of the data on real time basis

alongwith MIS to facilitate correct payment to the RESCO as per actual generation of power.

- 14.4 The Performance will be calculated annually during the contract period. Failure to maintain generation of 200 unit on average over the year/financial year will result in liquidated damages to an amount equivalent to number of annual shortfall units multiplied by the average power purchase cost by the J&K (INR per kWh) plus 8% of the said amount on account of transmission losses/distribution losses. The amount shall be deducted from the Performance Security and/or payments pertaining to O&M period as liquidated damages. However, no penalty shall be imposed on RESCO to the extent less generation is justified due to grid outages and not due to any other factor attributing to the poor performance of RTS.

## **15. Payment Terms**

- 15.1 The Paying Authority shall be

**Chief Engineer**  
**JKPCL / JPDCL,**

- 15.2 The payments to be made to the RESCO shall have two components:

i) **Central Finance Assistance (CFA):**

JPDCL will receive Central Financial Assistance (CFA) from MNRE, Gol as per the Operational Guidelines on PM-Surya Ghar: Muft Bijli Yojana and Fund Flow Mechanism issued by MNRE vide OM No. 318/17/2024-GCRT (Part 15) dated 28/12/2025 and its subsequent amendments and updates if any. The CFA structure shall be as per the provisions of the OM no. 318/17/2024-Grid Connected Rooftop dated 7th June, 2024( for residential sector).

The CFA shall be fixed as per benchmark rates established under the scheme as per the above OM. The CFA component shall be released in favour of the RESCO after commissioning of each site, issuance of commissioning report and as per the guidelines on National Portal dated 28/12/2024.

ii) **Payment for Solar Power Generation:**

- a) RESCO / RTS Vendor shall be paid a monthly payment ("Solar Power Payment") for the actual Solar Power generated by the RTS during each calendar month of the contract period, subject to a ceiling of 200 units / month / installation, multiplied by the Tariff Rate given in the LOA.
- b) The contractor will bill JPDCL for each KWh metered as above at the Delivery Point of each RTS System installation.
- c) The contractor shall invoice JPDCL on the first week of each month for the Solar Power Payment in respect of the immediately preceding month.

The invoice shall include:

- The Solar Power calculations for the relevant billing period.
- Supporting data, documents and calculations in accordance with the contract agreement.

Note: Any power generated in a month in excess of 200 units will be eligible for adjustment against the shortfall (i.e. generation below 200 units) in another month in the same financial year. The annual adjustment will be done for this purpose in the month of April immediately after the close of financial year but shall be subject to annual ceiling of 2400 units for the financial year (i.e. 12X 200 per month).

- d) Payments shall be made promptly to the contractor within 60 days of the receipt of invoice and its verification by the authorized official as designated by the purchaser.
- e) Any new taxes, duties, levies, cess or statutory charges, if imposed or made applicable in future pursuant to any Change in Law after the Effective Date of the Agreement, shall be payable by the Purchaser over and above the applicable Solar Power Tariff. Conversely, any reduction, withdrawal or exemption of such taxes, duties, levies, cess or statutory charges in future shall result in a corresponding reduction in the applicable Solar Power Tariff, to the extent of such benefit.



- f) Such taxes and duties could include, but not restricted to Electricity Duty, Tax on Sale of Electricity (TOSE) etc. If the Purchaser deducts any tax at source, the Purchaser will issue a tax credit certificates as per law.

15.3 Disputed Payments: In the event that JPDCL disputes an invoice, it shall give notice of such a dispute within 15 days of receiving the invoice setting out details of the disputed amount. JPDCL shall pay 100% of any undisputed amount. Thereafter, the Parties shall discuss and try to resolve the disputed amount within 15 days of receipt of such notice of dispute. If the Parties resolve the dispute, an appropriate adjustment shall be made in the next invoice. If the dispute has not been resolved by the date of the next invoice the dispute shall be referred to a committee of one member from each of Purchaser and RTS Vendor, If the dispute is still not resolved by the next following invoice date, it shall be referred to Arbitration as provided in this Agreement.

#### 15.4 Payment Security Mechanism (PSM)

- I. In order to instill confidence and mitigate financial risks for the bidders, JPDCL shall, with the approval of J&K Govt, secure payment obligations to the RESCO for the Solar Power Generated through the installed RTS systems by creating a PSM Corpus strictly in accordance with the provisions of MNRE's OM No. 318/17/2024-GCRT (Part-15) dated 28/12/2024, as amended from time to time. Further RESCO will also contribute a one-time fee of Rs. 2000.00 per installation towards the PSM corpus towards its compliance to all other terms and conditions specified herein. This onetime fee shall be in the form of CDR/FDR for Rs 2000.00 pledged to Chief Engineer, JKPCCL/JPDCL. No installation and commissioning certificate shall be issued to the RESCO for commissioning of any RTS under this contract without the payment of this onetime fee.
- II. The Payment Security Mechanism will be invoked if the purchaser fails to make the stipulated payments as per the terms of the executed PPA or RESCO fails to abide by terms and conditions of the contract.

- III. Payment Security Mechanism amount will be assessed on case-to-case basis for eligibility only after verification.
- IV. Payment Security Mechanism is to ensure a transparent and fair process for invoking and releasing the guarantee. Any disputes related to this will be resolved in accordance with the dispute resolution mechanisms specified in the document.
- V. Any modifications to the terms of the Payment Security Mechanism, including the amount or conditions, will be subject to mutual agreement between JPDCL & RESCO and shall be documented in writing.

## **17. Liquidated Damages**

- 17.1 If the RESCO fails to achieve the completion of works within the time period specified in the award letter/agreement including extension in execution timelines if granted by JPDCL, or does not comply with the deliverables as given in scope of work, then the RESCO shall have to pay JPDCL, the liquidated damages for such default (except for the reasons not attributable to the RESCO) proportionate to the installation cost of balance capacity not commissioned. JPDCL may, without prejudice to any method of recovery, deduct the amount from the running payment or by forfeiture of Performance security. The payment of deductions of such damages shall not relieve the RESCO from his obligations to complete the work or from any other of his obligations and liabilities under the contract.
- 17.2 The LD as aforesaid shall be paid by the RESCO without cavil or argument and without linking with the actual losses or damages to JPDCL due to delay in completion of the works or incomplete work. However, in case, the RESCO fails to complete the work in its entirety or is unable to fulfill the deliverables as defined in the scope of work, even after levying of maximum LD then JPDCL will serve a Show Cause Notice to explain reasons within the time as specified in the notice, for not executing the awarded work. If the reply submitted by the firm to the Show Cause Notice is not found satisfactory, the award/contract will be rescinded without any further notice and the Performance Security deposited will be forfeited and JPDCL will be at liberty to get the work done at its own or from any other agency at the risk and cost of the firm. In case the cost of completing any pending work as

defined in the scope of work from third party exceeds the value of the performance security, then the balance amount shall be paid to the third party by debiting the equivalent amount from the running payments due to RESCO on account of solar power generation. Further the firm will be blacklisted and will not be allowed to participate further in any of the tenders floated by JPDCL.

The RESCO shall replenish the Performance Security (PS) with the amount deducted so as to maintain the PS value.

- 17.3** Liquidated damages shall also be imposed on RESCO in case of failure to adhere to the RTS Performance as specified in Clause 14 above.

## **18. Force Majeure**

- 18.1** For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by government agencies.

- 18.2** Force Majeure shall not include:

- Any event which is caused by the negligence or intentional action of a Party or such Party's Sub-consultants or agents or employees, nor
- Any event which a diligent Party could reasonably have been expected to both
  - ☐ take into account at the time of the conclusion of this Contract,
  - ☐ and avoid or overcome in the carrying out of its obligations hereunder.

- 18.3** The failure of a Party to fulfill any of its obligations hereunder shall not be

considered to be a breach of, or default under, this Contract in so far as such inability arises from an event of Force Majeure, provided that the Party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objective of carrying out the terms and conditions of this Contract.

- 18.4 A Party affected by an event of Force Majeure shall take all reasonable measures to remove such Party's inability to fulfill its obligations hereunder with a minimum of delay.
- 18.5 A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible, and in any event not later than fourteen (14) days following the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
- 18.6 The Parties shall take all reasonable measures to minimize the consequences of any event of Force Majeure.
- 18.7 The decision of the Purchaser with regard to the occurrence, continuation, period or extent of Force Majeure shall be final and binding on the RESCO.
- 18.8 Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.
- 18.9 Not later than thirty (30) days after the RESCO, as the result of an event of Force Majeure, has become unable to perform a material portion of the Services, the Parties shall consult with each other with a view to agreeing on appropriate measures to be taken in the circumstances.

## **19. Change in Law**

- 19.1 For the Purpose of this section, the term "Change in Law" shall mean the occurrence of any of the following events after the Effective date, resulting into any additional recurring / non-recurring expenditure by the RESCO or any income to the RESCO. The enactment, coming into effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any Law, including rules and regulations framed pursuant to such Law: or

- I. A change in the interpretation of any Law by any Governmental

Authority having the legal power to interpret or apply such Law, or any competent court; or

- II. The imposition of a requirement, for obtaining any Government Approvals which was not required earlier; or
- III. A change in the terms and conditions prescribed for obtaining any Government Approvals or the inclusion of any new terms or conditions for Obtaining such Government Approvals; or
- IV. Any taxes, duties, levies, cess or statutory charges, if imposed or made applicable in future pursuant to any Change in Law after the Effective Date of the Agreement, shall be payable by the Purchaser over and above the applicable Solar Power Tariff. Conversely, any reduction, withdrawal or exemption of such taxes, duties, levies, cess or statutory charges shall result in a corresponding reduction in the applicable Solar Power Tariff, to the extent of such benefit.
- V. Any benefit arising due to change in above para (I) to (IV) shall be passed on to the Purchaser. But not include any change in any withholding tax on income or dividends distributed to the shareholders of the RESCO.

19.2 Application and Principles for computing impact of Change in Law:

While determining the consequence of Change in Law under this clause, the Parties shall have due regard to the Principle that the purpose of compensating the Party affected by such Change In Law, is to restore through monthly bill payment, to the extent contemplated in this clause, the affected Party to the same economic position as if such Change in Law has not occurred and such impact shall be mutually decided in writing.

19.3 Solar Power Payment Adjustment on account of Change in Law

Subject to provisions mentioned above, the adjustment in Solar Power Payment shall be effective from:

- i) The date of adoption, promulgation, amendment, re-enactment or repeal of the Law or Change in Law; or

- ii) The date of order/ judgment of the competent court; of tribunal or Governmental Authority, if the Change in •law is on account of a change in interpretation of Law.

## **20. Termination of the contract**

20.1 In the event of RESCO's failure to fulfill or abide by any of the terms and conditions of this SBD which shall form part of the contract agreement, the purchaser shall, without prejudice to other remedies available to it, under the law enforced in the UT, be competent to impose penalty as per terms of this RfP, on the RESCO in addition to the forfeiture of the performance bank guarantee in full or in part as the purchaser may deem fit. In addition Purchaser shall right to seek Liquidated damages as per relevant clause above.

### **20.2 Termination for Default**

The Purchaser, may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the RESCO, terminate this contract in whole or in part,

- i) if the RESCO fails to deliver any or all the services specified in the scope of work under Section VI within the time period (s) specified in the contract, or any extension thereof granted by the Purchaser
- ii) if the RESCO fails to perform any other obligation(s) under the contract;
- iii) if the RESCO, in either of the above circumstances, does not remedy his failure within a period of 15 days (or such longer period as the Purchaser may authorize in writing) after receipt of the default notice from the Purchaser.
- iv) On a notice period of 30 days
- v) In case of wrongful declaration or suppression of information of any sort during the bidding stage which may have influenced the qualification of the bidder and the subsequent award in his favour.

In the event the Purchaser terminates the contract in whole or in part pursuant to above para, the Purchaser may procure, upon such terms and in such

manner as it deems appropriate, services similar to those undelivered and the RESCO shall be liable to the Purchaser for any excess cost. However, the RESCO shall continue the performance of the contract to the extent not terminated.

### **20.3 Termination for Insolvency**

The Purchaser may at any time terminate the Contract by giving written notice to the RESCO, without compensation to the RESCO if the RESCO becomes bankrupt or otherwise insolvent as declared by the competent court provided that such termination will not prejudice or effect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.

## **21. Arbitration**

- 21.1 If at any time doubt, question, dispute or difference whatsoever shall arise between the contractor and the purchaser, upon or in relation to or in connection with this contract, either of the parties may give the notice in writing of existence of such doubt, question, dispute or difference and if not resolved within 45 days of issuance of such notice, the same shall be referred by either party to the three member Arbitral Tribunal in accordance with the provisions of Arbitration and Conciliation Act, 1996 as amended from time to time. No arbitration proceedings will commence unless such notice is given. The arbitration proceedings under this clause shall be held in Jammu, UT of J&K.
- 21.2 The RESCO shall not delay the carrying out of the installation of RTS Systems by reasons of any reference to the arbitrator and shall proceed with the work with all due diligence and shall, until the decision of the arbitrator, abide by the decision of the order placing authority or his representatives in-charge.
- 21.3 The services under this contract shall, if reasonably possible, continue during arbitration proceedings and no payment or payable by the purchaser shall be withheld on account of such proceedings except to the extent which may be in dispute.

## **22. Court of competent Jurisdiction**

- 22.1 The Courts of Union Territory of J&K at Jammu alone shall have the jurisdiction of deciding any dispute between the parties.

**23. General**

- 23.1 Bid Processing Fee shall not be refunded under any circumstances whatsoever.
- 23.2 The bidder shall be deemed to have carefully examined various stipulations in this tender and also to have fully informed himself with all conditions local and otherwise affecting the execution of the contract. Failure to do so shall be at his risk and cost.
- 23.3 Ambiguity in rates, if any shall be interpreted in favour of the Purchaser.

**Accepted**

**Seal & Signature of the bidder**

**Chief Engineer (D)**  
**JPDCL**



# **SECTION VI**

## **SCOPE OF WORK**

1. The Scope of Work includes design as per site conditions, engineering, manufacture/procurement, manufacturer's quality assurance, factory testing, transportation, handling, storage, erection including all civil/structural works, electrical and general works, piping, cabling, installation, remote monitoring system with communication facility to centralized monitoring system as per MNRE guidelines, testing, commissioning, services, project financing, permits/sanction/clearance if any and insurance at all stages of this contract and supply of energy from the 2 kW RTS and Mandatory O&M of the RTS system for the contract period.
2. The Scope of the Work would essentially cover, but not limited to Identification and Site Survey of Rooftop, Site Visit, Solar Potential Assessment, Finalization of Feasibility Report, Design, Engineering, Manufacture, Supply, Storage, Civil work, Erection, Testing, Commissioning, ensuring total solar power generated Billing arrangement as per the MNRE Regulations and the subsequent amendments made under the Grid Interactive Rooftop Regulations from time to time.
3. The size of the project will be 2 kW for each AAY beneficiary. As per the currently available records, there are a total of 77333 beneficiaries who are identified by Department of Consumer Affairs and Public Distribution(CAPD) as AAY households. However, JPDCL and the respective RESCO for each administrative district shall conduct a joint exercise with the Department of Consumer Affairs and Public Distribution along with the District Administration for firming up of AAY households. Payment of CFA to the RESCO shall be made strictly on the number of installations carried out for the identified AAY consumers only. The number of district wise households identified in Table 1 above represent the upper ceiling of potential installations. The JPDCL reserves right to revise the BOQ downward by maximum of 20% at the time of award or during the installation of RTS based on the verification, as required.
4. The plant shall be designed to ensure an average of 200 units per month over each year during the entire contract period.
5. RESCO shall enhance the plant by replacement of module/other components with all suitable modification requirements at his own cost to achieve the

performance. No additional payment shall be given to the RESCO for any such modification.

6. If grid connectivity is there and no shutdowns are enforced, responsibility to generate average 200 units per month shall fall on the RESCO. The cycle to account this average production shall be yearly in view of seasonal variations. The responsibility for deficient generation shall be fixed on RESCO by deducting an amount equivalent to number of annual shortfall units multiplied by the average purchase cost of power by J&K (INR per kWh) plus @ 8% of the said as transmission/distribution loss. This amount shall be deducted from RESCO from his Performance Security and/or payments pertaining to O&M period.

This penal action may be done by deducting the amount from his payable amount on quarterly basis in the month following the quarter, with final squaring off for the last quarter of financial year being done in April.

7. The successful bidder shall bear the sole responsibility to collect consent of the AAY Consumer for installing the Rooftop Solar system after studying the roof space and ascertaining the feasibility of setting up a 2 kW Solar Roof Top System. The RTS installed on the roof top of house of the AAY beneficiary shall get transferred to the AAY household /consumer after the completion of contract period.
8. In cases where household rooftops are technically and financially not suitable for installation of panels, alternate ground structures within the house compound of beneficiary shall be considered for installation of RTS.
9. Providing roof top or elevated structure is the responsibility of AAY household to avail benefit under this scheme. However, where AAY households do not have proper roof for installing RTS, JPDCL with the help of district administration may identify suitable public / government building in the same habitation / village or nearby town, on the roof of which a combined RTS may be installed by aggregating demand of such AAY households, to an extent possible. The benefit to the individual consumers in such a case shall be accounted through virtual metering by way of smart meters installed at their premises. This option shall be at the sole discretion of the JPDCL and is kept with a view to cover as many AAY

beneficiaries as possible. This will not however amount to imposing any condition on JPDCL or UT govt to provide space to RESCO for installation of RTS in favour of such AAY households.

10. The consent to be taken by RESCO from the AAY beneficiary shall also detail the terms and conditions of maintenance activities that RESCO has to undertake during the contract period. JPDCL, on request of RESCO shall provide assistance to RESCO in framing such terms and conditions.
11. No RTS System shall be installed on the rooftop of a AAY house owner, until he first registers himself with JPDCL as a domestic consumer.
12. District Wise estimated no. of beneficiaries and cumulative capacity is given in the table below:

Jammu Division:

S.No.	Name of District	Total AAY Ration Card Holders as per FCS&CA List	Potential Scope of Work (kW)
		(a)	(b=ax2)
1	Jammu (021)	8872	17744
2	Samba (022)	2071	4142
3	Kathua (007)	7271	14542
4	Reasi (020)	9451	18902
5	Udhampur (019)	4970	9940
6	Ramban (017)	4558	9116
7	Doda (016)	9293	18586
8	Kishtwar (018)	6469	12938
9	Rajouri (006)	13756	27512
10	Poonch (005)	10622	21244
	TOTAL	77333	

13. Scope of work shall include incorporation of necessary infrastructure, Hardware & Software to ensure flow of data relating generation of solar power to DISCOM/JPDCL. It shall include ensuring data flow to MNRE portal in line with MNRE inverter guidelines issued vide OM (F. No. 318/87/2024-GCRT-Part (1) dated 24/12/2025 and its subsequent amendments and updates if any. The responsibility of engaging a network bandwidth service provider including recurring expenses on account of monthly bandwidth charges for all the installations within the awarded district till the end of contract period shall also be within the scope of RESCO.

14. The Grid connected rooftop system will be installed strictly as per the technical specifications mentioned in this document and MNRE guidelines.
15. Commissioning includes Warranty, Mandatory O&M for the contract period, goods and services including spares required, if any, during the Project Period. The Bidder has to take all permits and other approvals and licenses, Insurance etc., to complete the scope of work mentioned above.
16. Bidder shall liaison with the AAY households to get access to roof of his residential premise. Any installation or maintenance activity shall be carried out in such a manner that the timings and day of maintenance is feasible for both the parties. RESCO shall coordinate such matters with the AAY households on his own without any assistance from JPDCL.
17. **The bidder shall also provide the necessary open, secure, and standard integration interfaces to enable and support exchange of data relating solar energy produced with the existing consumer billing systems (Presently Oracle CCB) of JPDCL on real time basis, as per smart metering norms.** The bidder shall arrange technical assistance for end-to-end integration between the two systems. The bidder shall provide this technical assistance including OEM assistance if required, without any additional cost to JPDCL which shall have supposed to be included in the tariff rate.
18. However, Net-billing arrangement requiring installation of a bidirectional meter which shall measure the net IMPORT or EXPORT of electricity by the AAY household will be installed by JPDCL and is NOT within the scope of the RESCO.
19. During the contract period, RESCO period shall follow the following.
  - i) O&M of the Project shall be compliant with necessary requirements to achieve required energy generation.
  - ii) Necessary qualified and experienced engineers/ technicians shall be deployed till the end of contract.
  - iii) Periodic cleaning of solar modules as and when required as per actual site conditions.
  - iv) A “hindrance register” shall be maintained by the RESCO with reasons and documentary evidence to register/record any delays/faults at the time of hindrance on account of the premises owner/consumer(s) and shall be updated from time to time.

- v) Periodic checks of the Modules, PCUs and BoS shall be carried out as a part of routine, preventive and breakdown maintenance.
- vi) Immediate replacement of defective Modules, Invertors/PCUs and other equipment.
- vii) 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.
- viii) All the testing instruments required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by RESCO. 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.
- ix) The RESCO is responsible to educate the Consumer about safeguarding, upkeeping and proper maintenance of the RTS System.
- x) RESCO shall set up a Service Centre / Call Centre / Customer Care Centre. The contact numbers of such call centre shall be shared with all the AAY households/consumers within the district to manage and regulate the O&M operations.  
  
Failure to set up such a call centre will lead to imposition of penalty as per relevant provisions or termination of the Agreement.
- xi) At the end of the contract period, the ownership of the RTS System along with related warranties, insurances etc. shall stand transferred to the consumer/AAY household. The RESCO shall ensure that all the assets are in good working condition as per the Specifications highlighted in this document.

# **Section VII**

## **Technical Specifications**

**TECHNICAL SPECIFICATIONS FOR ROOFTOP SOLAR PLANTS INSTALLED**  
**UNDER THE COMPONENT OF “CFA TO RESIDENTIAL CONSUMERS” 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. The RESCO 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 programme of the Ministry.

A Roof Top Solar (RTS) Photo Voltaic (PV) system shall be installed on rooftops/terraces/balcony/Building Integrated Photovoltaic (BIPV) or on elevated structures. In case of installation on an elevated structure, the structure must have a minimum ground clearance of 8 feet at the lowest point, in order to be considered eligible for the CFA under the scheme. The RTS system shall consist of the following:

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 of minimum 600mm ground clearance at the lowest point from the roof surface, 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, 05 years of comprehensive operation & maintenance of grid-connected rooftop solar PV plant and other miscellaneous works.

## 1. Solar PV modules

- 1.1. Domestic Manufactured Solar PV modules using domestically manufactured Solar cells shall be used in the Scheme. This is an essential condition for the installation to be eligible for the Central Financial Assistance (CFA) from MNRE, GoI. Use of non-DCR modules in any form shall render the installation ineligible for CFA.
- 1.2. The RESCO shall submit a declaration from the Original Equipment Manufacturer (OEM) certifying that the modules used in the installation meet the DCR standards. The RESCO shall also comply with any other mechanisms for DCR traceability established by the MNRE.
- 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/IS 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 (Requirement for Compulsory Registration) Order 2019 - Implementation issued vide OM NO. 283/54/2018-GRID SOLAR -Part (I) Dated 10th March 2021 and subsequent amendments.
- 1.9. Solar PV modules of minimum fill factor 75%, to be used.
- 1.10. All PV modules should have a nominal power output of >90% at STC during the first 25 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
- 1.11. The manufacturer should warrant the Solar Module(s) to be free from the defects and/or failures specified below for a period not less than five (5) years from the date of commissioning.
  - 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 manufacturer will repair or replace the solar module(s), at the Owners sole option. The PV modules shall be replaced by manufacturers, without charging any cost to the end consumer during the specified period of warranty.
- 1.12. 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.

1.13. 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  $P_{max}$  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.

1.14. 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 Order dated 30.08.2017 for Solar Photovoltaic Inverters and its amendments thereof.

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)

2.3 /Equivalent BIS Std.

2.4 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.

2.5 All inverters/PCUs shall be IEC 61000 compliant for electromagnetic compatibility, harmonics, Surge, etc.

2.6 The PCU/ inverter shall have overloading capacity of minimum 20%.

2.7 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.): >90% (In case of 10 kW or below with in-built galvanic isolation)
- x. The Minimum Overall Efficiency ( $\eta_t$ ) as per IS 17980 for Solar Inverters should adhere to the following:
- xi. THD: < 3%
- xii. PF: > 0.9 (lag or lead)
- xiii. Should not inject DC power more than 0.5% of full rated output at the interconnection point and comply to IEEE 519.
- xiv. 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.

2.8 All the Inverters should contain the following clear and indelible Marking Label & Warning Label as per IS16221 Part II, 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

2.9 In case the consumer is having a 3- $\phi$  connection, 1- $\phi$ /3- $\phi$  inverter shall be provided by the vendor as per the consumer's requirement and regulations of the State.

2.10 Inverter/PCU shall be capable of complete automatic operation including wake-up, synchronization & shutdown.

2.11 Integration of PV Power with Grid & Grid Islanding:

In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "islands." Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The 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 Empanelled Agency shall be fully responsible for any damages to SPV System caused due to high wind velocity within guarantee period 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:

i. 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.

ii. 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.

iii. 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 5MM 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 500MM.

**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 50MM 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 HDG 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 HDG 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 60MM 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
- g. 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 then sag angle/Bar should be provided 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 shall 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 & Communication

- 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 meters:
  - a) Net meter/ smart meter: To record import and export units.
  - b) Generation meter / Solar Inverter: To keep record for total generation of the plant.
- 4.3 The installation of net meters including CTs & PTs, wherever applicable, shall be carried out by JPDCL as per the terms, conditions and procedures laid down by the concerned JERCs.

The data relating to energy generated by each RTS shall be made available by RESCO to JPDCL on real time basis by providing IT interface as mandated by JPDCL. The JPDCL shall maintain database of the solar energy generated by RTS and create and MIS to facilitate payment to

RESCO as per this RFP. RESCO. In addition, the RESCO shall ensure flow of the data relating to solar energy produced onto MNRE Portal as MNRE draft guidelines issued vide OM (F. No. 318/87/2024-GCRT-Part (1) dated 21/07/2025 and its subsequent amendments and updates if any . (Attached as Annexue M)

## 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 can 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- $\phi$ /3- $\phi$ , 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 arrestor 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 arrestor 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 arrestor 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 mm<sup>2</sup> copper/ 16 mm<sup>2</sup> aluminum or GI strip bearing size 25\*3 mm thick). Separate pipe for running earth wires of Lightning Arrestor 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.
- 10.4 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.

**Quality Certification, Standards and Testing for Grid-Connected Rooftop Solar PV Systems/Power Plants****Solar PV Modules/Panels**

IEC 61215/ IS 14286	Design Qualification and Type Approval for Crystalline Silicon Terrestrial Photovoltaic (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) Modules – Ammonia (NH <sub>3</sub> ) Corrosion Testing (as per the site condition like dairies, toilets etc)
IS 16077 : 2013 / IEC 61646 : 2008	Thin - Film terrestrial photovoltaic (PV) modules - 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 (part 1) or IEC TS 62804-1	Photovoltaic (PV) modules – Test method for detection of potential-induced degradation. IEC 62804-1: Part 1: Crystalline Silicon

**Solar PV Inverters**

IEC 62109 or IS : 16221	Safety of power converters for use in photovoltaic power systems – Part 1: General requirements, and Safety of power converters for use in photovoltaic power systems  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 Systems – Power conditioners: Procedure for Measuring Efficiency (10%, 25%, 50%, 75% & 90-100% Loading Conditions)
IEC 60068-2 /IEC 62093 (as applicable)	Environmental Testing of PV System – Power Conditioners and Inverters

IEC 62116:2014/ IS16169	Utility-interconnected photovoltaic inverters - Test procedure of islanding prevention measures
<b>Fuses</b>	
IS/IEC 60947 (Part 1, 2 & 3), EN 50521	General safety requirements for connectors, switches, circuit breakers (AC/DC): 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-combination units 4) EN 50521: Connectors for photovoltaic system-Safety requirements and tests
IS/IEC 60269-6	Low-voltage fuses - Part 6: Supplementary requirements for fuse- Links for the protection of solar photovoltaic energy systems
<b>Solar PV Roof Mounting Structure</b>	
IS 2062/IS 4759/ AA6063 T6	Material for the structure mounting
<b>Surge Arrestors</b>	
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 electrical 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)/ IEC69947 (as applicable)	General test and measuring method for PVC (Polyvinyl chloride) insulated cables (for working voltages up to and including 1100 V, and resistant for outdoor installation)
IS 17293:2020	Electric Cables for Photovoltaic Systems for Rated Voltage 1500 V DC
Earthing /Lightning	
IEC 62561/IEC 60634 Series (Chemical earthing) (as applicable)	<p>IEC 62561-1: Lightning protection system components (LPSC) - Part: Requirements for connection components</p> <p>IEC 62561-2: Lightning protection system components (LPSC) – Part 2:Requirements for 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 thermo-plastic type with IP 65 or better protection for outdoor use, and IP 54 or better protection for indoor use

**Model Net Metering Agreement**

This Agreement is made and entered into at (location) ..... on this (date)..... day of (month) ..... (year) ..... between the Eligible Consumer (Name) ..... having premises at (address) ..... and Consumer No.....as the first Party,

AND

The Distribution Licensee ..... (hereinafter referred to as 'the Licensee') and having its Registered Office at (address) ..... as second Party of this Agreement.

Whereas, the Eligible Consumer has applied to the Licensee for approval of a Net Metering Arrangement under the provisions of the (State Guidelines reference name) ..... and subsequent amendments and sought its connectivity to the Licensee's Distribution Network.

And whereas, the Licensee has agreed to provide Network connectivity to the Eligible Consumer for injection of electricity generated from its Roof-top Renewable Energy

Generating System of ..... kilowatt (kW)

Both Parties hereby agree as follows:-

## 1. Eligibility:

The Roof-top Renewable Energy Generating System meets the applicable norms for being integrated into the Distribution Network, and that the Eligible Consumer shall maintain the System accordingly for the duration of this Agreement.

## 2. Technical and Inter-connection Requirements:

- 2.1. The metering arrangement and the inter-connection of the Roof-top Renewable Energy Generating System with the Network of the Licensee shall be as per the provisions of the Net Metering Regulations and the technical standards and norms specified by the Central Electricity Authority for connectivity of distributed generation resources and for the installation and operation of meters.
- 2.2. The Eligible Consumer agrees that he shall install, prior to connection of the Roof-top Renewable Energy Generating System to the Network of the Licensee, an isolation device (both automatic and in built within inverter and external manual relays); and the Licensee shall have access to it if required for the repair and maintenance of the Distribution Network.
- 2.3. The Licensee shall specify the interface/inter-connection point and metering point.
- 2.4. The Eligible Consumer shall furnish all relevant data, such as voltage, frequency, circuit breaker, isolator position in his System, as and when required by the Licensee.
- 2.5. All the equipment connected to Network of the Licensee at the time of installation shall be compliant with the Technical Specifications for rooftop system as Published by MNRE.

## 3. Safety:

- 3.1. The consumer shall comply with the Central Electricity Authority (Measures Relating to Safety and Electricity Supply) Regulations 2010
- 3.2. The equipment connected to the Licensee's Distribution System shall be compliant with relevant International (IEEE/IEC) or Indian Standards (BIS), as the case may be,

and the installation of electrical equipment shall comply with the requirements specified by the Central Electricity Authority regarding safety and electricity supply.

- 3.3. The design, installation, maintenance and operation of the Roof-top Renewable Energy Generating System shall be undertaken in a manner conducive to the safety of the Roof-top Renewable Energy Generating System as well as the Licensee's Network.
- 3.4. If, at any time, the Licensee determines that the Eligible Consumer's Roof-top Renewable Energy Generating System is causing or may cause damage to and/or results in the Licensee's other consumers or its assets, the Eligible Consumer shall disconnect the Roof-top Renewable Energy Generating System from the distribution Network upon direction from the Licensee and shall undertake corrective measures at his own expense prior to re-connection.
- 3.5. The Licensee shall not be responsible for any accident resulting in injury to human beings or animals or damage to property that may occur due to back-feeding from the Roof-top Renewable Energy Generating System when the grid supply is off. The Licensee may disconnect the installation at any time in the event of such exigencies to prevent such accident.

#### 4. Other Clearances and Approvals:

The Eligible Consumer shall obtain any statutory approvals and clearances that may be required, such as from the Electrical Inspector or the municipal or other authorities, before connecting the Roof-top Renewable Energy Generating System to the distribution Network.

#### 5. Period of Agreement, and Termination:

This Agreement shall be for a period for 25 years, but may be terminated prematurely.

- (a) By mutual consent; or
- (b) By the Eligible Consumer, by giving 30 days' notice to the Licensee.
- (c) By the Licensee, by giving 30 days' notice,

if the Eligible Consumer breaches any terms of this Agreement or the provisions of the

Net Metering Regulations and does not remedy such breach within 30 days, or such other reasonable period as may be provided, of receiving notice of such breach, or for any other valid reason communicated by the Licensee in writing.

## 6. Access and Disconnection:

- 6.1. The Eligible Consumer shall provide access to the Licensee to the metering equipment and disconnecting devices of Roof-top Renewable Energy Generating System, both automatic and manual, by the Eligible Consumer.
- 6.2. If, in an emergent or outage situation, the Licensee cannot access the disconnecting devices of the Roof-top Renewable Energy Generating System, both automatic and manual, it may disconnect power supply to the premises.
- 6.3. Upon termination of this Agreement under Clause 5, the Eligible Consumer shall disconnect the Roof-top Renewable Energy Generating System forthwith from the Network of the Licensee.

## 7. Liabilities:

- 7.1. The Parties shall indemnify each other for damages or adverse effects of either Party's negligence or misconduct during the installation of the Roof-top Renewable Energy Generating System, connectivity with the distribution Network and operation of the System.
- 7.2. The Parties shall not be liable to each other for any loss of profits or revenues, business interruption losses, loss of contract or goodwill, or for indirect, consequential, incidental or special damages including, but not limited to, punitive or exemplary damages, whether any of these liabilities, losses or damages arise in contract, or otherwise.

## 8. Commercial Settlement:

- 8.1. The commercial settlements under this Agreement shall be in accordance with the Net Metering Regulations.
- 8.2. The Licensee shall not be liable to compensate the Eligible Consumer if his Rooftop



Renewable Energy Generating System is unable to inject surplus power generated into the Licensee's Network on account of failure of power supply in the grid/Network.

- 8.3. The existing metering System, if not in accordance with the Net Metering Regulations, shall be replaced by a bi-directional meter (whole current/CT operated) or a pair of meters (as per the definition of 'Net Meter' in the Regulations), and a separate generation meter or solar inverter may be provided to measure Solar power generation. The bi- directional meter (whole current/CT operated) or pair of meters shall be installed at the inter-connection point to the Licensee's Network for recording export and import of energy.
- 8.4. The uni-directional and bi-directional or pair of meters shall be fixed in separate meter boxes in the same proximity.

## 9. Connection Costs:

NOT APPLICABLE

~~The Eligible Consumer shall bear all costs related to the setting up of the Roof-top Renewable Energy Generating System and the cost of Net Meters.~~

## 10. Dispute Resolution:

- 10.1. Any dispute arising under this Agreement shall be resolved promptly, in good faith and in an equitable manner by both the Parties.
- 10.2. The Eligible Consumer shall have recourse to the concerned Consumer Grievance Redressal Forum constituted under the relevant Regulations in respect of any grievance regarding billing which has not been redressed by the Licensee.

In the witness where of ..... (name) for and on behalf of Eligible Consumer and  
Shri. .... (name) for and on behalf of Licensee agree to this agreement.

Signed by

.....

(First Party)

.....

(Second Party)

Witnesses:

1) Signature with Name and Address:  
Address

2) Signature with Name and

.....

.....

.....

.....

# **Section VIII**

## **Annexures**

(Submit with Part I)  
TENDER SUBMISSION FORM

CHIEF ENGINEER (D)  
JPDCL

Sir,

With reference to your invitation to tender for **NIT NO: CE (D)/ JPDCL/ 01 of 2026 dated 03/06/2026**, I/We hereby offer JPDCL the services in the scope of work in strict accordance with the terms & conditions of the tender specifications of the Request for Proposal, to the satisfaction of the Employer or in default thereof forfeit and pay JPDCL the sum of money mentioned in the said conditions.

I/We agree to abide by this tender for the validity period of 180 days from the scheduled end date of bid submission (including extensions, if any) of the e-bid date.

A sum of Rs. 20000/- (Rupees Twenty Thousand) only in the form of Demand Draft in favour of the Chief Accounts Officer, Office of the Chief Engineer (Distribution), JPDCL/MSME Certificate (whichever is applicable) is enclosed with Part-I of the offer as Bid Processing Fee.

I/We hereby undertake and agree to execute an Agreement in accordance with the conditions of the contract.

Encl.: As above

PLACE: .....

SIGNATURE OF AUTHORISED SIGNATORY (BIDDER)

DATE:

NAME IN FULL

COMPANY SEAL

DESIGNATION / STATUS IN THE FIRM

**TECHNO-COMMERCIAL QUESTIONNAIRE.**

The bidders are requested to confirm acceptance of following terms and conditions along with documentary proof. This schedule must be submitted with the **techno-commercial bid** of the offer duly filled, signed & stamped along with supporting documents:

**Name of Bidder:** \_\_\_\_\_

Sl.	Particulars	Confirm Acceptance (Yes / No)
1	<b>Net Worth Certificate</b> Bidders shall furnish documentary evidence (Audited balance sheet and profit & loss account for the years 2022-23,2023-24 and 2024-25) duly certified by Authorized Signatory and the Statutory Auditor / Practicing Chartered Accountant of the Bidding Company in support of their financial capability along with CA certificate for Net-Worth.	
2	<b>Bid Processing Fee</b> Processing Fee deposited before last date and time of bid submission.	
3	<b>Validity</b> Whether the offer is valid for 180 days from the scheduled end date of bid submission (including extensions, if any) of the e-bid.	
4	<b>Earnest Money</b> Whether Bid Security Declaration has been submitted	
5	<b>Taxes and Duties</b> Please Confirm that prices quoted are on 'FIRM' basis and	

	inclusive of Taxes and Duties	
6	<b>Payment clause</b> Whether agreeable to <b>Payment terms</b>	
7	<b>Penalty Clause</b> Whether agreeable to Penalty clause	
8	<b>Extension Order Clause</b> Whether agreed to Extension order <b>Clause</b> of tender document	
9	<b>Acceptance of Part / whole Bids / modification – Rights there of</b> Whether agreed as per <b>Clause</b> of tender document.	
10	<b>Eligibility Criteria Documents</b> Whether documents are attached as stipulated in the tender document Whether a documentary proof of being registered on the MNRE portal enclosed	
11	<b>Whether photocopy of the following have been enclosed</b> a) Certificate of Incorporation b) Memorandum and Article of Association of the Company c) GST Registration d) Permanent Account Number (PAN) e) Profit and loss accounts and Turn over for last 3 years duly certified by the Chartered Accountant up to the last financial year (31/03/2021) f) Copies of Income Tax Return for last 3 Years	
12	List of Directors, their names, addresses, telephone numbers & mobile numbers	
13	Any other information that bidder may, like to give in order to highlight his offer.	

14	Bidder has carefully read General Terms & Conditions of the Tender Document and accepted the same	
----	---	--

PLACE

SIGNATURE OF AUTHORISED

SIGNATORY DATE

NAME IN FULL

COMPANY SEAL

DESIGNATION

STATUS IN THE

FIRM ADDRESS

OF BIDDER

**AFFIDAVIT**

I, \_\_\_\_\_ Director \_\_\_\_\_ of M/s \_\_\_\_\_ with  
Headquarter at \_\_\_\_\_ being their authorised  
signatory, do hereby solemnly affirm and declare that M/s \_\_\_\_\_ has not been  
blacklisted by any UT/State/Central Govt. or agencies under them. I understand that  
if, upon acceptance of our offer dated \_\_\_\_\_ against JPDCL  
tender enquiry No. \_\_\_\_\_ for supply of  
, any P.O. is placed upon us, the same is liable to be cancelled if this declaration is  
found wrong at any subsequent time and further I understand to compensate JPDCL,  
for the consequences arising out of wrong declaration.

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



**PERFORMANCE BG FORM OF**  
**GUARANTEE BOND**  
**(TO BE USED BY APPROVED SCHEDULED COMMERCIAL BANK)**

THIS DEED OF GUARANTEE IS MADE ON..... day of ..... 20.....,  
 between ..... (Name of the Bank and  
 its constitution with ..... detailed address  
 including its head office) (herein after called "the bank" which expression shall, where  
 the context so admits includes its successor and permitted assign) of the one part  
 and Jammu Power Distribution Corporation Limited , JPDCL having its head  
 office at  
 ..... (hereinafter called "Employer" which expression shall, where the context  
 so admits include its successor and permitted assign) of the other part,

1. WHEREAS,..... (name of RESCO) being a company  
 registered under the Indian Companies Act having its  
 registered office at  
 ..... bearing registration no. .... of  
 the year ..... with the registrar of firms at ..... and having its registered  
 office at and having its principal place of business at ..... entered into  
 an Agreement No. .... dated ..... with JPDCL for  
 .....  
 .....

2. WHEREAS, in accordance with clause number ..... of the said agreement,  
 RESCO is required to deposit with the Employer Rs..... only as cash security  
 for the due performance of the terms & conditions of said agreement.

AND WHEREAS in accordance with clause number .....of the said agreement, the Bank has at the request of the said RESCO agreed to give their guarantee and the Employer has agreed to accept the said bank guarantee for the aforesaid sum.

NOW THESE PRESENT WITNESSETH AS FOLLOWS:

We, ..... (name of the Bank) do hereby undertake to pay JPDCL an amount not exceeding Rs. .... against any loss or damage on nonpayment caused to or suffered or would be caused to or suffered by JPDCL by reason of any breach by the said RESCO of any of the terms and conditions contained in the said agreement/ the said purchase order.

3. We, ..... (Name of the Bank) to hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from JPDCL stating that amount claimed is due by way of loss or damage caused to or would be caused to or suffered by JPDCL by reason of any breach of the said contractors of any of the terms and conditions contained in the said agreement/ the said purchase order or by reason of the said contractors failure to perform the said agreement/ the said purchase order. Any such demand on the Bank shall be conclusive as regard the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.....

4. We, ..... (Name of the Bank) further agree that the guarantee herein contained remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of JPDCL under or by virtue of the said agreement/ the said purchase order has been fully paid and its claims satisfied or discharged or till JPDCL certifies that the terms and conditions of the said agreement fully and properly carried out by the said RESCOand accordingly discharges the guarantee. Unless a demand or claim under this guarantee is made on us in writing on or before ....., We shall be

discharged from all liability under this guarantee thereafter. We, further undertake that we shall intimate JPDCL about the expiry of the Bank Guarantee at least 45 days prior to the scheduled date.

5. We, ..... (Name of the Bank) further agree with JPDCL, that JPDCL shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said RESCO from time to time or to postpone for any time or from time to time any of the powers exercisable by JPDCL against the RESCO and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said RESCO or for any forbearance, act or omission on the part of JPDCL or any indulgence by JPDCL to the said contractor or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

6. We, ..... (Name of the Bank) Bank lastly undertake not to revoke this guarantee during its currency except with the previous consent of the JPDCL in writing.

Date:- The \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_

For \_\_\_\_\_ Bank.

### PROFORMA OF CONTRACT AGREEMENT

THIS AGREEMENT is made this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ between Jammu Power Distribution Corporation Limited JPDCL (hereinafter called "Purchaser") of the one part, and M/s \_\_\_\_\_ (hereinafter called "Renewable Energy Service Company (RESCO)"/Agency") of the other part:

AND WHEREAS the Purchaser invited bids for **"Discovery of Tariff along with Selection of Vendors (RESCO) for Design, Engineering, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for ----- years for 2 kW Grid Connected Roof Top Solar Plant for AAY Consumers of JPDCL through RESCO Mode of Utility Led Aggregation Implementation under PM - Surya Ghar: Muft Bijli Yojana"** and has accepted a Tariff Rate by the Agency for Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) per KWh (herein after called "Tariff Rate").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract referred to.
2. The following documents (collectively referred to as "Contract Documents") shall be deemed to form and be read and construed as part of this Agreement, viz.:
  - a) Purchaser Letter of Award.
  - b) The complete Tender Document including any addendums and supplementary issued by the Purchaser.
  - c) Bidder's Letter of Acceptance.
  - d) Bidder's response (proposal) to the SBD, including the Bid Submission Sheet and the Price

f) Contract Forms

In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

3. In consideration of the payments to be made by the Purchaser to the (RESCO) as indicated in this Agreement, the (RESCO) hereby covenants with the Purchaser to provide the Related Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the (RESCO) in consideration of the provision of the Related Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of \_\_\_\_\_ on the day, month and year indicated above.

Signed by \_\_\_\_\_ (Authorized Official for the Employer)

Signed by \_\_\_\_\_ (Authorized Official for the Bidder)

## Annexure G

S.No.	Name of District	Total AAY Ration Card Holders as per FCS&CA List (a)	Potential Scope of Work (kW) (b=ax2)	Bid Processing Fee (INR)	EMD Amount in Lakhs
1	Jammu(021)	8872	17744	20,000.00	43.00
2	Samba(022)	2071	4142	20,000.00	10.00
3	Kathua(007)	7271	14542	20,000.00	35.00
4	Reasi(020)	9451	18902	20,000.00	45.00
5	Udhampur(019)	4970	9940	20,000.00	24.00
6	Ramban(017)	4558	9116	20,000.00	22.00
7	Doda(016)	9293	18586	20,000.00	45.00
8	Kishtwar(018)	6469	12938	20,000.00	31.00
9	Rajouri(006)	13756	27512	20,000.00	66.00
10	Poonch(005)	10622	21244	20,000.00	51.00

## Annexure H

S.No.	Name of District	Total AAY Ration Card Holders as per FCS&CA List	Potential Scope of Work (kW)	Amount of Performance Bank Guarantee (In Crore)
		(a)	(b=ax2)	
1	Jammu(021)	8872	17744	0.90
2	Samba(022)	2071	4142	0.20
3	Kathua(007)	7271	14542	0.73
4	Reasi(020)	9451	18902	0.95
5	Udhampur(019)	4970	9940	0.50
6	Ramban(017)	4558	9116	0.45
7	Doda(016)	9293	18586	0.93
8	Kishtwar(018)	6469	12938	0.65
9	Rajouri(006)	13756	27512	1.37
10	Poonch(005)	10622	21244	1.06

# Annexure I

S.No.	Name of District	Total AAY Ration Card Holders as per FCS&CA List	Whether Bid for the District (Yes / No)
1	Jammu(021)	8872	
2	Samba(022)	2071	
3	Kathua(007)	7271	
4	Reasi(020)	9451	
5	Udhampur(019)	4970	
6	Ramban(017)	4558	
7	Doda(016)	9293	
8	Kishtwar(018)	6469	
9	Rajouri(006)	13756	
10	Poonch(005)	10622	



**Financial E-Bid format for Discovery of Tariff and Selection of RESCO-  
Renewable Energy Service Company for Design, Engineering, Supply, Erection,  
Testing and Commissioning including Warranty, Operation & Maintenance for  
2 kW Grid Connected Roof Top Solar Plant for AAY Households in Jurisdiction  
of JPDCL through RESCO Mode of Utility Led Aggregation Implementation  
under PM - Surya Ghar: Muft Bijli Yojana**

**Nit No.:-**

**Name of the Bidder:**

**DISCOM: JPDCL**

<b>S No.</b>	<b>Name of District</b>	<b>Quoted Tariff (INR / kWh) up to two (02) decimal places Incl of all taxes and duties for the contract period of 10 Years</b>	<b>Quoted Tariff (INR / kWh) up to two (02) decimal places Incl of all taxes and duties for the contract period of 25 Years</b>
<b>1</b>	<b>Jammu(021)</b>		
<b>2</b>	<b>Samba(022)</b>		
<b>3</b>	<b>Kathua(007)</b>		
<b>4</b>	<b>Reasi(020)</b>		
<b>5</b>	<b>Udhampur(019)</b>		
<b>6</b>	<b>Ramban(017)</b>		
<b>7</b>	<b>Doda(016)</b>		
<b>8</b>	<b>Kishtwar(018)</b>		
<b>9</b>	<b>Rajouri(006)</b>		
<b>10</b>	<b>Poonch(005)</b>		