

BIDDING DOCUMENT

FOR

DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING INCLUDING WARRANTY, COMPREHENSIVE OPERATION & MAINTENANCE OF GRID-CONNECTED ROOFTOP SOLAR PLANT OF VARIOUS CAPACITIES IN RESIDENTIAL SECTOR UNDER “UTILITY-LED AGGREGATION (ULA) MODEL THROUGH MODEL II: CONSUMER OWNED ASSETS” OF PM-SURYA GHAR: MUFT BIJLI YOJANA OF MNRE UNDER EPC MODE IN THE STATE OF ASSAM & UNDER OPERATIONAL AREA OF ASSAM POWER DISTRIBUTION COMPANY LIMITED (APDCL)



ASSAM POWER DISTRIBUTION COMPANY LTD.

(A Successor Company of Assam State Electricity Board)

O/o the Chief General Manager (NRE)

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RfS No. 1: APDCL/CGM (NRE)/NRE-152/PT-IV/2025-26/1 (Package-I: LAR) Date: 28.01.2025

RfS No. 2: APDCL/CGM (NRE)/NRE-152/PT-IV/2025-26/2 (Package-II: CAR) Date: 28.01.2025

RfS No. 3: APDCL/CGM (NRE)/NRE-152/PT-IV/2025-26/3 (Package-III: UAR) Date: 28.01.2025

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INTERPRETATIONS

1. Words comprising the singular shall include the plural & vice versa.
2. An applicable law shall be construed as reference to such applicable law including its amendments or re-enactments from time to time.
3. A time of day shall save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.
4. Different parts of this contract are to be taken as mutually explanatory and supplementary to each other and if there is any differentiation between or among the parts of this contract, they shall be interpreted in a harmonious manner so as to give effect to each part.
5. The table of contents and any headings or sub-headings in the contract has been inserted for case of reference only & shall not affect the interpretation of this agreement.

DISCLAIMER

1. Though adequate care has been taken while preparing the RFS document, 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 any Bidder **within fifteen (15) days from the date of notification of RFS/ Issue of the RFS document**, it shall be considered that the RFS document is complete in all respects and has been received by the Bidder.
2. Assam Power Distribution Company Limited (APDCL) reserves the right to cancel/withdraw this invitation for bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.
3. Assam Power Distribution Company Limited (APDCL) reserves the right to modify, amend or supplement this RFS document.
4. While this RFS has been prepared in good faith, neither APDCL nor their employees make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of this RFS, even if any loss or damage is caused by any act or omission on their part.

Place: Guwahati

Date: 28.01.2025

DEFINITIONS

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

- 1.1 **"Affiliate"** shall mean a company that either directly or indirectly;
 (a) controls or
 (b) is controlled by or
 (c) is under common control with
- A Bidding Company and "control" means ownership by one company of at least twenty six percent (26%) of the voting rights of the other company.
- 1.2 **"Beneficiary"** or **"Customer"** shall mean the residential category Consumers of APDCL for 1-phase / 3-phase connection of Supply of Electricity
- 1.3 **"Bid"** shall mean the Techno Commercial and Price Bid submitted by the Bidder along with all documents/credentials/attachment's annexure etc., in response to this RFS, in accordance with the terms and conditions hereof.
- 1.4 **"Bidder"** shall mean Bidding Company/ Bidding consortium submitting the Bid. Any reference to the Bidder includes Bidding Company / Bidding consortium / consortium, members of a bidding consortium including its successors, executors and permitted assigns and lead member of the bidding consortium jointly and severally, as the context may require".
- 1.5 **"Bidding Company"** shall refer to such single company that has submitted the response in accordance with the provisions of this RFS.
- 1.6 **"Bidding consortium or consortium"** shall refer to a group of companies that have collectively submitted the response in accordance with the provisions of this RFS.
- 1.7 **"Bid Bond"** shall mean the unconditional and irrevocable bank guarantee to be submitted along with the Bid by the Bidder, in the prescribed Format;
- 1.8 **"Bid Deadline"** shall mean the last date and time for submission of Bid in response to this RFS as specified in Bid information Sheet;
- 1.9 **"Bid Capacity"** shall means capacity offered by the bidder in his Bid under invitation.
- 1.10 **"CAPEX"** CAPEX Model.
- 1.11 **"CEA"** shall mean Central Electricity Authority.
- 1.12 **"Chartered Accountant"** shall mean a person practicing in India or a firm whereof all the partners practicing in India as a Chartered Accountant(s) within the meaning of the Chartered Accountants Act, 1949;
- 1.13 **"Competent Authority"** shall mean Managing Director (MD) of APDCL himself and/or a person or group of persons nominated by MD for the mentioned purpose herein;
- 1.14 **"Contract"** shall mean the agreement to be entered into by APDCL with the Agency upon receiving the Letter of Award from APDCL for implementation of the Scheme/ Project and shall include the General and commercial terms & condition, scope of work, project

requirement, technical conditions, schedules, appendixes, drawings and any other conditions specifically agreed between the parties forming a part of the contract.

- 1.15 **“Commissioning”** shall mean successful installation and grid-integration of the Solar Power Project, as defined in RFS.
- 1.16 **“Company”** shall mean a body incorporated in India under the Companies Act, 1956 or Companies Act, 2013, including any amendment there to.
- 1.17 **“Capacity Utilization Factor”** (CUF) means the ratio of the annual output of the plant in kWh versus installed plant capacity for number of days.
- CUF = plant output in kWh / (installed plant capacity in kW * 365 * 24).**
- 1.18 **“Circle”** means electrical circle of APDCL
- 1.19 **“DNI”** shall means Direct Normal Irradiation.
- 1.20 **“Date of completion of project”** shall mean that the date when the system has been installed and connected to the grid and is fit to be handed over to the beneficiary.
- 1.21 **“Division”** Shall mean Electrical Sub-division of APDCL.
- 1.22 **“Eligibility Criteria”** shall mean the Eligibility Criteria as set forth in **Clause 3.2** of this RFS.
- 1.23 **“EMD”** shall mean Earnest Money Deposit which is required to be Paid as per the prevailing terms and conditions of RFS.
- 1.24 **“Vendor(s)”** shall mean the Bidder(s) selected by APDCL pursuant to this RFS
- 1.25 **“EPC”** Shall mean Engineering, Procurement and commissioning of the complete project as per the terms and condition of the RFS Document.
- 1.26 **“Financially Evaluated Entity”** shall mean the company which has been evaluated for the satisfaction of the Financial Eligibility Criteria.
- 1.27 **“Financial Year”** or **“FY”** shall mean the Period starting from 1 April of the first calendar year to 31 March of the consecutive calendar year.
- 1.28 **“Inter-connection point / Delivery / Metering Point”** shall mean the point at distribution voltage level where the power from the solar power Project is injected. Metering shall be done at this interconnection point where the power is injected into the Distribution System i.e. the Delivery Point. For interconnection with grid and metering, the EPC shall abide by the relevant EXIM Metering Regulations and their amendments thereof.
- 1.29 APDCL shall mean Distribution Company of the State responsible for implementation of
- 1.30 **“kWp”** shall mean Kilo-Watt Peak.
- 1.31 **“kWh”** shall mean Kilo-Watthour.
- 1.32 **“Letter of Intent”** or **“LOI”** shall mean the letter issued by APDCL to the Selected Bidder to secure their Intent for award of the Project.
- 1.33 **“Limited Liability Partnership (LLP)”** shall mean Limited Liability Partnership as per Limited Liability Partnership Act 2008.

- 1.34 “**LOA**” shall mean the letter issued by APDCL to the selected Bidder for Award of Work.
- 1.35 “**MNRE**” shall mean Ministry of New and Renewable Energy, Government of India.
- 1.36 “**Maximum & Minimum Bid Capacity**” shall mean 75 kW which is the maximum capacity for which the Bidder can submit its Bid against each Part/ Category. The minimum bid capacity shall mean 28 kW which is the minimum capacity for which the Bidder can submit its Bid against each Part/ Category
- 1.37 “**Model**” shall mean CAPEX Model.
- 1.38 “**EXIM Meter**” means an appropriate energy meter capable of recording both import and export of electricity.
- 1.39 “**O&M**” shall mean Operation & Maintenance of Rooftop Solar PV System for a period of 05 years for CAPEX Model.
- 1.40 “**Project**” Shall mean the project of the Design, Supply, Installation, testing & Commissioning of Grid connected Rooftop Solar Systems including five years comprehensive maintenance
- 1.41 “**Project Cost / Project Price**” shall mean the price offered by the Bidder for the Scope of work as per RFS document.
- 1.42 “**Project capacity**” shall mean individual project capacity in kW for a single beneficiary within the state of Assam.
- 1.43 “**Performance Ratio**” (PR) means “Performance Ratio” (PR) means the ratio of plant output versus installed plant capacity at any instance with respect to the radiation measured.
- $$PR = (\text{Measured output in kW} / \text{Installed Plant capacity in kW}) * (1000 \text{ W/m}^2 / \text{Measured radiation intensity in W/m}^2).$$
- 1.44 “**Parent Company**” shall mean a company that holds at least twenty six percent (26%) of the paid-up equity capital directly or indirectly in the Bidding Company as the case may be.
- 1.45 “**Project Sanction Documents**” shall mean the documents required for sanction of project.
- 1.46 “**Price Bid**” shall mean **Envelope II: Price Bid** of the Bid, containing the Bidder’s quoted Price as per this RFS;
- 1.47 “**Project Cost**” shall mean the Cost offered by the bidder for the scope of work as per the RFS document and **shall be exclusive of GST**
- 1.48 “**PV System or SPV System or RTS System**” for the purpose of this tender shall mean the Grid-connected Rooftop Solar Photo-Voltaic (PV) system including the PV modules, grid-connected inverter(s), module mounting structure(s), cables and connectors, safety and Earthing equipment, interconnection equipment, and inverter with remote monitoring with other components for Rooftop Solar System that shall be supplied, installed, commissioned and maintained by the Agency.
- 1.49 “**Qualified Bidder**” shall mean the Bidder(s) who, after evaluation of their Techno Commercial Bid stand qualified for opening and evaluation of their Price Bid;
- 1.50 “**RFS**” shall mean Request for Proposals (RFS) /Bid Document/ Tender Document.
- 1.51 “**Renewable Energy Meter**” refers to a unidirectional energy meter, installed and used solely to record the renewable energy generation from the Renewable Energy System

installed at the consumer's premises.

- 1.52 **“Rooftop Owner”** shall mean owner of roofs at various locations within the state of Assam consisting of single or multiple rooftops.
- 1.53 **“Consent Letter”** shall mean the letter provided by APDCL for a single or group of PV systems after the approval of the project sanction documents submitted by the contractor.
- 1.54 **“Scheme”** shall mean PM Surya Ghar Muft Bijli Yojana Grid Connected Rooftop Solar Scheme for Providing Grid-connected Rooftop Solar System for Residential Consumers announced by the Ministry of New and Renewable and Renewable Energy, Government of India.
- 1.55 **“Statutory Auditor”** shall mean the auditor of a Company appointed under the provisions of the Companies Act, 1956 or under the provisions of any other applicable governing law.
- 1.56 **“SNA”** shall mean State Nodal Agency.
- 1.57 **“Solar Power Developer (SPD)”** shall mean L1 bidder to whom the project is/are allocated.
- 1.58 **“Specification”** shall mean the RFS Document forming a part of the contract along with Proforma, schedules, appendixes and Annexures.
- 1.59 **“Sub-Division”** shall mean Electrical Sub-Division of DISCOM.
- 1.60 **“Central Financial Assistance (CFA)”** shall mean subsidy to be provided by MNRE under the ambit of Phase-II Rooftop Solar Scheme.
- 1.61 **“System”** shall mean the Grid connected Rooftop Solar System as per RFS Document that shall be supplied, installed, commissioned and maintained with all other ancillary required by the vendor for satisfactory operation of the System.
- 1.61 **“Tendered Capacity”** shall mean the Total aggregate capacity in kW indicated by the Vendors through this bidding process as per terms and conditions specified therein.
- 1.63 **“Ultimate Parent Company”** shall mean a company which directly or indirectly owns at least twenty six percent (26%) paid up equity capital in the Bidding Company) and/or in the Financially Evaluated Entity and such Bidding Company and /or the Financially Evaluated Entity shall be under the direct control or indirectly under the common control of such company.
- 1.64 **“Wp”** shall mean Watt Peak.
- 1.65 **“Week”** shall mean the continuous period of seven days.
- 1.66 **“Work”** shall mean activities of Supply, Installation, testing & commissioning of the RFS Document item for which the offers are invited.
- 1.67 **“Allocated capacity”** shall mean the capacity allocated to a bidder by APDCL based on the procedure defined in Section 4 of this tender document. The allocated capacity will be mentioned in the Letter of Allocation (LoA).
- 1.68 **“Installed Capacity”** shall mean the capacity of Grid connected Rooftop Solar Photovoltaic Systems installed and commissioned by the bidder during the contract period.

ABBREVIATIONS

| Abbreviation | Full Form |
|--------------|---------------------------------------------------|
| DSC | Digital Signature Certificate |
| AC | Alternating Current |
| ACDB | Alternating Current Distribution Board |
| Ah | Ampere-hour |
| ALMM | Approved List of Models and Manufacturers |
| BOQ | Bill of Quantity |
| BIS | Bureau of Indian Standards |
| CCA | Controller of Certifying Authorities |
| CEA | Central Electricity Authority |
| CFA | Central Financial Assistance |
| CEI | Chief Electrical Inspector |
| CMC | Comprehensive Maintenance Contract |
| EP | Empanelled Partner |
| CUF | Capacity Utilization Factor |
| DC | Direct Current |
| DCDB | DC Distribution Board |
| DPR | Detailed Project Report |
| DG | Diesel Generator |
| DISCOM | Distribution Company |
| DPB | Distribution Panel Board |
| DSP | Digital Signal Processor |
| EMC | Electromagnetic Compatibility |
| EMD | Earnest Money Deposit |
| EMI | Electromagnetic Interference |
| EN | European Norms |
| EOI | Expression of Interest |
| EPDM | Ethylene Propylene Diene Monomers |
| FF | Fill Factor |
| FOR | Freight on Rail/Road |
| FRP | Fibre-reinforced plastic |
| GHI | Global Horizontal Irradiance |
| GHS | Group Housing Society |
| GI | Galvanised Iron |
| GPRS | General Packet Radio Service |
| GPS | Global Positioning System |
| GRP | Glass Reinforced Plastic |
| GST | Goods and Services Tax |
| HDPE | High Density Polythylene |
| Hz | Hertz |
| IEC | International Electrotechnical Commission |
| IEEE | Institute of Electrical and Electronics Engineers |
| IGBT | Insulated-gate bipolar transistor |

| | |
|---------|---------------------------------------------------|
| Imp | Peak Power Current |
| INR | Indian Rupees |
| IP | Ingress Protection |
| IS | Indian Standard |
| Isc | Short Circuit Current |
| ISI | Indian Standards Institute |
| ISO | International Standards Organization |
| ITB | Instructions to Bidders |
| JB | Junction Box |
| SERC | State Electricity Regulatory Commission |
| JSON | JavaScript Object Notation |
| kg | Kilogram |
| km/hour | kilometres per hour |
| kVA | kilo-volt-ampere |
| kW | Kilowatt |
| LCD | Liquid Crystal Display |
| LED | Light Emitting Diode |
| LoA | Letter of Authorization |
| Lol | Letter of Intent |
| LPSC | Lightning Protection System Components |
| LT | Low Tension |
| MCB | Miniature Circuit Breaker |
| MCCB | Moulded Case Circuit Breaker |
| mm | Millimetre |
| MNRE | Ministry of New and Renewable Energy |
| MMS | Module Mounting Structure |
| MOSFET | Metal-Oxide Semiconductor Field-Effect Transistor |
| MOV | Metal Oxide Varistor |
| MPPT | Maximum Power Point Tracker |
| MSME | Micro, Small and Medium Enterprises |
| MW | Mega Watt |
| NIB | Notice Inviting Bid |
| NIT | Notice Inviting Tender |
| NOC | No Objection Certificate |
| O&M | Operations and Maintenance |
| PAN | Permanent Account Number |
| PBG | Performance Bank Guarantee |
| PCU | Power Conditioning Unit |
| PR | Performance Ratio |
| PGT | Performance Guarantee Test |
| PSU | Public Sector Undertaking |
| PV | Photovoltaic |
| PVC | Polyvinyl Chloride |
| PWM | Pulse width modulation |
| RFID | Radio Frequency Identification |
| RFS | Request for Proposal |
| RFS | Request for Selection |
| RTS | Rooftop Solar |

| | |
|------|----------------------------------|
| RWA | Residential Welfare Association |
| SBD | Standard Bid Document |
| SIM | Subscriber Identification Module |
| SNA | State Nodal Agency |
| SPD | Surge Protection Device |
| SPIN | Solar Photovoltaic Installation |
| SPV | Solar Photo Voltaic |
| sq.m | square meter |
| STC | Standard Testing Condition |
| TAC | Tariff Advisory Committee |
| THD | Total Harmonic Distortion |
| TIN | Taxpayer Identification Number |
| UV | Ultraviolet |
| V | Volt |
| VA | Volt Ampere |
| Vmp | Peak Power Voltage |
| Voc | Open Circuit Voltage |
| W | Watt |
| XLPE | Cross-linked polyethylen |
| XLPO | Cross-linked Polyolefin |
| XML | Extensible Mark-up Language |

SECTION-1

**INVITATION FOR BIDS (IFB) &
BID INFORMATION SHEET**

INVITATION FOR BIDS (IFB)

FOR

“DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING INCLUDING WARRANTY, COMPREHENSIVE OPERATION & MAINTENANCE OF GRID-CONNECTED ROOFTOP SOLAR PLANT OF VARIOUS CAPACITIES IN RESIDENTIAL SECTOR UNDER “UTILITY-LED AGGREGATION (ULA) MODEL THROUGH MODEL II: CONSUMER OWNED ASSETS” OF PM-SURYA GHAR: MUFT BIJLI YOJANA OF MNRE UNDER EPC MODE IN THE STATE OF ASSAM & UNDER OPERATIONAL AREA OF ASSAM POWER DISTRIBUTION COMPANY LIMITED (APDCL)”

(SINGLE STAGE TWO ENVELOPE BIDDING)

(Under E-Procurement)

1. The Ministry of New and Renewable Energy, Government of India (MNRE) is implementing PM-SURYA GHAR: MUFT BIJLI YOJANA wherein central financial assistance (CFA) is being provided for installation of rooftop solar (RTS) projects in residential buildings. MNRE has notified operational guidelines for the implementation of Payment Security Mechanism and Central Financial Assistance component for Utility Led Aggregation Models of PM-Surya Ghar: Muft Bijli Yojana. This proposed proposal outlines the approach for implementation of the scheme in the State of Assam under the Utility-Led Aggregation (ULA) Model, targeting plant sizes ranging from 1 kWp to 3 kWp.
2. For implementation of the RTS activities in respect of the aforesaid programme, respective Power Distribution companies (DISCOMs) have been designated as the implementing agency. Government of Assam, has decided that APDCL shall be the tendering agency of Assam and will implement the project through the successful bidder at L1 rates discovered through this bid for three regions i.e. Lower Assam Region (LAR), Upper Assam Region (UAR) & Central Assam Region (CAR).
3. For the purpose of all procurement activities related to the said works, Assam Power Distribution Company Limited (hereinafter referred to as ‘APDCL’) shall be referred to as ‘Employer’.
4. This RFS shall be governed by *MNRE Office Memorandum No. 318/17/2024-Grid Connected Rooftop Dated 07.06.2024*, *MNRE Office Memorandum No. 318/17/2024-Grid Connected Rooftop (Part-15) dated 28.12.2024* and subsequent amendments.
5. APDCL invites sealed bids from eligible bidders to participate in Request for Selection (RFS) for Site Survey, Design, Installation, Supply, Erection, Testing and Commissioning including Warranty and 5 years of Comprehensive Operation and Maintenance of Roof Top Solar PV Power System for Residential Consumers in the state of Assam on turnkey mode for the following packages:

| SI No. | Package No. | Total Solar Plant Capacity (kW) | Benchmark Cost including GST (Rs.) | Bid submitted for* (Tick mark (√)) |
|---------------|------------------------------------------------|-------------------------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------|
| 1 | Package No. -I: Lower Assam Region (LAR) | Based on the applications received from PM Surya Ghar Portal under ULA Scheme | Rs 55,000 for first 2 kW of RTS capacity and Rs 49,500 for the | |
| 2 | Package No. -II: Central Assam Region (CAR) | | | |
| 3 | Package No. -III: Upper Assam Region (UAR) | | | |

| | | | | |
|--|--|--|----------------------------------|--|
| | | | additional kW of RTS capacity | |
|--|--|--|----------------------------------|--|

6. For the implementation of above mentioned work, Bidders should submit their bid proposal both online and offline complete in all respect on or before Last date of Bid Submission as mentioned on the Bid Information Sheet.
 7. Bidder shall submit bid along with non-refundable Tender Processing Fee and refundable Bid Security (EMD) complete in all respect as per the Bid Information Sheet.
 8. Techno-Commercial bids will be opened as per the Bid Information Sheet in online & offline mode in presence of authorized representatives of bidders who wish to be present. Bid proposals received without the prescribed bid fees and Bid Security (EMD) will be rejected. However the bidder must deposit online non-refundable tender processing fee and EMD shall also be submitted online while submission of tenders in <https://assamtenders.gov.in>. In the event of any date indicated above is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.
 9. Bid documents which include Eligibility Criteria, Technical Specifications, various conditions of contract, formats etc. can be downloaded from the official website of APDCL <https://www.apdcl.org> or from <https://assamtenders.gov.in>. It is mandatory to download official copy of RfS document from <https://assamtenders.gov.in> in order to participate in the tender. Any amendment (s)/ corrigendum/clarification(s) with respect to this Bid shall be uploaded on <https://assamtenders.gov.in> only. The Bidder should regularly check for any Amendment(s)/ Corrigendum/Clarification (s) on the above website only.
- 10. The bidder can submit their bid only one package only.**
11. The detailed scope of work includes:
 - Site Survey, Design, Engineering, Manufacture, Supply, Storage, Civil works, Erection, Testing & Commissioning of grid connected Solar Power Plants including Operation and Maintenance (O&M) of the project for a period of 5 years after commissioning of project.
 - Visit to the respective sites and check the feasibility of space for installation of allotted capacity in consultation with respective site owner of the residential household.
 12. Tender Processing Fee and Bid Security/EMD shall be submitted online and the techno-commercial bid shall be submitted both online & offline in the office of APDCL.
 13. PBG amount shall be furnished by the successful bidder after issuance of LOA by APDCL.

Note:

1. The CFA would be admissible as per MNRE scheme guidelines.
2. For common facilities including EV charging in Group Housing Societies/Residential Welfare Associations (GHS/RWA) etc. The allowed RTS capacity shall be limited up to 500 kWp (@ 3kWp per house), with the upper limit being inclusive of individual rooftop plants already installed by individual residents in that GHS/RWA at the time of installation.
3. APDCL reserves the right for diversion of capacity from one bidder/ category to another for 100% utilization of capacity sanctioned by MNRE, Gol.

Chief General Manager (NRE),
Assam Power Distribution Company Limited
Bijulee Bhawan (Annex Building), Paltanbazar
Guwahati – 01

SCOPE OF WORK

APDCL invites bids for “Design, supply, erection, testing and commissioning including warranty, comprehensive operation & maintenance of grid-connected rooftop solar plant of various capacities in residential sector under Utility-Led Aggregation (ULA) model through model II: Consumer owned assets of PM-Surya Ghar: Muft Bijli Yojana of MNRE in the state of Assam & under operational area of Assam Power Distribution Company Limited (APDCL)” under Engineering, Procurement and Construction (EPC) /CAPEX model.

APDCL will allot the Region wise applications to the successful L1 bidder. The CFA available from MNRE would be admissible as per MNRE scheme guidelines. Applicable State Subsidy, as approved by Govt. of Assam will also be disbursed to the bidders in addition to the CFA. Group Housing Societies/Residential Welfare Associations (GHS/RWA) etc. for common facilities including EV charging are allowed to install RTS projects up to 500 kW capacity (@ 3kWp per house), with the upper limit being inclusive of individual rooftop plants already installed by individual residents in that GHS/RWA at the time of installation of RTS for common activity.

APDCL will allot the beneficiaries to the L1 bidder as per the guidelines of the “Utility-Led Aggregation (ULA) Model Through Model II: Consumer Owned Assets” of PM-Surya Ghar: Muft Bijli Yojana guidelines of MNRE and subsequent amendments.

The successful L1 bidder will carry out the design, supply, erection, testing and commissioning including warranty, comprehensive operation & maintenance for a period of 05 years for EPC/CAPEX Model of grid interactive rooftop solar PV power plant and shall make all necessary arrangement for evacuation and injection of surplus power to the grid at the interconnection point/ points as agreed with APDCL.

1. The detailed Scope of Work for vendors shall essentially cover but not be limited to:

- 1.1. Identification of prospective beneficiaries and providing necessary assistance to the prospective beneficiary in submitting online applications in the PM Surya Ghar portal for installation of RTS project.
- 1.2. Obtaining NET/EXIM metering approval from APDCL for providing grid connectivity/NET-metering/EXIM-metering.
- 1.3. Execution of the work shall be carried out in an approved manner as per the technical specification of RFS. In case of any dispute, relevant MNRE/BIS/ISI/NABL/ISO/IEC/IS specification shall be followed and work shall be carried out to the reasonable satisfaction of the engineer in charge.
- 1.4. The vendor shall complete the work of Design, supply, civil work, erection, testing and commissioning of SPV grid connected Power Plant. APDCL will allot the all beneficiaries from the regions after receiving the beneficiary share to the L1 bidder in a lot of approximately 100 kW and will keep on allocating the beneficiaries as per the receipt of application and receipt of beneficiary share lot wise. The successful L1 bidder will complete the allotted Lot in all respect within 2 months from the date of the allotment of the Lot. The allotment may continue till the project timeline specified by MNRE to APDCL i.e. 31.03.2027, or achievement of targeted capacity for the scheme. In event of failure to install and commission the RTS system within the mentioned timeframe, the entire Performance Bank Guarantee may be forfeited and may also lead to termination of LOA of the vendor at the sole discretion of APDCL. The penalty for non-completion will be on pro-rata basis.
- 1.5. The work covers Design, supply, installation, commissioning and Comprehensive Maintenance Contract (CMC) for 05 (Five) Years.
- 1.6. The successful bidder shall establish sufficient nos. of Service Centres to cater the 05 Years CMC. The details of all such service centres (address, contact no. etc.) will be made available on the website of the APDCL (www.apdcl.org).
- 1.7. All the material required for the installation of solar power plant as per the work order issued shall be kept at site in custody of the vendor. APDCL shall not be responsible for any loss or damage of any material during the installation. The vendor shall be responsible and take an insurance policy for transit-cum-storage-erection for all the materials.

- 1.8. All installations shall ensure generation data reporting (at least hourly frequency) and shall provide necessary integration facility to the National Portal.
- 1.9. The vendor shall take entire responsibility of electrical safety of the installations including connectivity with the grid and follow all the safety rules and regulations applicable as per Indian Electricity Act-2003 and prevailing CEA guidelines and amendments, it shall be responsibility of the vendor to take NOC from concerned authority and engage person as per provisions as per in CEA Rules and Regulations.

The successful bidder shall ensure proper safety of all the workmen, material, plants and equipment belonging to him/her. In case any accident occurs during the construction / erection or during guarantee period for work undertaken by Vendor thereby causing any minor or major or fatal accident will be the responsibility of the Vendor. The successful Vendors shall follow and comply with the employer's safety rules relevant provisions of applicable laws pertaining to the safety of workmen, employees, plant and equipment. The Vendors shall also arrange all certificates and test reports of the module and inverter and other equipment. The Vendors must adhere to the Operation and Maintenance procedure given in **Annexure-B** of this document.

BID INFORMATION SHEET

| Particulars | Description | | | | | | | | | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------|------------------------------------------------------|---|----------------------------------------------|-----------------------------------------------------------------------------------------------|---|-------------------------------------------------|---|------------------------------------------------|
| Document Description | Bid document for “Design, supply, erection, testing and commissioning including warranty, comprehensive operation & maintenance of grid-connected rooftop solar plant of various capacities in residential sector under Utility-Led Aggregation (ULA) model through model II: Consumer owned assets of PM-Surya Ghar: Muft Bijli Yojana of MNRE in the state of Assam & under operational area of Assam Power Distribution Company Limited (APDCL)” | | | | | | | | | | |
| RfS No. and Date | APDCL/CGM(NRE)/NRE-152/PT-IV/2025-26/1/Package-I: LAR APDCL/CGM(NRE)/NRE-152/PT-IV/2025-26/2/Package-II: CAR APDCL/CGM(NRE)/NRE-152/PT-IV/2025-26/3/Package-III: UAR Date: 28.01.2025 | | | | | | | | | | |
| Estimated Cost of system | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">SI No.</th> <th style="text-align: center;">Package No.</th> <th style="text-align: center;">Estimated Cost of the System including GST (Rs./kWp)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Package No. - I: Lower Assam Region (LAR)</td> <td rowspan="3" style="vertical-align: top;">Rs 55,000 for first 2 kW of RTS capacity and Rs 49,500 for the additional kW of RTS capacity.</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Package No. – II: Central Assam Region (CAR)</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Package No. - III: Upper Assam Region (UAR)</td> </tr> </tbody> </table> | SI No. | Package No. | Estimated Cost of the System including GST (Rs./kWp) | 1 | Package No. - I: Lower Assam Region (LAR) | Rs 55,000 for first 2 kW of RTS capacity and Rs 49,500 for the additional kW of RTS capacity. | 2 | Package No. – II: Central Assam Region (CAR) | 3 | Package No. - III: Upper Assam Region (UAR) |
| SI No. | Package No. | Estimated Cost of the System including GST (Rs./kWp) | | | | | | | | | |
| 1 | Package No. - I: Lower Assam Region (LAR) | Rs 55,000 for first 2 kW of RTS capacity and Rs 49,500 for the additional kW of RTS capacity. | | | | | | | | | |
| 2 | Package No. – II: Central Assam Region (CAR) | | | | | | | | | | |
| 3 | Package No. - III: Upper Assam Region (UAR) | | | | | | | | | | |
| List of Project Location along with respective Solar Plant Capacity and Type | Based on the application received from PM Surya Ghar Portal under ULA model. | | | | | | | | | | |
| Board Scope | Design, Engineering, Manufacture, Supply, Storage, Civil work, Erection, Testing & Commissioning of the Grid-connected rooftop solar PV project including comprehensive Operation and Maintenance (O&M) of the project for a period of 05 years for CAPEX Model after commissioning of project. | | | | | | | | | | |
| Downloading of Bidding Document | The Bidding Document can be downloaded online only from https://www.apdcl.org and https://www.assamtenders.gov.in website of Government of India from _____ at _____ Hrs | | | | | | | | | | |
| Period of work | APDCL will allot the all beneficiaries from the regions after receiving the beneficiary share to the L1 bidder in a lot of approximately 100 kW and will keep on allocating the beneficiaries as per the receipt of application and receipt of beneficiary share lot wise. The successful L1 bidder will complete the allotted Lot in all respect within 2 months from the date of the allotment of the Lot. The allotment may continue till the project timeline specified by MNRE to APDCL i.e. 31.03.2027, or achievement of targeted capacity for the scheme. | | | | | | | | | | |
| Last Date of Submission of Pre-Bid Queries | 10.02.2025 upto 15.00 HRS | | | | | | | | | | |
| Pre-bid Meeting | 13.02.2025 at 14:00 Hrs at Conference Room, O/o the CGM (NRE), APDCL, Bijulee Bhawan, Paltan Bazar, Guwahati-1. | | | | | | | | | | |

| | All the prospective developers are requested to visit official website of APDCL (www.apdcl.org) or https://assamtenders.gov.in for referring updates, if any, on the pre-bid meeting. | | | | | | | | | | | | |
|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------|--------------------------|---|----------------------------------------------|-----------------|---|-------------------------------------------------|-----------------|---|------------------------------------------------|-----------------|
| Bid Submission Start Date | 19.02.2025 (10:00 Hrs) | | | | | | | | | | | | |
| Last date & time for submission of online bids and hard copy submission of offline bids | 26.02.2025 (17:00 Hrs) | | | | | | | | | | | | |
| Address for submission of Techno-Commercial Bid (Hard Copies) | Chief General Manager (NRE) Assam Power Distribution Company Limited, Bijulee Bhawan , Annex Building, Paltanbazar, Guwahati. Dist.: Kamrup (M), Pin: 781001, Assam, India. Contact No: 8399883941 E-mail: cgm.nre@apdcl.org | | | | | | | | | | | | |
| Online Bid Opening (Techno-Commercial) | 28.02.2025 at 14:00 Hrs | | | | | | | | | | | | |
| Price Bid Opening | To be intimated through online notification subsequent to techno – commercially responsive bidders | | | | | | | | | | | | |
| Cost of RfS (Non-refundable applicable for the Bidder) | The package wise cost of RfS is as under: <table border="1" data-bbox="652 821 1440 1066"> <thead> <tr> <th>SI No.</th> <th>Package No.</th> <th>Cost of RfS (Rs.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Package No. - I: Lower Assam Region (LAR)</td> <td>Rs. 2,000/-</td> </tr> <tr> <td>2</td> <td>Package No. – II: Central Assam Region (CAR)</td> <td>Rs. 2000/-</td> </tr> <tr> <td>3</td> <td>Package No. - III: Upper Assam Region (UAR)</td> <td>Rs. 2000/-</td> </tr> </tbody> </table> <p>The cost of RfS to be submitted online by the bidder during submission of tenders in https://assamtenders.gov.in.</p> | SI No. | Package No. | Cost of RfS (Rs.) | 1 | Package No. - I: Lower Assam Region (LAR) | Rs. 2,000/- | 2 | Package No. – II: Central Assam Region (CAR) | Rs. 2000/- | 3 | Package No. - III: Upper Assam Region (UAR) | Rs. 2000/- |
| SI No. | Package No. | Cost of RfS (Rs.) | | | | | | | | | | | |
| 1 | Package No. - I: Lower Assam Region (LAR) | Rs. 2,000/- | | | | | | | | | | | |
| 2 | Package No. – II: Central Assam Region (CAR) | Rs. 2000/- | | | | | | | | | | | |
| 3 | Package No. - III: Upper Assam Region (UAR) | Rs. 2000/- | | | | | | | | | | | |
| Bid Security (EMD) applicable for the Bidder | The Package wise EMD is as under: <table border="1" data-bbox="652 1236 1440 1482"> <thead> <tr> <th>SI No.</th> <th>Package No.</th> <th>Bid Security (EMD) (Rs.)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Package No. - I: Lower Assam Region (LAR)</td> <td>Rs. 25,000,00/-</td> </tr> <tr> <td>2</td> <td>Package No. – II: Central Assam Region (CAR)</td> <td>Rs. 25,000,00/-</td> </tr> <tr> <td>3</td> <td>Package No. - III: Upper Assam Region (UAR)</td> <td>Rs. 25,000,00/-</td> </tr> </tbody> </table> <p>The EMD to be submitted by the Bidder online while submission of tenders in https://assamtenders.gov.in.</p> | SI No. | Package No. | Bid Security (EMD) (Rs.) | 1 | Package No. - I: Lower Assam Region (LAR) | Rs. 25,000,00/- | 2 | Package No. – II: Central Assam Region (CAR) | Rs. 25,000,00/- | 3 | Package No. - III: Upper Assam Region (UAR) | Rs. 25,000,00/- |
| SI No. | Package No. | Bid Security (EMD) (Rs.) | | | | | | | | | | | |
| 1 | Package No. - I: Lower Assam Region (LAR) | Rs. 25,000,00/- | | | | | | | | | | | |
| 2 | Package No. – II: Central Assam Region (CAR) | Rs. 25,000,00/- | | | | | | | | | | | |
| 3 | Package No. - III: Upper Assam Region (UAR) | Rs. 25,000,00/- | | | | | | | | | | | |
| Performance Security / Contract Performance Guarantee (CPG) to be submitted by successful bidders | PBG Amounting to Rs. 25 Lakhs Allocation (@Rs. 5500.00 per kWp) shall be initially submitted by the successful bidder in the form of Bank Guarantee in favour of “ Chief General Manager (NRE), APDCL ” payable at Guwahati. The bidder shall submit additional PBG so that the total BG amount should be 10% of the total project cost in the form of Bank Guarantee in favour of “ Chief General Manager (NRE), APDCL ” payable at Guwahati. | | | | | | | | | | | | |
| Consortium | Allowed | | | | | | | | | | | | |

| | |
|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name, Designation, Address and other details of Tender Inviting Authority | Sri Bijoy Sankar Baruah Chief General Manager (NRE), Assam Power Distribution Company Limited Annex Building, Bijulee Bhawan, Paltanbazar, Guwahati-01 |
| Details of persons to be contacted in case of any assistance required | <ol style="list-style-type: none"> 1. Binoy Jyoti Nath AGM (NRE), APDCL M. No. 9401675463 (Office hours only) 2. Arnab Ghosh DGM (NRE), APDCL M. No: 7002231686 (Office hour only) 3. Baishali Talukdar DM (NRE), APDCL M. No: 8638898504 (Office hour only) 4. Vivek Kumar Rajak DM (NRE), APDCL M. No. 9654056704 (Office hours only) |

Important Note:

1. Prospective Bidders are requested to remain updated for any or all notices, amendments, corrigendum, clarifications etc. to the Bidding Document published through the websites <https://www.assamtenders.gov.in>. No separate notifications shall be issued for such notices, amendments, corrigendum, clarifications etc. in the print media or individually to the prospective Bidders and in no case APDCL shall be held responsible for any loss of information to the Bidders.
2. Intimation regarding notification on the above shall be updated and the details shall be only available from <https://www.assamtenders.gov.in>.

-S/d-

Chief General Manager (NRE)
APDCL, Bijulee Bhawan (Annex Building)
Paltanbazar, Guwahati-1

SECTION-2

PM SURYA GHAR MUFT BIJLI YOJANA

PM SURYA GHAR: MUFT BIJLI YOJANA

Objectives:

- Govt. of India announced the launch of rooftop solar scheme for free electricity - **PM Surya Ghar Muft Bijli Yojana** on 13th February, 2024. During the launch, the Hon'ble PM quoted as:
- PM Surya Ghar: Muft Bijli Yojana is a Central Scheme that aims to provide free electricity to One Crore households in India, who opt to install roof top solar electricity unit.

PMSGMBY Utility Led Aggregation Models:

Utility Led Aggregation Models: ULA Models includes business models where the distribution utility (DISCOM) or the State Government or some other state designated entity with majority state ownership (State Nodal Agency, State Generation Company, Autonomous bodies etc.), separately or in some combination, install rooftop solar projects on behalf of individual residential sector households. For this purpose, the utility may mobilize resources from the respective state government, its own internal resources, contributions made to it for this purpose under Corporate Social Responsibility or any other resources mobilized for providing rooftop solar to households under ULA model. These may include two models with additional sub-variants possible under each Model.

Model I: Utility owned Assets

Under ULA Utility Owned Asset Model, the installed rooftop solar systems are not owned by the residential household for the project period, which shall not be less than 5 years. The ownership may subsequently be transferred to the household after the completion of the project period, as per the arrangements decided by the concerned Utility.

Under this mechanism, the Utility may aggregate demands of interested consumer of eligible categories and implements the installation of the system on behalf of individual residential households as a RESCO entity. The utility in turn, may either get these installations carried out under an EPC mode (Engineering, Procurement, and Construction) or through sub RESCO entities that implement the project. These EPC vendors or sub RESCO entities shall be selected through an open, competitive and transparent bidding processes or by matching feed-in tariffs established by the respective Electricity Regulatory Commission, depending on the model being implemented by the Utility.

In such cases, the Utility is responsible for the payment against the contracts to EPC or sub-RESCO players for the project period. The Utility may sell the power generated to the consumer or the DISCOM or a mix of the two under a Power Purchasing Agreement. The utility may also provide roof rent/lease rent to the households, if applicable or charge an EMI/Service charge from households in order to repay any debt/liabilities it might have incurred for providing the rooftop service.

Model II: Consumer owned Assets

Under the ULA Consumer Owned Asset model, the Utility provides an additional grant component for the installation and the installed rooftop solar systems are owned by the consumer from the date of commissioning.

Under this mechanism, the Utility may aggregate demands of interested consumer of eligible categories and implement the installation of the PM Surya Ghar: Muft Bijli Yojana RESCO, Utility Led Models and Payment Security Mechanism system on behalf of individual residential households as an EPC entity. The utility in turn, may either get these installations done under an EPC mode (Engineering, Procurement, and Construction). These EPC vendors shall be selected/empanelled through an open, competitive and transparent bidding process.

In such cases, the Utility is responsible for the payment against the contracts to EPC vendors for the project period. The Consumer installation may be metered under net metering, gross metering or any other metering mechanism approved by the concerned Electricity Regulatory Authority.

The Consumer installation may be metered under net metering, gross metering or any other metering mechanism approved by the concerned Electricity Regulatory Authority.

No CFA will be provided to non-residential segments of consumers (including Government segment, commercial and industrial segment etc.).

CFA Structure: The CFA structure for residential sector and RWAs/GHG's (for common facilities) shall be as per the provisions of the OM no. 318/17/2024-Grid Connected Rooftop dated 7th June, 2024. The CFA shall be fixed as per benchmark rates established under the scheme as per the above OM, irrespective of any price/cost discovery undertaken by the state entities under ULA.

Additional Components: The rooftop solar installation may include additional technology components such as small wind hybrids, battery storage, solar tracker systems etc. However, the CFA calculation shall be based on the CFA structure under the scheme as per capacity of solar modules installed in the system.

Domestic Content Requirement: Solar modules used in the installation must satisfy the Domestic Content Requirement condition i.e., domestically manufactured modules manufactured from domestically manufactured cells. This PM Surya Ghar: Muft Bijli Yojana RESCO, Utility Led Models and Payment Security Mechanism is an essential condition for the installation to be eligible for the CFA. Use of non DCR modules in any form in the installation shall render the installation ineligible for CFA. RESCO will submit a declaration from the Original Equipment Manufacturer (OEM) certifying that the modules used in the installation meet DCR standards. The RESCO shall also comply with any other mechanisms for DCR traceability established by the Ministry.

Pre-existing RTS: Households with pre-existing rooftop solar shall not be considered eligible under RESCO and ULA Models.

Metering Arrangements: RESCO and ULA based installations under metering mechanisms such as Net Metering, Net Billing, Gross Metering, Group Net Metering or Virtual Net Metering shall be eligible for CFA, subject to their compliance with the relevant regulations as established by the concerned Electricity Regulatory Commission.

Non Metered Grid Connected Systems: Systems that are not feeding into the grid but are connected to the grid (behind-the-meter systems, battery hybrid systems etc.) shall be eligible for CFA under the scheme subject to approval by the respective Electricity Regulatory Commissions. In such cases, the DISCOM will inspect the installation, ensure the functioning of the reverse power relay protection and incorporate suitable remarks in the report. However, Off-grid connected installations will not be eligible for CFA under the scheme.

Generation Data: All installations in ULA/RESCO mode shall ensure generation data reporting (at least hourly frequency) and shall provide necessary integration facility to the National Portal.

Consumer Application Process:

- Step-1:** Consumer Registration at <https://pmsuryaghar.gov.in>
- Step-2:** Apply for Rooftop Solar
- Step-3:** Technical Feasibility (TFR) approval waived upto 10 kW
- Step-4:** Selection of Vendor by Consumer and Plant Installation online through the portal.
- Step-5:** Submit Installation Details with Photographs
- Step-6:** Plant Inspection and Meter installation by APDCL
- Step-7:** Generate Project Commissioning Certificate online

SECTION-3

INSTRUCTIONS TO BIDDERS (ITB) & BID DETAILS

1. INTRODUCTION

The Ministry of New and Renewable Energy, Government of India (MNRE) is implementing PM-SURYA GHAR: MUFT BIJLI YOJANA wherein central financial assistance (CFA) is being provided for installation of rooftop solar (RTS) projects in residential buildings. MNRE has notified operational guidelines for the implementation of Payment Security Mechanism and Central Financial Assistance component for Utility Led Aggregation Models of PM-Surya Ghar: Muft Bijli Yojana vide notification 318/17/2024-Grid Connected Rooftop (Part-15) dated 28.12.2024. This proposed proposal outlines the approach for implementation of the scheme in the State of Assam under the Utility-Led Aggregation (ULA) Model, targeting plant sizes ranging from 1 kWp to 3 kWp. For implementation of the RTS activities in respect of the aforesaid programme, respective Power Distribution companies (DISCOMs) have been designated as the implementing agency. Government of Assam, has decided that APDCL shall be the tendering agency of Assam and shall identify L-1 rates for implementation of the programme. APDCL will execute RTS projects in their operational areas through the vendors, in accordance with the rates discovered in this tender.

- 1.1. This tender document is in accordance with MNRE guidelines vide notification 318/17/2024-Grid Connected Rooftop (Part-15) dated 28.12.2024 for the implementation of Payment Security Mechanism and Central Financial Assistance component for Utility Led Aggregation Models of PM-Surya Ghar: Muft Bijli Yojana. The guidelines/scheme documents/amendments for the programme can be seen on MNRE portal (<https://mnre.gov.in>).

For identification of applicants/ consumers, APDCL will assist vendors by providing the list of applications received from consumers in the PM Surya Ghar portal of MNRE. The allotment of beneficiaries will be based on applications and beneficiary share received. The total capacity shown in this bid region wise is estimated based on nos. of applications received in the portal. This may vary during execution of the project as per receipt of beneficiary share.

- 1.2. The aggregate targeted capacity against each package shall be based on the application received from PM Surya Ghar Portal under ULA model. The category of the location/ beneficiary under this model are as under:

| Sl. No. | Category | Coverage of Buildings |
|---------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (i) | Residential | All types of Residential buildings and Group Housing Societies/Residential Welfare Associations (GHS/RWA) (Applicable for 3 kWp per household only) |

The Ministry of New and Renewable Energy (MNRE), Government of India vide OM No. 318/17/2024-Grid Connected Rooftop Dated 07.06.2024 has notified the Benchmark cost for Rooftop Solar Plants for pm Surya Ghar Scheme as under:

| Sl. No | Capacity Range* | Benchmark Cost (INR/kWp) |
|--------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | Special Category States including North-Eastern States including Sikkim, Uttarakhand, Himanchal Pradesh, Jammu & Kashmir, Ladakh, Andaman & Nicobar and Lakshadweep island |
| 1. | For first 2 kW | 55,000 |
| 2. | For the additional kW of RTS capacity | 49,500 |

Note:

- All the above benchmark costs are inclusive of total system cost including Photo-Voltaic solar modules, inverters, balance of systems including cables, Switches/Circuit Breakers /Connectors/ Junction Boxes, mounting structure, earthing, Lightning arrester, local connectivity cost, cost of civil works, foundations etc. and its installation, commissioning, transportation, insurance, comprehensive maintenance charges for five years, other applicable fees and taxes if any (**including GST**) etc.
- The above-mentioned benchmark costs are excluding NET/EXIM metering cost and battery back-up costs.

The CFA structure applicable is as Tabulated below (As per MNRE Guidelines or as applicable at the time of commissioning of the project):

| Type of Residential Sector | Central Financial Assistance (CFA) (For Special Category States) | Additional State Subsidy for the state of Assam | Total Subsidy (CFA + State Subsidy) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------------------|-------------------------------------|
| Residential Sector (first 2 kWp of RTS capacity or part thereof) | Rs 33,000/kWp | Rs 15,000/kWp | Rs 48,000/kWp |
| Residential Sector (with additional RTS capacity of 1 kWp or part thereof) | Rs 19,800/kWp | Rs 15,000/kWp | Rs 34,800/kWp |
| Residential Sector (additional RTS capacity beyond 3 kWp) | No additional CFA | No additional Subsidy | No additional Subsidy |
| Group Housing Societies/ Residential Welfare Associations (GHS/RWA) etc, for common facilities including EV charging up to 500 kWp (@3 kWp per house) | Rs 19,800/kWp | Rs 15,000/kWp | Rs 34,800/kWp |

Note:

- Central Financial Assistance (CFA) disbursement will be governed as per **MNRE Office Memorandum No.318/17/2024-Grid Connected Rooftop Dated 07.06.2024** on “Operational Guidelines for Implementation of PM Surya Ghar: Muft Bijli Yojana for the component “CFA to Residential Consumers”.
- Special Category States include States/UTs of Uttarakhand, Himachal Pradesh, J&K, Ladakh, States in the North East including Sikkim, UTs of A&N and Lakshadweep.
- Additional State Subsidy will be provided as per Notification No. **PEL/412024/16 Dated 14.03.2024** of Power (Electricity) Department, Govt. of Assam.

1.3. . The total subsidy (CFA + State Subsidy) shall be calculated as indicated in the above table. The implementing agencies shall ensure that the tenure of project shall be in synchronization with the timelines of MNRE sanction. Depending on requirement/contingencies and with prior approval of MNRE, APDCL may **extend the tenure of L1 vendors for implementation of the project.**

1.4. The Bidders are advised to read carefully all instructions and conditions appearing in this document and understand them fully. All information and documents required as per the bid document must be furnished. Failure to provide the information and/ or documents as required may render the bid technically nonresponsive.

1.5. The bidder shall be deemed to have examined the bid document and MNRE scheme, to have obtained his own information in all matters whatsoever that might affect carrying out the works in line with the scope of work specified elsewhere in the document at the offered rates and to have satisfied himself to the level of sufficiency. The bidder shall be deemed to be in knowledge of 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, he has to complete in accordance with the bid documents irrespective of any defects, omissions or errors that may be found in the bid documents.

2. BID DETAILS

2.1. The size of each project shall be in the range for each part as under:

| Sl. No. | Category | Proposed Capacity Range |
|---------|----------------------|-------------------------|
| 1 | Residential (Part-A) | 1 kW |
| 2 | Residential(Part-B) | Above 1 kW to upto 2 kW |
| 3 | Residential(Part-C) | Above 2 kW to upto 3 kW |

One part may however comprise of several rooftop units. Each Rooftop unit can separately connect with the grid and may have separate meters.

2.2. A Bidder shall be eligible to submit bid in only one package in the same tendering process, either as an individual bidder or as a partner of a consortium. If the bidder submits bid for more than one package either as an individual bidder or as a partner of a consortium, all his bids will be rejected.

2.3. Based on the price quoted by the bidders, APDCL shall list the bidders in the ascending order i.e. L1, L2, L3, _ _ _ (L1 being the lowest quoted bidder) for each package. L1 bidders in each package shall be awarded the work.

2.4. SIZE OF THE PROJECTS:

- On-Grid Solar Project: The size of each project shall be in the range from 1 kWp to 3 kWp.

APDCL reserves the Right to increase/decrease the individual plant capacity as well as transfer location from one site to another site or add new site as per requirement of the project.

2.5. BID CAPACITY:

- The region wise capacity as per the received applications is as follows-
- This region wise capacity will be based on the application received from PM Surys Ghar Portal and the actual allotted capacity may increase/decrease as per the receipt of beneficiary share.

APDCL will allot the all beneficiaries from the region after receiving the beneficiary share to the L1 bidder in a lot of approximately 100 kWp and will keep on allocating the beneficiaries as per the receipt of application and receipt of beneficiary share lot wise

2.6. Components/Package of Grid Connected Rooftop Solar PV System:

The bidders shall quote price for 1 kWp solar plant (excluding GST) essentially covering -“Design, supply, erection, testing and commissioning including warranty and 05 years of comprehensive operation & maintenance of grid-connected rooftop solar PV plant. For the purpose of this tender, the components of a Grid Connected Rooftop Solar PV System shall essentially comprise but not be limited to crystalline solar PV Panels/modules of required number, Inverters/PCU, module mounting structures of minimum 300mm ground clearance at the lowest point from the roof surface, total Cable/wiring up to 30 m in 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 and other miscellaneous works. **However, the price quoted by the bidders shall be exclusive of GST (Goods and Services Tax).**

The vendor shall not be allowed to charge any extra amount other than the L-1 price for the package of Grid Connected Rooftop Solar PV system as indicated above. However, in case of any customization desired by the beneficiary/consumer, the vendor is allowed to charge extra amount to the beneficiary/consumer, on actual basis, subject to signing of a declaration in this regard in the format attached at **Annexure-M. APDCL/MNRE shall not be held responsible for any dispute arising out of this agreement.**

3. INSTRUCTIONS TO BIDDERS

3.1. GENERAL INSTRUCTIONS

- I. Bidders should not be blacklisted from any of the agency with direct or indirect control of Central Government Ministries/ Departments/ Public Sector Units (PSUs)/ Institutions, State Government Departments/ Organizations /Institutions etc.
- II. Bidder should have valid PAN & GST Registration Numbers as per statutory requirement.
- III. Bidder must meet the eligibility criteria independently as Bidding Company or as a Bidding Consortium with one of the members acting as the Lead Member of the Bidding Consortium. Bidder will be declared as a Qualified Bidder based on meeting the eligibility criteria (Technical and Financial) and as demonstrated based on documentary evidence submitted by the Bidder during the bidding process.
- IV. *In case of a Bidding Consortium the Financial Eligibility criteria like Annual turnover or Net worth as indicated in **Clause 3.2.3**, shall be fulfilled by the Lead Member or Parent Company of the Lead Member while the Technical Eligibility Criteria shall be fulfilled by consortium members.* In case bidder is a consortium, a Consortium Agreement along with Resolution shall be furnished as per the **Format-10**.
- V. *Financial Consortium is not allowed in this Bidding Process. Consortium is only permitted for Technical partnership as per **Format- 10**.* Further in-case where the bidding company has used the financial eligibility criteria of its parent company then it needs to be ensured that no change in the controlling equity of the Bidding Company is done before 2 years from the date of commissioning of the sanctioned capacity; requires prior approval of APDCL. All members of the consortium should be registered under the Company Act.
- VI. All members of the consortium should be registered as a Company/ Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company (LLC).
- VII. Bidder including its member of the consortium can submit only one bid against RFS.

NB: If the bidder's submitted information is found to be false declaration or misrepresentation, the bidder(s) shall be out rightly rejected or debarred or blacklisted from APDCL's future tenders. Also the EMD shall be forfeited in such a case.

3.2 ELIGIBILITY CRITERIA

3.2.1 GENERAL ELIGIBILITY CRITERIA

The Bidder should be either a body incorporated in India under the Companies Act, 1956 or 2013 including any amendment thereto or Partnership firms/ Sole Proprietorship Firm / Limited Liability Partnership (LLP)/ Limited Liability Company (LLC). In case, Bidder is a Consortium, all members of the Consortium should be registered individually as a Company/ Partnership firms/ Sole Proprietorship Firm / Limited Liability Partnership (LLP)/ Limited Liability Company (LLC).

A copy of certificate of incorporation/registration shall be furnished along with the bid in support of above.

- i. A Bidder may be from any country, either a single entity or any combination of entities. In the case of a Consortium, all partners shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms; and the Consortium shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the partners of the Consortium during the tendering process and, in the event the Consortium is awarded the Contract, during contract execution.
- ii. APDCL/Any Central/State Government department or Public Sector Undertaking/ Other Government Entity or local body must not have banned business with the Bidder (including

individual members in case of Consortium) as on the date of Bid submission.

- iii. Also, no work of the Bidder must have been rescinded/ terminated by APDCL/ any Central or State Govt. Department/ Public Sector Undertaking/ Other Govt. entity or local body after award of contract during last 3 Financial Years due to non-performance of the Bidder. The Bidder should submit undertaking to this effect as per the format prescribed in this RfS (**Format-12**). If the bidder's submitted information is found to be false declaration or misrepresentation, the bidder(s) shall be out rightly rejected or debarred or blacklisted from APDCL's future tenders.
- iv. Bidder (any member in case of consortium) must not have suffered bankruptcy/ insolvency during the last 5 years. The Bidder should submit undertaking to this effect as per the format prescribed in this RfS (**Format-14**).
- v. The bidder should have valid GST registration certificate & PAN (Copy to be furnished in support).

GENERAL ELIGIBILITY CRITERIA FOR CONSORTIUM:

The Bidder can also participate as Bidding Consortium with one of the members acting as the Lead Member of the Bidding Consortium. In case bidder is a consortium, a Consortium Agreement as per the format prescribed in this RfS (**Format-10**) shall be furnished along with the bid.

- i. Bidding Consortium with a maximum of two (2) members shall be allowed in this bid.
- ii. All members of the consortium should be registered as a Company/ Partnership firms/ Sole Proprietorship Firm / Limited Liability Partnership (LLP)/ Limited Liability Company (LLC). A copy of certificate of incorporation/registration shall be furnished along with the bid in support the same.
- iii. GST Registration Certificate & PAN of all the members of the consortium shall be furnished along with the bid.
- iv. A Bidder shall be eligible to submit in more than one package in the same tendering process, either as an individual bidder or as a partner of a consortium, provided the bidder fulfils the following criteria:
 - a. Financial Eligibility criteria like MAAT & Net worth etc. as indicated in the RfS shall be fulfilled by the Lead Member while the Technical Eligibility Criteria shall be fulfilled by consortium member.

3.2.2 TECHNICAL ELIGIBILITY CRITERIA

Technical experience of design, supply, erection, testing and commissioning of On-Grid Solar PV Power Plants/Off-Grid Solar PV Power Plants in **last 3 Financial Years i.e. 2021-22, 2022-23, 2023-24 or 2022-23, 2023-24, 2024-25** whose package-wise minimum aggregate capacity shall be as mentioned below:

| Sl. No. | Package No. | Minimum Aggregate On-Grid / Off Grid Solar Power Plant Capacity (kWp) in last 3 Financial years |
|----------------|----------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 1 | Package No. - I: Lower Assam Region (LAR) | 250 kWp |
| 2 | Package No. - II: Central Assam Region (CAR) | 250 kWp |
| 3 | Package No. – III: Upper Assam Region (UAR) | 250 kWp |

The list of projects commissioned indicating type of project (On-Grid Solar PV Power Plants/Off-

Grid Solar PV Power Plants) along with a copy of Work Completion Certificate and Work order from the Client/Issuing Authority shall be submitted in support of the same. Technical experience shall be considered only from Government Organizations.

Work experience for installation of Rooftop Solar Plants under PM Surya Ghar Scheme will be considered. The bidders will need to submit a Work Completion Certificate against appropriate capacity issued from respective DISCOM(s).

In the case of Consortium, the technical criteria as indicated above shall be fulfilled by another Partner of the Consortium (Other than lead partner of the consortium).

Note:

- a. The work order & work completion certificate in support of technical eligibility criteria furnished from any private organization shall not be considered for evaluation.
- b. **Government Organization means any entity which is either directly controlled by the Central or State Government or is under the administrative control of Central or State Government or a Central Public Sector Enterprise (CPSE)/ Central Public Sector Undertaking (CPSU)/State PSU etc.**
- c. Subcontractor experience shall not be considered for evaluation.

3.2.3 FINANCIAL ELIGIBILITY CRITERIA

The Bidder should have an Annual Turnover AND Net Worth as indicated below:

I. Minimum Average Annual Turnover (MAAT):

- The package-wise Minimum Average Annual Turnover (MAAT) of the bidder in the last 3 (Three) audited financial years (i.e. FY 2021-2022, 2022-2023 and 2023-2024) shall be as mentioned below:

| Sl. No. | Package No. | Minimum Aggregate Annual Turnover (MAAT) in last 3 Audited FY |
|----------------|-------------------------------------------------|----------------------------------------------------------------------|
| 1 | Package No. - I: Lower Assam Region (LAR) | Rs. 10.00 Crore |
| 2 | Package No. – II: Central Assam Region (CAR) | Rs. 10.00 Crore |
| 3 | Package No. - III: Upper Assam Region (UAR) | Rs. 10.00 Crore |

- This must be the individual Company's turnover and not that of any group of Companies. **A summarized sheet of Average Annual Turnover certified by Registered Chartered Accountant with his stamp and signature in original should be compulsorily enclosed along with corresponding annual accounts.**

II. Net-Worth:

- **The Net-Worth of Bidder during last audited financial year shall be positive.**

A summarized sheet of MAAT & Net-worth value certified by Registered Chartered Accountant with his stamp and signature in original should be compulsorily enclosed along with corresponding annual accounts. "Net Worth" of the Bidder shall be calculated as per Companies Act, 2013.

- **Financial data for latest last 3 (three) audited financial years has to be submitted by the Bidder in the formats as prescribed in this RfS along with audited balance sheets.** The financial data in the prescribed format shall be certified by Registered Chartered Accountant

with his stamp and signature in original. In case audited balance sheet of the last financial year is not made available by the bidder, **he has to submit an affidavit certifying that 'the balance sheet has actually not been audited so far'**. In such case, the financial data of previous '2' audited financial years will be taken into consideration for evaluation. **If audited balance sheet of any of these 2 years other than the last three (3) years is not submitted, the tender will be considered as nonresponsive. But in case the company is operative for less than 3 years, it still can be considered provided its financial standing meets the tender requirement based on available audited balance sheets.**

- **The formula of calculation of net-worth shall be as follows:**

Net-worth = (Paid up share capital) + {(Free reserves – Share premium) + Share premium of listed companies} - (Revaluation of reserves) - (Intangible assets) - (Miscellaneous expenditure to the extent not written off and carry forward losses)

For the purposes of meeting financial requirements, only unconsolidated audited annual accounts shall be used. However, audited consolidated annual accounts of the Bidder may be used for the purpose of financial requirements provided the Bidder has at least twenty six percent (26%) equity in each company whose accounts are merged in the audited consolidated accounts and provided further that the financial capability of such companies (of which accounts are being merged in the consolidated accounts) shall not be considered again for the purpose of evaluation of the Bid.

Bidders shall furnish documentary evidence as per the **Format-7** (online as well as offline), duly certified by Authorized Signatory and the Statutory Auditor / Practicing Chartered Accountant of the Bidding Company in support of their financial capability.

Note:

- **In case of Consortium, the Financial Eligibility criteria like MAAT or Net-worth as indicated in the clause no. 3.2.3 (I) & (II) of RfS shall be fulfilled by the lead member of Consortium.**

3.3. CLARIFICATIONS AND PRE-BID MEETING

- 3.3.1.** APDCL will not enter into any correspondence with the Bidders, except to furnish clarifications on RfS Documents, if necessary. The Bidders may seek clarifications or suggest amendments to RfS online, also soft copy by e-mail to reach APDCL at the address, date and time mentioned in Bid Information Sheet.
- 3.3.2.** The Bidder(s) or their authorized representative(s) is/are invited to attend pre-bid meeting(s), which will take place on date(s) as specified in Bid Information Sheet, or any such other date as notified by APDCL.
- 3.3.3.** The purpose of the pre-bid meeting will be to clarify any issues regarding the RfS including in particular, issues raised in writing and submitted by the Bidders.
- 3.3.4.** APDCL is not under any obligation to entertain/respond to suggestions made or to incorporate modifications sought by the bidder.
- 3.3.5.** A prospective Bidder requiring any clarification of the Bid Documents may contact Chief General Manager (NRE), APDCL in writing or by E- mailing at cgm.nre@apdcl.org.

3.4. AMENDMENTS TO RfS BY APDCL

- 3.4.1.** At any time prior to the deadline for submission of Bids, APDCL may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the RfS document by issuing clarification(s) and/or amendment(s).
- 3.4.2.** The clarification(s)/ amendment(s) (if any) shall be notified on <https://www.assamtenders.gov.in>

at least three (3) days before the proposed date of submission of the Bid. If any amendment is required to be notified within three (3) days of the proposed date of submission of the Bid, the Bid Deadline may be extended for a suitable period of time.

- 3.4.3. APDCL will not bear any responsibility or liability arising out of non-receipt of the information regarding Amendments in time or otherwise. Bidders must check the website for any such amendment before submitting their Bid.
- 3.4.4. In case any amendment is notified after due date of submission of the Bid (prior to the opening of Techno-Commercial Bid), time shall be extended and it will be for the Bidders to submit fresh bids/supplementary bids as the date notified by the APDCL for the purpose.
- 3.4.5. All the notices related to this Bid which are required to be publicized shall be uploaded on <https://www.assamtenders.gov.in>.

3.5. BIDDING PROCESS

3.5.1. INSTRUCTIONS TO BIDDERS FOR E- TENDERING

For conducting the bidding process in a transparent and secured manner, APDCL has decided to use the portal <https://assamtenders.gov.in> for e-tendering process.

To participate in bidding process, bidders must have '**Digital Signature Certificate (DSC)**' as per Information Technology Act-2000 to participate in online bidding. This certificate will be required for digitally signing the bid. Bidders can get above mention digital signature certificate from any approved vendors (CCA). Bidders, who already possess valid Digital Signature Certificates, need not to procure new Digital Signature Certificate.

3.5.2. OFFLINE BID FOR SUBMISSION OF HARDCOPIES

The Bid in response to this RfS shall be submitted by the Bidder in the manner provided in the RfS. The Bid shall comprise of the following in the Techno – Commercial Bid:

A. ENVELOPE-I: COVERING LETTER

- I. Covering Letter as per prescribed Format-1
- II. Copy of Bid Submission Confirmation regarding Online Submission of Tender Processing Fee & EMD generated from e-Procurement System Government of Assam (Assam Tenders)

B. ENVELOPE- II: TECHNO-COMMERCIAL DOCUMENTS

- I. General Information about the Bidder as per prescribed Format –A. Following needs to be submitted by the bidder (or by each member in case of Consortium)
 - Certificate of Incorporation for Public/Private Limited Company/Limited Liability Partnership / Limited Liability Company.
 - Registration Certificate/Partnership Deed in case of Sole Proprietorship/ Partnership Firms.
 - Memorandum & Article of Association in case of Public / Private Limited Company.
 - GST Registration Certificate & PAN.
- II. General particulars of bidders as per **Format-2**

- III. **Power of Attorney** issued by the Bidding Company in favour of the authorized person signing the Bid, in the form attached hereto as **Format-5** or standard power of attorney in favour of authorized person signing the Bid.

(Power of Attorney must be supplemented by Board Resolution to above effect for the company incorporated under Company Act 1956 or Company Act 2013). However, Employer may accept general Power of Attorney executed in favour of Authorized signatory of the Bidder, if it shall conclusively establish that the signatory has been authorized by the Board of Directors to execute all documents on behalf of the Bidding Company.

- IV. Details for meeting General Eligibility Criteria as per Clause no. 3.2.1 with documentary evidence for the same.
- V. Details for meeting Technical Eligibility Criteria as per Clause no. 3.2.2 in the prescribed **Format-7** along with documentary evidence for the same.
- VI. Details for meeting Financial Eligibility Criteria as per Clause no. 3.2.3 in the prescribed **Format-6 & Format 9** along with documentary evidence for the same.
- VII. **Format 10** Signed Copy of Consortium Agreement (In case of bidder participated as a Consortium).
- VIII. All required formats like **Format-11, Format-12, Format-13, Format -14 & Format-15.**
- IX. Details of the proposed items as per prescribed format 'Format-16' along with following supporting documents:
- ❖ Test report/certificate of **Solar PV Module** from IEC/NABL accredited laboratory as per relevant IEC standard (IEC 61215 edition II / IS 14286 and IEC 61730 Part 1- requirements for construction & Part 2 – requirements for testing, for safety qualification.
 - ❖ Enclose test reports/ certificate of **proposed PCU** from IEC/NABL accredited laboratory to comply following IEC standard:
 - IEC 62116 (Anti-islanding protection)
 - IEC 62109-1, IEC 62109-2 (Safety compliance)
 - IEC 60068-2 (1, 2, 14, 30) (Environmental Testing)
 - IS/IEC 61683 (Efficiency Measurement Procedure)
 - ❖ Enclose test reports/certificate of **proposed Cable** from IEC/NABL accredited laboratory/manufacturer technical data sheet to comply following IEC standard:
 - IEC 60227/ IS 694, IEC 60502 / IS 554 Std
 - ❖ Enclose test reports/certificate of **proposed Junction Box** from IEC/NABL accredited laboratory/manufacturer technical data sheet to comply following IEC standard:
 - IP 65 and IEC 62208
 - ❖ Enclose test reports/certificate of **proposed ACDB** from IEC/NABL accredited laboratory/manufacturer technical data sheet to comply following IEC standard:
 - IEC 60947, Part I, II and III/ IS 60947 Part I, II and III
- X. Signed and stamped Copy of RfS Documents including amendments & clarifications by Authorized signatory on each page.

Please note that, the price bid should not be submitted in the techno-commercial bid. If the price bid is submitted as a part of technical bid submission, all the quoted bids will be rejected.

3.5.3. ONLINE BID FOR SUBMISSION OF TECHNO-COMMERCIAL BID AND PRICE BID

A. TECHNO- COMMERCIAL BIDS

The Techno-Commercial Bid shall **contain the scanned copy of the documents & online submission of tender processing fee & EMD** set out below, in a sequential manner:

- I. Covering Letter as per prescribed **Format-1**
- II. Non- Refundable Tender Processing fee to be submitted online while online submission of tender in <https://assamtenders.gov.in>
- III. Bid Security/EMD, to be submitted online while online submission of tender in <https://assamtenders.gov.in>
- IV. General Information about the Bidder as per prescribed **Format –A**. Following needs to be submitted by the bidder (by each member in case of Consortium):
 - Certificate of Incorporation for Public/Private Limited company/Limited Liability Partnership / Limited Liability Company.
 - Registration Certificate/Partnership Deed in case of Sole Proprietorship/ Partnership Firms
 - Memorandum & Article of Association in case of Public / Private Limited Company
 - GST Registration Certificate & PAN
- V. General particulars of bidders as per **Format-2**
- VI. Power of Attorney issued by the Bidding Company in favour of the authorized person signing the Bid, in the form attached hereto as **Format-5** or standard power of attorney in favour of authorized person signing the Bid.

(Power of Attorney must be supplemented by Board Resolution to above effect for the company incorporated under Company Act 1956 or Company Act 2013). However, Employer may accept general Power of Attorney executed in favour of Authorized signatory of the Bidder, if it shall conclusively establish that the signatory has been authorized by the Board of Directors to execute all documents on behalf of the Bidding Company.
- VII. Details for meeting General Eligibility Criteria as per Clause no. 3.2.1 with documentary evidence for the same.
- VIII. Details for meeting Technical Eligibility Criteria as per Clause no. 3.2.2 in the prescribed **Format-7** along with documentary evidence for the same.
- IX. Details for meeting Financial Eligibility Criteria as per Clause no. 3.2.3 in the prescribed **Format-6 & Format-9** along with documentary evidence for the same.
- X. **Format-10** Signed Copy of Consortium Agreement (In case of bidder participated as a Consortium)
- XI. All required formats like **Format-11, Format-12, Format-13, Format -14 & Format-15**.

- XII. Details of the proposed items as per prescribed format 'Format-16' along with following supporting documents:
- ❖ Test report/certificate of Solar PV Module from IEC/NABL accredited laboratory as per relevant IEC standard (IEC 61215 edition II / IS 14286 and IEC 61730 Part 1- requirements for construction & Part 2 – requirements for testing, for safety qualification)
 - ❖ Enclose test reports/ certificate of proposed PCU from IEC/NABL accredited laboratory to comply following IEC standard:
 - IEC 62116 (Anti-islanding protection)
 - IEC 62109-1, IEC 62109-2 (Safety compliance)
 - IEC 60068-2 (1, 2, 14, 30) (Environmental Testing)
 - IS/IEC 61683 (Efficiency Measurement Procedure)
 - ❖ Enclose test reports/ certificate of proposed Cable from IEC/NABL accredited laboratory / manufacturer technical data sheet to comply following IEC standard:
 - IEC 60227/ IS 694, IEC 60502 / IS 554 Std
 - ❖ Enclose test reports/ certificate of proposed Junction Box from IEC/NABL accredited laboratory / manufacturer technical data sheet to comply following IEC standard:
 - IP 65 and IEC 62208
 - ❖ Enclose test reports/ certificate of proposed ACDB from IEC/NABL accredited laboratory / manufacturer technical data sheet to comply following IEC standard:
 - IEC 60947, Part I, II and III/ IS 60947 Part I, II and III
- XIII. Signed and stamped Copy of RfS Documents including amendments & clarifications by Authorized signatory on each page.

B. PRICE BIDS

- a) **Financial Bid shall be submitted only through online mode with due encryption.** The Bidder shall submit its Financial Bid for each Package, online only in the format [As per Section-7] uploaded in the <https://www.assamtenders.gov.in> portal.
- b) The bidder/bidders shall submit the price bids as per the BOQ uploaded in Assam Tenders for all the items. There should be no zero (0) value against any item. However, if any bidder uploads zero (0) against any item, it will be binding on him to do the corresponding work against the item without any claim from APDCL.
- c) **The bidder shall submit rates in the BOQ without GST i.e. ex-works only.**

Please note that, the price bid should not be uploaded in the technical bid submission. If the price bid is submitted as a part of technical bid submission, all the quoted bids will be rejected.

3.5.4. SPECIAL NOTE ON SECURITY AND TRANSPARENCY OF BIDS

- Security related functionality has been rigorously implemented in e-procurement portal in a multidimensional manner. Starting with 'Acceptance of Registration by the Service Provider', provision for security has been made at various stages in Electronic Tender's software.
- If variation is noted between the information contained in the Electronic Form and

the 'Hard Copy', **the contents of the Electronic Forms and details shall prevail.** In such cases, if the information/declaration/details contained in the electronic forms is found to be false, forged, incomplete or in-eligible, the bid shall be summarily rejected and the tendering authority may initiate blacklisting/criminal/legal proceedings depending on the severity of the case.

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

Other Instructions

It shall be the sole responsibility of the bidders to regularly visit the website/tender portal/state portal/MNRE portal/Surya Ghar portal for any amendment or update on the tender process of project.

3.6. BID SUBMISSION BY THE BIDDER

- 3.6.1.** The information and/or documents shall be submitted by the Bidder as per the formats specified in the RfS document.
- 3.6.2.** Strict adherence to the formats wherever specified, is required. Wherever, information has been sought in specified formats, the Bidder shall refrain from referring to brochures/pamphlets. Non-adherence to formats and/or submission of incomplete information may be a ground for declaring the Bid as non-responsive. Each format has to be duly signed and stamped by the authorized signatory of the Bidder.
- 3.6.3.** The Bidder shall furnish documentary evidence in support of meeting Eligibility Criteria as indicated in Clause no. 3.2.1, 3.2.2 and 3.2.3 to fulfil the compliance of the bidding document.
- 3.6.4. Bids are required to be submitted online and offline mode for each part separately.** The offline documents are to be submitted in a single sealed cover comprises the list of documents as per **Clause 3.5.2.**
- 3.6.5.** The Bidders can send Offline Documents either by registered post; or speed post; or courier; or by hand delivery, so as to reach **"The CGM (NRE), Assam Power Distribution Company Limited (APDCL), Annex Building, Bijulee Bhawan, Paltanbazar, Guwahati-01"** by the Bid Deadline. Documents submitted by telex/telegram/fax/e-mail shall not be considered under any circumstances. APDCL shall not be responsible for any delay in receipt of the Bid. Any Bid received after the Bid Deadline shall be returned unopened. **It should be noted that Offline Document envelope shall not contain any information/document relating to Price Bid.** APDCL shall not be responsible for premature opening of the Price Bids in case of non-compliance of above.
- 3.6.6.** All pages of the offline documents, except for the Bid Security Declaration on non-judicial stamp papers (in case of MSMEs), and any other document executed on non-judicial stamp paper, forming part of the Bid and corrections in the Bid, if any, must be signed by the authorized signatory on behalf of the Bidder. No change or supplemental information to a Bid will be accepted after the Bid Deadline, unless the same is requested for by the bidder and acceptance of same by APDCL.
- 3.6.7.** The Bidder shall furnish documentary evidence in support of meeting Eligibility Criteria as indicated in the RFS. Bidder shall also furnish unconsolidated/ consolidated audited annual accounts in support of meeting financial requirement, which shall consist of unabridged balance sheet, profit and loss account, profit appropriation account, auditor's report, etc., as the case may be of Bidding Company or Financially Evaluated Entity for any of the last three (3) financial years immediately preceding the Bid Deadline which are used by the bidder for the purpose of calculation of Annual Turnover or of last Financial Year in case of Net Worth.
- 3.6.8. The sealed envelope shall be addressed to:**

The CGM (NRE),
Assam Power Distribution Company Limited (APDCL),
Annex Building, Bijulee Bhawan, Paltanbazar, Guwahati-01
Dist.: Kamrup (Metro), Pin: 781001, Assam, India.
E-mail: cgm.nre@apdcl.org

3.7. BID SUBMITTED BY A BIDDING COMPANY

- 3.7.1.** The Bidder shall submit a duly notarized written Power of Attorney (POA) authorizing the signatory(ies) of the Tender to commit the Bidder. In case of consortium each member of the partnership, consortium along with copy of Board Resolution/authorization in favour of signatory to POA.
- 3.7.2.** Each Bidder (each member in the case of consortium) is required to confirm and declare with his Tender that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other item or work related to the award and performance of this Contract and declare that no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the tender price will not include any such amount. To fulfil this requirement, the Bidder (each member in case of Consortium) has to sign the declaration given as prescribed in this RfS. If the Employer subsequently finds to the contrary, the Employer reserves the right to declare the Bidder as non-compliant, and declare any Contract if already awarded to the Bidder to be null and void.

3.8. TENDER DUE DATE

The Bidder should submit the Bids so as to reach the address indicated at **Clause No. 3.6.8** at the date and time mentioned in the Bid Information Sheet.

3.9. VALIDITY OF TENDER

- 3.9.1.** The Tender shall be valid for a period of **120 days** from the latest Date of Submission of Tender, with bidder having no right to withdraw, revoke or cancel his offer or unilaterally vary the offer submitted or any terms thereof. In case of the bidder revoking or cancelling his offer or varying any term & conditions in regard thereof or not accepting letter of award, APDCL shall forfeit the EMD furnished by him. Confirmation regarding the Bid offer validity shall be clearly mentioned in the covering letter.
- 3.9.2.** In exceptional circumstances when letter of award (LOA) is not issued, APDCL may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made through e-mail. A Bidder granting the request will neither be required nor permitted to modify its Bid in any manner.

3.10. COST OF BIDDING

- 3.10.1.** The bidder shall bear all the costs associated with the preparation and submission of his offer, and APDCL will in no case be responsible or liable for those costs, under any conditions. The Bidder shall not be entitled to claim any costs, charges and expenses of and incidental to or incurred by him through or in connection with his submission of bid even though APDCL may elect to modify / withdraw the invitation of Bid.

3.11. BID SECURITY/EMD

The Bidder shall furnish Interest free Bid Security as mentioned below and shall be submitted online while online submission of tender in <https://assamtenders.gov.in>. The package-wise Bid Security (EMD) shall be as follows:

| Sl. No. | Package No. | Bid Security (EMD) (Rs.) |
|---------|-------------------------------------------------|--------------------------|
| 1 | Package No. - I: Lower Assam Region (LAR) | Rs. 25 Lakh |
| 2 | Package No. – II: Central Assam Region (CAR) | Rs. 25 Lakh |
| 3 | Package No. - III: Upper Assam Region (UAR) | Rs. 25 Lakh |

- The Bid Security/EMD of bidders who fail in technical evaluation shall be returned after opening of financial package.
- The Bid Security/EMD of the unsuccessful bidders in financial bid opening shall be released after unconditional acceptance of the Letter of Award (LOA) and submission of PBG by the successful bidders.
- The Bid Security of successful bidders shall be returned after award of work and submission of Performance BG and after the receipt of confirmation of their PBG's from their respective banker along with execution of the contract agreement

In case of a consortium, the EMD / Bid Security is to be submitted in the name of the Lead Member of consortium.

No clarification shall be sought from the bidders regarding bid security.

The Bid Security/EMD shall be forfeited without prejudice to the Bidder being liable for any further consequential loss or damage incurred to APDCL:

- If a Bidder withdraws/revokes or cancels or unilaterally varies his bid in any manner during the period of Bid Validity specified in the RfS document.
- If the Successful Bidder fails to unconditionally accept the Letter of Award (LOA) within three (3) days from the date of its issue.
- If the Successful Bidder fails to furnish the "Performance Bank Guarantee (PBG)" within ten (10) days from the date of issue of LOA.

3.12. PERFORMANCE SECURITY/PERFORMANCE BANK GUARANTEE (PBG)

3.12.1. Within ten (10) days from the date of issue of Letter of Award (LOA), the Successful Bidders shall furnish the Performance Security/PBG of amount to **Rs. 25 Lakhs (@Rs. 5500.00 per kWp)**. The PBG shall be furnished in the form of Bank Guarantee (BG) in favour of "Chief General Manager (NRE), APDCL" payable at Guwahati.

The bidder shall submit additional PBG so that the total BG amount should be 10% of the total project cost (including GST) in the form of Bank Guarantee in favour of "**Chief General Manager (NRE), APDCL**" payable at Guwahati.

3.12.2. The initial Performance Security shall be valid for a minimum period of **5 years and 4 months** from the date of issuance of Letter of Award (LOA) and shall be renewed/extended till the completion of 5 years of O&M period, if situation arises. The Performance security shall be released after 5 years from the date of commissioning of the project with the compliance of entire obligations in the contract.

NB: In case the successful bidder is not able to furnish the PBG for 5 years of validity, then PBG with initial validity period of 1 year may also be accepted by APDCL provided the successful bidder shall renew/extend the PBG, thirty (30) days prior to the expiry of the

same. **If the successful bidder does not extend the PBG, the same shall be forfeited by APDCL.**

3.12.3. The PBG shall be forfeited as follows without prejudice to the Bidder being liable for any further consequential loss or damage incurred to APDCL:

- a) If the Successful Bidder is not able to not execute the work to the satisfaction of APDCL, PBG amount pro-rata to the capacity for which the Successful Bidder is not able to execute the Projects.
- b) If the Successful Bidder is not able to commission the projects to the satisfaction of APDCL, PBG amount pro-rata to the capacity not commissioned by the Successful Bidder.
- c) If the Successful Bidder does not attend and address the O&M issues/complaints till completion of 5 years CMC period from the date of commissioning even after intimation from APDCL.

3.12.4. In case, the bidder qualified as a successful bidder and fails to furnish the Performance Bank Guarantee (PBG) within due date, then APDCL have the right to blacklist the bidder for a period of 5 years and same shall be intimated to all the concerned Department of Govt. of Assam / India. No clarification shall be sought from the bidders regarding submission of PBG.

3.12.5. If Bidder fails to fulfil to provide O&M service of the installed systems, it may lead to the encashment of Performance Bank Guarantee and subsequently debarring and blacklisting from the future State/Central Government Tender.

3.13. OPENING OF BIDS

3.13.1. Technical bid (Envelope I and Envelope II) of the Bidder shall be opened on the date and time at the venue mentioned as indicated in Bid Information Sheet of this RfS, in the presence of one representative from each of the Bidder who wish to be present.

3.13.2. The bid documents shall be opened by the TEC (Tender Evaluation Committee) on due date and time of tender opening. On opening of the Tender, APDCL will first check the tender processing fee and EMD submitted by the bidders.

3.13.3. The Financial Bids will be opened on a subsequent date after evaluation of techno-commercial bids. Financial bids of only those bidders whose technical bid submissions are found substantially responsive and technically compliant will be opened. The time of opening of financial bids shall be informed separately to only the Bidders who have qualified during Technical evaluation stage and bidders can be present to witness opening of financial bids.

3.14. RIGHT TO WITHDRAW THE RFS AND TO REJECT ANY BID

3.14.1. This RfS may be withdrawn or cancelled by APDCL at any time without assigning any reasons thereof. APDCL further reserves the right, at its complete discretion, to reject any or all of the Bids without assigning any reasons whatsoever and without incurring any liability on any account.

3.14.2. APDCL reserves the right to interpret the Bid submitted by the Bidder in accordance with the provisions of the RfS and make its own judgment regarding the interpretation of the same. In this regard, APDCL shall have no liability towards any Bidder and no Bidder shall have any recourse to APDCL with respect to the selection process. APDCL shall evaluate the Bids using the evaluation process specified in this RfS, at its sole discretion. APDCL decision in this regard shall be final and binding on the Bidders.

3.14.3. APDCL reserves its right to vary, modify, revise, amend or change any of the terms and conditions of the Bid before submission. The decision regarding acceptance or rejection of bid by APDCL will be full and final.

3.15. ZERO DEVIATION

3.15.1. This is a ZERO Deviation Bidding Process. Bidder is to ensure compliance of all provisions of the Bid Document and submit their Bid accordingly. Tenders with any deviation to the bid conditions shall be liable for rejection.

3.16. EXAMINATION OF BID DOCUMENT

3.16.1. The Bidder is required to carefully examine the Technical Specifications, terms and Conditions of Contract, and other details relating to supplies as given in the Bid Document.

3.16.2. The Bidder shall be deemed to have examined the bid document including the agreement/contract, to have obtained information on all matters whatsoever that might affect to execute the project activity and to have satisfied himself as to the adequacy of his bid. The bidder shall be deemed to have known the scope, nature and magnitude of the supplies and the requirements of material and labour involved etc. and as to all supplies and erection that he has to complete in accordance with the Bid document.

3.16.3. Bidder is advised to submit the bid on the basis of conditions stipulated in the Bid Document. Bidder's standard terms and conditions if any will not be considered.

3.16.4. Bid not submitted as per the INSTRUCTIONS TO BIDDERS (ITB) is liable to be rejected. Bidder shall confirm in all respects with requirements and conditions referred in this bid document.

SECTION-4

EVALUATION OF BIDS & CONTRACT AWARD

4. BID EVALUATION

4.1. The evaluation process comprises of the following four steps:

| | |
|----------|-----------------------------------------------------------|
| Step I | Responsiveness Check of Techno-Commercial Bid |
| Step II | Evaluation of Bidder's fulfilment of Eligibility Criteria |
| Step III | Evaluation of Price Bid |
| Step IV | Selection of Successful Bidder(s) |

STEP – I: RESPONSIVENESS CHECK OF TECHNO-COMMERCIAL BID

The Techno Commercial Bid submitted by Bidders shall be scrutinized to check responsiveness to the requirements laid down in the RfS subject to Clause 3.2.1, Clause 3.2.2 and Clause 3.2.3. Any of the following may cause the bid to be considered “Nonresponsive” at the sole discretion of APDCL:

- i. Bids that are incomplete, i.e. not accompanied by any of the applicable formats inter alia covering letter, power of attorney supported by a board resolution, applicable undertakings, format for disclosure, valid Bid Security etc;
- ii. Bids not signed by authorized signatory and/or stamped in the manner indicated in this RfS;
- iii. Material inconsistencies in the information/documents submitted by the Bidder, affecting the Eligibility Criteria;
- iv. Information not submitted in the formats specified in this RfS;
- v. Bids being conditional in nature;
- vi. Bids (Both ONLINE & OFFLINE) not received within the Bid Submission Deadline;
- vii. Bids having Conflict of Interest;
- viii. Bidder delaying in submission of additional information or clarifications sought by APDCL as applicable;
- ix. Bidder makes any misrepresentation;

Each Bid shall be checked for compliance with the submission requirements set forth in this RfS before the evaluation of Bidder's fulfilment of Eligibility Criteria is taken up. In case of any non-conformity, the tender shall be disqualified and rejected.

STEP – II: EVALUATION OF BIDDER'S FULFILMENT OF ELIGIBILITY CRITERIA

EVALUATION OF ELIGIBILITY:

- a. Evaluation of Bidder's Eligibility will be carried out based on the information furnished by the Bidder as per the prescribed Formats and related documentary evidences in support of meeting the Eligibility Criteria as specified in this RfS. Non-availability of information and related documentary evidences for the satisfaction of Eligibility Criteria may cause the Bid to be non-responsive.
- b. Tenders not considered substantially responsive and non-fulfilment of the requirements of the tender document as evaluated as per clause 4.1 shall be rejected by APDCL and shall not be allowed subsequently to be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

- c. If any tender is rejected, pursuant to paragraph (b) above, the Financial Bid of such bidder shall not be opened.
- d. The decision of APDCL as to which of the tenders are not substantially responsive shall be final.

STEP – III: EVALUATION OF PRICE BID

- a. All techno-commercially responsive bidders will be eligible for opening of their financial proposals. APDCL shall notify all technically qualified Bidders to attend the opening of the financial proposal. The financial proposal will then be opened in front of attending Bidders.
- b. Evaluation of financial offer will be based on rates quoted in prescribed format of Price Bid. Any alteration in Price Bid will not be given any cognizance. The rates will be as per BoQ exclusive of GST.

STEP – IV: SELECTION OF SUCCESSFUL BIDDER(S)

- a. Based on the quoted price by the bidders, APDCL shall arrange the bids Package-wise in the ascending order of ranking i.e. L1, L2, L3, _ _ _ (L1 being the lowest quoted bidder). The L1 bidder shall be recommended for issuance of Letter of Award (LOA). In case of tie in the quoted price among two or more bidders, then the ranking of the bidder shall be arranged according to their MAAT value:

For example:

| Package No. | Bidders | Quoted Price (Rs.) | MAAT (Rs. Lakh) | Ranking |
|-------------|---------|--------------------|-----------------|---------|
| Package-1 | B1 | 55,000.00 | 100 | L1 |
| | B2 | 55,000.00 | 90 | L2 |
| | B3 | 55,000.00 | 80 | L3 |

5. NOTIFICATION TO SUCCESSFUL BIDDERS

- 5.1. Prior to the expiry of the period of tender validity prescribed by APDCL, APDCL will notify the successful Bidder by e-mail that his tender has been accepted (hereinafter and in the Conditions of Contract called 'the Letter of Award'). The "Letter of Award" will be issued under signature of CGM (NRE), APDCL. The successful Bidder has to submit the acceptance letter of LOA along with copy of the 'Letter of Award' to APDCL duly acknowledged and signed by the authorized signatory, within 3 days of receipt of the same by him. No correspondence will be entertained by APDCL for the unsuccessful Bidders.

6. PROJECT ALLOCATION AND SANCTION

- 6.1. The identification of the projects (roof tops) at the time of bidding is not mandatory. The Bidders, however, in their own interest are advised to make a preliminary survey of availability of roof tops for which they intend to Bid and as prescribed in the RFS, as well as issue of Grid connectivity. The Successful L1 Bidders selected as per provision of this Rfs shall be allotted LOA for the corresponding package/packages.
- 6.2. Documentation like finalizing the Project report and entering into agreements with the buildings/rooftops owners lies with the Vendor as per provisions of the scheme within the above-mentioned time frame even for the buildings/rooftops identified by APDCL for preferential installation.
- 6.3. The bidder shall submit list of applicants against the allocated phase wise capacity to APDCL which shall be verified by APDCL as per the PM Surya Ghar: Muft Bijli Yojana National Portal of MNRE.

- 6.4. The entire process of Consumer Registration, Application Submission, Submission of Consumer Consent Form, Submission of Installation Details etc. shall be executed in the PM Surya Ghar: Muft Bijli Yojana National Portal of MNRE as per Operational Guidelines of the scheme. The entire process of application, execution, payments and release of CFA shall be governed by MNRE guidelines in this regard and any amendments thereof.
- 6.5. If the Vendor fails to commission the sanctioned project within specified time, no CFA as well as additional state subsidy will be disbursed by APDCL.

7. CFA DISBURSEMENT & PAYMENT CLAUSES

- 7.1. The beneficiary shall be charged only balance of the project cost, excluding CFA and additional state subsidy amount. The total amount against each allocation including admissible CFA and state share shall be disbursed by APDCL to the vendor directly after successful commissioning of the allotted capacity as per MNRE Operational as per Guidelines issued vide **MNRE Office Memorandum No.318/17/2024-Grid Connected Rooftop Dated 07.06.2024** and their amendments. For CFA calculation, the project capacity would be decided based on PV array capacity or inverter capacity, whichever is lower.
Additional State Subsidy will be provided as per Notification No. **PEL/412024/16 Dated 14.03.2024** of Power (Electricity) Department, Govt. of Assam.
It shall be noted that beneficiary/customer shall be solely responsible for financial transaction with APDCL for the net amount of project cost (Total cost – (CFA + State Subsidy)).
- 7.2. The applicable CFA as well as Additional State Subsidy will be released on submission of requisite installation information (e.g. geo-tagged photos, module serial nos. etc.) and necessary documents (e.g. Consumer Electricity Bill, DCR certificate etc.) in the PM Surya Ghar: Muft Bijli Yojana National Portal of MNRE and generation of Project/Work Completion Report in the portal. The bidders shall submit all the Project/Work Completion Reports to APDCL which shall be signed by concerned APDCL Officials.
- 7.3. The CFA shall be released to the Vendor only after the completion and successful commissioning of the Project(s) as per terms & conditions as per MNRE Operational Guidelines issued vide **MNRE Office Memorandum No.318/17/2024-Grid Connected Rooftop Dated 07.06.2024**. The CFA and Additional State Subsidy shall be released by APDCL, only after receipt of the same from MNRE/Concerned Govt. Department.

The Tentative schedule of disbursement of Total Subsidy (CFA+ Additional State Subsidy) shall be as follows:

| Sl. No | Milestone | Release of Total Subsidy amount |
|--------|-----------------------------------------------------------------------------------------------------------------|---------------------------------|
| 1 | Supply & Installation including Synchronization & Commissioning of the Plant of the Plant and accepted by APDCL | 100% |

- 7.4. The whole or part of the Total Subsidy (CFA+ Additional State Subsidy) shall be recovered from the Vendor's PBG or future Payments (to be released), in case of violation of any Terms & Conditions of this bid or guidelines of MNRE/ APDCL.

8. LIQUIDATED DAMAGES (LD) FOR DELAY IN PROJECT IMPLEMENTATION

- 8.1. APDCL will issue the Letter of Award (LOA) for the Project(s). The Bidder shall complete the site survey, design, engineering, supply, storage, civil works, erection, testing & commissioning of project within 2 months from the date of issuance of LOA.

If the contractor fails to execute the works within the time period specified in the contract, APDCL shall without prejudice to its other remedies under the contract deduct from the contract price as liquidated damages, a sum equivalent to 1% of the price of the unperformed works/services for each week of

delay until actual performance up to a maximum deduction of 10% of the delayed services. **If the contractor fails to complete the works beyond the 10 weeks of delay period, the work order will be treated as cancelled and 10% security money deposit will be forfeited.** Once the maximum of the penalty is reached, APDCL may consider termination of the contract/blacklisting of the contractor for non-execution of the awarded works or non-performance of the contractor.

The contractor shall have to comply with all the rules, regulations, laws and by-laws for the time being in force and the instructions if any, of the organization, in whose premises the work has to be done. APDCL shall have no liability in this regard.

8.2. The Contractor may apply for an extension of the time for project completion if the Work is or will be delayed by any of the following causes:

- a) "Force Majeure"
- b) The Contractor's work is held up for not being given possession of or access to the site for a considerable period.
- c) Concerned authority to suspend the works and the Contractor not being in default as to reasons of suspension.

9. TIME OF COMPLETION OF PROJECT

9.1. The vendor shall complete the work of Design, supply, civil work, erection, testing and commissioning of SPV grid connected Power Plant. APDCL will allot the all beneficiaries from the regions after receiving the beneficiary share to the L1 bidder in a lot of approximately 100 kW and will keep on allocating the beneficiaries as per the receipt of application and receipt of beneficiary share lot wise. The successful L1 bidder will complete the allotted Lot in all respect within 2 months from the date of the allotment of the Lot. The allotment may continue till the project timeline specified by MNRE to APDCL i.e. 31.03.2027, or achievement of targeted capacity for the scheme

10. INSPECTION, AND AUDIT BY APDCL

10.1. The Successful bidder shall permit APDCL or their authorized agency to inspect the Successful bidder's site, accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by APDCL, if so required by APDCL any time.

10.2. The project progress will be monitored by APDCL, and the projects will be inspected for quality at any time during commissioning or after completion of the project either by officer(s) from APDCL or any authorized agency/experts.

10.3. APDCL may depute a technical person(s) for inspection, third party verification, monitoring of system installed to oversee, the implementation as per required standards and also to visit the manufacturers' facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required.

10.4. Duly authorized representative of APDCL shall have at all reasonable times access to the premises of the bidder's firm or works and shall have the power at all reasonable times to inspect and examine the materials and workmanship of the works during its manufacture.

10.5. The Bidder shall give 15 days written notice of any material being ready for inspection and testing to APDCL. The materials shall be ready for inspections at a date so that the work can be completed within the scheduled time. Such tests shall be on the Bidder's accounts/expenses. If APDCL wants to inspect the material other than its works/factory (specified in the bid) than the whole expenses of the inspector shall be borne by the contractor. **APDCL reserves the full rights, to waive off inspection of material, if required based on exigency of the project.**

- 10.6.** The Bidder is required to get the entire lot of the ordered material inspected at one time, before the supply of the materials. In case the Bidder fails to get the entire lot inspected at one time, the total expenses of the further inspection will be borne by the Bidder.
- 10.7.** The inspection by APDCL and issue of dispatch instruction thereon shall in no way limit the liabilities and responsibilities of the Bidder in respect of the agreed quality assurance program forming a part of the contract.
- 10.8.** All items shall be subject to Pre-Dispatch Inspection (PDI) by APDCL at manufacturer's premises before their dispatch. PDI will not be done in any place other than the concerned manufacturing site. Successful bidder shall arrange the inspections with necessary equipment for PDI at the manufacturer's premises. The cost of testing such tests shall be on the Bidder's accounts/expenses.

11. SCOPE OF WORK

11.1. DESIGN, SUPPLY, ERECTION AND COMMISSIONING: The scope of work for the bidder includes site survey of the proposed locations, complete design, engineering, manufacture, supply, storage, civil works, erection, testing & commissioning of the solar power plants including operation and maintenance (O&M) of the plant for a period of 5 years after commissioning of the plants as per APDCL's acceptance.

- Detailed planning of time bound smooth execution of Project;
- The successful bidder shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, wherever appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit;
- Supplier shall be responsible for delivering all the equipment at store of district head quarter under his own arrangement within the stipulated time frame.
- The goods supplied under the contract shall be fully insured against loss or damage incidental to manufacture of acquisition, transportation, storage at site and delivery to site during the construction period by the supplier at his own cost;
- Comprehensive O&M of the Project for 5 (five) years to assure faultless operation, and inventory maintenance;
- After sales service through service center/s;
- Coverage of risk liability of all personnel associated with implementation and realization of the Project;
- The successful bidder shall train the user about the day to day care and maintenance of the system;
- The Successful Bidder shall maintain sufficient inventory of the spare parts to ensure that the Project is functional during the warranty period;
- Comprehensive O&M of the Project at each location, from the date of the Commissioning of Project shall have to be carried out by the Successful Bidder. Comprehensive O&M of the Project shall be for five (5) years from the date of Commissioning;
- Performance or supervision of the on-site assembly and/or start-up of the supplied Goods;
- Furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- All installations shall ensure generation data reporting (at least hourly frequency) and shall provide necessary integration facility to the National Portal;

- Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
- Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

The Successful Bidder(s) shall be obligated to perform the following Scope of Work, but not limited to, in relation to the development of the power plant:

A. Design, develop, procure, construct and commission on-grid solar photovoltaic power plants, which includes, but is not limited to the following:

- Solar Mono-PERC PV modules with DCR Compliance
- Mounting frames, structures, array foundation (grouting on terrace), earthing grid design, and module inter-connection
- All System Junction boxes
- Power Conditioning Units (PCU)
- MPPT – Max power point tracking built in the PCU
- Power and Control Cables
- Earthing system for PV Array, DC power system, lightning protection system
- Transportation, unloading, and loading of all equipment at Site
- Project Management including adherence to all requisite safety practices
- Fire fighting and fire detection systems

B. INSTALLATION AND COMMISSIONING OF ON-GRID GROUND-MOUNTED/ ROOFTOP SOLAR PHOTOVOLTAIC POWER PLANTS, WHICH INCLUDES:

- Design and construction of foundations or grouting for holding module mounting structures without puncturing the roof; maintaining proper drainage of rain water over terrace through the installation area; cable routings through PVC pipes not obstructing the movement on the terrace
- The Solar Power Plants shall be either rooftop or ground-mounted, depending on the project location feasibility. The successful bidder shall be required to carry out site survey with due verification by the end user (Owner) and submit the site survey reports along with photographs prior to execution of the project.
- Before commencement of work, the successful bidder shall obtain approvals for all related drawings from the relevant and concerned building authorities
- All drawings shall conform to relevant IS/ IEC standards
- Special care to be taken while designing all structures for modules to cater to heavy rainfall, strong winds and earthquake that may be prevalent in the area

C. COMPREHENSIVE OPERATION AND MAINTENANCE

The comprehensive operation & maintenance of the plant would include wear, tear, overhauling, machine breakdown, insurance, replacement of defective modules, invertors, PCU's, spares, consumables & other parts for a period of 5 (five) years. This shall also include operation and maintenance of the evacuation infrastructure, as well.

The Selected Bidder shall be responsible for following activities:

- Regular operation and maintenance of the plant.
- Daily monitoring of plant performance and supply of all technical, production/operation data and information through a monthly report. Daily Plant Generation data shall be made available to the primary beneficiary with a copy of such report to the Chief General Manager (NRE), APDCL and respective Primary Beneficiaries.

- Prepare and submit a detailed report on the operation and maintenance requirement, if any to the respective Primary Beneficiaries on half-yearly basis. A copy of such report shall also be submitted to the Chief General Manager (NRE), APDCL.
- Undertake day to day checks and maintenance activities on round the clock basis, required to be carried out, as a recommended practice by the manufacturer of the equipment, on all the components of the power plant to minimize breakdowns and to ensure smooth and trouble free operation of the plant and to get maximum output from the panels. The supplier shall be responsible to carry out routine and preventive maintenance and replacement of each and every component / equipment of the power plant and he shall provide all labour, material, consumables etc. for routine and preventive maintenance at his own cost.
- Carry out maintenance activities as a result of sudden failure/breakdown of any particular component or equipment. It shall be responsible to carry out breakdown maintenance of each and every component of the power plant and shall provide the required manpower, materials, consumables, components or equipment etc. for breakdown maintenance at his own cost irrespective of the reasons of the breakdown/failure.
- Prepare and maintain records on daily basis towards maintenance of the plant, electricity generation, etc.
- The Selected Bidder should not misuse the area and/or assign responsibility for the safety of machinery within the premises.
- The Selected Bidder shall be responsible for undertaking the operation and maintenance of the plant for a term of five (5) years from the date of entering into handover agreement of the plant to respective Primary Beneficiaries.
- The term for operation and maintenance of the plant may be extended for another five (5) years on mutually agreed terms and conditions and charges as quoted by the Selected Bidder.

11.2. The detailed work would involve (include but not limited to) the following major activities:

- 11.2.1.** Bidder shall submit following project sanction documents to CGM (NRE), APDCL as mentioned below to get go ahead for the project:
- GTP & PERT Chart against each project location
- 11.2.2.** Bidder shall prepare route profile drawing along with electrical connection to consumer(s)
- 11.2.3.** Bill of material shall include PV module, inverter, distribution boards (AC and DC), cable, combiner box,) and associated works including protection and monitoring arrangements etc.
- 11.2.4.** The Bidder shall have to take all permits, approvals and licenses, insurance etc., provide training to the users and such other items & services required to complete the scope of work mentioned above.
- 11.2.5.** Smart NET Metering: NET metering and grid connectivity of the On-Grid Solar PV Power Plants under this scheme would be in accordance with the prevailing guidelines of APDCL and/or Central Electricity Authority (CEA)/Assam Electricity Regulatory Commission (AERC). The costs of Smart NET-meters shall be borne by APDCL. However, facilitation for the same i.e. submission of application in concerned APDCL's office, follow-up & liaisoning etc. shall be in the scope of successful bidders.
- 11.2.6.** The Bidder shall provide Technical Manual, User Manual and Operation and Maintenance (O&M) Manual of the plant to the beneficiary in English and Assamese language.
- 11.2.7.** The Bidder shall provide training (General/ Technical/ Safety) to the beneficiary's nominated persons for daily operation, cleaning, monitoring and maintenance of power plant. Bidder shall provide maintenance schedule of the plant to beneficiary.

- 11.2.8.** Any other works though not specifically mentioned but are required to complete the project in all respects for its safe, reliable, efficient and trouble free operation shall also be included and the same shall be supplied and installed by the Bidder without any extra cost.
- 11.2.9.** Clean up: Upon completion of the Works, the bidder shall remove from the vicinity of the work all residues, building rubbish, unused materials, concrete forms and other like materials belonging to him or under his direction during construction to the satisfaction of beneficiary and in the event of his failure to do so within 15 days from the date of commissioning. The cost on account of clean up shall be included in the quoted rate and no additional extra claim shall be entertained.
- 11.3.** Scope of Comprehensive O&M Activities (Quarterly): The Comprehensive quarterly O&M schedule shall include (but not limited to) the following mentioned activities:

Solar Modules:

- Visual inspection of modules and mounting clamps
- Washing and cleaning of modules and structures
- Check modules for any broken glass/ discolouration, misaligned modules

Module Mounting Structure:

- Visual inspection of mounting structures, screws and fasteners
- Tightening of screws and fasteners as needed

Junction Box:

- Checking and tightening of solar inter connections
- Visual inspection of junction boxes and wiring
- Tightening of any interconnections as needed

Inverters:

- General Cleaning
- Check LCD displays of inverters
- Check integrity of wiring
- Visual inspection of mechanical fixings of inverters

Cables:

- Visual inspection of DC and AC cables
- Replacement of cables if damaged

Remote Monitoring:

- SCADA daily production data recorded
- Physical verification of RS485 communication cables between equipment and server
- Ensure communication between weather station, (Temperature sensor, Wind speed, solar radiation), Inverter output, String monitoring if supplied
- Internet connectivity, configuration (Remote connectivity HW) Check the data reports like graphs

SECTION-5

GENERAL CONDITIONS OF CONTRACT (GCC)

12. GENERAL CONDITIONS OF CONTRACT

12.1. PROJECT COST

- 12.1.1. The Project cost shall include all the costs related to above Scope of Work. Bidder shall quote for the entire facilities on a "single responsibility" basis such that the total Bid Price covers all the obligations mentioned in the Bidding Documents in respect of Design, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance (for a period of 5 years), goods and services including spares required if any during O&M period. The Bidder has to take all permits, approvals and licenses, insurance etc., provide training and such other items and services required to complete the scope of work as mentioned above.
- 12.1.2. The Project cost is on lump sum turnkey basis and the bidder is responsible for the entire Scope of work as per RFS.
- 12.1.3. The cost per kWp discovered shall remain firm and fixed and shall be binding on the Successful Bidder till completion of work for payment of CFA amount as well as additional state subsidy irrespective of his actual cost of execution of the project. No escalation will be granted on any reason whatsoever. The bidder shall not be entitled to claim any additional charges, even though it may be necessary to extend the completion period for any reasons whatsoever.
- 12.1.4. The Project cost shall be **inclusive of cost of all components and duties/taxes/insurance during transit/purchase of materials**. The prices quoted by the firm shall be complete in all respect and no price variation /adjustment shall be payable by APDCL. **However, the prices shall be exclusive of GST.**
- 12.1.5. Operation & Maintenance of Solar PV Power Plant would include wear, tear, overhauling, machine breakdown, and replacement of defective modules, invertors / Power Conditioning Unit (PCU) spares, consumables & other parts for a period of 05 years projects.
- 12.1.6. The project cost shall be specified in consent letter in accordance with all terms, conditions, specifications and other conditions of the Contract as accepted by the APDCL and incorporated into the consent letter.
- 12.1.7. The Bidder shall complete the Price Bid as per applicable **Formats** online only (Section-7) furnished in the RFS Documents.

12.2. INSURANCE

- 12.2.1. The Bidder shall be responsible and take an Insurance Policy for transit-cum-storage-cum-erection of all the materials to cover all risks and liabilities for supply of materials on site basis, storage of materials at site, erection, testing and commissioning. The bidder shall also take appropriate insurance during O&M period.
- 12.2.2. The Bidder shall also take insurance for Third Party Liability covering loss of human life, engineers and workmen and also covering the risks of damage to the third party/material/equipment/properties during execution of the Contract including O&M period covering structural damages & fire hazard. Before commencement of the work, the Bidder will ensure that all its employees and representatives are covered by suitable insurance against any damage, loss, injury or death arising out of the execution of the work or in carrying out the Contract. Liquidation, Death, Bankruptcy etc., shall be the responsibility of bidder.

12.3. WARRANTEES AND GUARANTEES

- 12.3.1. The Bidder shall warrant that the goods supplied under this contract are new, unused, of the most recent or latest technology and incorporate all recent improvements in design and materials.

12.3.2. The bidder shall provide warranty covering the rectification of any and all defects in the design of equipment, materials and workmanship including spare parts for a period of 5 years from the date of commissioning.

12.3.3. The successful bidder shall have to transfer all the Guarantees/ Warranties of the different components to the Owner of the project. The responsibility of operation of Warranty and Guarantee clauses and Claims/Settlement of issues arising out of said clauses shall be sole responsibility of the Successful bidder and APDCL will not be responsible in any way for any claims whatsoever on account of the above.

12.4. PENALTY PROVISIONS

12.4.1. Penalty will be imposed on bidder by APDCL if following conditions are encountered:

- i. If L1 bidder fails to execute the allocated capacity Lot-wise as per conditions of this RfS, as a penalty his/her bank guarantee will be encashed, LOA terminated and he/she shall be blacklisted for 5 years from all government tenders.
- ii. If bidders demand for additional amount/remuneration against the installation of work on and above the discovered L1 rate for the identified package/capacity. This shall however not be applicable for cases of customized installations such as raised structure etc, as indicated in earlier para.
- iii. If bidders are defaulting in submission of Bank Guarantee/Required Relevant Documents during the bidding process.
- iv. If bidders denied implementing projects in allocated districts/regions/clusters etc.
- v. Non- performance of the RTS plant based on PR as mentioned in the **clause No. 12.8.**
- vi. If bidders fail to comply with DCR, ALMM and other mandatory requirements of PM Surya Ghar Guidelines and issued Amendments.
- vii. Penalties may lead to withholding CFA amount or encashment of Partial/full Performance Bank Guarantee and subsequently debaring or blacklisting from the future State/Central Government Tender.

12.5. TYPE AND QUALITY OF MATERIALS AND WORKMANSHIP

12.5.1. The design, engineering, supply, installation, testing and performance of the equipment shall be in accordance with latest appropriate IEC/Indian Standards as detailed in the Part-V (Technical specifications) of the bid document. Where appropriate Indian Standards and Codes are not available, other suitable standards and codes as approved by the MNRE shall be used.

12.5.2. The specifications of the components should meet the technical specifications mentioned in Part-V.

12.5.3. Any supplies which have not been specifically mentioned in this Contract but which are necessary for the design, engineering, supply & performance or completeness of the project shall be provided by the Bidder without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the SPV plant.

12.6. OPERATION & MAINTENANCE (O&M) GUIDELINES

12.6.1. The bidder shall be responsible for all the required activities for successful operation and maintenance of the Rooftop Solar PV system for a period of 5 years from the date of commissioning of the plant.

12.6.2. Below mentioned guidelines, shall be followed for O&M practices, which is not limited to **Annexure-B:**

- i. O&M of Solar Power Plant shall be compliant with grid requirements to achieve committed energy generation.
- ii. Deputation of qualified and experienced personnel till the O&M period at project site as &

- when required.
- iii. Quarterly checks of the Modules, PCUs and BoS shall be carried out as a part of routine preventive and breakdown maintenance.
- iv. Immediate replacement of defective Modules, Invertors/PCUs and other equipment as and when required.
- v. Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for all associated equipment and materials as per manufacturer/ supplier's recommendations.
- vi. All the equipment testing instrument required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by the Bidder. The testing equipment must be calibrated once every 2 years from NABL accredited labs and the certificate of calibration must be kept for reference as required.
- vii. If negligence/ mal-operation on part of the Bidder's operator results in failure of equipment, such equipment should be repaired/ replaced by the Bidder free of cost.

12.6.3. If any jobs covered in O&M Scope as per RFS are not carried out by the contractor/ Bidders during the O&M period, the designated Official shall take appropriate action as deemed fit. APDCL reserves the right to make surprise checks/ inspection visits at its own or through authorized representative to verify the O&M activities being carried out by the Bidder. ***Failure to adhere to above guidelines will result in penal action including debarring from participation in next tender.***

12.6.4. The Bidders should have their service network in or around of the project location and shall provide address of service centre in O&M manual. A copy of the same shall also be provided to the APDCL.

12.6.5. The bidder shall use the original parts in case of any fault in the PCU/Inverter during the AMC period of 5 years. In case the original part/parts are not available with the manufacturer of the PCU/Inverter (Based on certificate from the manufacturer), the bidder shall use the new parts of other standard brands available in the market or will use the repaired parts.

12.6.6. ***If Bidders fail to comply with the O&M guidelines, it may lead to the encashment of Performance Bank Guarantee and subsequently debarring or blacklisting from the future State/Central Government Tender.***

12.7. METERING AND GRID CONNECTIVITY

Metering and grid connectivity of the Solar Rooftop Plants under this scheme would be the responsibility of APDCL in accordance with the terms and conditions laid down in bid document and prevailing guidelines/regulation of AERC/ Central Electricity Authority (CEA)/MNRE and issued amendments.

12.8. PLANT PERFORMANCE EVALUATION

The Vendor shall be required to meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning as per the radiation levels of the location during the O&M period. PR should be shown minimum of 75% at the time of inspection for initial commissioning acceptance to qualify for release of CFA. The PR will be measured at Inverter output level during peak radiation conditions. The vendor should ensure that the solar PV panels are installed in such a way that optimum generation is achieved i.e. the panels should be facing south and should be installed in shadow free area.

12.9. PROGRESS REPORT

The bidder shall submit the progress report to APDCL during the period of installation in any mode decided by APDCL. APDCL will have the right to depute its representatives to ascertain the progress

of contract at the premises of works of the vendors.

12.9.1. Submission of Project Completion Report (PCR)

The Vendor shall submit all the Project/Work Completion Reports generated in PM Surya Ghar: Muft Bijli Yojana National Portal of MNRE to APDCL after commissioning of the project as per the Scope of RFS to APDCL. Non submission of the report shall be considered as "Breach of Contract" and shall attract punitive actions as per the relevant provisions of the Contract including non-release of subsidy. However, the decision of Engineer-in-charge shall be final in this regard.

12.10. INVOICE

The selected bidders shall raise the Tax Invoice to APDCL after completion of the project as per the. The tax invoice should contain all invocable items with the applicable tax as per Gol GST slabs. **The net invoice amount shall not exceed per kW discovered rate, exclusive of GST. If additional charges have been levied on the consumer for any customization, it shall be clearly specified in the invoice.**

12.11. PROJECT INSPECTION

- 12.11.1.** The project progress will be monitored by APDCL and the projects will be inspected for quality at any time during commissioning or after completion of the project either by officer(s) from APDCL or any authorized agency/experts.
- 12.11.2.** APDCL may depute a technical person(s) for inspection, third party verification, monitoring of system installed to oversee, the implementation as per required standards and also to visit the manufacturers' facilities to check the quality of products as well as to visit the system integrators to assess their technical capabilities as and when required.
- 12.11.3.** Duly authorized representative of APDCL shall have at all reasonable times access to the premises of the bidder's firm or works and shall have the power at all reasonable times to inspect and examine the materials and workmanship of the works during its manufacture.
- 12.11.4.** The Bidder shall give 15 days written notice of any material being ready for inspection and testing to APDCL. It shall be mandatory that such notice should reach APDCL within 21 days of issuance of LOA. Such tests shall be on the Bidder's accounts/expenses. If APDCL wants to inspect the material other than its works/factory (specified in the bid) than the whole expenses of the inspector shall be borne by the contractor. APDCL reserves the full rights, to waive off inspection of material, if required based on exigency of the project.
- 12.11.5.** The Bidder is required to get the entire lot of the ordered material inspected at one time, before the supply of the materials. In case the Bidder fails to get the entire lot inspected at one time, the total expenses of the further inspection will be borne by the Bidder.
- 12.11.6.** The inspection by APDCL and issue of dispatch instruction thereon shall in no way limit the liabilities and responsibilities of the Bidder in respect of the agreed quality assurance program forming a part of the contract.

12.12. APPLICABLE LAW

- 12.12.1.** The Contract shall be interpreted in accordance with the laws of the Union of India. The station of APDCL Headquarter in Guwahati shall have exclusive jurisdiction in all matters arising under this contract.

12.13. CHANGE IN LAW

- 12.13.1.** In the event a Change in Law results in any adverse financial loss/ gain to the Vendor then, in

order to ensure that the Vendor is placed in the same financial position as it would have been had it not been for the occurrence of the Change in Law, the Vendor on behalf of residential consumer shall be entitled to compensation by the other party, as the case may be, subject to the condition that the quantum and mechanism of compensation payment shall be determined and shall be effective from such date as decided by APDCL.

12.13.2. The term Change in Law shall refer to the occurrence of any of the following events after the last date of the bid submission, including (i) ***the enactment of any new law; or (ii) an amendment, modification or repeal of an existing law; or (iii) the requirement to obtain a new consent, permit or license; or (iv) any modification to the prevailing conditions prescribed for obtaining an consent, permit or license, not owing to any default of the vendor; or (v) any change in the rates of any Taxes which have a direct effect on the Project.*** However, Change in Law shall not include any change in taxes on corporate income or any change in any withholding tax on income or dividends.

12.13.3. The bidders are required to study carefully the conditions of the tender document, the enclosed specifications and the relevant provision of the relevant BIS/IS/MNRE specifications wherever necessary before submitting the proposal. Technical particulars of the material offered must comply with the enclosed specifications and the relevant provisions of the BIS/IS/MNRE as far as possible.

12.13.4. Any changes in the constitution of the firm/company shall be notified forth with by the Vendor in writing to the Company and such change shall not relieve the tenderer from any liability under the contract.

12.14. SETTLEMENT OF DISPUTE

12.14.1. All disputes and differences arising out of or under the contract including, however, without prejudice to the generality of the aforesaid, any question regarding the existence, validity or termination, in respect thereof, the parties at the first instance shall endeavour to resolve such dispute or differences amicably by mutual consultation.

12.14.2. If the parties fail to resolve, the disputes or differences amicably by mutual consent, within 45 days of its arising, the disputes or differences shall be referred to arbitration either party may refer the disputes or differences to arbitration as provided hereinafter, by giving notice in writing to the other party of its intention to refer the disputes or differences to arbitration and such arbitration proceedings shall commence with the receipt of the aforesaid notice by the other party.

12.14.3. IN CASE THE CONTRACTOR IS A PUBLIC SECTOR ENTERPRISE OR A GOVERNMENT DEPARTMENT

In case the Contractor is a Public Sector Enterprise or a Government Department, the dispute shall be referred by either party for Arbitration to the sole Arbitrator to be nominated by the **Secretary (Power)**, Assam.

12.14.4. IN ALL OTHER CASES

- i. In case the contractor is not a public sector enterprise or a Govt. Dept. And in all other cases, any dispute referred to arbitration by a party shall be heard by an arbitration panel composed of three arbitrators, in accordance with the provisions as set forth below.
- ii. APDCL and the Contractor shall each appoint one arbitrator, and these two arbitrators shall jointly appoint a third arbitrator, who shall chair the arbitration panel. If the two arbitrators do not succeed in appointing a third arbitrator within twenty (20) days after the latter of the two arbitrators has been appointed, the third arbitrator shall, at the request of either party, be appointed by the Appointing Authority for third arbitrator who shall be the Secretary (Power), Assam.

- iii. If one party fails to appoint its arbitrator within thirty-two (32) days after the other party has named its arbitrator, the party which has named an arbitrator may request the Appointing Authority to appoint the second arbitrator.
- iv. If for any reason an arbitrator is unable to perform its function, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws and a substitute shall be appointed in the same manner as the original arbitrator.
- v. The venue of arbitration shall be Guwahati. The provisions of Arbitration and Conciliation Act, 1996, as amended from time to time shall govern the Arbitration proceedings conducted in respect of the disputes and the differences arising out of or under the contract, except to the extent, otherwise agreed herein by the parties.
- vi. The decision of a majority of the arbitrators (or of the third arbitrator chairing the arbitration panel, if there is no such majority) shall be final and binding and shall be enforceable in any court of competent jurisdiction as decree of the court. The parties thereby waive any objections to or claims of immunity from such enforcement.
- vii. The arbitrator(s) shall give Honorarium as per the extant rules of the govt.

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

12.14.6. Cost of arbitration shall be equally shared between the Parties.

12.15. FORCE MAJEURE

12.15.1. Notwithstanding the provisions of clauses contained in this RFS document; the contractor shall not be liable to forfeit (a) PBG for delay and (b) termination of contract; if he/she is unable to fulfil his obligation under this contract due to force majeure conditions.

12.15.2. For purpose of this clause, "Force Majeure" means an event beyond the control of the contractor and not involving the contractor's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions, Grid Problems/ shutdowns and fright embargoes etc. Whether a "Force majeure" situation exists or not, shall be decided by APDCL and MNRE & this decision shall be final and binding on the contractor and all other concerned.

12.15.3. In the event that the contractor is not able to perform his obligations under this contract on account of force majeure, he will be relieved of his obligations during the force majeure period. In the event that such force majeure extends beyond Six (06) months, APDCL has the right to terminate the contract in which case, the PBG shall be refunded to the vendor.

12.15.4. If a force majeure situation arises, the contractor shall notify APDCL in writing promptly, not later than 14 days from the date such situation arises. The contractor shall notify APDCL not later than 3 days of cessation of force majeure conditions. After examining the cases, APDCL shall decide and grant suitable additional time for the completion of the work, if required.

12.16. LANGUAGE

All documents, drawings, instructions, design data, calculations, operation, maintenance and safety manuals, reports, labels and any other data shall be in English Language only. The contract agreement and all correspondence between the APDCL and the bidder shall be in English language. O&M manual and warranty card should be in English & local languages.

12.17. PAYMENT TERMS

12.17.1. The total contract value shall be calculated as follows:

The total contract value = [Supply Cost + Cost of Installation & Commissioning + Cost of CMC for 5 years]

All progressive payments shall be released on validity of sufficient Contract Performance Security. Payment shall be made by CGM (NRE), APDCL. The successful bidder shall, along with the bill, submit the schedule of rates.

The net amount of project cost (i.e. Total Project Cost – (CFA + State Subsidy)) shall be paid by the concerned roof top owner to APDCL in full before execution of work. The consumer shall sign an agreement with APDCL regarding payment of the net amount of project cost. APDCL will release the total amount (CFA + State subsidy + beneficiary contribution) for the allotted capacity lot wise subject to the submission of following-

- i. Copy of unconditional acceptance of the Letter of Award (LOA) and signing of contract agreement.
- ii. Copy of Guaranteed Technical Particulars (GTP) and drawing approved by APDCL.
- iii. Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of APDCL.
- iv. Contractor's detailed invoice & Warrantee certificate.

Note: All payments shall be made subject to the receipt & availability of fund from MNRE/Govt. of Assam.

12.18. TAXES AND DUTIES

The quoted price shall be exclusive of all applicable taxes and duties. The bidder's firm shall be entirely responsible for all taxes, duties, license fees, etc. All taxes payable as per Government norms will be payable by the contractor. If any new tax/duty is levied during the contract period, the same will be borne by the firm exclusively. TDS, labour cess etc. will be deducted from the payment of the contractor as per the prevalent laws and rules of Government of India and Government of Assam in this regard.

12.19. TRANSPORTATION

The Bidder is required under the contract to deliver the goods to the site. (The storage/ handling etc. shall be sole responsibility of the contractor till the commissioning/ handover of the system).

12.20. SUCCESSORS AND ASSIGNEES:

In case APDCL or Vendor may undergo any merger or amalgamation or a scheme of arrangement or similar re-organization & this contract is assigned to any entity(ies) partly or wholly, the contract shall be binding mutatis mutandis upon the successor entities & shall continue to remain valid with respect to obligation of the successor entities.

12.21. SEVERABILITY:

It is stated that each paragraph, clause, sub-clause, schedule or annexure of this contract shall be deemed severable & in the event of the unenforceability of any paragraph, clause sub-clause, schedule or the remaining part of the paragraph, clause, sub-clause, schedule annexure & rest of the contract shall continue to be in full force & effect.

12.22. COUNTERPARTS

This contract may be executed in one or more counterparts, each of which shall be deemed an original

& all of which collectively shall be deemed one of the same instruments.

12.23. RIGHTS & REMEDIES UNDER THE CONTRACT ONLY FOR THE PARTIES

This contract is not intended & shall not be construed to confer on any person other than the APDCL & Vendor hereto, any rights and / or remedies herein.

12.24. TERMINATION FOR INSOLVENCY

12.24.1. APDCL may at any time terminate the contract by giving written notice to the contractor without compensation to the contractor, if it becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the APDCL.

12.25. TERMINATION FOR CONNIVANCE

12.25.1. The APDCL, may by written notice sent to the Bidder, terminate the contract, in whole or in part at any time for its connivance. The notice of termination shall specify that termination is for the bidder's connivance in the interest of APDCL.

12.26. OTHER CONDITIONS

12.26.1. The Vendor shall not transfer, assign or sublet the work under this contract or any substantial part thereof to any other party without the prior consent of APDCL in writing.

12.26.2. The Vendor shall not display the photographs of the work and not take advantage through publicity of the work without written permission of consumer.

12.26.3. The Vendor shall not make any other use of any of the documents or information of this contract, except for the purposes of performing the contract.

12.26.4. APDCL will not be bound by any Power of Attorney granted/ issued by the Vendor or its subcontractors or by any change in the composition of the firm made during or subsequent to the execution of the contract. However, recognition to such Power of Attorney and change (if any) may be given by APDCL after obtaining proper legal advice, the cost of which will be chargeable to the Vendor concerned.

12.26.5. APDCL's role is limited to selection of vendors and disbursement of CFA after successful installation of the solar PV plant. The vendor will be solely responsible for plant performance and maintenance and any liability arising on this account shall lie solely with the vendors, provided the beneficiary has given proper access and facilitation to the vendor for regular O&M and there has not been alteration in solar irradiance due to alteration in building or its surrounding over which the vendor has no control.

12.27. CORRESPONDENCE

Bidder requiring any Techno-Commercial clarification of the bid documents may contact in writing or by Fax /E Mail.

| Name & Designation | Contact Number | Email id |
|--------------------|----------------|----------------------------------------------------------|
| | | cgm.nre@apdcl.org |

Verbal clarifications and information given by the APDCL or its employees or its Representatives shall not be in any way entertained.

SECTION-6

**TECHNICAL
SPECIFICATIONS**

TECHNICAL SPECIFICATIONS

The proposed projects shall be commissioned as per the technical specifications given in **MNRE Office Memorandum No. 318/17/2024-Grid Connected Rooftop Dated 07.06.2024** which is provided below. **The vendor will be solely responsible for any shortcomings or negligence/malpractice, which may lead to the delisting/blacklisting of the firm/vendor from participation in any programme of the Ministry.** Any shortcomings will lead to cancellation of CFA in full or part as decided by APDCL. Domestic Modules are to be used failing which it will be assumed that system is not matching the requirement of the scheme and bidder's PBG shall be forfeited. Competent Authority's decision will be final and binding on the bidder.

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.
- 1.2 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
- 1.3 The rated power of solar PV module shall have maximum tolerance up to +3%.
- 1.4 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.
- 1.5 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.
- 1.6 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.

- 1.7 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.
- 1.8 Solar PV modules of minimum fill factor 75%, to be used.
- 1.9 All PV modules should have a nominal power output of >90% at STC during the first 10 years, and >80% during the next 15 years. Further, module shall have nominal power output of >97% during the first year of installation—degradation of the module below 0.5 % per annum
- 1.10 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.
- 1.11 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.
- 1.12. 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.
- 1.13. 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 (η) 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- ϕ connection, 1- ϕ /3- ϕ 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:

- i. In the event of a power failure on the electric grid, it is required that any independent power-producing inverters attached to the grid turn off in a short period of time. This prevents the DC-to-AC inverters from continuing to feed power into small sections of the grid, known as "islands." Powered islands present a risk to workers who may expect the area to be unpowered, and they may also damage grid-tied equipment. The Rooftop PV system shall be equipped with islanding protection. In addition to disconnection from the grid (due to islanding protection) disconnection due to under and over voltage conditions shall also be provided, if not available in inverter.

3. Module Mounting Structure (MMS):

- 3.1. Supply, installation, erection and acceptance of module mounting structure (MMS) with all necessary accessories, auxiliaries and spare part shall be in the scope of the work.
- 3.2. Module mounting structures can be made from three types of materials. They are Hot Dip Galvanized Iron, Aluminium and Hot Dip Galvanized Mild Steel (MS). However, MS will be preferred for raised structure.
- 3.3. MMS Steel shall be as per latest IS 2062:2011 and galvanization of the mounting structure shall be in compliance of latest IS 4759. MMS Aluminium shall be as per AA6063 T6. For Aluminium structures, necessary protection towards rusting need to be provided either by coating or anodization.
- 3.4. All bolts, nuts, fasteners shall be of stainless steel of grade SS 304 or hot dip galvanized, panel mounting clamps shall be of aluminium and must sustain the adverse climatic conditions. Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.
- 3.5. The module mounting structures should have angle of inclination as per the site conditions to take maximum insolation and complete shadow-free operation during generation hours. However, to accommodate more capacity the angle of inclination may be reduced until the plant meets the specified performance ratio requirements.
- 3.6. The Mounting structure shall be so designed to withstand the speed for the wind zone of the location where a PV system is proposed to be installed. The PV array structure design shall be appropriate with a factor of safety of minimum 1.5.
- 3.7. The upper edge of the module must be covered with wind shield so as to avoid build air ingress below the module. Slight clearance must be provided on both edges (upper & lower) to allow air for cooling.
- 3.8. Suitable fastening arrangement such as grouting and calming should be provided to secure the installation against the specific wind speed. The 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 than 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 than sag angle/Bar should be provide for purlin to avoid deflection failure. The sag angle should be minimum 2MM thick, and bar should be minimum 12Dia.

 - D. Degree - The Module alignment and tilt angle shell be calculated to provide the maximum

annual energy output. This shall be decided on the location of array installation.

- E. Foundation – Foundation should be as per the roof condition; two types of the foundation can be done- either penetrating the roof or without penetrating the roof.
- a. If penetration on the roof is allowed (based on the client requirement) then minimum 12MM diameter anchor fasteners with minimum length 100MM can be used with proper chipping. The minimum RCC size should be 400x400x300 cubic mm. Material grade of foundation should be minimum M20.
 - b. If penetration on roof is not allowed, then foundation can be done with the help of 'J Bolt' (refer IS 5624 for foundation hardware). Proper Neto bond solution should be used to adhere the Foundation block with the RCC roof. Foundation J - bolt length should be minimum 12MM diameter and length should be minimum 300MM.
- F. Material standards:
- a. Design of foundation for mounting the structure should be as per defined standards which clearly states the Load Bearing Capacity & other relevant parameters for foundation design (As per IS 6403 / 456 / 4091 / 875).
 - b. Grade of raw material to be used for mounting the structures so that it complies the defined wind loading conditions (As per IS 875 - III) should be referred as follows (IS 2062 – for angles and channels, IS 1079 – for sheet, IS 1161 & 1239 for round pipes, IS 4923 for rectangular and square hollow section)
 - c. Test reports for the raw material should be as per IS 1852 / 808 / 2062 / 1079 / 811.
 - d. In process inspection report as per approved drawing & tolerance should be as per IS 7215.
 - e. For ascertaining proper welding of structure part following should be referred:
 - f. D.P. Test (Pin Hole / Crack) (IS 822)
 - g. Weld wire grade should be of grade (ER 70 S - 6)
 - h. For ascertaining hot dip galvanizing of fabricated structure following should be referred:-
 - i. Min coating required should be as per IS 4759 & EN 1461.
 - j. Testing of galvanized material
 - a. Pierce Test (IS 2633)
 - b. Mass of Zinc (IS 6745)
 - c. Adhesion Test (IS 2629)
 - d. CuSO4 Test (IS 2633)
 - e. Superior High-Grade Zinc Ingot should be of 99.999% purity (IS 209) (Preferably Hindustan Zinc Limited or Equivalent).
 - k. Foundation Hardware – If using foundation bolt in foundation then it should be as per IS 5624.

4. Metering

4.1. The specifications net meter/smart meter shall be as per the latest technical specifications issued by the Central Electricity Authority (CEA) and its amendment thereof.

4.2. A Roof Top Solar (RTS) Photo Voltaic (PV) system shall consist of following energy meters:

- a) Net meter/ smart meter: To record import and export units.
- b) Generation meter (if required as per the state regulations: To keep record for total generation of the plant.
- c) The installation of meters including CTs & PTs, wherever applicable, shall be carried out by the respective DisComs as per the terms, conditions and procedures laid down by the concerned SERCs/DISCOMs.

5. Array Junction Boxes

5.1. The junction boxes are to be provided in the PV array for termination of connecting cables. The Junction

Boxes (JBs) shall be made of GRP/FRP/Powder Coated aluminum /cast aluminum alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination 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- ϕ /3- ϕ , 415 or 230 volts, 50 Hz (or voltage levels as per CEA/State regulations).
- 7.5. The panels shall be designed for minimum expected ambient temperature of 45 degree Celsius, 80 percent humidity and dusty weather.
- 7.6. All indoor panels will have protection of IP 54 or better, as per site conditions. All outdoor panels will have protection of IP 65 or better, as per site conditions.
- 7.7. Should conform to Indian Electricity Act and CEA safety regulations (till last amendment).
- 7.8. All the 415 or 230 volts (or voltage levels as per CEA/State regulations) AC devices / equipment like bus support insulators, circuit breakers, SPDs, Voltage Transformers (VTs) etc., mounted inside the switchgear shall be suitable for continuous operation and satisfactory performance under the following

supply conditions.

- a. Variation in supply voltage: as per CEA/State regulations
- b. Variation in supply frequency: as per CEA/State regulations

7.9. The inverter output shall have the necessary rated AC surge arrestors, if required and MCB/ MCCB. RCCB shall be used for successful operation of the PV system, if inverter does not have required earth fault/residual current protection.

8. Protections

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

8.1. Earthing Protection

- 8.1.1. The earthing shall be done in accordance with latest Standards.
- 8.1.2. Each array structure of the PV yard, Low Tension (LT) power system, earthing grid for switchyard, all electrical equipment, inverter, all junction boxes, etc. shall be grounded properly as per IS 3043-2018.
- 8.1.3. All metal casing/ shielding of the plant shall be thoroughly grounded in accordance with CEA Safety Regulation 2010. In addition, the lightning arrester/masts should also be earthed inside the array field.
- 8.1.4. Earth resistance should be as low as possible and shall never be higher than 5 ohms.
- 8.1.5. For 10 KW and above systems, separate three earth pits shall be provided for individual three earthing viz.: DC side earthing, AC side earthing and lightning arrester earthing.

8.2. Lightning Protection

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

8.3. Surge Protection

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

9. Cables

- 9.1. All cables should conform to latest edition of IEC/equivalent BIS Standards along with IEC 60227/IS 694, IEC 60502/IS 1554 standards.
- 9.2. Cables should be flexible and should have good resistance to heat, cold, water, oil, abrasion etc.
- 9.3. Armored cable should be used and overall PVC type 'A' pressure extruded insulation or XLPE insulation should be there for UV protection.
- 9.4. Cables should have Multi Strand, annealed high conductivity copper conductor on DC side and copper/FRLS type Aluminum conductor on AC side. For DC cabling, multi- core cables shall not be used.

- 9.5. Cables should have operating temperature range of -10°C to $+80^{\circ}\text{C}$ and voltage rating of 660/1000 V.
- 9.6. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop less than 2% (DC Cable losses).
- 9.7. The size of each type of AC cable selected shall be based on minimum voltage drop. However; the maximum drop shall be limited to 2%.
- 9.8. The electric cables for DC systems for rated voltage of 1500 V shall conform to IS 17293:2020.
- 9.9. All cable/wires are to be routed in a RPVC pipe/ GI cable tray and suitably tagged and marked with proper manner by good quality ferule or by other means so that the cable is easily identified.
- 9.10. All cable trays including covers to be provided.
- 9.11. Thermo-plastic clamps to be used to clamp the cables and conduits, at intervals not exceeding 50 cm.
- 9.12. Size of neutral wire shall be equal to the size of phase wires, in a three phase system.
- 9.13. The Cable should be so selected that it should be compatible up to the life of the solar PV panels i.e. 25 years.

10. Drawings & Manuals

- 10.1. Operation & Maintenance manual/user manual, Engineering and Electrical Drawings shall be supplied along with the power plant.
- 10.2. The manual shall include complete system details such as array lay out, schematic of the system, inverter details, working principle etc.
- 10.3. The Manual should also include all the Dos & Don'ts of Power Plant along with Graphical Representation with indication of proper methodology for cleaning, Operation and Maintenance etc.
- 10.4. Step by step maintenance and troubleshooting procedures shall also be given in the manuals.
- 10.5. 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 (NH3) 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 |
| Fuses | |
| 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 |
| Solar PV Roof Mounting Structure | |
| IS 2062/IS 4759/ AA6063 T6 | Material for the structure mounting |
| Surge Arrestors | |
| BFC 17-102:2011/ NFC 102:2011/ IEC 62305 | Lightening Protection Standard |
| IEC 60364-5-53/ IS 15086-5 (SPD) IEC 61643- 11:2011 | Electrical installations of buildings - Part 5-53: Selection and erection of 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) | IEC 62561-1: Lightning protection system components (LPSC) - Part: Requirements for connection components IEC 62561-2: Lightning protection system components (LPSC) – Part 2:Requirements for conductors and earth electrodes IEC 62561-7: Lightning protection system components (LPSC) - Part 7:Requirements for earthing enhancing compounds |
| 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 |

SECTION-7

FORMAT FOR PRICE BID

PRICE BID

(To be submitted online separately)

Performa for submission of rates of different capacity of roof top Solar Power Projects under RFS No. _____ by APDCL.

Name of Bidder: _____

| Scope of Work | Description | Rate per kWp in INR excluding GST (Rs. /kWp) | Rate per kWp in words excluding GST (Rs./kWp) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|
| Design, supply, erection, testing and commissioning including warranty, Comprehensive operation & maintenance of grid connected rooftop solar power plant of various capacities in the State of Assam under PM Surya Ghar Muft Bijli Yojana of RTS Scheme. | Supply of Materials of 1 kWp to 3 kWp On-Grid Solar Power Plant excluding all applicable taxes and duties | | |
| | Installation & Commissioning of 1 kWp to 3 kWp On-Grid Solar Power Plant excluding all applicable taxes and duties. | | |
| | CMC for 5 Years of 1 kWp to 3 kWp On-Grid Solar Power Plant excluding all applicable taxes and duties. | | |

- Rates quoted will be exclusive of GST.
- In case there is difference between Figure Rate & Words Rate, then the rates given in words column will be accepted by APDCL.
- In case of discrepancy in price bid (Excel file) and electronic form, the price mentioned in Excel file will prevail.

SECTION-8

FORMS & FORMATS

GENERAL INFORMATION ABOUT THE BIDDER

| A. BIDDER INFORMATION SHEET | | | |
|---------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| Bidder's Name | Legal | | |
| Legal status of the Bidder <i>(Please tick one)</i> | Private Company | Limited | |
| | Public Limited Company | | |
| | Partnership firms | | |
| | Limited Partnership (LLP) | Liability | |
| | Limited Company (LLC) | Liability | |
| | Sole Proprietorship Firm | | |
| In case of Consortium, Legal name of each partner with participation in technical & financial bid | Legal Name of Consortium member | Legal status of the Bidder (Private Limited Company/ Public Limited Company/ Partnership firms/LIP/LLC/ Sole Proprietorship Firm) | Participate as a Technical / Financial Partner |
| | 1 | | |
| | 2 | | |
| Lead member of Consortium | | | |
| Bidder's legal address in India, telephone numbers, email address for communication | | | |
| Bidder's authorized signatory (name, designation, address, contact no.) | | | |
| Bidder's authorized representative (name, designation, address, contact no.) | | | |

FOLLOWING NEEDS TO BE SUBMITTED BY THE BIDDER: (By each member in case of Consortium):

- a) Certificate of Incorporation for Public/Private limited company or Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company (LLC)/ Sole Proprietorship Firm
- b) Memorandum & Article of Association in case of a Public/Private limited company.
- c) In case of Consortium, MoU/Agreement (duly notarized) entered into by the consortium members, containing intended participation as a Technical / Financial, nomination of Lead Member and division of responsibility to clearly define the work of each member etc.
- d) Authorization in favour of authorized signatory of bidder to sign the tender, and also in favour of authorized representative of each member in case of Consortium.

Note: Bidder's authorised representative shall be deemed to have authority of the Bidder to receive and deliver any correspondence and attend meetings with APDCL related to the tender

**SIGNATURE OF AUTHORIZED SIGNATORY
ON BEHALF OF BIDDER**

| B. CONSORTIUM MEMBER INFORMATION | |
|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MEMBER - 1 | |
| Consortium Member's Legal Name (Lead Member / Financial Partner) | |
| Legal status of the Member | Private Limited Company / Public Limited Company / Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company/ (LLC/ Sole Proprietorship Firm (Please tick one) |
| Member's country of constitution | |
| Member's legal address, telephone numbers, fax numbers, email address) | |
| Member's authorized representative (name, designation, address) | |
| MEMBER - 2 | |
| Consortium Member's Legal Name (Other Member/Technical Partner) | |
| Legal status of the Member | Private Limited Company / Public Limited Company / Partnership firms/ Limited Liability Partnership (LLP)/ Limited Liability Company (LLC)/ Sole Proprietorship Firm (Please tick one) |
| Member's country of constitution | |
| Member's legal address, telephone numbers, fax numbers, email address) | |
| Member's authorized representative (name, designation, address) | |

**SIGNATURE OF AUTHORIZED SIGNATORY
ON BEHALF OF BIDDER**

COVERING LETTER

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

RfS No:

Dated:

From:

_____ (Insert name and address of Bidding Company)

Contact No.: _____

E-mail address: _____

To,

The Chief General Manager (NRE)

Assam Power Distribution Company Limited

Annex Building, 2nd Floor, Bijulee Bhawan, Paltanbazar

Dist. Kamrup (Metro), Pin: 781001, Assam, India

E-mail: cgm.nre@apdcl.org

Sub: Request for Selection (RfS) for Selection of Bidders for “DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING INCLUDING WARRANTY, COMPREHENSIVE OPERATION & MAINTENANCE OF GRID-CONNECTED ROOFTOP SOLAR PLANT OF VARIOUS CAPACITIES IN RESIDENTIAL SECTOR UNDER “UTILITY-LED AGGREGATION (ULA) MODEL THROUGH MODEL II: CONSUMER OWNED ASSETS” OF PM-SURYA GHAR: MUFT BIJLI YOJANA OF MNRE UNDER EPC MODE IN THE STATE OF ASSAM & UNDER OPERATIONAL AREA OF ASSAM POWER DISTRIBUTION COMPANY LIMITED (APDCL)” with RfS Specification No..... Dated

Dear Sir,

We, the undersigned _____ [*insert name of the Bidder*] having read, examined and understood in detail the Request for Selection (RfS) for Standardization of Rates for works of Survey, Design, Engineering, Supply, Installation, Testing and Commissioning Including Comprehensive Operation & Maintenance for five (5) years, **hereby submit our Bid for a capacity of _____ (in word) kWp against Package No. _____ (Insert Package Specification No. and Region)** comprising of Financial Bid and Techno Commercial Bid. **We confirm that neither we nor any of our Parent Company/Affiliate/Ultimate Parent Company has submitted Bid other than this Bid directly or indirectly in response to the aforesaid RfS.**

We give our unconditional acceptance to the RfS Documents attached thereto, issued by APDCL, as amended. As a token of our acceptance to the RfS Documents, the same have been initiated by us and enclosed to the Bid. We shall ensure that we execute such RfS Documents as per the provisions of the RfS and provisions of such RfS Documents shall be binding on us.

1. Bid Fee

We have submitted the tender processing fee of Rs against the **Package No.** online as per provision of bid document.

2. Bid Security

We have submitted the Bid Security/EMD fee of Rs against the **Package No.** online as per provision of bid document.

3. We have submitted our Price Bid strictly as per provision of this RfS, without any deviations, conditions and without mentioning any assumptions or notes for the Price Bid in the said format(s).

4. Participate:

We have participated as a bidder against the **Package No.** _____ *[Insert Package Specification No.]* in Region _____ and have accordingly submitted our Technical Bids & Price Bids for the same as per provisions of this RfS.

5. Acceptance

We hereby unconditionally and irrevocably agree and accept that the decision made by APDCL in respect of any matter regarding or arising out of the RFS shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process. We confirm that there are no litigations or disputes against us, which materially affect our ability to fulfill our obligations with regard to execution of projects of capacity offered by us

6. Familiarity with Relevant Indian Laws & Regulations

We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this Bid and execute the RFS Documents, in the event of our selection as Successful Bidder. We further undertake and agree that all such factors as mentioned in RFS have been fully examined and considered while submitting the Bid

7. Contact Person

Details of the contact person are furnished as under

| | |
|----------------|--|
| Name | |
| Designation | |
| Company | |
| Address | |
| Phone No | |
| Fax No | |
| E-mail Address | |

8. We are enclosing/attaching herewith the **Envelope-I (Covering letter, Tender fee and Bid Security) Envelope-II (Techno-Commercial documents)** containing duly signed formats,

each one duly sealed separately, in one original as desired by you in the RfS for your consideration.

It is confirmed that our Bid is consistent with all the requirements of submission as stated in the RfS and subsequent communications from APDCL. The information submitted in our Bid is complete, strictly as per the requirements stipulated in the RfS and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid. We confirm that all the terms and conditions of our Bid are valid for acceptance for a period of **120 days** from the Bid deadline. We confirm that we have not taken any deviation so as to be deemed non-responsive

Dated the _____ day of _____, 2025

Thanking you

Yours faithfully,

Name

Designation

Signature of Authorized Person in whose name
Power of Attorney/Board Resolution as per
Clause.....is issued.

GENERAL PARTICULARS OF THE BIDDER

| | |
|---------------------------------------------------------------------------------------------------------------------------------------|--------|
| Name of the Bidder | |
| Registered Office Address | |
| Contact No. | |
| E-mail | |
| Website | |
| Authorized Contact Person(s) with name, designation Address and Mobile Phone No., E-mail address to whom all references shall be made | |
| Year of Incorporation | |
| Have the bidder/Company ever been Debarred By any Govt. Dept. / Undertaking for undertaking any work | |
| Reference of any document information attached by the Bidder other than specified in the RfS. | |
| Whether the Bidder wishes to form a Project Company for execution of work | Yes/No |
| Bidding company is listed in India | Yes/No |
| GST No | |
| Certificate of Incorporation of Bidder/ Affiliate (as applicable) enclosed | Yes/No |
| Partnership deed or LLP/ Sole Proprietor registration (as applicable) enclosed | Yes/No |

(Signature and stamp (on each page) of Authorized Signatory of Bidding Company)

Name:-.....

Date:-.....

Place:-.....

FORMAT-3

FORMAT FOR PERFORMANCE BANK GUARANTEE (PBG)

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

In consideration of the _____ [*Insert name of the Bidder*] (hereinafter referred to as selected Solar Power Developer') submitting the response to RFS inter alia for selection of the Project for **“DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING INCLUDING WARRANTY, COMPREHENSIVE OPERATION & MAINTENANCE OF GRID-CONNECTED ROOFTOP SOLAR PLANT OF VARIOUS CAPACITIES IN RESIDENTIAL SECTOR UNDER “UTILITY-LED AGGREGATION (ULA) MODEL THROUGH MODEL II: CONSUMER OWNED ASSETS” OF PM-SURYA GHAR: MUFT BIJLI YOJANA OF MNRE UNDER EPC MODE IN THE STATE OF ASSAM & UNDER OPERATIONAL AREA OF ASSAM POWER DISTRIBUTION COMPANY LIMITED (APDCL)”** in response to the RfS dated..... issued by Assam Power Distribution Company Limited (hereinafter referred to as APDCL) and APDCL considering such response to the RfS of.....[*insert the name of the selected Solar Power Developer*] (which expression shall unless repugnant to the context or meaning thereof include its executors, administrators, successors and assignees) and selecting the Solar Power Project of the Solar Power Developer and issuing Letter of allocation under Package No. ____ to (*Insert Name of selected Solar Power Developer*) as per terms of RfS and the same having been accepted by the selected SPD or a Project Company, M/s ----- [*a Special Purpose Vehicle (SPV) formed for this purpose, if applicable*]. As per the terms of the RFS, the _____ [*insert name & address of bank*] hereby agrees unequivocally, irrevocably and unconditionally pay to APDCL without demur at Guwahati forthwith on demand in writing from APDCL or any Officer authorized by it in this behalf, any amount upto and not exceeding Rupees _____ [*Total Value*] only, on behalf of M/s _____ [*Insert name of the selected Solar Power Developer / Project Company*]

This guarantee shall be valid and binding on this Bank up to and including..... and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement

Our liability under this Guarantee is restricted to Rs. _____ (Rs. _____ only). i) Nos ----- dated ----, Value -----; ii) Nos-----dated ----, Value -----).

Our Guarantee shall remain in force until..... APDCL shall be entitled to invoke this Guarantee till

The Guarantor Bank hereby agrees and acknowledges that APDCL shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by APDCL, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to APDCL.

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

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

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

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

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

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

Signature
Name:
Power of Attorney No.:

For
[Insert Name of the Bank]
Banker's Stamp and Full Address
Dated this ___ day of ___, 2025

Witness:

1.
Signature
Name and Address

2.

Signature

Name and Address

Notes:

1. The Stamp Paper should be in the name of the Executing Bank and of appropriate value.
The Performance Bank Guarantee (PBG) shall be executed by any of the Scheduled Bank

FORMAT-4**CHECK LIST FOR BANK DIRECTORY**

| Sl. No | Details of checks | Yes/No |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| a. | Is the BG on non-judicial Stamp paper of appropriate value, as per applicable Stamp Act of the place of execution | |
| b. | Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on back of stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be purchased either in the name of executing Bank or the party on whose behalf the BG has been issued. Also the Stamp Paper should not be older than six months from the date of execution of BG). | |
| c. | Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG? | |
| d. | Is each page of BG duly signed / initialed by executants and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed Performa? | |
| e. | Does the Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents? | |
| f. | Are the factual details such as Bid Document No. / Specification No., / LOI No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG | |
| g. | Whether overwriting/cutting if any on the BG have been properly Authenticated under signature & seal of executants? | |

POWER OF ATTORNEY

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

(a) Power of Attorney to be provided by the Bidding Company in favour of its representative as evidence of authorized signatory's authority.

Know all men by these presents, We (*Name and address of the registered office of the Bidding Company as applicable*) do hereby constitute, appoint and authorize Mr./Ms. (*Name & residential address*) who is presently employed with us and holding the position of as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for **“DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING INCLUDING WARRANTY, COMPREHENSIVE OPERATION & MAINTENANCE OF GRID-CONNECTED ROOFTOP SOLAR PLANT OF VARIOUS CAPACITIES IN RESIDENTIAL SECTOR UNDER “UTILITY-LED AGGREGATION (ULA) MODEL THROUGH MODEL II: CONSUMER OWNED ASSETS” OF PM-SURYA GHAR: MUFT BIJLI YOJANA OF MNRE UNDER EPC MODE IN THE STATE OF ASSAM & UNDER OPERATIONAL AREA OF ASSAM POWER DISTRIBUTION COMPANY LIMITED (APDCL)”** in response to the RfS No. dated issued by Assam Power Distribution Company Limited (APDCL), Guwahati including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which APDCL may require us to submit. The aforesaid Attorney is further authorized for making representations to APDCL, Guwahati and providing information / responses to APDCL, Guwahati representing us in all matters before APDCL and generally dealing with APDCL, Guwahati in all matters in connection without Bid till the completion of the bidding process as per the terms of the above mentioned RfS.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.

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

Signed by the within named

..... (**Insert the name of the executant company**)

through the hand of

Mr.

duly authorized by the Board to issue such Power of Attorney

Dated this day of

Accepted

.....

Signature of Attorney
(Name, designation and address of the Attorney)

Attested

.....

(Signature of the executants)
(Name, designation and address of the executants)

.....

Signature and stamp of Notary of the place of execution

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

WITNESS

1.

(Signature)

Name.....

Designation

2.

(Signature)

Name.....

Designation

FORMAT-6

FINANCIAL ELIGIBILITY CRITERIA REQUIREMENT

(To be submitted on the letterhead of Bidding Company & Certify by Chartered Accountant)

Ref: RfS No. _____ Dated: _____

To,

The Chief General Manager (NRE)

Assam Power Distribution Company Limited

Annex Building, 2nd Floor, Bijulee Bhawan, Paltanbazar

Dist. Kamrup (Metro), Pin: 781001, Assam, India

E-mail: cgm.nre@apdcl.org

Sub: Request for Selection (RfS) for Selection of Bidders for “DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING INCLUDING WARRANTY, COMPREHENSIVE OPERATION & MAINTENANCE OF GRID-CONNECTED ROOFTOP SOLAR PLANT OF VARIOUS CAPACITIES IN RESIDENTIAL SECTOR UNDER “UTILITY-LED AGGREGATION (ULA) MODEL THROUGH MODEL II: CONSUMER OWNED ASSETS” OF PM-SURYA GHAR: MUFT BIJLI YOJANAOF MNRE UNDER EPC MODE IN THE STATE OF ASSAM & UNDER OPERATIONAL AREA OF ASSAM POWER DISTRIBUTION COMPANY LIMITED (APDCL)” with RfS Specification No..... Dated

Dear Sir,

We submit our Bid/Bids for the total capacity of _____ kWp against Package No. ___ ; for Bids for which we submit details of our Financial Eligibility Criteria Requirements.

We certify that the Financially Evaluated Entity had an Annual Turnover and Net worth as specified in this RFS

| Name of Financially Evaluated Entity | Financial Year | Year of Incorporation | Annual Turnover (Rs. Crore) | MAAT Value (Rs. Crore) | Net Worth (Rs. Crore) |
|--------------------------------------|----------------|-----------------------|-----------------------------|------------------------|-----------------------|
| | 2021-22 | | | | |
| | 2022-23 | | | | |
| | 2023-24 | | | | |

(Attach Separately **Format-9** with this format)

Yours' Faithfully

(Signature and stamp (on each page) of Authorized Signatory of Bidding Company)

Name:-

Date:-

Place:-.....

Signature and stamp (on each page) of Chartered Accountant/Statutory Auditors of Bidding Company

Name:

Date:

Place:

Work Experience
(To be submitted individually against each work / contract)

Bidder's legal name **Date.....**

| Work Experience | | |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Particular | Details | |
| Employer's Name (Letter of Award / Contract issuing authority) | | |
| Employer's Address: Contact number: E-mail: | | |
| LOA No. & Date | | |
| Schedule Date of Completion | | |
| Type of Work (Grid-Connected Rooftop Solar Power Plant/ Grid-Connected Ground Mounted Solar Power Plant/Off-Grid Solar Power Plant etc) | | |
| Capacity of Allotted Work | _____ kWp | |
| Role in Contract (Individual/JV/Consortium) | | |
| If Role in Contract is JV/Consortium, specify Technical Partner & Financial Partner | Name of Technical Partner | Name of Financial Partner |
| | | |
| Actual works executed by the Applicant (Individual bidder or Technical partner of Consortium) | Minimum Aggregate On-Grid Solar Power Plant Capacity (kW) in last 3 Financial years | Minimum Aggregate Off-Grid Solar Power Plant Capacity (kW) in last 3 Financial years |
| | _____ kWp (Duly substantiated with Work Order and Work Completion Certificate from Issuing Authority) | _____ kWp (Duly substantiated with Work Order and Work Completion Certificate from Issuing Authority) |
| % of work executed by the Applicant within the Schedule Date of Completion | _____ % (Duly substantiated with Certificate from Issuing Authority) | |

NOTE:

1. Only the value of contract as executed by the applicant/member in his own name should be indicated. Where a work is undertaken by a group JV/JVA only, that portion of the contract which is undertaken by the concerned applicant/member should be indicated and the remaining done by the other members of the group be excluded. This is to be substantiated with documentary evidence.

2. Separate sheet for each work along with Clients Certificate and Performance Certificate against minimum 1 year in operation after the completion of work to be submitted.

(Signature and stamp (on each page) of Authorized Signatory of Bidding Company)

Name:-.....

Date:-.....

Place:-.....

FORMAT -8

Documents Required to be Submitted by Successful Bidder prior to Execution of Work

1. Application at PM Surya Ghar Portal of MNRE on behalf of consumer & submit the copy of online submitted application form generated from the portal.
2. Copy of Technical Feasibility Report against each consumer generated from the portal.

Financial Data

Applicant's legal name **Date:** / /2025

Each Applicant or member of a Consortium must fill in this form

| Sl. No. | Description | Financial Data for Last Year (Indian Rupees) (Audited Data) | | |
|---------|--------------------------------------------------------------|-------------------------------------------------------------|---------|---------|
| | | 2021-22 | 2022-23 | 2023-24 |
| 1 | Total Assets | | | |
| 2 | Current Assets | | | |
| 3 | Total External Liabilities | | | |
| 4 | Current Liabilities (inclusive of provisions, if any) | | | |
| 5 | Annual Profits Before Taxes | | | |
| 6 | Annual Profits After Taxes | | | |
| 7 | Net Worth [= 1 - 3] | | | |
| 8 | Working Capital [=2 - 4] | | | |
| 9 | Return on Equity | | | |
| 10 | Annual Turnover | | | |

Attach copies of the audited balance sheets, including all related notes, income statements for the last audited financial years, as indicated above, complying with the following conditions

1. Separate Performa shall be used for each member in case of Consortium.
2. All such documents reflect the financial data of the Applicant or member in case of Consortium, and not sister or Parent Company.
3. Historic financial statements shall be audited by Statutory Auditor of the Company under their seal & stamp and shall be strictly based on Audited Annual Financial results of the relevant period(s). No statements for partial periods will be accepted.
4. Historic financial statements must be complete, including all notes to the financial statements.
5. Return on Equity = Net Income / Shareholders Equity
6. Return on Equity = Net Income is for the full fiscal year (before dividends paid to common stock holders but after dividends to preferred stock).
Shareholders equity does not include preferred shares.

The above Annexure shall be duly certified by Chartered Accountant under his signature & stamp.

Signature and stamp (on each page) of Chartered Accountant/Statutory Auditors of Bidding Company

Name:

Date:

Place:

CONSORTIUM AGREEMENT

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution)

THIS Consortium Agreement ("Agreement") executed on this _____ day of _____ 2020 between M/s [*insert name of Lead Member*] _____ a Firm / Company incorporated under the laws of _____ and having its Registered Office at _____ (hereinafter called the "Lead Member", which expression shall include its successors, executors and permitted assigns)

And

M/s _____ a Firm / Company incorporated under the laws of _____ and having its Registered Office at _____ (hereinafter called the "Technical Member", which expression shall include its successors, executors and permitted assigns), which expression shall include its successors, executors and permitted assigns)

WHEREAS, each Member individually shall be referred to as the "Member" and both the Members shall be collectively referred to as the "Members" in this Agreement.

WHEREAS, the Assam Power Distribution Company Limited (hereinafter called APDCL or Employer), Company incorporated under the Company's Act, 2013 has invited response to RfS No. _____ dated ___ against Package No. _____ for **DESIGN, SUPPLY, ERECTION, TESTING AND COMMISSIONING INCLUDING WARRANTY, COMPREHENSIVE OPERATION & MAINTENANCE OF GRID-CONNECTED ROOFTOP SOLAR PLANT OF VARIOUS CAPACITIES IN RESIDENTIAL SECTOR UNDER "UTILITY-LED AGGREGATION (ULA) MODEL THROUGH MODEL II: CONSUMER OWNED ASSETS" OF PM-SURYA GHAR: MUFT BIJLI YOJANA OF MNRE UNDER EPC MODE IN THE STATE OF ASSAM & UNDER OPERATIONAL AREA OF ASSAM POWER DISTRIBUTION COMPANY LIMITED (APDCL).**

WHEREAS the RFS documents stipulates that the Lead Member may enter into a Technical Consortium Agreement with another Company / Corporate entity to fulfill the Technical Eligibility Criteria as stipulated in the RFS document. The Members of the Bidding Consortium will have to submit a legally enforceable Consortium Agreement in a format enclosed with the RFS document

NOW THEREFORE, THIS AGREEMENT WITNESSTH AS UNDER:

In consideration of the above premises and agreements all the Members in this Consortium do hereby mutually agree as follows

1. We, the Members of the Consortium and Members to the Agreement do hereby unequivocally agree that (M/s _____), shall act as the Lead Member as defined in the RFS for self and agent for and on behalf of Technical Member.
2. The Lead Member is hereby authorized by the Technical Member of the Consortium to bind the Consortium and receive instructions for and on their behalf.
3. The Lead Member shall be liable and responsible for ensuring the individual and collective commitment of each of the Members of the Consortium in discharging all of their respective obligations. Each Member further undertakes to be individually liable for the performance of its part of the obligations without in any way limiting the scope of collective liability envisaged in this Agreement
4. Subject to the terms of this Agreement, the Technical member shall be responsible for providing technical knowledge for "Site Survey, Design, Manufacture, Supply, Erection, Testing and Commissioning including Warranty, Operation & Maintenance for 5 years" to the lead member.
5. In case of any breach of any commitment by any of the Consortium Members, the Lead Member shall be liable for the consequences thereof.
6. This Agreement shall be construed and interpreted in accordance with the Laws of India and courts at Guwahati alone shall have the exclusive jurisdiction in all matters relating thereto and arising there under.
7. It is hereby further agreed that in case of being shortlisted, the Members do hereby agree that they shall abide by the terms & conditions of the RFS document.
8. It is further expressly agreed that this Agreement shall be irrevocable and shall form an integral part of the RfS submitted to APDCL and shall remain valid till completion of the job assigned to the Contractor.
9. The Lead Member is authorized and shall be fully responsible for the accuracy and veracity of the representations and information submitted by the Members respectively from time to time in the response to RfS.
10. It is hereby expressly understood between the Members that no Member at any given point of time, may assign or delegate its rights, duties or obligations under this agreement without the explicit permission of APDCL.
11. This Agreement
 - (a) Has been duly executed and delivered on behalf of each Member hereto and constitutes the legal, valid, binding and enforceable obligation of each such Member;

(b) Sets forth the entire understanding of the Members hereto with respect to the subject matter hereof; and

(c) May not be amended or modified except in writing signed by each of the Members and with prior written consent of APDCL.

IN WITNESS WHEREOF, the Members have, through their authorized representatives, executed these present on the Day, Month and Year first mentioned above.

**For M/s ----- [Lead Member]
(Signature, Name & Designation of the person authorized vide Board Resolution)
Dated**

Witnesses:

1) Signature-----

Name:

Address:

2) Signature -----

Name:

Address:

**For M/s ----- [Technical Member]
(Signature, Name & Designation of the person authorized vide Board Resolution
Dated _____)**

Witnesses:

1) Signature-----

Name:

Address:

2) Signature -----

Name:

Address:

FORMAT-11

UNDERTAKING FOR CORRUPT & FRAUDULENT PRACTICE
(To be submitted on the letterhead of Bidding Company)

It is confirmed and declared that we, or any of our associate, have not been engaged in any fraudulent and corrupt practice and that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other items of work related to the award and performance of this contract and no agency commission or any payment which may be construed as an agency commission has been, or will be, paid and that the tender price will not any such amount.

STAMP & SIGNATURE OF AUTHORIZED SIGNATORY

NOTE:

1. In case of Consortium, the undertaking shall be submitted by each member of the Consortium.
2. The undertaking shall be signed by authorized signatory of the bidder or constituent member in case of Consortium.

FORMAT- 12

(UNDERTAKING FOR NON-TERMINATION BY ANY ORGANIZATION)
(To be submitted on the letterhead of Bidding Company)

We do hereby undertake that APDCL/ any Central / State government department / public sector undertaking / other government entity or local body has not banned business with us as on the date of tender submission. Also none of the work has been rescinded / terminated by APDCL / any Central or State Govt. Department / Public Sector Undertaking / Other Govt. entity or local body after award of contract to us during last 3 years (from the last day of the previous month of tender submission) due to our non-performance.

STAMP & SIGNATURE OF AUTHORISED SIGNATORY

Note:

1. In case of Consortium, the undertaking shall be submitted by each member of the JV/Consortium.
2. The undertaking shall be signed by authorized signatory of the bidder. In case of Consortium by the authorized signatory of the constituent members counter signed by the authorized signatory of bidder

FORMAT- 13

(UNDERTAKING FOR NOT BEING PENALISED IN A CONTRACT)
(To be submitted on the letterhead of Bidding Company)

We do hereby undertake that we have not paid liquidated damages of 10% (or more) of the contract value in a contract due to delay or penalty of 10% (or more) of the contract value due to any other reason during last five years.

STAMP & SIGNATURE OF AUTHORISED SIGNATORY

Note:

1. In case of Consortium, the undertaking shall be submitted by each member of the Consortium.
2. The undertaking shall be signed by authorized signatory of the bidder. In case of Consortium by the authorized signatory of the constituent members counter signed by the authorized signatory of bidder

FORMAT- 14

(UNDERTAKING FOR FINANCIAL STABILITY)
(To be submitted on the letterhead of Bidding Company)

We do hereby undertake that we have not suffered bankruptcy/insolvency during the last 5 years.

STAMP & SIGNATURE OF AUTHORISED SIGNATORY

Note:

1. In case of Consortium, the undertaking shall be submitted by each member of the Consortium.
2. The undertaking shall be signed by authorized signatory of the bidder. In case of Consortium by the authorized signatory of the constituent members counter signed by the authorized signatory of bidder

FORMAT- 15

UNDERTAKING FOR DOWNLOADED TENDER DOCUMENT

We here by confirm that, we have downloaded / read the complete set of tender documents /addendum/clarifications along with the set of enclosures hosted on <https://www.assamtenders.gov.in>. We confirm that we have gone through the bid documents, addendums and clarifications for this work placed upto the date of opening of bids on / <https://www.assamtenders.gov.in>. We confirm our unconditional acceptance for the same and have considered for these in the submission of our financial bid.

STAMP & SIGNATURE OF AUTHORIZED SIGNATORY

TECHNICAL DETAILS OF THE PROPOSED COMPONENTS
(To be submitted on the letterhead of Bidding Company)

| Sl. No | Item | Make Proposed by Bidder | Technical Compliance as per RfS | Test report submitted by the Bidder (Yes/No) |
|---------------|--------------------|--------------------------------|------------------------------------------------------------|-----------------------------------------------------|
| 1 | Solar PV Module | | IEC 61215 / IS 14286 | Yes/No |
| | | | IEC 61730 Part -1 | Yes/No |
| | | | IEC 61730 Part -2 | Yes/No |
| 2 | Mounting Structure | | Hot dip galvanized MS (IS 2062:1992 & IS 4759) | Yes /No |
| 3 | Junction Box | | IP 65 and IEC 62208 | Yes/No |
| 4 | DCDB | | IP 65 | Yes/No |
| 6 | ACDB | | IEC 60947, Part I, II and III/ IS 60947 Part I, II and III | Yes/No |
| | | | IP 65 and IP 54 | Yes/No |
| 7 | PCU /Inverter | | IEC 61683 / IS 61683 and IEC 60068 -2 (1,2,14,30) | Yes/No |
| 8 | Cable | | IEC 60227/ IS 694, IEC 60502 / IS 554 Std | Yes/No |
| 9 | Battery | | As per latest BIS / IEC / IS Standard | Yes / No |
| 10 | Civil Works | | Shall conform to relevant IS | Yes/No |

STAMP & SIGNATURE OF AUTHORIZED SIGNATORY

SECTION-9

ANNEXURES

List of Banks

| 1. SCHEDULED COMMERCIAL BANKS | 2. OTHER PUBLIC SECTOR BANKS |
|--------------------------------------|----------------------------------------------------|
| SBI AND ASSOCIATES | 1. IDBI Bank Ltd. |
| 1. State Bank of India | 3. FOREIGN BANKS |
| 2. State Bank of Bikaner & Jaipur | 1. Bank of America NA |
| 3. State Bank of Hyderabad | 2. Bank of Tokyo Mitsubishi UFJ Ltd. |
| 4. State Bank of Indore | 3. BNP Paribas |
| 5. State Bank of Mysore | 4. Calyon Bank |
| 6. State Bank of Patiala | 5. Citi Bank N.A. |
| 7. State Bank of Travancore | 6. Deutsche Bank A.G |
| NATIONALISED BANKS | 7. The Hong Kong and Shanghai Banking Corpn. Ltd. |
| 1. Allahabad Bank | 8. Standard Chartered Bank |
| 2. Andhra Bank | 9. SocieteGenerale |
| 3. Bank of India | 10. Barclays Bank |
| 4. Bank of Maharashtra | 11. Royal Bank of Scotland |
| 5. Canara Bank | 12. Bank of Nova Scotia |
| 6. Central Bank of India | 13. Development Bank of Singapore (DBS, Bank Ltd.) |
| 7. Corporation Bank | 14. Credit Agricole Corporate and Investment Bank |
| 8. Dena Bank | 4. SCHEDULED PRIVATE BANKS |
| 9. Indian Bank | 1. Federal Bank Ltd. |
| 10. Indian Overseas Bank | 2. ING Vysya Bank Ltd. |
| 11. Oriental Bank of Commerce | 3. Axis Bank Ltd. |
| 12. Punjab National Bank | 4. ICICI Bank Ltd. |

| | |
|--------------------------|------------------------|
| 13. Punjab & Sind Bank | 5. HDFC Bank Ltd. |
| 14. Syndicate Bank | 6. Yes Bank Ltd. |
| 15. Union Bank of India | 7. Kotak Mahindra Bank |
| 16. United Bank of India | 8. IndusInd Bank Ltd |
| 17. UCO Bank | 9. KarurVysya Bank |
| 18. Vijaya Bank | 19. Bank of Baroda |

Operation and Maintenance Guidelines of Grid Connected PV Plants

1. For the optimal operation of a PV plant, maintenance must be carried out on a regular basis.
2. All the components should be kept clean. It should be ensured that all the components are fastened well at their due place.
3. Maintenance guidelines for various components viz. solar panels, inverter, wiring etc. are discussed below:

SOLAR PANELS

Although the cleaning frequency for the panels will vary from site to site depending on soiling, it is recommended that

- i. The panels are cleaned at least once every fifteen days.
- ii. Any bird droppings or spots should be cleaned immediately.
- iii. Use water and a soft sponge or cloth for cleaning.
- iv. Do not use detergent or any abrasive material for panel cleaning.
- v. Iso-propyl alcohol may be used to remove oil or grease stains.
- vi. Do not spray water on the panel if the panel glass is cracked or the back side is perforated.
- vii. Wipe water from module as soon as possible.
- viii. Use proper safety belts while cleaning modules at inclined roofs etc.
- ix. The modules should not be cleaned when they are excessively hot. Early morning is particularly good time for module cleaning.
- x. Check if there are any shade problems due to vegetation or new building. If there are, make arrangements for removing the vegetation or moving the panels to a shade-free place.
- xi. Ensure that the module terminal connections are not exposed while cleaning; this poses a risk of electric shock.
- xii. Never use panels for any unintended use, e. g. drying clothes, chips etc.
- xiii. Ensure that monkeys or other animals do not damage the panels.

CABLES AND CONNECTION BOXES

- i. Check the connections for corrosion and tightness.
- ii. Check the connection box to make sure that the wires are tight, and the water seals are not damaged.
- iii. There should be no vermin inside the box.
- iv. Check the cable insulating sheath for cracks, breaks or burns. If the insulation is damaged, replace the wire
- v. If the wire is outside the building, use wire with weather-resistant insulation.
- vi. Make sure that the wire is clamped properly and that it should not rub against any sharp edges or corners.
- vii. If some wire needs to be changed, make sure it is of proper rating and type.

INVERTER

- i. The inverter should be installed in a clean, dry, and ventilated area which is separated from, and not directly above, the battery bank.
- ii. Remove any excess dust in heat sinks and ventilations. This should only be done with a dry cloth or brush.
- iii. Check that vermin have not infested the inverter. Typical signs of this include
- iv. Spider webs on ventilation grills or wasps' nests in heat sinks.
- v. Check functionality, e.g. automatic disconnection upon loss of grid power supply, at least once a month.
- vi. Verify the state of DC/AC surge arrestors, cable connections, and circuit breakers.

SHUTTING DOWN THE SYSTEM

- i. Disconnect system from all power sources in accordance with instructions for all other components used in the system.
- ii. Completely cover system modules with an opaque material to prevent electricity from being

- generated while disconnecting conductors.
- iii. To the extent possible, system shutdown will not be done during daytime or peak generation.

INSPECTION AND MAINTENANCE SCHEDULE:

| Component | Activity | Description | Interval | By |
|------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------|
| PV Module | Cleaning | Clean any bird droppings/ dark spots on module | Immediately | Beneficiary |
| | Cleaning | Clean PV modules with plain water or mild dishwashing detergent. Do not use brushes, any types of solvents, abrasives, or harsh detergents. | Fortnightly or as per the site conditions | Beneficiary |
| | Inspection (for plants > 100 kWp) | Use infrared camera to inspect for hot spots; bypass diode failure | Annual | Technician |

| Component | Activity | Description | Interval | By |
|------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|
| PV Array | Inspection | Check the PV modules and rack for any damage. Note down location and serial number of damaged modules. | Annual | User/Technician |
| | Inspection | Determine if any new objects, such as vegetation growth, are causing shading of the, array and move them if possible. | Annual | User/Technician |
| | Vermin Removal | Remove bird nests or Vermin from array and rack area. | Annual | User/Technician |
| Junction Boxes | Inspection | Inspect electrical boxes for corrosion or intrusion of water or insects. Seal boxes if required. Check position of switches and breakers. Check operation of all protection devices. | Annual | Electrician |

| | | | | |
|----------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------|
| Wiring | Inspection | Inspect cabling for signs of cracks, defects, loose connections, overheating, arcing, short or open circuits, and ground faults. | Annual | Electrician |
| Inverter | Inspection | Observe | Quarterly | Electrician |
| Component | Activity | Description | Interval | By |
| | | Instantaneous operational indicators on the faceplate of the inverter to ensure that the amount of power being generated is typical of the conditions. Inspect Inverter housing or shelter for physical maintenance, if required. | | |
| Inverter | Service | Clean or replace any air filters. | As needed | Electrician |
| Instruments | Validation | Spot-check monitoring instruments (pyranometer etc.) with standard instruments to ensure that they are operational and within specifications. | Annual | PV Specialist |
| Transformer | Inspection | Inspect transformer oil level, temperature gauges, breather, silica gel, meter, connections etc. | Annual | Electrician |
| Tracker (if present) | Inspection | Inspect gears, gear boxes, bearings as required. | Annual | Technician |
| | Service | Lubricate tracker mounting bearings, gearbox as required. | Bi-annual | Technician |
| Plant | Monitoring | Daily Operation and Performance Monitoring | Daily | Beneficiary |

| | | | | |
|-----------------------------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------|
| Inverter | Inspection | Observe instantaneous operational indicators on the faceplate of the inverter to ensure that the amount of power being generated is typical of the conditions. Inspect Inverter housing or shelter for physical maintenance, if required. | Quarterly | Electrician |
| Inverter | Service | Clean or replace any air filters. | As needed | Electrician |
| Instruments | Validation | Spot – check monitoring instruments(pyranometer etc.) with standard instruments to ensure that they are operational and within specifications. | Annual | PV Specialist |
| Transformer | Inspection | Inspect transformer oil level, temperature gauges, breather, silica gel, meter, connections etc. | Annual | Electrician |
| Tracker (if present) | Inspection | Inspect gears, gear boxes, bearings as required. | Annual | Technician |
| | Service | Lubricate tracker mounting bearings, gearbox as required. | Bi-annual | Technician |
| Plant | Monitoring | Daily Operation and Performance Monitoring | Daily | Beneficiary |
| Spare Parts | Management | Manage inventory of spare parts. | As needed | Site in charge |
| Logbook | Documentation | Document all O&M activities in a workbook available to all service personnel | Continuous | Site in charge |

- i. Periodic cleaning of solar modules, preferably once every fortnight. As this task has to be done by the beneficiary, the vendors shall apprise the beneficiary on the importance and proper technique for cleaning.
- ii. O&M of Solar Power Plant shall be compliant with grid requirements to achieve committed energy generation.
- iii. Periodic checks of the Modules, PCUs and BoS shall be carried out as a part of routine preventive and breakdown maintenance.

- iv. Immediate replacement of defective Modules, Invertors/PCUs and other equipment as and when required.
- v. Supply of all spares, consumables and fixtures as required. Such stock shall be maintained for all associated equipment and materials as per manufacturer/ supplier's recommendations.
- vi. All the equipment testing instrument required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by the Bidder. The testing equipment must be calibrated once every 2 years from NABL accredited labs and the certificate of calibration must be kept for reference as required.
- vii. If negligence/ mal operation on part of the Bidder's operator results in failure of equipment, such equipment should be repaired/ replaced by the Bidder free of cost.
- viii. If any jobs covered in O&M Scope as per RFS are not carried out by the contractor/ Bidders during the O&M period, the Engineer-In-Charge shall take appropriate action as deemed fit.
- ix. APDCL reserves the right to make surprise checks/ inspection visits at its own or through authorized representative to verify the O&M activities being carried out by the Bidder. Failure to adhere to above guidelines will result in penal action including debarring from participation in next tender

Quality Certification, Standards and Testing for Grid-connected Rooftop Solar PV Systems/Power Plants

Quality certification and standards for grid-connected rooftop solar PV systems are essential for the successful mass-scale implementation of this technology. It is also imperative to put in place an efficient and rigorous monitoring mechanism, adherence to these standards. Hence, all components of grid-connected rooftop solar PV system/ plant must conform to the relevant standards and certifications given below:

| Solar PV Modules/Panels | |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IEC 61215/ IS14286 | Design Qualification and Type Approval for Crystalline Silicon Terrestrial Photovoltaic (PV) Modules |
| IEC 61701 | Salt Mist Corrosion Testing of Photovoltaic (PV) Modules |
| IEC 61853- Part 1/ IS 16170: Part 1 | Photovoltaic (PV) module performance testing and energy rating: Irradiance and temperature performance measurements, and power rating |
| IEC 62716 | Photovoltaic (PV) Modules – Ammonia (NH ₃) Corrosion Testing (As per the site condition like dairies, toilets) |
| IEC 61730-1,2 | Photovoltaic (PV) Module Safety Qualification – Part 1: Requirements for Construction, Part 2: Requirements for Testing |
| IEC 62804 | Photovoltaic (PV) modules - Test methods for the detection of potential-induced degradation. IEC TS 62804-1: Part 1: Crystalline silicon (mandatory for applications where the system voltage is > 600 VDC and advisory for installations where the system voltage is < 600 VDC) |
| IEC 62759-1 | Photovoltaic (PV) modules – Transportation testing, Part 1: Transportation and shipping of module package units |
| Solar PV Inverters | |
| IEC 62109-1, IEC 62109-2 | 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 for outdoor mounting, IP 54 for indoor mounting) |
| IEC/IS 61683 (as applicable) | Photovoltaic Systems – Power conditioners: Procedure for Measuring Efficiency (10%, 25%, 50%, 75% & 90-100% Loading Conditions) |

| | |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BS EN 50530 (as applicable) | Overall efficiency of grid-connected photovoltaic inverters: This European Standard provides a procedure for the measurement of the accuracy of the maximum power point tracking (MPPT) of inverters, which are used in grid-connected photovoltaic systems. In that case the inverter energizes a low voltage grid of stable AC voltage and constant frequency. Both the static and dynamic MPPT efficiency is considered. |
| IEC 62116/ UL 1741/ IEEE 1547 (as applicable) | Utility-interconnected Photovoltaic Inverters - Test Procedure of Islanding Prevention Measures |
| IEC 60255-27 | Measuring relays and protection equipment – Part 27: Product safety requirements |
| IEC 60068-2 (1, 2, 14 & 30) | Environmental Testing of PV System – Power Conditioners and Inverters a) IEC 60068-2-1: Environmental testing - Part 2-1: Tests - Test A: Cold b) IEC 60068-2-2: Environmental testing - Part 2-2: Tests - Test B: Dry heat c) IEC 60068-2-14: Environmental testing - Part 2-14: Tests - Test N: Change of temperature e) IEC 60068-2-30: Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle) |
| IEC 61000 – 2,3,5 (as applicable) | Electromagnetic Interference (EMI) and Electromagnetic Compatibility (EMC) testing of PV Inverters |
| Fuse | |
| IS/IEC 60947 (Part 1, 2 & 3), EN 50521 | General safety requirements for connectors, switches, circuit breakers (AC/DC): a) Low-voltage Switchgear and Control-gear, Part 1: General rules b) Low-Voltage Switchgear and Control-gear, Part 2: Circuit Breakers c) Low-voltage switchgear and Control-gear, Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units d) EN 50521: Connectors for photovoltaic systems – Safety requirements and tests |
| IEC 60269-6 | Low-voltage fuses - Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems |
| Surge Arrestors | |
| IEC 62305-4 | Lightening Protection Standard |
| IEC 60364-5-53/ IS 15086-5 (SPD) | Electrical installations of buildings - Part 5-53: Selection and erection of electrical equipment - Isolation, switching and control |
| IEC 61643-11:2011 | 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 | General test and measuring method for PVC (Polyvinyl chloride) insulated cables (for working voltages up to and including 1100 V, and UV resistant for outdoor installation) |
| BS EN 50618 | Electric cables for photovoltaic systems (BT(DE/NOT)258), mainly for DC Cables |
| Earthing /Lightning | |
| IEC 62561 Series (Chemical earthing) | IEC 62561-1: Lightning protection system components (LPSC) - Part 1: Requirements for connection components IEC 62561-2: Lightning protection system components (LPSC) - Part 2: Requirements for conductors and earth electrodes IEC 62561-7: Lightning protection system components (LPSC) - Part 7: Requirements for earthing enhancing compounds |
| Junction Boxes | |
| IEC 60529 | Junction boxes and solar panel terminal boxes shall be of the thermo-plastic type with IP 65 protection for outdoor use, and IP 54 protection for indoor use |
| Energy Meter | |
| IS 16444 or as specified by the DISCOMs | A.C. Static direct connected watt-hour Smart Meter Class 1 and 2 — Specification (with Import & Export/Net energy measurements) |
| Solar PV Roof Mounting Structure | |
| IS 2062/IS 4759 | Material for the structure mounting |

Note: Equivalent standards may be used for different system components of the plants.

PROJECT COMPLETION REPORT/COMMISSIONING CERTIFICATE FOR GRID CONNECTED ROOFTOP

"Upon successful completion of the installation and updating of plant data, a commissioning certificate will be automatically generated within the system. This certificate must then be signed by the concerned APDCL official. Following the signature, the certificate should be submitted for further processing."

DECLARATION of AUTHORIZATION

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

I/ We (name and address of the registered office of the Bidding Company as applicable) do hereby constitute, appoint and authorize Mr./Ms. (name & residential address) who is presently employed with us and holding the position of to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for implementation of grid connected Roof top solar projects in response to the RFS No dated issued by APDCL, including signing and submission of the Bid and all other documents related to the Bid, including but not limited to undertakings, letters, certificates, acceptances, clarifications, guarantees or any other document which APDCL may require us to submit.

The aforesaid undertaking is further authorized for making representations to APDCL and providing information / responses to APDCL representing us in all matters before APDCL and generally dealing with APDCL in all matters in connection with Bid till the completion of the bidding process as per the terms of the above mentioned RFS.

We hereby agree to ratify all acts, deeds and things done by our said undertaking pursuant to this undertaking and that all acts, deeds and things done by our aforesaid undertaking shall be binding on us and shall always be deemed to have been done by us.

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

Signed by (Insert the name of the executants' company) Name: Company:

Phone :
E-mail: Address :
Sincerely

(On non-judicial stamp paper of appropriate value)

INDEMNITY BOND

This Indemnity bond is made this _____ day _____ by M/s _____ having its registered office at _____ (herein after called as vendor which expression shall include its successors and permitted assigns) in favour of Assam Power Distribution Company Limited, Guwahati-01, (hereinafter called APDCL which expression shall include its successor and assigns).

Whereas APDCL has sanctioned to the vendor following Solar projects vide its sanctions letters in terms of which APDCL is required to release CFA to the vendor for erection, operation and maintenance of Solar Power Plant:

| S. No. | Name & Address of Consumers | CA No. | Capacity of Plant |
|--------|-----------------------------|--------|-------------------|
| | | | |

And whereas by virtue of clause No..... of the said contract, the vendor is required to establish an Insurance Cover for third party liability, however same has not been established and therefore, executing an Indemnity bond in favour of APDCL for the purpose of performance of the contract (hereinafter called the CFA)

Now, therefore, this indemnity bond witnesses this as follows:

1. The contractor undertakes to keep APDCL harmless against any past, future unforeseen loss or damage due to any event/act occurred up to the period of commissioning that may be caused due to non-establishment of Insurance Cover under the contract against which the CFA has been released by APDCL.
2. This indemnity bond is irrevocable. The vendor to execute the project in part / full as per the terms and conditions of the contract, shall be deemed to be a breach of contract and the vendor shall forthwith return the CFA with interest @ 18% upon demand from APDCL without demur, reservation or protest and without reference to any arbitrator / tribunal or any other authority whatsoever.
3. Now, the condition of this bond is that if the contractor shall duly and punctually comply with the terms and conditions of this bond to the satisfaction of APDCL, then the above bond shall be void, but otherwise, it shall remain in full force and virtue.

In witness where of the vendor has here-unto set its hand through its authorized representative under the common seal of the company, the day, month and year first above mentioned.

Witness I

Authorized Representative

Signature

Name

Address

For and on behalf of M/s

Signature

Name

Address

Witness II

Authorized Representative

Signature

Name

Address

(Bond should be duly notarized)

Note: *Indemnity Bonds are to be executed by the authorized persons and (i) In case of contracting Company under common seal of the Company or (ii) having the power of attorney issued under common seal of the company with authority to execute Indemnity Bonds, (iii) In case, (ii) the original Power of Attorney if it is specifically for our contract or a Photostat copy of the Power of Attorney if it is a General Power of Attorney and such documents should be attached to Indemnity Bond.

Reference Bidders' Declaration Format associated with Implementation of ALMM Order

(On the letter head of the bidder)

Declaration

To whom so ever this may concern

Reference: (RFP no. and description)

1. We hereby declare that we are fully aware of the binding provisions of the ALMM order and the Lists there under, while quoting the rate in the tender no. [*tender number*] floated by APDCL
2. We understand that the List – I (Solar PV Modules) of ALMM Order, Annexure – I of the O M, issued by MNRE on 10th March 2021 will be updated by MNRE from time to time. We also understand that the Modules to be procured for this project, shall be from the List – I of the ALMM order applicable on the date of invoicing of such modules.
3. We further understand and accept that we shall be liable for penal action, including but not limited to blacklisting and invocation of Performance Bank Guarantee, if we are found not complying with the provisions of ALMM Order, including those mentioned above.

Name:

Designation:

Organization:

Date:

(Signature and Stamp)

Timeline for Installation and Metering Connection of Grid Connected Solar Rooftop PV System under PM Surya Ghar: Muft Bijli Yojana, Assam.

| ACTIVITY | RESPONSIBILITY | TIMELINE (Max Working Days) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------|
| Register at National Portal through the link https://pmsuryaghar.gov.in | Applicant Consumer | Zero Date |
| After registration, login into the account and click submit application | Applicant Consumer | Zero Date |
| Site Verification/ Technical feasibility & approval of application | APDCL | 3 |
| Sign an agreement with the selected registered vendor and Installation of Rooftop Solar System | Registered Vendor & Consumer | As notified by MNRE |
| After installation of the Plant, submit installation details in the National Portal, upload a photo of the applicant with the rooftop solar plant along with other necessary documents as per portal requirement and apply for net meter bi-directional meter. | Registered Vendor & Consumer | 3 |
| Inspect the installed system | APDCL | 5 |
| Upon successful inspection, EXIM-meter would be installed or update export import features on existing Smart Meter. | APDCL | 7 |
| Approve the installation details on the portal and generate an online commissioning certificate. | APDCL | 2 |
| Submit the bank account details and upload a cancelled cheque through the portal. | Consumer | 1 |
| Release of Central Govt. subsidy CFA directly into the bank account of the applicant on submission of CFA/subsidy claim. | As notified by MNRE, Govt. of India. | As notified by MNRE, Govt. of India. |
| Release of State Govt. subsidy directly into the bank account of the applicant on submission of subsidy claim. | As notified by Govt. of Assam. | As notified by Govt. of Assam. |

Format for Bid Security Declaration

(To be stamped on non – judicial stamp paper as per the stamp act of the state where the document is made)

Ref: _____

Date: _____

Subject: Declaration of bid security requirement.

We, _____(insert name of the Bidder) hereby provide this undertaking to APDCL, in respect to our response to RfS vide RfS No. _____dated_____. We undertake that we will abide by the provisions of the RfS for the activities pertaining to submission of response to RfS, during the bid validity period. We undertake not to withdraw or modify our bid during the bid validity period, in line with provisions of the RfS. In case we withdraw or modify our response to the RfS during the bid validity period, or violate other provisions of the RfS which make the bid non-responsive, we, _____ (insert name of the bidder) including our Parent, Ultimate Parent, and our Affiliates shall be suspended/debarred from participating in upcoming tenders issued by any department of Assam Government for a period of 5 years from the date of default as notified by APDCL.

(Name and Signature of the Authorized Signatory

**Undertaking/Self- Declaration for domestic content requirement fulfilment
(On a plain Paper)**

This is to certify that M/S.....[Company Name] has installed
.....KW [Capacity] Grid Connected Rooftop Solar PV Power Plant
for..... [Consumer Name] at
..... [Address] under sanction
number.....dated.....[sanction date] issued
by.....APDCL.

It is hereby undertaken that the PV modules installed for the above-mentioned project are domestically
manufactured using domestic manufactured solar cells. The details of installed PV Modules are follows:

1. PV Module Capacity:
2. Number of PV Modules:
3. Sr No of PV Module
4. PV Module Make:
5. Purchase Order Number:
6. Purchase Order Date:
7. Cell manufacturer's name
8. Cell GST invoice No

The above undertaking is based on the certificate issued by PV Module manufacturer/supplier while supplying
the above-mentioned order.

I,on behalf of M/S.....[Company Name] further
declare that the information given above is true and correct and nothing has been concealed therein. If anything
is found incorrect at any stage then the due Central Financial Assistance (CFA) that I have not charged from the
consumer can be withheld and appropriate criminal action may be taken against me and my company, as per
law, for wrong declaration. Supporting documents and proof of the above information will be provided as and
when requested by MNRE/APDCL.

(Signature With official Seal)

For M/S.....
Name.....
Designation.....
Phone.....
Email.....