

### THE ASSAM GAZETTE

### অসাধাৰণ EXTRAORDINARY প্ৰাপ্ত কৰ্তৃত্বৰ দ্বাৰা প্ৰকাশিত PUBLISHED BY THE AUTHORITY

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## GOVERNMENT OF ASSAM ORDERS BY THE GOVERNOR POWER (ELECTRICITY) DEPARTMENT

### **NOTIFICATION**

The 13th October, 2022

No. PEL.230/2021/138.-

### Assam Renewable Energy Policy, 2022

In pursuance of Section 108 of the Electricity Act, 2003, the Governor of Assam is pleased to notify the Assam Renewable Energy Policy, 2022 for the State of Assam.

#### PART-A

### 1. Preamble

It is envisaged under this policy to leverage renewable energy potential of the State of Assam for expanding the installed RE power capacity by deploying resources provisioned under various State and Central schemes, policies and programmes.

### 2. Definitions & Abbreviations:

In this Policy, unless the context otherwise requires,-

- (i) "Act" means the Electricity Act, 2003, including amendments thereto;
- (ii) "AERC" means the Assam Electricity Regulatory Commission;

- (iii) "APDCL" means the Assam Power Distribution Company Limited;
- "AEGCL" means the Assam Electricity Grid Corporation (iv) Limited;
- (v) "APGCL" means the Assam Power Generation Corporation Limited:
- (vi) "APPC or Average Pooled Power Cost" means theweighted average per unit purchase rate of distribution licensee including the cost to self-generation, if any, but excluding short -term power purchases and those based on renewable energy, REC and transmission charges asper the effective tariff order for the year.
- "Authorized Representative of the DISCOM" means the (vii) authority carrying out the tendering / bidding process shall be deemed to be the Authorized Representative of the 'DISCOM' and will on behalf of the DISCOM be responsible for fulfilling all the obligations imposed on the 'DISCOM' during the bidding process, in accordance with prevalent Guidelines from competent authorities;
- (viii) "CEA" means the Central Electricity Authority;
- "CERC" the Central Electricity Regulatory (ix) means Commission:
- "CAPEX Mode" means the mode under which entire (x) investment is to be incurred by the power consumer for installation of RE power plant;
- "Central Agency" means National Load Dispatch Centre (xi) (NLDC) as designated by the Central Electricity Regulatory Commission vide Order dated 29.01.2010 for the purposes of the REC Regulations;
- "CPP" or "Captive Power Plant" means Captive Power (xii) Plant as defined in Electricity Act, 2003 and Electricity Rules, 2005;
- "DISCOM" means a distribution licensee of Assam under (xiii) the Act;

- (xiv) "EXIM Meter" means bi-directional Export Import Energy Meter for recording of bi-directional flow of energy at consumer interconnection point;
- (xv) "Generating Plant Substation" means substation or suitable switchyard & respective transformer developed by SPG for interfacing with receiving substation.
- (xvi) "Government" and "State" means the Government of Assam and the State of Assam respectively;
- (xvii) "GW", "MW" and "KW" mean Giga Watt, Mega Watt and Kilo Watt respectively;
- (xviii) "Gross Metering" means methodology under which the entire electricity generated by the rooftop/ ground mounted Solar PV System set up in the premises of the consumer is delivered to the distribution system of the licensee.
- (xix) "Interconnection Point" means a point at Extra High Voltage (EHV) substation of transmission licensee or High Voltage (HV) substation of distribution licensee, as the case may be, where electricity produced from the RE Power plant is injected into the Grid.
- (xx) "Interconnection Line" means Transmission / Distribution Line connecting Generating Plant substation / Pooling Substation to Receiving Substation (EHV/HV substation) of STU/DISCOM.
- (xxi) "KWp" means Kilo Watt (peak);
- (xxii) "MNRE" means the Ministry of New and Renewable Energy, Govt. of India;
- (xxiii) "MoP" means Ministry of Power, Govt. of India;
- (xxiv) "Nodal Department" means the Power (Electricity)
  Department, Govt. of Assam for the purpose of promoting
  energy generation from Renewable sources of Energy;
- (xxv) "Policy" means the Assam Renewable Energy Policy, 2021;
- (xxvi) "PPA" means Power Purchase Agreement;
- (xxvii) "PSA" means Power Sale Agreement;
- (xxviii) "PPP" means Public Private Participation;

- (xxix) "Procurer" means the individual entity/Agency/Utility who procures solar energy from SPG;
- (xxx) "Pooling Substation" means Substation developed by the SPPD within the park boundary for interfacing with receiving substation.
- (xxxi) "Qualified Coordinating Agency (QCA)" means the agency coordinating on behalf of Solar Power Generator connected to a pooling substation as per AERC (Forecasting, Scheduling, Deviation Settlement & Related Matters of Solar and Wind Generation Sources), Regulations, 2018 and as amended from time to time.
- (xxxii) "REC" means Renewable Energy Certificate;
- (xxxiii) "REC Regulation" or "CERC REC Regulation" means Central Electricity Regulatory Commission (Terms & Condition for recognition and issuances of Renewable Energy Certificate for Renewable Energy Generation) Regulation, 2010, amended from time to time;
- (xxxiv) "Receiving Substation" means EHV/HV substation developed by STU/DISCOM of Assam / existing EHV/HV substation of STU or DISCOM for evacuation of power generated from solar power projects.
- (xxxv) "RESCO" means Renewable Energy Service Company;
- (xxxvi) "RESCO Mode" means the methodology in which entire investment is to be incurred by a SPG other than the consumer for setting up of the solar power project in the consumer premises and the consumer pays for the electricity generated from such solar power project at mutually agreed tariff to such investor SPG;
- (xxxvii) "RPO" means Renewable Purchase Obligation;
- (xxxviii) "Rooftop Solar (RTS)" means the concept of rooftop solar is based on the scale of the PV plant rather than the fact whether it is situated on a roof / terrace or not. Hence, the definition of RTS will also include small plant on the ground residing within the boundary of a facility.

- (xxxix) "Solar Park" means a concentrated zone of development of solar power generation project and provide developers an area that is well characterized with proper infrastructure and access to amenities.
  - (xl) "SPG" means Solar Power Generator that make an investment for setting up of solar power project and generating electricity from solar energy.
  - (xli) "SPPD or Solar Power Park Developer" means a person who develops and/or maintains solar parks and the related common infrastructure & shall acts as an implementing agency for development of Solar Park as defined under National Mission, MNRE, GOI.
  - (xlii) "State Agency" means State Load Despatch Centre (SLDC), Assam or any other agency designated by the Assam Electricity Regulatory Commission for accreditation and recommending the Renewable Energy Project for registration with Central Agency in accordance with the procedure prescribed by it and under the provisions specified in the CERC REC Regulations.
  - (xliii) "Tariff' means the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof.
  - (xliv) "TRANSCO" means a transmission licensee of Assam under the Act.
- 2.1 All other expressions used herein but not specifically defined herein but defined in the Act, the CERC/AERC regulations, CEA/MoP/MNRE guidelines etc. shall have same meaning assigned therein.

### 3. Vision

The State Government of Assam aims to fulfill its commitments under Sustainable Development Goals by promoting clean, accessible, affordable, and equitable solar energy availability to ensure energy security for its citizens, as well as facilitate meeting of renewable energy obligations placed by MNRE and the AERC on various obligated entities.

### 4. Title of the Policy

The Policy shall be known as the "Assam Renewable Energy Policy, 2022" and it will come in to force from the date of its publication in official Gazette.

### 5. Objectives

The main objectives of the policy are:

- a. To create an enabling environment for businesses and developers to participate and invest in the process of targeted RE power capacity expansion of 1200 MW by 2027 in the state of Assam by means of multiple models of RE power generation.
- b. To encourage residential, commercial, industrial and Government consumers for adoption of modern solar power technology with on-grid and off-grid installations.
- c. To encourage setting up of solar parks with the necessary utility infrastructure facilities in the state on vacant Government lands.
- d. To incorporate the provisions for solar energy in the municipal byelaws for promotion of rooftop solar plants.
- e. To ensure irrigation facility for farmers by promoting solar pumps.
- f. To encourage other forms of RE power generation.

### 6. Regulatory framework

Section 108 of the Electricity Act, 2003 empowers the state Government to give directions to the regulator in the matter of policy and accordingly AERC shall be guided by this policy while formulation of rules and regulations.

### 7. Operative Period

The Policy shall come into effect from the date of its notification and shall remain in force up-to 31.03.2027 ("Operative Period"), unless superseded or modified by another Policy.

### 8. Eligible Entity

All registered companies, firms, societies, Government entities, consumers of DISCOM and individuals will be eligible for setting up of Solar Power Projects within the State for sale of electricity or captive use, in accordance with the Electricity Act – 2003, as amended from time to time.

### 9. Target capacity

The State shall strive to achieve the following targets within the policy period:

Sl. No.	Description	Target Capacity (MW)
A	Grid Connected Solar Power Plant	
1	Solar Park	
	a. Normal Solar Park	50
	b. On water bodies	50
	Sub - Total (1)	100
2	Solar Power Plants for sale of power to APDCL	
	a. With storage	250
	b. Without storage	50
	Sub – Total (2)	300
3	Solar Power Plants for sale of power to any entity other than APDCL	50
4	Solar Power Plants under REC mechanism	50
5	Solar Power Plant in Agricultural Sector	100
6	Captive Solar Power Plant	20
	Sub – Total (A)	620
В	Grid Connected Rooftop Solar Power Plant	
	a. Industry-With storage	100
	b. Residential	100
	c. State Govt. installations	100
	Sub – Total (B)	300
C	Off Grid Solar Applications	
1	Solar Pump	25
2	Mini / Micro Grid Solar Power Plant, Solar Home Light, Solar Street Light, Off Grid Solar Power Plant	5
3	State Govt. installations	50
	Sub – Total (C)	80
	Grand Total :: Solar	1000
D	Other renewable energy sources	
1	Small hydro	25
2	Pump storage (water bodies/ ground water based)	50
3	Bio-mass based	25
4	Solid waste	100
	Sub – Total (D)	200
	Grand Total ::	1200

In addition to the above, Govt. of Assam has declared an ambitious project of "মুখ্যমন্ত্ৰী সৌৰশক্তি প্ৰকল্প" (Mukhya Mantri Souro Shakti Prokolpo) for installing 1000 MW in free Government lands in the budget statement for FY 2022-23. One of the intents of this scheme is to monetize the free unused Government lands over and above development of solar power plants to augment power generation capacity of the State. Govt. of Assam will explore creation of Joint Venture Company (JVC) with other Public Sector Undertakings to carry out such projects. JVC may created between APDCL/APGCL with other Public Undertakings. The JVC shall undertake Operation & Maintenance (O&M) activities of the Renewable Power Projects and supply power produced from these Projects to APDCL (need based) / Bulk Consumers in the State of Assam or to other State DISCOMs /Utilities (also under any bundling scheme) and to open access / captive consumers. APDCL will procure power from any such JVC after observing all regulatory norms.

#### PART-B

### 10. Categories of Grid connected Solar Power Plants

### 10.1 Solar Parks

- 10.1.1 Solar Parks with aggregate capacity around 100 MW shall be developed during the policy Operative Period. The State Government, under this policy, will help facilitate in building up the necessary infrastructure like power evacuation, water requirements, land development and internal roads etc.
- 10.1.2 The minimum capacity of Solar Park shall be 25 MW.
- 10.1.3 APDCL shall act as the 'SPPD' for development of infrastructure and management of Solar Park in the State.
- 10.1.4 The SPPD will formulate business modalities in respect of land allotment within the park boundary,

sharing of development cost by the SPGs. The SPV will develop the initial infrastructure from the funds allocated by GoI and Govt. of Assam, which will be subsequently recovered from the SPGs whose projects are located in Solar Parks by levying development charges.

- 10.1.5 APDCL shall purchase 100% of the aggregate capacity of solar energy produced from all the solar parks in the State.
- 10.1.6 It shall be obligation of the DISCOM / Authorized Representative of the DISCOM as the case may be to comply all the provisions of prevalent Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects' and subsequent amendments thereto.
- 10.1.7 The State will promote setting up of Solar Park on water bodies for sale of power to DISCOM through tariff based competitive bidding route. Out of 100 MW, Solar Parks on water bodies with aggregate capacity around 50 MW shall be developed during the policy Operative Period.
- 10.1.8 Necessary framework for development of solar park in the state shall be under the overall framework of MNRE guidelines and as decided by the SPPD from time to time.

### 10.2 Grid Connected Rooftop

The State Government shall promote development of grid connected rooftop solar power plant with or without storage systems within the premises of Government, social, institutional, residential, commercial and industrial sector on EXIM metering basis through CAPEX and RESCO Model (Third Party Owned Business Model).

(a) Installation of Grid Connected Rooftop Solar Power Plants through RESCO model will be encourages on the offices of the Government Organizations / Semi Government Organizations / State Government owned or aided institutions under EXIM metering

mechanism. In this arrangement power purchase agreement between consumer and RESCO (Third Party) and EXIM metering interconnection arrangement between consumer and APDCL will be executed.

- (b) State Government may make budgetary provision for providing payment security in case of any State Government,
  Semi Government, Government aided organizations, Government owned corporations and statutory bodies etc decides to implement Grid Connected Rooftop Solar Power Plants through RESCO.
- 10.2.2 The State Government shall also promote development of grid connected rooftop solar power plant at vacant Roof or land within the premises of the consumer for sale of power to DISCOM under Gross Metering. The development of RTS Power Plant under Gross metering will be levied as under:
  - (a) APDCL shall procure entire power generated from the Grid Connected RTS Plant under gross metering through tariff based competitive bidding route. Year wise levellized tariff for the Grid Connected RTS Power Plant shall be notified by State Commission.
  - (b) The development models of RTS Power Plant under Gross metering will be levied as under:
    - Plant setup by SPG/RESCO within the premises of Consumer of DISCOM (Solar Lease Model, Sale of power to DISCOM)
      - SPG / RESCO to be selected through competitive bidding, shall setup RTS Solar Power Plant on identified roof spaces / vacant land within the premises of consumer. The SPG/RESCO shall take roof spaces / vacant land on lease. The RESCO shall enter into a lease agreement with consumer. DISCOM shall procure entire generated power at a tariff discovered through competitive bidding

route. The amount of monthly lease rent shall be paid by lease holders.

(ii) Plant setup by eligible consumer other than SPG/RESCO within their premises

The Power Purchase Agreement (PPA) to be executed between DISCOM and eligible consumer at the levellized tariff approved by State Commission for that relevant year. In such case, the consumer may hire Engineering Procurement Construction (EPC) Contractor for installation & maintenance of his/her plant.

- (c) The target of Grid Connected Rooftop Solar Power Plant under Gross Metering shall be up to the limit to meet RPO requirements for that particular year and same shall be notified by DISCOM at the beginning of the financial year.
- (d) The DISCOM will notify sub-station wise surplus capacity which can be fed from RTS power plants to the Grid and shall invite applications from interested consumers for setting up the Grid Connected RTS Power Plant under gross metering within their premises.
- (e) The relevant regulations on Grid Connected Rooftop Solar Power Plant under Gross Metering including detailed guidelines and model power purchase agreement shall be notified by AERC after the gazette notification of this policy.
- (f) Industries installing grid connected RTS shall be encouraged to put storage facilities to avoid injection of Solar power in day hours and for use of the stored power in peak hours.
- 10.2.3 The energy accounting & billing of RTS Power Plants under EXIM & Gross metering will be levied as under:

### (i) **EXIM Metering**:

The billing shall be done in the following ways:

- (a) The energy consumed during a month by the consumer from the grid shall be billed as per prevailing tariff schedule of tariff applicable for the category.
- (b) The amount due to the consumer on account of injection of solar energy to the grid shall be reckoned @100% of the APPC rate. This amount shall be adjusted from the monthly electricity bill.

### (ii) Gross Metering:

The energy accounting & billing of RTS Power Plants under gross metering will be levied as under:

### a. For the project setup under clause 10.2.2(b) (i):

DISCOM shall procure entire generated power at a tariff discovered through competitive bidding route.

### b. For the project setup under clause 10.2.2(b) (ii):

The quantum of injected electricity to be paid by DISCOM shall be at the levellized tariff approved by the State Commission for the relevant year. The PPA tariff shall be fixed for a period of 25 years.

10.2.4 The State shall strive to achieve the objectives of the policy and aim at implementing grid connected rooftop solar power plants during the operative period as per the following table:

Establishments	Target (MW)	Capacity
a. Industry-With storage	100	
b. Residential	100	
c. State Govt. installations	100	

- 10.2.5 The minimum and maximum size of Grid Connected RTS Plant at Single location shall be 1 kW and 1000 kW respectively. The Solar Panel capacity of Grid Interactive Solar System to be installed at any eligible consumer premises under EXIM & Gross metering shall be as follows:
  - (i) The maximum capacity of Grid Connected RTS Solar Power Plant to be installed at any individual consumer establishments shall be equal to the Sanctioned load (in kW) or the Contract Demand (in kVA) of the Consumer, as applicable.
  - (ii) The cumulative capacity of Grid Connected RTS Power Plant to be allowed at a particular distribution transformer shall not exceed 80% of the capacity of the distribution transformer or any other transformer.
- 10.2.6 The DISCOM shall notify distribution level capacity available for connecting rooftop solar system under EXIM metering on yearly basis and augment the DTR capacity& distribution systems to evacuation the power.
- 10.2.7 Sub Divisional Engineer (SDE) shall be empowered to release EXIM metering connection up-to 1000 KW under the policy and act as nodal officer for implementation of RTS projects in his operational area.
- 10.2.8 Rooftop Solar (RTS) Cell at each Circle level headed by the Chief Executive Officer (CEO) shall be established by DISCOM for faster implementation of RTS projects in his operational area.
- 10.2.9 No permission shall be required from the designated building development authority for setting up of rooftop solar power plant except locating near airports where building regulations issued by the Airports Authority of India take precedence.
- 10.2.10 DISCOM shall notify time bound procedure including modalities for implementation of the Rooftop Solar

- programme within 30 days from the date of gazette notification of this policy.
- 10.2.11 No inspection from the State Electrical Inspectorate is required for RTS plants up to 500 kVA capacity.
- 10.2.12 The fulfillment of RPO for RPO obligated entity installing Grid Connected Rooftop Solar Power Plant under EXIM metering shall be as follows:
  - (ii) Option -1: If the Grid Connected Rooftop Solar Power Plant setup at RPO obligated entity, then the quantum of electricity generated from the solar energy system shall qualify for accounting towards the Renewable Purchase Obligations (RPO) of such RPO obligated entity.
  - (iii) Option -2: If the Grid Connected Rooftop Solar Power Plant setup under REC mechanism, then the generation of electricity from RTS plant shall be eligible to apply for registration for issuance of and dealing in Certificates as per CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendments thereto.
  - (iv) Option -3: If the Grid Connected Rooftop Solar Power Plant setup at Non RPO obligated entity and not to avail REC benefit; then the quantum of energy exported to the grid shall qualify accounting towards RPO of DISCOM.
- 10.2.13 The DISCOMs will develop a suitable and comprehensive IT application for Monitoring policy target, sanctioned RTS capacity and expedite commissioning of the allotted RTS capacity by MNRE.
- 10.3 Solar plants set up by private developers for sale of powerto APDCL solely
- 10.3.1 The State Government shall promote development of solar power plants for sale of generated electricity to APDCL through tariff based competitive bidding route as per the "Guidelines for Tariff Based

- Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects" and subsequent amendments thereto.
- 10.3.2 Selection of the SPGs and the discovery of corresponding tariffs etc. shall be done by APDCL.
- 10.3.3 Solar power is intermittent in nature as it is available only in daytime and it also depends on prevailing weather conditions. Therefore, to reduce the variability of output of solar power injected into the grid and to ensure availability of firm power for a particular period, the State will promote Solar Power Projects with storage systems in form of battery storage, pumped hydro storage or any other grid interactive storage system.
- 10.3.4 APDCL would procure with aggregate capacity around 250 MW solar powers under this category during the policy operative period. The procurement of power under this category shall be as follows:
  - APDCL would procure around 100 MW Ground Mounted solar power projects without storage systems under this category.
  - (ii) Initially, power upto the capacity of 100 MW from Ground Mounted Solar Power Projects with Storage systems in form of battery storage, pumped hydro storage or any other grid interactive storage system will be procured by APDCL at a tariff discovered through competitive bidding route.
  - (iii) The setting up of MW scale Floating Solar Power Plants on water bodies shall be encouraged and APDCL would procure around 50 MW of solar power under this policy. List of water bodies shall be indentified in consultation with concerned department, Govt. of Assam. The bidder shall be selected through open competitive bidding by a separate tender by APDCL.

- 10.3.5 APDCL would enter into long term PPA of 25 years with SPGs who are selected based on a competitive bidding process.
- 10.3.6 The state Government shall evolve a guaranteed payment security mechanism to the investors under this category of projects.

### 10.4 Development of Solar Power Plants for Sale to Electricity to any entity other than APDCL

- 10.4.1 The State Government shall promote SPGs for setting up Solar Power Projects for sale of power to 3<sup>rd</sup> party
  - i. Within the State through open access or
  - ii. Outside the State through open access.
- 10.4.2 SPG shall be responsible for arranging required land necessary for the project.
- 10.4.3 The applicant (SPG / Consumer) apply for connectivity to the distribution system within the state shall meet the following criteria
  - (i) The minimum capacity of solar power plant shall be 1 MW
  - (ii) A captive generating solar power plant intending to inject power to the grid with a minimum of 1 MW
  - (iii) The SPG shall be allowed to supply power to a consumer having a minimum of 1 MW connected load.
- 10.4.4 The maximum solar plant capacity for sale of power within or outside the state shall be allowed based on transmission and evacuation capacity of the network.
- 10.4.5 The State shall promote for an aggregate capacity 15 MW solar power plants under this category during this policy operative period.
- 10.4.6 Any SPG / consumer shall be eligible for availing incentive under this policy, subject to registration with APDCL.

- 10.4.7 The wheeling and transmission arrangement with APDCL /AEGCL/or with other grid or network as applicable will be executed separately.
- 10.4.8 The cost involvement for evacuation of power from interconnection point to grid substation shall be borne by the SPG.
- 10.4.9 State Load Despatch Centre (SLDC), Assam shall be designated as a Nodal Agency for approval of Intra State Open Access clearance for solar projects in Assam. In absence of any response or intimation from the Nodal Agency to the generator within 21 days from the date of receipt of application, then such application shall be considered to be deemed open access.
- 10.4.10 The modalities for implementation of solar power plant including wheeling and transmission agreement with APDCL and AEGCL under this category shall be notified by State Commission from the date of gazette notification of this policy

### 10.5 Development of solar power plants under Renewable Energy Certificate Mechanism

- 10.5.1 The State Government shall promote development of solar power plants under REC mechanism specified by the CERC.
- 10.5.2 The State shall promote for an aggregate capacity 6 MW solar power plants under this category during this policy operative period.
- 10.5.3 Necessary land/ project site shall be arranged by the SPGs.
- State Load Despatch Centre (SLDC), Assam shall be designated as a state agency for accreditation of solar projects in Assam under REC mechanism.
- 10.5.5 The prospective SPGs may approach SLDC, Assam for capacity allotment upto the target capacity under this category.

- 10.5.6 The administrative procedure, as notified by the CERC and as amended from time to time, shall be followed.
- 10.5.7 The minimum capacity of solar power plant shall be 250 kw or as specified by CERC/AERC from time to time.
- 10.5.8 The modalities for implementation of solar power projects under REC mechanism shall be issued by State Load Despatch Centre (SLDC), Assam in consultation with AERC within 30 days from the date of gazette notification of this policy.
- 10.5.9 Policy benefits like wheeling, banking, electricity duty as brought out in this policy shall be applicable as per the provisions made out by CERC/AERC.
- 10.5.10 The Projects set up under clause 10.2, 10.4 & 10.6 will also be eligible for RE (Solar) Certificate as per Orders/Regulations issued in this regard by the appropriate Commission.

### 10.6 Captive Solar Power Plant:

- 10.6.1 The State Government will encourage SPGs to setup solar power projects for captive use within the state or 3rd party sale within and outside the state. A power plant shall qualify as a 'Captive Generating Plant', under Section 9 read with Section 2(8) of the Act and Rule 3 of the Electricity Rules, 2005, as amended from time to time.
- 10.6.2 It shall be obligation of the Captive Users to ensure the captive consumption at the percentage mentioned in the Electricity Rules 2005 and subsequent amendments thereto. In case the minimum percentage of captive generation is not used for captive purposes in any year, the generating plant shall not be eligible for the benefits of a captive generating plant in that financial year.
- 10.6.3 State Commission shall certify a generating station or power plant to be a Captive Generating Plant.

- 10.6.4 The minimum solar panel capacity of captive generating plant to be installed by any eligible SPG shall be above 1 MW and the maximum capacity shall be allowed based on transmission and evacuation capacity of the network.
- 10.6.5 The State will promote setting up of solar power projects for captive use as under:
  - (i) Option -1: Solar Power Projects setup within premises of a consumer of Assam & sale surplus power to DISCOM. The surplus energy may be sold either to DISCOM @75% of the APPC rate. The Captive Generating Plant shall ensure that the DISCOM has submitted Power Purchase Agreement to the Commission for approval, if the captive power plant intends to sale surplus power to DISCOM.
  - (ii) Option -2: Solar Power Projects setup within premises of a consumer of Assam &sale of power to 3<sup>rd</sup> party within State under Open Access. Under this category, the project shall be exempted on cross subsidy surcharge & Additional surcharges for a period of 5 years.
  - (iii) Option -3: Solar Power Projects setup within premises of a consumer of Assam &sale of power to 3<sup>rd</sup> party outside State under Open Access. Under this category, the charges shall be applicable to normal open access consumer determined by AERC, as amended from time to time.
- 10.6.6 The projects under this category shall be eligible for availing incentives, subject to registration with APDCL.
- 10.6.7 For the projects under clause 10.4 & 10.6, the SPG shall execute Wheeling and Banking Agreement with DISCOM. In case transmission system of STU is also used, then SPG will execute separate transmission agreement with STU.

- The State will also promote Solar Power Projects with Storage Systems for captive use/third party sale.
- 10.6.9 The relevant regulations of Captive Solar Power Plant including detailed guidelines, model power purchase agreement, wheeling & Banking Agreement and transmission agreement shall be notified by State Commission after the gazette notification of this policy.
- 10.6.10 The Captive Solar Power Plant shall provide bidirectional Availability Based Tariff compliant Special Energy Meters (SEM). Check meters shall be mandatory for eligible captive generating plant. The energy recording and billing shall be at the substation of the DISCOM/STU.

### 10.7 Grid Connected Solar Power Plant in Agricultural Sector

The State will promote setting up of solar power projects in agricultural sector as under:

### 10.7.1 Grid Connected Solar Pump

- (i) The State shall promote development of grid connected solar power plant to solarise agriculture pumps to meet the irrigation needs within the premises of individual farmer under EXIM metering. The surplus energy may be sold to DISCOM @100% of the APPC rate as notified by State Commission.
- (ii) APDCL shall be the Nodal Agency for promotion and implementation of Grid Connected Solar Water Pumping systems in the State.
- (iii) The relevant authority of the concerned department (viz. Agriculture, Irrigation, Horticulture etc.) shall quantify the number of Grid Connected Agriculture Pumps to be energized through solar power in the State and same shall be intimated to Nodal Agency at the beginning of every financial year.

- (iv) The relevant regulation of 'grid connected solar power plant to solarise agriculture pumps' shall be notified by AERC after the gazette notification of this policy.
- (v) The administrative guidelines issued by MNRE, GOI and as amended from time to time shall be followed.

### 10.7.2 Decentralized Ground/ Stilt Mounted Grid Connected Solar Power Plant at Barren /uncultivable land/ agriculture land

- (i) The State shall promote development of grid connected solar power plant on Barren / uncultivable land or Agricultural land provided that solar plants to be installed in stilt fashion (i.e. raised structure for installation of Solar panels) and with adequate spacing between panel rows for ensuring that farming activity is not affected.
- (ii) The minimum & maximum plant capacity shall be 500 kW and 2 MW respectively.
- (iii) Individual farmers/ group of farmers/ cooperatives/ panchayats / Farmer Producer Organizations (FPO)/Water User associations (WUA) shall be eligible to setup the Solar Power Plant.
- (iv) Solar Power Plant set up by SPG other than under Clause 10.7.2 (iii); in such a case, the land owner will get lease rent as mutually agreed between the SPG and land owner.
- (v) The generated power will be purchased by DISCOM as per guidelines issued by MNRE and subsequent amendments thereto.
- (vi) Year wise pre-fixed levelised tariff under this category shall be notified by State Commission.

### 10.8 Promotion of setting up of Renewable Energy based Electric Vehicle Charging Stations

The shift to clean and green transport has become necessary due to increase in carbon emission from fossil fuel which leads to global warming and climate change. The rapid increase in fossil fuel consumption due to rising vehicular movement has led to increase in pollution and an adverse impact on climate change. The above factors are main reasons for adoption of Electric Vehicles (EV) and supporting technologies. The requirement of suitable grid-grade electricity is seen as a major challenge for establishing sufficient charging stations for the EVs. Charging of EVs from electricity generated from fossil fuel based conventional sources does not reduce emissions. For further reduction of carbon footprint it is essential that the EVs are charged from renewable energy sources. In view of the above, the State will promote the use of renewable energy for charging of EVs in the following manner:

- (i) The Charging Infrastructure will be developed as per the guidelines and standards issued by Ministry of Power and Central Electricity Authority.
- (ii) The EV charging stations may be established by the State/Central Public Sector Undertakings, private operators or under public private partnership models.
- (iii) The charging station service providers may set up solar power plants within their premises for captive use, and may also draw solar power through open access from generation plants located within the State to avail the benefits as provided under clause 16 of this Policy.

### 10.9 Promotion of other Renewable Energy sources

Various new technologies have evolved in pumped storage, biomass, solid waste etc. Such technologies will be very useful in supplementing various Government schemes particularly solid waste management etc.

Localized Pump storage may be useful in catering peak load in a particular area having supply constraints due to grid availability. Successful commercial operation may lead to reduction in capital expenses in various infrastructure projects. Other RE technologies may also be encouraged for optimal utilization of available resources.

### PART-C

### 11. Evacuation and Grid Interfacing for the solar projects under clause 10.1

The evacuation of power for the projects under clause 10.1 shall be as follows:

### 11.1 Grid Interfacing

The grid interfacing arrangements for power using solar as Renewable Energy Sources will be made by STU/DISCOM as under:

### a. Pooling Substation:

- The pooling Sub-station shall be developed within the Park boundary and maintained by SPPD.
- ii) The interfacing arrangements from points of generation to the Pooling Sub-station such as transformers, panels, kiosks, protection, metering, HT lines shall be developed and maintained by the SPG as per the Grid Code applicable from time to time and will bear its entire cost.
- Receiving Sub-station: STU / DISCOM shall b. finalize the location of Receiving Station on which the electricity generated will received. For creation of proper facility for receiving power at the receiving sub-station of STU/DISCOM; the SPG shall pay connectivity charges as finalized State Commission (AERC) from time to time to STU/DISCOM as the case may be. The charges will include cost of complete line bay (including civil works) and its interconnections with existing electrical system.

### 11.2 Transmission and Distribution Network

a) For augmentation of transmission / distribution systems to evacuation the power from receiving sub-station, STU/DISCOM shall develop / augment the necessary transmission /distribution network within mutually agreed timeframe.

### b) Transmission line from Pooling Substation to Receiving Sub-station

The evacuation system beyond pooling substation to Receiving Sub-Station shall be developed & maintained by SPG as per terms and conditions of power purchase agreement.

### 12. Evacuation and Grid Interfacing for the solar projects under clause 10.3, 10.4, 10.5, 10.6.5 (ii), 10.6.5 (iii) & 10.7.2

- i) The interfacing arrangements from points of generation to the Receiving Sub-station such as transformers, panels, kiosks, protection, metering, HT lines shall be developed and maintained by the SPG as per the Grid Code applicable from time to time and will bear its entire cost.
- ii) STU / DISCOM shall finalize the location of Receiving Station on which the electricity generated will be received. For creation of proper facility for receiving power at the receiving sub-station of STU/DISCOM; the SPG shall pay grid connectivity charges as finalized State Commission (AERC) from time to time to STU/DISCOM as the case may be. The charges will include cost of complete line bay (including civil works), associated terminal equipment and synchronization equipment with existing electrical system.

### 13. Evacuation and Grid Interfacing for the solar projects under clause 10.6.5 (i)

The SPG entrusted for development of Captive Solar Power Plant shall be responsible for construction of the evacuation system for connecting its plant with distribution substation of DISCOM or grid substation of STU. The cost of laying the dedicated transmission line to the substation, the required bays, associated terminal equipment and synchronization equipment shall be borne by the SPG and the work shall be undertaken under approval and supervision of the DISCOM/STU. The applicable charges shall be payable to DISCOM or STU.

#### PART- D

### 14. Decentralized & off – grid solar applications

The following types of projects shall be encouraged under the off-grid applications of solar PV technology.

### 14.1 Solar PV Pumps for Micro – Irrigation & Drinking Water Supply:

- (i) For encouraging the application of solar water pumps and make them affordable to farmers, the relevant authority of the concerned department (viz. Agriculture, Irrigation, Horticulture etc.) shall identify priority areas for deployment of solar water pump.
- (ii) The State Agriculture Department shall be the Nodal Agency for promotion and implementation of Solar Water Pumping systems in the State.
- (iii) The Nodal Agency as notified by Govt. of Assam for promotion and implementation of off grid Solar Water Pumping systems shall quantify the number of Standalone Off Grid Solar Water Pumping Systems & Solarisation of Grid Connected Agriculture Pumps in the State.
- (iv) The State in collaboration with the Central Government / MNRE, Govt. of India will promote the installation of Agricultural Solar Powered Pump sets through subsidy support (if applicable) to meet water/ irrigation energy needs.

### 14.2 Mini / Micro Grid Solar Power Plant for Electrification of un-electrified villages

- (i) State shall encourage for installation of Mini / Micro Grid Solar Power Plant for Electrification of un-electrified villages of the State though the scheme/program notified by Govt. of India.
- (ii) The administrative guidelines issued by Rural Electrification Corporation Limited and as amended from time to time shall be followed.

# 14.3 Other solar PV applications such as solar home lights, solar street light, off grid solar power plant etc for use in stand-alone mode by individual and communities.

(i) The state shall promote for implementation of solar street lighting systems in urban/rural

areas by involving Municipal Sector / Urban Bodies/Government or any other agencies of the state. State Government will review from time to time and take appropriate decision in regard to subsidy.

- (ii) The deployment of Solar home lighting systems state shall be promoted in off grid areas through state budgetary support and central subsidy (if applicable).
- (iii) The state shall promote for implementation of off grid standalone solar power plant in Government offices, Government schools, Government / Government affiliated Colleges, Government hospitals and other buildings notified by Government situated in rural areas by involving APDCL/AEDA or any other agencies of the State through state budgetary support and central subsidy (if applicable).
- (iv) State will also provide support to local entrepreneur / user association as per the capacity development program.

#### PART-E

### 15. Metering Arrangement

15.1 The metering of electricity generated from the SPGs, shall be complying with the provisions of relevant Meter Regulations of Central Electricity Authority and amendment thereto.

#### PART-F

### 16. Incentives from the State Government

### 16.1 Surplus power injection to APDCL:

- (A) For the solar power project under clause 10.2 without storage: 75% of latest available lowest bid carried out by APDCL.
- (B) For the solar power project under clause 10.2 with storage: 100% of latest available lowest bid carried out by APDCL.

### 16.2 Wheeling and Transmission charges

The transmission and wheeling charges for Solar Power Projects setup for sale of power within the State after the commencement of this policy and up to March 2026 will be levied as under:

- (C) For the solar power project under clause 10.1, 10.2, 10.3, 10.6.5 (i) shall not be applicable under the policy.
- (D) For Solar Power Projects set up for captive use/third party sale within the State will be levied as under:
  - (i) For Solar Power Project under clause 10.6.5 (ii) and 10.4.1 (i): @50% of normal transmission and wheeling charges for a period of 3 years from the date of commissioning of the project.
  - (ii) For the Solar Power Project under clause 10.6.5 (iii) & 10.4.1 (ii) shall be applicable as per the provisions made out by AERC/CERC.
  - (iii) For the Solar Power Project under clause 10.8 (iii): @100% exemption in normal transmission and wheeling charges for a period of 10 years from the date of establishment of Electric Vehicle (EV) charging station.

### 16.3 Cross Subsidy Charges & Additional Surcharges

The Cross Subsidy Charges & Additional Surcharges for Solar Power Projects setup for sale of power to 3<sup>rd</sup> party within or outside the State under open access after the commencement of this policy and up to March 2025 will be levied as under:

- (i) For the Solar Power Project under clause 10.6.5 (ii), 10.6.8, 10.4.1 (i) will be exempted for a period of 5 years from the date of commissioning of the project.
- (ii) For the Solar Power Project under clause 10.6.5 (iii) & 10.4.1 (ii) shall be applicable as per the provisions made out by AERC.

### 16.4 Electricity Duty

The electricity consumed by the Consumer for captive use within the State under clause 10.2, 10.6.5 (i), 10.6.5 (ii), 10.6.8 & 10.8 (iii) will be exempted from payment of electricity duty and cess for a period of 5 years from the date of commissioning of the project.

### 16.5 Open Access

Intra-state Open Access clearance for the whole tenure of the project or 25 years whichever is earlier will be granted as per the AERC Regulations amended from time to time. In absence of any response or intimation from the Nodal Agency to the generator within 21 days from the date of receipt of application, then such application shall be considered to be deemed open access.

### 16.6 State Subsidy for Grid Connected Rooftop Solar PV Plant

To promote large scale installation of Grid Connected Rooftop Solar Power Plant under EXIM Metering arrangement in residential sectors in addition to Central Financial Assistance available from Government of India, State Government will provide subsidy of Rs. 1000 per kW to a maximum limit of subsidy Rs. 3000/- per consumer on first come first basis for the first 30 MW applications submitted online to APDCL. This subsidy will be in addition to any Central Financial Assistance available from Ministry of New and Renewable Energy, Government of India which would be dispersed by APDCL.

### 16.7 Banking of Power

Banking of energy in every financial year shall be permitted as per banking provisions of AERC (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations, 2015 and as amended from time to time.

### 16.8 Statutory clearances

No clearance from any district authority or state authority or department is required on setting up of solar plants under the policy on lands or property otherwise not barred by any Act, rule or Judicial or executive order.

#### 16.9 Incentives available from Government of India

Various incentives allowed by Ministry of New and Renewable Energy (MNRE) for solar projects like exemption in excise duty and concession in customs duty shall be allowed to the SPG.

#### 16.10 Land

The SPG shall be responsible for obtaining the land for setting up and operating solar power projects.

- 16.11 Solar PV projects shall be exempted from obtaining Environmental clearance.
- 16.12 Grid connected Solar PV Projects will be exempted from obtaining any NOC/ Consent for establishment and operation under pollution control laws from Assam Pollution Control Board.

#### PART-G

### 17. Forecasting and Scheduling

- 17.1 All Solar Power Projects in Assam connected to the Intra –State Transmission /Distribution system, including those connected to through pooling substation, and using the power generated for self- consumption or selling power within or outside the State of Assam shall forecast and schedule their generation as per Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 and AERC (Forecasting, Scheduling, Deviation Settlement and Related Matters of Solar and Wind Generation Sources) Regulations, 2018 as amended from time to time.
- 17.2 The SPGs connected at each Pooling Sub-Station shall appoint a QCA. An individual SPG not connected to a Pooling Sub-Station may opt to be its own or to appoint a separate entity as its QCA.
- 17.3 The QCA shall be appointed by the SPGs and every QCA shall be registered with the SLDC.
- 17.4 The QCA shall be the single point of contact between the SLDC and its SPG.
- 17.5 SLDC will ensure 'Must Run' Status of Solar Plants in the State and maintain the data of Solar Power Plants Curtailment in transparent manner.

#### PART-H

### 18. Nodal Department, Nodal Agency

### 18.1 Nodal Department:

The Power (Electricity) Department, Govt. of Assam shall be the Nodal Department under this policy.

### Role of Nodal Department:

- (i) Facilitate for allotment of suitable land/space in control of State Government or its agencies.
- (ii) For arranging right of way, if any, water supply and connecting infrastructure like roads etc Nodal Department will coordinate with other Government departments for expediting the setting up of Solar Projects.

### 18.2 Nodal Agency:

APDCL shall act as a Nodal Agency for implementation of Solar Power Projects in Assam under this Policy. Strengthening and extension of Nodal agency will be done.

### Role of Nodal Agency:

- (i) Registration of all projects under this Policy
- (ii) Facilitate in getting power evacuation and / or Open Access as per regulation issued by AERC and amended from time to time
- (iii) Facilitate and process of proposals for availing subsidy for RTS plant as per MNRE guidelines
- (iv) For statutory clearance / permissions, the concerned Department will be the relevant authority like Revenue Department for lands, Forest Department for Forest clearance etc.
- (v) Bidding of Project: The Nodal agency will be responsible for carrying out all the tasks related to bidding process for Solar Power Projects in the state
  - For utility scale Solar Energy Projects Government of Assam shall provide funds for activities like hiring of consultants for

Bid process management, hiring of consultants for preparation of detailed project report, outsourcing of single window system and other incentives to be made available directly under this policy feasibility report preparation and bid

feasibility report preparation and bid process management. Nodal Agency may charge a nominal facilitation charge for providing this service.

### 19. Registration

- 19.1 To avail the policy benefit and getting NOC for evacuation of power, the SPG entrusted directly by the consumer / organization other than APDCL for the development of Grid Connected Solar Power Projects in Assam shall be registered with APDCL prior to execution of the work.
- **19.2** The SPG will submit an online application for registration to APDCL in the prescribed format along with the following registration fee:

SL. No.	Cumulative Projects Capacity (kW)	Rate (Rs./kW)
1	For the cumulative project capacities ≤ 5 kW capacity	200
2	For the cumulative project capacities above 5 kW to upto 100 kW	50
3	For the cumulative project capacities above 100 kW to upto 1000 kW	20
4	For the cumulative project capacities more than 1000 kW	

- **19.3** The GST and other charges, as applicable, shall be payable in addition to the registration charges.
- 19.4 The installation of Solar Power Plants not registered with APDCL and without prior approval of competent authority as per policy provisions will be liable to be disconnected from the Grid.
- 19.5 Those who have started such project works prior to notification of the policy shall also get registered with necessary documents sought by APDCL.

### 20 Power to remove difficulties

The Power (Electricity) Department, Govt. of Assam shall have the power to amend / issue clarification, if any, on any matter related to interpretation of any provisions under this Policy in consultation with the concerned Departments / Agencies, as required under standard Government legal mechanism and procedure.

### 21. Power to Interpret:

If there is any confusion or dispute about the meaning, intent or purpose of any provision of this Policy, the interpretation given by Power (Electricity) Department, Government of Assam shall be final and binding to all concerned.

### NIRAJ VERMA,

Principal Secretary to the Government of Assam, Power (Electricity) Department.