

EPC Contractor/ RTS Vendor Agreement for Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing, Commissioning, and mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOMs under PM-Surya Ghar: Muft Bijli Yojana

Tender Reference No.: NREDCAP/PMSG/SC&ST/7A/2025

EPC CONTRACTOR/ RTS VENDOR AGREEMENT

for

Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing & Commissioning, and Mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISOM under PM-Surya Ghar: Muft Bijli Yojana

Bipartite Agreement

Between

[Insert Name of EPC Contractor/ RTS Vendor]

And

APCPDCL/APSPDCL/APEPDCL

BIPARTITE AGREEMENT

This Engineering, Procurement and Construction (EPC) Contractor/ Rooftop Solar (RTS) Vendor Agreement (hereinafter referred to as the “Agreement”) is entered into on this (*Insert date here*), at(*Insert location here*)

BETWEEN

M/s (*Insert name of EPC Contractor/ RTS Vendor here*), a company incorporated under the Companies Act, 1956/2013 and having its registered office at (*Insert registered office address here*) (hereinafter referred to as the “EPC Contractor/ RTS Vendor”, which expression shall where the context so admits be deemed to include its executors, administrators, representatives and permitted assigns) of the ONE PART;

AND

APCPDCL/APSPDCL/APEPDCL, (hereinafter referred to as the “Utility”, which expression shall, unless repugnant to the context or meaning thereof, include its successors and assignees) of the OTHER PART;

EPC Contractor/ RTS Vendor Agreement for Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing, Commissioning, and mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOMs under PM-Surya Ghar: Muft Bijli Yojana

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

The expressions “EPC Contractor/ RTS Vendor” and “Utility” wherever the context so permits or requires shall collectively be referred to as “Parties” and individually as the “Party”.

WHEREAS,

- A. EPC Contractor/ RTS Vendor is a fully integrated solar solutions provider that offers comprehensive solutions to governments, corporate houses, villages, industries and other consumers.
- B. EPC Contractor/ RTS Vendor has been notified as the Successful Bidder by New and Renewable Energy Development Corporation of Andhra Pradesh Limited (NREDCAP) vide its Letter of Award (LOA) no. (Insert LOA no. here) dated(Insert LOA date here) for Design, Engineering, Supply, Installation, Testing & Commissioning and O&M for 5 years of 233.33 MWp Grid Connected Rooftop Solar Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOM under PM-Surya Ghar: Muft Bijli Yojana and has been awarded[XXX] MWp capacity for the following divisions/ clusters at APDISCOM:

S.No.	Project Number	Division/ Cluster	Rooftop Solar Capacity (MWp)	No of SC and ST consumers	Minimum CUF (%)

- C. EPC Contractor/ RTS Vendor and Utility enter into this Agreement for the engineering, procurement, construction of the rooftop solar plants.

NOW, this Agreement witnesseth as follows:

1. DEFINITIONS

“**Act or Electricity Act, 2003**” shall mean the Electricity Act, 2003 and include any modifications, amendments and substitution from time to time.

“**Agreement**” or “**Contract Agreement**” or “**EPC Contract/ RTS Vendor Agreement**” shall mean the agreement signed between APDISCOMs and the Successful Bidder to undertake all works as mentioned in this RfS.

“**DISCOM/APDISCOM**” shall mean the public sector power distribution utilities namely Andhra Pradesh Central Power Distribution Corporation Limited (APCPDCL) / Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL) / Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL),

“**APERC**” shall mean Andhra Pradesh Electricity Regulatory Commission, a governing body incorporated under the Electricity Regulatory Commission Act, 1998 and existing under the Electricity Act, 2003.

EPC Contractor/ RTS Vendor Agreement for Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing, Commissioning, and mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOMs under PM-Surya Ghar: Muft Bijli Yojana

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

“Authorized Representative” shall mean New and Renewable Energy Development Corporation of Andhra Pradesh Limited (NREDCAP), authorized as Nodal Agency/ Bid Coordinator representing APDISCOMs.

“Bid Capacity” shall mean cumulative Rooftop Solar capacity of Division(s)/ Cluster(s) that a Bidder is bidding for.

“BIS” shall mean specifications of Bureau of Indian Standards (BIS).

“Capacity Utilization Factor (CUF)” means the ratio of the actual output from a solar plant over the year (kWh) to the maximum possible output from it for a year (kWh) under ideal conditions.

“CAPEX” means the model through which the Rooftop Solar Plants shall be installed under EPC mode.

“CEA” shall mean Central Electricity Authority.

“Certificates” or **“completion certificates”** shall be the certificates pertaining to the completion of works envisaged in the RfS, as per clause 7.17 of the document, and duly certified by the relevant authorities of DISCOM.

“Central Financial Assistance” or **“CFA”** shall be the monetary assistance provided by MNRE towards the installation of Rooftop Solar Plant to the domestic consumer under the PM-Surya Ghar: Muft Bijli Yojana.

“Commercial Operation Date (COD)” shall mean the date on which the Commissioning Certificate is issued upon the successful commissioning of all the Grid connected rooftop solar systems and after demonstrating Performance Ratio as per this Tender document.

“Company” shall mean a body incorporated in India under the Companies Act,1956 or Companies Act, 2013 including any amendment thereto.

“Current FY” shall mean the Financial Year FY 2025-26 whenever the RfS is being floated.

“EPC” shall mean the Engineering, Procurement, and Construction activities pertaining to installation, operation and maintenance of the Rooftop Solar Plants as per the terms and conditions of the RFS Document.

“Financial Year” shall mean a year beginning on 1st April and ending on 31st March in the succeeding year.

“Firm” shall mean a body incorporated as a Proprietorship firm in India as per the prevailing laws or as a Partnership firm in India as per the Indian Partnerships Act,1932 (including any amendments thereto) or as a Limited Liability Partnership firm in India as per the Limited Liability Partnerships Act,2008 (including any amendments thereto).

“GoAP” shall mean the Government of Andhra Pradesh.

EPC Contractor/ RTS Vendor Agreement for Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing, Commissioning, and mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOMs under PM-Surya Ghar: Muft Bijli Yojana

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

“GoI” shall mean the Government of India.

“Hindrance Register” shall mean a register/ record maintained by the EPC Contractor/ RTS Vendor where reasons along with documentary evidence for delays/ faults on account of the consumer(s) may be recorded at the time of hindrance and updated from time to time, to be duly certified by the authorized representative from APDISCOM.

“IEC” shall mean specifications of International Electro-Technical Commission.

“Insurance Surety Bond” shall mean the irrevocable surety bond from Insurer as per the guidelines issued by the Insurance Regulatory and Development Authority of India (IRDAI).

“Interconnection Point” shall mean the point at which energy generated by the Rooftop Solar PV plant is supplied to respective APDISCOMs grid (at the Gross/Smart metering point).

“Invoice” or **“invoice”** or **“invoices”** shall mean the invoice copies raised and submitted by the EPC Contractor/RTS Vendor to DISCOM, as per clause 7.17 of the RfS, towards payments with respect to installation and O&M of the RTS at the respective divisions/clusters.

“IS” shall mean the Indian Standard Specifications of the Bureau of Indian Standards.

“Joint Venture” or **“JV”** shall mean the joint arrangement among **not more than three** Firms/Companies, as per the Companies Act 2013, whereby **all the** parties have rights to net assets of the arrangement and share the risks associated with the development of those assets.

“JV Partners” shall mean parties in the Joint Venture.

“kWh” shall mean Kilo Watt Hour

“kWp” shall mean Kilo Watt Peak.

“Letter of Award” or **“LOA”** shall mean the letter of formal acceptance signed and issued by the NREDCAP intimating the award of work.

“Mandatory O&M period” or **“Warranty”** or **“O&M period”** or **“O&M”** shall mean the activities carried out in operating and maintaining the Rooftop Solar Plants from the Commercial Operation Date (COD) with the activities carried out but not limited to supply and storage of all spare parts, consumables, repairs/ replacement of any defective equipment, etc., that have to be performed by the EPC Contractor/ RTS Vendor at free of cost for the first 5 years from the Commercial Operation Date (COD) as per PM-Surya Ghar Scheme guidelines.

“Minimum Guaranteed Generation” or **“Annual Generation Required”** shall mean the annual generation required from the Rooftop Solar Plant by the EPC Contractor/ RTS vendor for that particular Division/ Cluster.

“MNRE” shall mean the Ministry of New and Renewable Energy, Government of India.

EPC Contractor/ RTS Vendor Agreement for Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing, Commissioning, and mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOMs under PM-Surya Ghar: Muft Bijli Yojana

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

“NREDCAP” shall mean New & Renewable Energy Development Corporation of Andhra Pradesh Limited.

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

“Performance Security” or **“PS”** shall mean the performance security amount to be remitted as Bank Guarantee/ Insurance Surety Bond by the Successful Bidder and it shall be an amount equal to 5% of the Total Awarded Contract Value as per clause 3.2 of this RfS.

“Plant Capacity” shall mean the rated generation capacity of Rooftop Solar Plant in kWp at Plant Location.

“Plant Location” shall mean the rooftops of residential buildings of identified SC and ST consumers.

“Project” shall mean and include all Rooftop Solar systems to be installed by EPC Contractor /RTS Vendor on terrace/rooftops of identified SC-ST residential households within Division/ Cluster in APDISCOM.

“Project Period” or **“Project Tenure”** shall mean the overall period of EPC and maintenance activities which is 5 years from COD.

“RfS / RFS” shall mean Request for Selection (RfS)/ Bid document/ Tender document.

“Rooftop Solar Plant” or **“RTS”** shall mean the Rooftop Solar Photovoltaic (PV) power plant or system along with all its key components installed on the terraces of the individual shortlisted residential households that utilize sunlight for direct conversion of solar energy into electricity (to be consumed by the household or injected into the grid) through Photovoltaic technology.

“SCOD or Scheduled Commercial Operation Date” shall mean the date that falls upon the expiry of a period of 6 (six) months from the date of Issuance of LOA or a date as extended in accordance with the common agreed terms. SCOD can be COD.

“SC and ST Consumer” shall mean the Scheduled Caste (SC) and Scheduled Tribe (ST) domestic consumer under the Free Power Subsidy Scheme of GoAP, as identified by DISCOM, who has proper roof space and has provided consent towards installation of RTS plant.

“Successful Bidder(s)/ EPC Contractor/RTS Vendor” shall mean the Bidder(s), including individual bidders or JV, selected by NREDCAP pursuant to this RfS for Setting up of Grid Connected Rooftop Solar systems on terrace/rooftops of identified residential consumer houses within the particular Division/ Cluster of the respective APDISCOMs as per the terms of the RfS Documents, and to whom Letter of Award has been issued.

“Tender” or **“Tender documents”** or **“Bid document”** shall mean the same as RfS.

“Tender Inviting Authority” shall mean the same as Authorized Representative, i.e., **NREDCAP**.

EPC Contractor/ RTS Vendor Agreement for Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing, Commissioning, and mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOMs under PM-Surya Ghar: Muft Bijli Yojana

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

“Test Certificates” shall mean valid test certificates issued by respective Distribution Utilities/State Nodal Agencies of Rooftop Solar and consumers that indicate successful operation of Rooftop Solar Plant installed by the Bidder.

“Technical specifications” shall mean the technical specifications and standards mentioned by MNRE/CEA/CERC/APERC/NREDCAP towards installation and operations of Rooftop Solar Plant.

“Total Awarded Contract Value” shall mean the sum of Contract Value of Division/ Cluster of all the Divisions/ Clusters awarded to a particular Bidder.

2. PURPOSE AND SCOPE OF THE AGREEMENT

- 2.1. The purpose of this Agreement includes design, engineering, supply, installation, testing and commissioning of 233.33 MWp grid connected rooftop solar plant along with operation and maintenance for 5 years for 1,16,663 SC and ST consumers through Utility Led Aggregation (CAPEX) mode in [APDISCOM] under PM-Surya Ghar: Muft Bijli Yojana (hereinafter cumulatively referred to as the “Works”), for which the Utility has identified and aggregated the demand of [XXXX] SC and ST consumers and thereby handed over the consumer details to EPC Contractor/ RTS Vendor for design, engineering, supply, installation, testing and commissioning, with mandatory operation and maintenance for 5 years from the date of commissioning of rooftop solar plants, along with required approvals from concerned authorities.
- 2.2. EPC Contractor/ RTS Vendor shall strictly abide by and meet all the conditions set forth under various Clauses in the RfS No. (Insert RfS No. here) dated(Insert RfS date here) as mandatory obligations of the EPC Contractor/ RTS Vendor and any violations of conditions under such clauses shall lead to breach of contract and attract penalties. Utility reserves the right in deciding the said penalty.
- 2.3. The EPC Contractor/ RTS Vendor shall strictly adhere to the minimum technical specifications (hereinafter referred to as “Technical Specifications”) as per the terms established in the **Annexure – 3** “Technical Specifications for Rooftop Solar Plants Installed under the Component of CFA to Residential Consumers under PM-Surya Ghar: Muft Bijli Yojana” under Operational Guidelines for Implementation of PM-Surya Ghar: Muft Bijli Yojana for the component of “CFA to Residential Consumers” issued by Ministry of New and Renewable Energy (MNRE), Government of India (GoI) vide O.M No.: 318/17/2024-Grid Connected Rooftop dated 07.06.2024 and any amendments thereto.
- 2.4. The EPC Contractor/ RTS Vendor shall submit Guaranteed Technical Particulars (GTP) & Program Evaluation and Review Technique (PERT) Chart for the awarded division/ cluster to APDISCOM to get go ahead for the project. The Bill of Material (BOM) shall be submitted to APDISCOM within a week of obtaining Letter of Award.

- 2.5. EPC Contractor/ RTS Vendor shall strictly adhere to the scope of work as per Clause 7.8 in the RfS No. (Insert RfS No. here) dated (Insert RfS date here).
- 2.6. EPC Contractor/ RTS Vendor shall ensure that the solar modules and cells used in the installation must satisfy the Domestic Content Requirement (DCR) condition, i.e., domestically manufactured modules manufactured from domestically manufactured cells. This condition for the installation is mandatory to be eligible for the Central Financial Assistance (CFA) from MNRE, GoI. Use of non-DCR modules in any form in the installation shall render the installation ineligible for CFA. The EPC Contractor/ RTS Vendor shall submit a declaration from the Original Equipment Manufacturer (OEM) certifying that the modules used in the installation meet the DCR standards. The EPC Contractor/ RTS Vendor shall also comply with any other mechanisms for DCR traceability established by the MNRE.
- 2.7. EPC Contractor/ RTS Vendor shall ensure all the pedestals meant for mounting the modules must be casted on the lintel by removing the tiles and other loose material in the area where the pedestals are to be casted. The surface of the lintel should be thoroughly cleaned, and an adhesive should be applied on the lintel surface before casting the pedestals in order to have strong bonding with the lintel. After casting of the pedestals, the water proofing material should be applied surrounding the pedestals in order to avoid any water seepage during rainfall.
- 2.8. EPC Contractor/ RTS Vendor shall ensure that Solar Photo Voltaic (PV) modules, parts of Mild Steel (MS) structures, other hardware like nuts, bolts and grouting hardware, etc., are not loosely scattered over the terrace of household. These items must be securely stored in an enclosed room where they cannot be affected by winds, or such loose materials must be tied properly. The mounting structure shall be designed and constructed to withstand extreme weather conditions, including wind speeds of upto.....insert 215 kmph for APEPDCL/150kmph for APSPDCL and APCPDCL) and severe cyclones, ensuring resilience against natural calamities prone areas. Further, Successful bidder shall ensure that rooftop solar plants should be designed and installed in such a way that their performance should not be affected due to the problem of water logging at site, etc.
- 2.9. EPC Contractor/ RTS Vendor shall ensure that supplies which have not been specifically mentioned in this Agreement, but which are necessary for the design, engineering, supply, installation, and performance or completeness of the project shall be provided without any extra cost and within the time schedule for efficient and smooth operation and maintenance of the rooftop solar plant.
- 2.10. EPC Contractor/ RTS Vendor shall ensure that a rooftop solar plant of capacity upto 2kWp size per consumer is installed on the roof of each consumer. Further, the metering is done via Gross Metering as per APERC (The Grid Interactive Solar Rooftop Photovoltaic System under Gross/ Net Metering) Regulation, 2023 (Regulation 4 of 2023).

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

- 2.11. It shall be the sole responsibility of the EPC Contractor/ RTS Vendor to undertake all Works and obtain all necessary permissions and approvals to synchronize the rooftop solar plants with the Grid as per the MNRE Guidelines and APERC Regulations.
- 2.12. Grid connectivity of the rooftop solar plant shall be the responsibility of the EPC Contractor/ RTS Vendor in accordance with the guidelines of APDISCOM/MNRE/CEA/APERC. Utility could facilitate connectivity and necessary approvals, however, the entire responsibility lies with the EPC Contractor/ RTS Vendor only.
- 2.13. Clause has been deleted intentionally.
- 2.14. The EPC contractor must perform wiring from Gross/ Smart meter to Distribution board.
- 2.15. EPC Contractor/ RTS Vendor shall be responsible to meet minimum guaranteed generation with Performance Ratio (PR) at the time of commissioning and related Capacity Utilization Factor (CUF) during the Operations & Maintenance period of 5 years:
 - i) PR (AC) should be shown minimum of 75% at the time of inspection for initial commissioning acceptance to qualify. If the specified performance ratio is not achieved, the same shall be demonstrated within a period of another 7 days immediately following the previous testing and still if it is not achieved, the EPC Contractor/RTS Vendor shall enhance the module capacity of solar plant/improve the quality of the plant by replacement of module/other components with all suitable modification requirements on balance of systems at his own cost to achieve the performance ratio. **PR shall be measured at 15-minute intervals for the period from 11AM to 3PM** during the above period and average of these values is taken for calculating PR. PR assessment shall be evaluated using the standard calibrated equipment of APDISCOM.
 - ii) Capacity Utilization Factor (CUF) means the ratio of total kWh (units) of power generated by solar plant in a period and Contracted Capacity multiplied with number of hours in the same period. CUF of the rooftop solar plants shall be calculated on monthly/ yearly basis from Commercial Operation Date (COD) of each individual rooftop solar plant as per requirement of DISCOMs.
 - iii) The EPC Contractor/ RTS Vendor should send the Quarterly rooftop solar plant output details to APDISCOM for ensuring the minimum PR and CUF at the Interconnection point and the same shall be verified by APDISCOM.
- 2.16. EPC Contractor/ RTS Vendor shall submit the Quarterly progress report to APDISCOM as per prescribed proforma including performance parameters as mentioned in Schedule – I of this Bipartite Agreement during the project tenure including O&M period of 5 years for all the rooftop

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

solar plants in the respective Divisions/ Clusters. APDISCOM will have the right to depute their representatives to ascertain the progress of contract at project locations.

- 2.17. **Utility shall depute technical person(s) from its list of empanelled experts for inspection, third party verification, monitoring of rooftop solar plants installed to oversee the implementation as per required standards and to visit the EPC Contractor/ RTS Vendor's facilities to check the quality of products.**
- 2.18. EPC Contractor/ RTS Vendor shall undertake all necessary activities as defined in the RfS and this Agreement to obtain Central Financial Assistance (CFA).
- 2.19. Anti-theft bolts, nuts, fasteners shall be used for the installation of solar modules to ensure the security of the modules.
- 2.20. **The EPC Contractor/ RTS Vendor should allow the 3rd party Quality control Inspection Team or from any Statutory body, the premises of the SC ST installation during installation works are going on or completed.**

3. EFFECTIVE DATE

- 3.1. The Agreement shall be effective from the date of its execution (the "Effective Date") for all contractual obligations under this Agreement.

4. NON-DISCLOSURE AND CONFIDENTIALITY

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

5. COMPLETION PERIOD

- 5.1. The completion period of the project shall be (*Insert date - 6 months from issuance of LOA by NREDCAP*) (here in after called the "Scheduled Commercial Operation Date" or "SCOD").

- 5.2. The Performance Security shall be returned to the Successful Bidder/ EPC Contractor/ RTS Vendor 15 days after completion of **5th year of O&M, successful handover of the project to DISCOMs and after taking into account the liquidated damages incurred during this tenure.**

6. LIQUIDATED DAMAGES

- 6.1. The maximum time period allowed for commissioning of the full Project Capacity with applicable liquidated damages, shall be limited to 6 months from the SCOD or the extended SCOD (if applicable) (for e.g., if SCOD of the Project is 07.09.2025, then the above deadline for Project commissioning shall be 07.03.2026).
- 6.2. In case of delay in commissioning of the Project beyond the SCOD until the date as per clause 6.1 above, as part of the liquidated damages, the total Performance Security (PS) amount for the Project shall be encashed on per-day-basis and proportionate to the balance capacity not commissioned. For example, in case of a Project of 1,000 kWp capacity, if commissioning of 100 kWp capacity is delayed by 18 days beyond the SCOD, then the liquidated damages shall be: PS amount * (100/1000) * (18/180). For the purpose of calculations of the liquidated damages, 'month' shall be considered as 30 days.
- 6.3. In case the Project of full capacity is not commissioned beyond the maximum timeline of 6 months allowed beyond SCOD, then the entire PS value shall be encashed and the Agreement shall be terminated.
- 6.4. In case of malfunctioning of the system, if the EPC Contractor/ RTS Vendor has failed to attend for rectification of defects within **48 hours** from the time of defect and fails to replace the defective/ failed equipment at free of cost (including transportation and insurance expenses) within **5 Days** from the time of defect in whole or any part of the Rooftop Solar Plant, then EPC Contractor/ RTS Vendor shall be liable to pay penalties calculated at **INR 500 (Indian Rupees Five Hundred only) per kWp per day** until such malfunctioning persists beyond the permitted time limit which will be recovered from the PS and/or payments pertaining to O&M period. The EPC Contractor/RTS Vendor shall replenish the PS with the amount deducted so as to maintain the PS value.
- 6.5. The Capacity Utilization Factor (CUF) of the Rooftop Solar Plants will be calculated division/ cluster wise annually during the Mandatory O&M period. The EPC Contractor/ RTS Vendor must ensure to maintain the CUF annually, as specified for each division/ cluster. Failure to maintain such CUF of the corresponding division/ cluster during the Warranty/Mandatory O&M period, apart from the Force Majeure and grid outages that may impact plant operations as certified by competent authority from STU/APDISCOM, will result in liquidated damages to an amount equivalent to the percentage decrease in CUF, multiplied by the CAPEX rate and Division/ Cluster

Capacity in kWp, which will be deducted from the PS and/or payments pertaining to O&M period as liquidated damages. The EPC Contractor/RTS Vendor shall replenish the PS with the amount deducted so as to maintain the PS value. In case the liquidated damages are more than the value of PS, the excess amount shall be deducted from the payments due during the O&M period as per clause 7.17 of the RfS.

Illustration: *The EPC Contractor/RTS Vendor guaranteed an annual CUF of 17% in a division/ cluster, but only achieved 15%. As a result, EPC Contractor/ RTS Vendor incurred an 11.76% decrease in annual CUF, the liquidated damages will be calculated as:*

$(17-15)/17 * 100 = 11.76\% * \text{CAPEX rate in INR per kWp} * \text{Division/ Cluster Capacity in kWp.}$

- 6.6. In case any of the RTS plants within the Project fail to generate any power continuously for 1 month any time during the Mandatory O&M period, apart from the Force Majeure and grid outages as certified by competent authority from **STU/APDISCOM**, it shall be considered as “an Event of Default”. In the case of default, the PS amount and/or payments pertaining to O&M period, as per clause 7.17 of the RfS, equivalent to CAPEX of those RTS plants which is/are not functioning will be forfeited.

7. PAYMENT TERMS

The Capex payment to the EPC Contractor/RTS Vendor shall be made in phases as detailed below:

- i. A part of CAPEX shall be the CFA released directly to the EPC Contractor/ RTS Vendor through the ULA portal by the Ministry of New and Renewable Energy (MNRE), Government of India, after successful commissioning of the rooftop solar plant, completion of inspection by DISCOM officials, and achievement of at least one month’s CUF as defined for the respective divisions/ clusters.

The CFA amount will be 60% of the benchmark cost, in accordance with the Operational Guidelines of PM-Surya Ghar: Muft Bijli Yojana O.M.318/17/2024-Grid Connected Rooftop dated 7th June 2024, PM-Surya Ghar: Muft Bijli Yojana O.M. 318/17/2024-Grid Connected Rooftop (Part-15) dated 28th December 2024, and subsequent amendments, if any.

- ii. 2% of CAPEX shall be paid by APEPDCL/ APCPDCL/ APSPDCL to the EPC Contractor/ RTS Vendor on successful completion of each year of O&M from 1st year through 5th year and final handover at the end of 5th year.
- iii. Balance CAPEX shall be paid by APEPDCL/ APCPDCL/ APSPDCL to the EPC Contractor/ RTS Vendor upon satisfactory evidence of procurement and availability of major materials such as solar modules and inverters at the Divisions/ Clusters.

The EPC Contractor/ RTS Vendor shall raise and submit invoices, along with relevant certificates/completion certificates, as per the milestones mentioned above. The Payment shall be made to the EPC Contractor/ RTS Vendor by the APDISCOM within 45 Days from the date of receipt of the invoice. In case any of the above days falls on holiday, the subsequent working day shall be considered.

The Rooftop Solar Plant size per consumer shall be 2 kWp. If the plant's capacity at any household exceeds 2 kWp, the CAPEX payment will be limited to a maximum of 2 kWp for that household at the Quoted Division/ Cluster Wise CAPEX Rate.

In case the EPC Contractor/ RTS Vendor is a Joint venture, all the payments shall be made through RTGS to the joint account of the Joint Venture.

8. LATE PAYMENT SURCHARGE

- 8.1. In case payment of any invoice is delayed by APDISCOM beyond its Due Date, a late payment surcharge shall be payable by APDISCOM to the EPC Contractor/RTS Vendor at the rate of 0.50% per month on outstanding payment, calculated on a day-to-day basis for each day of the delay. A late Payment Surcharge shall be claimed by the EPC Contractor/RTS Vendor, through its subsequent invoice.

9. WARRANTY

- 9.1. The Solar PV Panels shall carry a warranty of minimum of 8 years from the date of supply against all material/ manufacturing defects and workmanship.
- 9.2. The Solar PV panel must be warranted for their output peak watt capacity which shall not be less than 90% at the end of 10 years and 80% at the end of 25 years. The EPC Contractor/RTS Vendor shall ensure that the warranty shall be transferred to the respective DISCOM after completion of the Project Tenure.
- 9.3. The PCU/Solar Grid tied Inverter shall carry a warranty of minimum of 8 years.
- 9.4. The complete Rooftop Solar systems installed and commissioned shall be under a warranty against any manufacturing or usage defect for a minimum period of 5 years from the date of Commissioning. The mechanical structures, electrical works including power conditioners/inverters/maximum power point tracker units/ distribution boards/digital meters/ switchgear, etc., and overall workmanship of the Rooftop Solar systems must be warranted against any manufacturing/ design/ installation defects for a minimum period of 5 years.

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

- 9.5. The warranty will be against breakages, malfunctions, non-fulfillment of guaranteed performance and breakdowns due to manufacturing defects or defects that may arise due to improper operation of electrical /electronic components of the system but do not include physical damages by the end users/beneficiary.
- 9.6. The above warranty shall take effect from the date on which the system is taken over by the purchaser after commissioning and synchronization.
- 9.7. The EPC Contractor/RTS Vendor shall be liable to make good the loss by replacing the defective product during the warranty period for the entire system free of cost.
- 9.8. The warranty will cover all the materials and goods involved in the installation and commissioning of Rooftop Solar systems by the successful Bidder.
- 9.9. Non-performing/Under-performing PV Panels will be replaced free of cost in the warranty period. Non-compliance of the service standards by the vendor will make it ineligible for future work orders.

10. FORCE MAJEURE

- 10.1. Force Majeure shall mean any cause, existing or future, which is beyond the reasonable control of any of the Parties including acts of God, storm, fire, floods, explosion, pandemic, epidemics, quarantine, earthquake, strike, riot, lock out, embargo, interference by civil or military authorities, acts, regulations or orders of any governmental authority in their sovereign capacity, acts of war (declared or undeclared) including any acts of terrorism.
- 10.2. None of the Parties shall be liable for the failure to perform any obligation in terms of this Agreement if and to such extent such failure is caused by a Force Majeure.
- 10.3. The Party prevented to fulfill its obligations (hereinafter referred to as "the Affected Party") by Force Majeure shall notify the other Party through written means including fax/email/ post within one week after occurrence and cessation of such Force Majeure and it shall be established by the Affected Party that the Force Majeure had delayed performance of the Affected Party's obligations and services and was beyond the reasonable control of the Affected Party and not due to the default or negligence of the Affected Party.
- 10.4. The periods for performance of this Agreement as agreed upon shall be extended by the periods of delay caused by such Force Majeure, as long as the period of Force Majeure does not last longer than three months.
- 10.5. If a Force Majeure continues for more than three months and the Parties are not able to reach an agreement on the continuation of the Agreement within a further term of one month, the fulfillment of the Agreement shall automatically be deemed impossible and shall stand suspended/ terminated.

- 10.6. Upon such suspension/termination, the EPC Contractor/ RTS Vendor shall be entitled to be paid the following amount:
- a. the amounts payable for the work completed until the date of suspension,
 - b. the cost of materials which have been delivered or of which EPC Contractor/ RTS Vendor is liable to accept delivery: this material shall become the property of Utility when paid for by it, and EPC Contractor/ RTS Vendor shall place them at Utility's disposal,
 - c. any other cost or liability, including unamortized cost of materials, which in the circumstances was reasonably incurred by EPC Contractor/ RTS Vendor in the expectation of completion of the Works,
 - d. demobilization costs of EPC Contractor/ RTS Vendor personnel and equipment,
 - e. all other costs incurred by EPC Contractor/ RTS Vendor on account of cancellation of order on such other suppliers.

11. INSURANCE

- 11.1. The EPC Contractor/ RTS Vendor shall be responsible and take an Insurance Policy for transit-cum-storage-cum-erection for all the materials to cover all risks and liabilities for supply and storage of materials at site, erection, testing and commissioning.
- 11.2. The EPC Contractor/ RTS Vendor shall take appropriate insurance during Project Period **including adequate insurance coverage during O&M period to mitigate all risks related to O&M of the plant to indemnify the Employer.**
- 11.3. Before commencement of work, the EPC Contractor/ RTS Vendor shall also take the 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. The EPC Contractor/ RTS Vendor 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 in carrying out the Contract. Any liabilities arising from liquidation, death, bankruptcy, etc., shall be the responsibility of the EPC Contractor/ RTS Vendor.
- 11.4. Before commencement of work, the EPC Contractor/RTS Vendor shall obtain and maintain comprehensive insurance coverage against theft for all major materials and equipment intended for use in the development and installation of Rooftop Solar Plants. This insurance shall remain **valid till the commissioning of the Project.**
- 11.5. Before commencement of work, the EPC Contractor/RTS Vendor shall obtain and maintain comprehensive insurance coverage against damage caused to RTS plants due to fire, flood and natural calamities. **This insurance shall remain valid till the commissioning of the Project.**
- 11.6. The Insurance covers as mentioned in Clauses 11.1, 11.2, 11.3, 11.4 and 11.5 are mandatory and in case of any violation to obtain Insurance Cover may result in imposition of a penalty. This penalty

shall be deducted from the EPC Contractor/ RTS Vendor's claim for subsidy as under and the subsidy, in such cases shall be released only on submission of Indemnity Bond @ INR 5,000 per Plant Location. The provision of penalty for not taking Insurance is one time only, on repetition of the same, the sanction of the particular site will be cancelled.

12. SITE ACCESS

- 12.1. APDISCOM shall ensure the accuracy of all information and/or data to be supplied to the EPC contractor/ RTS Vendor. APDISCOM shall also take the sole responsibility of taking the consumer consent for the roof access by the EPC contractor/RTS vendor for the entire project tenure.
- 12.2. APDISCOM shall ensure that the EPC Contractor/ RTS Vendor shall have access to roof of the consumer during the daytime (**9am to 5 pm**) for construction, installation, testing, operation and maintenance of the rooftop solar plant for the entire project tenure. In case of any unforeseen events such as demolition of the residential building, Utility shall ensure that the EPC Contractor/ RTS Vendor shall be provided with access to another rooftop premise in nearby vicinity for transfer/ installation of rooftop solar plant within a time period of one week. **APDISCOM shall bear the expenses for transfer and re-installation up to a maximum of 30% of the Quoted Capex Rate per kWp as relocation charges to be paid to the EPC Contractor. Further, the affected RTS plant shall not be considered for mandatory CUF compliance mentioned in RfS clause 3.6.5 for the duration of downtime due to transfer and reinstallation.**
- 12.3. The progress of Works will be monitored by Utility and the rooftop solar plant will be inspected for quality at any time during commissioning or after the completion of the rooftop solar plant by officer(s) from Utility or a team comprising of officers from Utility or by 3rd party agency

13. CONSUMER OBLIGATIONS

- 13.1. The consumer must not interrupt the Works, and/or shall abstain from any act or omission of which it can reasonably be expected that it may delay the Works or make the Works more difficult and/or expensive for the EPC Contractor/ RTS Vendor.

14. OPERATION AND MAINTENANCE OBLIGATIONS OF THE EPC CONTRACTOR/ RTS VENDOR POST INSTALLATION OF THE ROOFTOP SOLAR PLANTS

The EPC Contractor/ RTS Vendor shall ensure satisfactory performance of the rooftop solar plants during the 5 years of Project tenure and shall mandatorily undertake O&M activities, thereby ensuring the following obligations:

- A. EPC Contractor/ RTS Vendor shall depute qualified and experienced engineers/ technicians till the end of Project Tenure at the Project site(s) who shall visit the rooftop solar plant installed

- at the consumers' premises monthly, to attend routine maintenance, for a period of 5 years from the Commercial Operation Date (COD) of the entire allocated capacity. In case of malfunctioning of the system, the EPC Contractor/ RTS Vendor shall attend for rectification of defects within 48 hours from the time of lodging a complaint with the EPC Contractor/ RTS Vendor.
- B. Periodic cleaning of solar modules: The modules shall be cleaned with a periodic interval of **1month** or as and when required as per actual site conditions. It is the responsibility of the EPC Contractor/ RTS Vendor to get the modules cleaned during Project Period.
- C. Periodic checks of the Modules, PCUs and BoS shall be carried out as a part of routine, preventive and breakdown maintenance.
- D. The EPC Contractor/ RTS Vendor shall warrant the goods supplied under the RfS and Agreement are new, unused, of the most recent technology and incorporate all recent improvements in design and materials. The EPC Contractor/ RTS Vendor shall adhere to the warranty specifications as mentioned in the RfS.
- E. Necessary maintenance spares to ensure trouble free operation for the Project period of 5 years shall also be supplied by EPC Contractor/ RTS Vendor.
- F. Supply of all spares, consumables and fixtures as required. The EPC Contractor/ RTS Vendor shall make arrangements to maintain a sufficient stock of essential spares and consumable spares to ensure proper maintenance of the rooftop solar plants promptly.
- G. All the testing instruments required for Testing, Commissioning and O&M for the healthy operation of the Plant shall be maintained by the EPC Contractor/ RTS Vendor. The testing equipment must be calibrated once a year from NABL accredited labs, and the certificate of calibration must be kept for reference as required.
- H. The EPC Contractor/ RTS Vendor shall be responsible to replace the defective/ failed equipment free of cost (including transportation and Insurance expenses) in whole within 5 days of lodging a complaint with division office of the DISCOM or the EPC Contractor/ RTS Vendor.
- I. If the EPC Contractor/ RTS Vendor fails to submit the **Quarterly** performance report to APDISCOM in prescribed proforma in Schedule – 1, during the O&M period INR 10,000 (Indian Rupees Ten Thousand Only) per kWp shall be forfeited for each incident. In case the number of incidents of non-compliance exceeds two, the entire PS/ O&M payments or both shall be forfeited.

- J. A “hindrance register” shall be maintained by the EPC Contractor/ RTS Vendor with reasons and documentary evidence to register/record any delays/faults at the time of hindrance on account of the consumer(s) and shall be updated from time to time. The same shall be duly certified by the Authorized Representative.

15. INDEMNITY

- 15.1. Both Parties shall fully Indemnify and hold harmless both Parties and its affiliates, associates, directors and employees from and against, any and all losses, costs, damages, injuries, liabilities, claims and causes of action, including without limitation arising out of or resulting from claims by Third Parties, acts, omissions or breach of any of the both Parties, affiliates, suppliers, employees, agents or Contractors in the performance of both Parties’ obligations under this Agreement or otherwise arising out of the Rooftop Solar PV System or its usage.

16. NOTICES

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

17. DISPUTE RESOLUTION

- 17.1. If any Dispute of any kind whatsoever arises between the EPC Contractor and Utility in connection with or arising out of the contract including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, the Parties shall seek to resolve any such Dispute or difference by mutual consent.
- 17.2. If the Parties fail to resolve, such a Dispute or difference by mutual consent, within Forty-five (45) days of its arising, then the Dispute shall be referred by either Party by giving notice to the other Party in writing of its intention to refer to Arbitration as hereafter provided regarding matter under dispute. No Arbitration proceedings will commence unless such notice is given. Any Dispute in respect of which a notice of intention to commence Arbitration has been given in accordance with Sub-Clause either 17.2(a) or 17.2(b), shall be finally settled by Arbitration.

In case the EPC Contractor/ RTS Vendor is a Public Sector Enterprise or a Government Department.

- a) In case the EPC Contractor/ RTS Vendor is a Public Sector Enterprise or a Government Department, the Dispute shall be referred for resolution in Permanent Machinery for Arbitration (PMA) of the Department of Public Enterprise, Government of India. Such Dispute or difference shall be referred by either Party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India

in-charge of the Department of Public Enterprises. The award of the Arbitrator shall be binding upon the Parties to the Dispute, provided, however, any Party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law & Justice, Government of India. Upon such reference, the Dispute shall be decided by the Law Secretary or the Special Secretary/ Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusive. The Parties to the dispute will share equally the cost of Arbitration as intimated by the Arbitrator.

In all other cases.

- b) In all other cases, any Dispute submitted by a Party to Arbitration shall be heard by an Arbitration panel composed of three Arbitrators, in accordance with the provisions set forth below.

The Utility and the EPC Contractor/ RTS Vendor shall each appoint one Arbitrator, and these two Arbitrators shall jointly appoint a third Arbitrator, who shall chair the Arbitration panel. If the two Arbitrators do not succeed in appointing a third Arbitrator within Thirty (30) days after the later of the two Arbitrators has been appointed, the third Arbitrator shall, at the request of either Party, be appointed by the Appointing Authority for third Arbitrator which shall be the President, Institution of Engineers.

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

If for any reason an Arbitrator is unable to perform its function for a period of Forty-five (45) days or more, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws as mentioned in Clause 18 (Governing Law) and a substitute shall be appointed in the same manner as the original Arbitrator.

Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue of Arbitration shall be Visakhapatnam / Vijayawada / Tirupati.

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.

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

Cost of arbitration shall be equally shared between the EPC Contractor/ RTS Vendor and Utility.

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

18. GOVERNING LAW

- 18.1. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of India, and the courts at Visakhapatnam / Vijayawada / Tirupati only, with respect to any Dispute that occurs according to, or in relation to, the Agreement.

19. SEVERABILITY

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

20. LIMITATION OF LIABILITY

- 20.1. Subject to Clause 15 of this Agreement, but notwithstanding anything contained anywhere else in this Agreement, in no event shall a Party be liable, whether in contract, tort or otherwise, to the other Party for special, indirect or consequential loss or damages (such as, not exclusively, loss of production, loss of reputation, loss of income, loss of profit), except in case of fraud, willful default or reckless misconduct by the defaulting Party.

21. BINDING AGREEMENT

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

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

**Name of EPC Contractor Authorized
Representative:**

**Name/ Cadre of Utility
Authorized Representative:**

EPC Contractor

Utility Name:

EPC Contractor/ RTS Vendor Agreement for Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing, Commissioning, and mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOMs under PM-Surya Ghar: Muft Bijli Yojana

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

Company Name:

**Signature of EPC Contractor
Representative:**

Signature of Utility Representative:

EPC Contractor/ RTS Vendor Agreement for Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing, Commissioning, and mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOMs under PM-Surya Ghar: Muft Bijli Yojana

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

SCHEDULE – I

Performance Parameters

Project –

Site Location – (Latitude and Longitude):

Total Rooftop Area (m²):

Total Usable Rooftop Area for Solar Installation (m²):

Type of Roof and Tilt:

Radiation Data Reference:

Energy Simulation:

Power Evacuation:

Energy in kWh AC per month:

End of Month	Global Horizontal Irradiation (kWh/m ² /year)	Global Inclined Irradiation (kWh/m ² /year)	RTS generation at Gross/ Smart Meter (kWh AC per month)	Net Energy at Metering point (kWh AC per month)	CUF (%)	PR (%) at the metering point
1						
2						
3						
4						
5						

EPC Contractor/ RTS Vendor Agreement for Request for Selection of EPC Contractors/ RTS Vendors for Design, Engineering, Supply, Installation, Testing, Commissioning, and mandatory O&M of 233.33 MWp Grid Connected Rooftop Solar (RTS) Plants for 1,16,663 SC & ST Consumers through Utility Led Aggregation (CAPEX) Mode in APDISCOMs under PM-Surya Ghar: Muft Bijli Yojana

Tender Reference No.: **NREDCAP/PMSG/SC&ST/7A/2025**

SCHEDULE – II

Technical Specifications

The EPC Contractor/ RTS Vendor shall strictly adhere to the minimum technical specifications (hereinafter referred to as “Technical Specifications”) as per the terms established in the **Annexure – 3** “Technical Specifications for Rooftop Solar Plants Installed under the Component of CFA Residential Consumers under PM-Surya Ghar: Muft Bijli Yojana” under Operational Guidelines for Implementation of PM-Surya Ghar: Muft Bijli Yojana for the component of “CFA to Residential Consumers” issued by MNRE, GoI vide O.M No.: 318/17/2024-Grid Connected Rooftop dated 07.06.2024.