

## THE ASSAM GAZETTE

## অসাধাৰণ

## EXTRAORDINARY

প্ৰাপ্ত কৰ্ত্তত্বৰ দ্বাৰা প্ৰকাশিত

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

## **NOTIFICATION**

The 16th January, 2018

**No. PEL.65/2014/207.-** In pursuance of the Section 108 of the Electricity Act, 2003, the Governor of Assam is pleased to notify the Assam Solar Energy Policy, 2017 for the state of Assam.

#### PART-A

#### 1. Preamble

It is envisaged under this policy to leverage solar energy potential of the State of Assam for augmenting the installed solar power capacity by deploying resources provisioned under state and central schemes, policies and programmes.

#### 2. Definitions & Abbreviations:

2.1 In this Policy, unless the context otherwise requires,-

- "Act" means the Electricity Act, 2003, including amendments thereto;
- ii) "AEDA" means Assam Energy Development Agency.
- iii) "AERC" means the Assam Electricity Regulatory Commission;
- iv) "APDCL" means the Assam Power Distribution Company Limited;
- v) "AEGCL" means the Assam Electricity Grid Corporation Limited;
- vi) "APGCL" means the Assam Power Generation Corporation Limited;
- vii) "APPC" means the rate for Average Pooled Power Cost of APDCL.
- viii) "Commission" means Electricity Regulatory Commission;
- ix) "CEA" means the Central Electricity Authority;
- x) "CERC" means the Central Electricity Regulatory Commission:
- xi) "CAPEX" means Capital Expenditure model for Rooftop solar and small solar power plant program of MNRE, GOI.
- xii) "DIPP" means the Department of Industrial Policy and Promotion, Govt. of India;
- xiii) "DISCOM" means a distribution licensee of Assam under 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) "Government" and "State" means the Government of Assam and the State of Assam respectively;
- xvi) "GoI" means the Government of India;
- xvii) "GW", "MW" and "KW" mean Giga Watt, Mega Watt and Kilo Watt respectively;
- xviii) "Gross Metering" means an arrangement under which eligible consumer or RESCO operator supplies the electricity generated from the Rooftop Solar Power Plant to the Distribution Licensee's network.
- xix) "KWp" means Kilo Watt (peak);
- "MNRE" means the Ministry of New and Renewable Energy, Govt. of India;
- xxi) "MoP" means Ministry of Power, Govt. of India,
- xxii) "Nodal Department" means the Power (Electricity) Department, Govt. of Assam for the purpose of promoting

energy generation from New and Renewable sources of Energy;

- xxiii) "Policy" means the Assam Solar Energy Policy, 2017;
- xxiv) "PPA" means Power Purchase Agreement;
- xxv) "PPP" means Public Private Participation;
- xxvi) "Procurer" means the individual entity/Agency/Utility who procures solar energy from SPG.
- xxvii) "REC" means Renewable Energy Certificate;
- xxviii) "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 up to time;
- xxix) "RESCO" means Renewable Energy Service Company
- xxx) "RPO" means Renewable Purchase Obligation;
- xxxi) "RTS" means the concept of rooftop solar 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 up to the capacity of 1000 kW.
- xxxii) "SDE" means the Sub Divisional Engineer holding the responsibility and authority within the jurisdiction of an Electrical Sub-division as assigned by APDCL.
- xxxiii) "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.
- xxxiv) "SPG" means Solar Power Generator;
- xxxv) "SPPD" means Solar Power Park Developer, the implementing agency of Solar Park as defined under National Mission, MNRE, GOI.
- xxxvi) "State Agency" means the agency in the concerned state as may be designated by the State Commission to act as the agency for accreditation and recommending the renewable energy projects for registration and to undertake such functions as may be specified under clause (e) of subsection (1) of section 86 of the Act
- xxxvii) "Tariff' means the schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof.
- xxxviii) "TRANSCO" " means a transmission licensee of Assam under the Act.

2.2 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 the 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 Solar Energy Policy, 2017" and it will come into 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 solar power capacity expansion of 590 MW by 2019-20 in the state of Assam by means of multiple models of solar 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.

#### 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. Also, other prevailing rules, regulations, policies, guidelines of MoP/CEA/CERC/MNRE/DIPP wherever applicable and pertaining to safe and efficient generation, transmission and distribution of solar power shall act as guiding principles upto their respective effective date.

#### 7. Operative Period

The Policy shall come into effect from the date of its notification and shall remain in force up-to 31.03.2020 ("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 year 2019-2020:

	Target Capacity (MW)				
Description	2017-18 2018-19			Total	
A. Grid Connected Solar Power P	lant		4: 		
1.1 Solar Park	80	60	60	200	
1.2 Solar Power Plants for sale of power to APDCL	100	50	50	200	
1.3 Solar Power Plants for sale of power to any entity other than APDCL	5	5	5	15	
1.4 Solar Power Plants under REC mechanism	2	2	2	6	
1.5 Solar Power Projects under any scheme of State Government	3	5	7	15	
1.6 Captive Solar Power Plant	6	10	13	29	
Sub – Total (A)	196	132	137	465	
B. Grid Connected Rooftop Solar Pow	er Plant		1		
Sub – Total (B)	30	40	40	110	
C. Off Grid Solar Applications	•	1	1		
3.1 Solar Pump	1	1	1	3	
3.2 Mini / Micro Grid Solar Power Plant	2	2	2	6	
3.3 Solar Home Light, Solar Street Light	1	1	1	3	
3.4 Solar Power Plants	1	1	1	3	
Sub – Total (C)	5	5	5	15	
Grand Total	231	177	182	590	

#### PART-B

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

#### 10.1 Solar Parks

- 10.1.1 Solar Parks with aggregate capacity around 200 MW shall be developed in the next 3 years up to the year 2019-20.
- 10.1.2 The minimum capacity of Solar Park shall be 20 MW.
- 10.1.3 APGCL or any other agency notified by Govt. of Assam shall act as the SPPD for development and maintenance of Solar Park in the State.
- 10.1.4 The SPPD shall develop the infrastructure like power evacuation, water requirement, land development etc. within the park from the funds allocated by Govt. of India/ Govt. of Assam
- 10.1.5 100% of the aggregate capacity of solar energy produced from all the Solar Parks in the State shall be sold to APDCL.
- 10.1.6 Selection of the SPGs and the discovery of corresponding tariffs etc. shall be done by APDCL through competitive bidding process.
- 10.1.7 The state government shall evolve a guaranteed payment security mechanism to the investors under this category of projects.
- 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

10.2.1 The State Government shall promote development of grid connected rooftop solar power plant within the premises of Government, social, institutional, residential, commercial and industrial sector on gross or EXIM metering basis through CAPEX and RESCO Model (Third Party Owned Business Model).

10.2.2 The RTS Power Plants shall be developed in the following ways:

#### (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 applicable for the category.
- (b) The amount due to the consumer on account of injection of solar energy to the grid shall be reckoned @75% of the APPC rate. This amount shall be adjusted from the monthly bill.
- (c)No payment shall be made by APDCL for any excess energy injected from the RTS Plant to the grid beyond 90% of the energy consumed from the grid during the billing cycle.
- (ii) <u>Gross Metering</u>: Tariff for the Grid Connected RTS Plant under gross metering shall be discovered through competitive bidding process approved by AERC.
- 10.2.3 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 Capacity (MW)				
	2017-18	2018-19	2019-20	Total	
Residential	6	7	8	21	
Government	6	10	10	26	
Social & Institutional	3	5	8	16	
Commercial	5	10	7	22	
Industrial	10	8	7	25	
Total	30	40	40	110	

- 10.2.4 The minimum and maximum size of Grid Connected RTS Plant at Single location shall be 1 kW and 1000 kW respectively. The maximum capacity of Grid Connected RTS to be installed at any individual consumer establishments, and as a percentage of the connected DTR capacity, shall be governed by the regulations notified by AERC from time to time.
- 10.2.5 SDEs shall be empowered to release EXIM metering connection up-to 500 KW under the policy. Above 500 kW and upto 1000 kW, the existing delegation of power for APDCL official shall be applicable for the purpose.
- 10.2.6 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.
- 10.2.7 The modalities for implementation of RTS plant including metering, billing, settlement & technical aspects etc. shall be issued by APDCL within 30 days from the date of gazette notification of this policy.

## 10.3 Solar plants set up by private developers for sale of power to 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.
- 10.3.2 The guidelines for bidding process shall be as finalized by APDCL.

- 10.3.3 The capacity of Solar Power Plant for the bidding process shall be 3 MW to 20 MW.
- 10.3.4 APDCL would procure around 200 MW of solar power in the next 3 years up-to the year 2019-20 under this category.
- 10.3.5 APDCL may or may not set up the evacuation facility depending on the mode of execution of the project.
- 10.3.6 APDCL would enter into long term PPA of 25 years with SPGs who are selected based on a competitive bidding process.
- 10.3.7 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 of 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 within or 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:
  - 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 15MW solar power plants under this category in the next3 years up to the year 2019-20.
- 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 The modalities for implementation of solar power plant under this category shall be issued by APDCL in consultation with AERC within 30 days 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 projects under REC mechanism shall be developed in following modes:

	Target Capacity (MW)			
Description	2017-18	2018-19	2019-20	Total
1.1 Solar Power Plants for sale of power to APDCL at 50% of the APPC rate	1	1	1	3
1.2 Solar Power for sale of power to an open access consumer at a mutually agreed tariff	0.5	0.5	0.5	1.5
1.3 Solar Power for captive mode	0.5	0.5	0.5	1.5
Grand Total	2	2	2	6

- 10.5.3 APDCL would procure around 3 MW of solar power under REC mechanism in the next 3 years upto the year 2019 – 20 under this category.
- 10.5.4 The prospective SPGs may approach APDCL for capacity allotment upto the target capacity.
- 10.5.5 Necessary land/ project site shall be arranged by the SPGs.
- 10.5.6 The SPGs may approach the designated state agency as notified by AERC for accreditation of solar projects in Assam under REC mechanism.
- 10.5.7 The administrative procedure, as notified by the CERC and as amended from time to time, shall be followed.
- 10.5.8 The minimum capacity of solar power plant shall be 250 kW or as specified by CERC/AERC from time to time.
- 10.5.9 The modalities for implementation of solar power projects under REC mechanism shall be issued by

APDCL in consultation with AERC within 30 days from the date of gazette notification of this policy.

10.5.10 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.

## 10.6 Development of solar power plants under the schemes announced by Government of India

- 10.6.1 The State Government shall extend support its cooperation to the SPG participating in the schemes announced by the MNRE, GoI, from time to time.
- 10.6.2 AERC shall also announce suitable framework for the implementation of such schemes from time to time.

## 10.7 Development of solar power plants under any other scheme of State Government

The State Government shall promote development of solar power plants under any other scheme announced by the State Government, from time to time.

#### **10.8 Captive Solar Power Plant:**

- 10.8.1 The State Government will encourage SPGs to setup solar power projects for captive use within the state or 3<sup>rd</sup> party sale within and outside the state.
- 10.8.2 The maximum capacity of the solar power plant under captive mode shall be allowed based on transmission and evacuation capacity of the network.
- 10.8.3 The Projects shall be developed in any of the following ways:
  - (i) The captive consumer shall consume at-least
    51% of the aggregate electricity generated in

solar plant. The surplus energy may be sold either to APDCL @75% of the APPC rate or to any entity within or outside the state.

- (ii) The captive solar power plant availing open access for 3<sup>rd</sup> party sale within the state shall be exempted on wheeling, transmission & cross subsidy surcharge for a period of 3 years.
- (iii) The captive solar power plant availing open access for 3<sup>rd</sup> party sale outside the state, charges shall be applicable to normal open access consumer determined by AERC, as amended from time to time.
- 10.8.4 The projects under this category shall be eligible for availing incentives, subject to registration with APDCL.
- 10.8.5 The modalities for implementation as well as grid interconnection procedure for solar power projects under this category shall be issued by APDCL within 30 days from the date of gazette notification of this policy.

#### PART- C

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

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

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

- 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 of Assam shall promote 1200 nos. of solar water pumping systems with aggregate capacity 6 MW in the next 3 years up to the year 2019-20.

		Target (Nos./MW)			
Solar Pump	2017-18	2018-19	2019-20	Total	
Number (Nos.)	400	400	400	1200	
Capacity (MW)	2	2	2	6	

- (iii) The state shall provide a maximum subsidy upto30% of the capital cost of the system.
- (iv) The State Agriculture Department shall be the Nodal Agency for promotion and implementation of Solar Water Pumping systems in the State.
- (v) The modalities of the scheme will be developed within 30 days from the date of gazette notification of this policy.

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

- Nodal Agency shall identify priority areas / sectors for deployment of Mini / Micro Grid Solar Power Plant which are not catered by Deen Dayal Upadhaya Gram Jyoti Yojana (DDUGJY) Scheme of Govt. of India.
- (ii) The State of Assam shall promote 6 MW aggregate capacities of Mini/Micro Grid Solar Power Plant shall be installed in the next 3 years upto the year 2019 -20.
- (iii) The projects shall be developed under DDUGJY scheme of Govt. of India.
- (iv) The administrative guidelines issued by Rural Electrification Corporation Limited and as amended from time to time shall be followed.
- 11.3 Other solar PV applications such as solar home lights, solar street light and off-grid Solar Power Plants for use in stand-alone mode by individual and communities.

		Target Capacity (Nos./MW)			
Item		2017-18	2018-19	2019-20	Total
1. Solar Home Light					
	Number (Nos.)	5000	5000	5000	15000
	Capacity (MW)	0.5	0.5	0.5	1.5
2. Solar Street Light					
	Number (Nos.)	5000	5000	5000	15000
	Capacity (MW)	0.5	0.5	0.5	1.5
3. Off-grid Solar Power Plants					
	Capacity (MW)	1.0	1.0	1.0	3.0

(i) The target sets under this segment is as follows:

- (ii) The state shall promote for implementation of solar street lighting systems in urban and rural areas by involving Municipal Sector / Urban Bodies/Government or any other agencies of the state.
- (iii) The state shall provide a maximum subsidy upto 20% of the capital cost of solar street lighting system as applicable.
- (iv) The deployment of Solar home lighting systems state shall be promoted by the state in off – grid areas under state budgetary support.
- (v) State will also provide support to local entrepreneur / user association as per the capacity development program.
- (vi) The state shall promote for implementation of off-grid solar power plants in remote and rural areas by providing upto a maximum of 30% of the capital cost as subsidy.

#### PART-D

#### 12. Metering Arrangement

12.1 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-E

#### 13. Incentives

#### 13.1 Wheeling and Transmission charges

Wheeling and transmission charges for sale of solar energy inside the state of Assam by the SPGs shall not be applicable under the policy.

#### 13.2 Cross Subsidy Charges & Additional Charges

Cross subsidy surcharge shall be exempted for third party sale provided the source of power is from Solar Power Projects setup within the State for a period of three (3) years from the date of commissioning of the Solar Power Plant.

#### 13.3 Electricity Duty

All Solar power projects (including captive units) will be eligible for exemption from payment of electricity duty and cess for a period of 3 years from the date of commissioning of the project.

#### 13.4 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.

#### 13.5 Government of India Incentives

Various concessions allowed by MNRE, Ministry of Electronics and IT shall be allowed to SPGs for the purpose of related solar power projects.

#### 13.6 Land

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

#### PART- F

#### 14. Nodal Department, Nodal Agency, Implementing Agency

#### 14.1 Nodal Department:

The Power (Electricity) Department, Govt. of Assam shall be the Nodal Department under this policy. The Nodal Department shall formulate and notify relevant applicable guidelines and procedures for the purpose of governing the provisions of the policy.

#### 14.2 Nodal Agency:

APDCL shall act as a Nodal Agency for implementation of Solar Power Projects in Assam under this Policy. Nodal Agency shall be responsible for the following activities:

- (i) Registration of the projects
- (ii) To facilitate in getting power evacuation and / or Open Access as per regulation issued by AERC as amended from time to time.
- (iii) To facilitate and process the proposals for availing subsidy for RTS plants 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.

#### 14.3 Implementing Agency:

AEDA shall act as an Implementing Agency for executing nonconventional demonstration projects, community awareness projects and research projects which are isolated and not connected to the grid under this Policy. Also, AEDA shall be the State Agency for accreditation of the solar projects under REC mechanism in Assam.

### 15. Registration

- 15.1 All SPGs entrusted directly for the development of Solar Power Projects in Assam shall be registered with APDCL prior to execution of the work in the prescribed format along with the following registration fee:
  - (i) For capacities upto 5 kW ----- Rs. 1000/-
  - (ii) Capacities above 5 kW to 50 kW ------ Rs. 3000/-
  - (iii) Capacities above 50 kW to 100 kW -----Rs. 8000/-
  - (iv) Capacities above 100 kW to 500 kW ------Rs. 12000/-
  - (v) Capacities above 500 kW to 1000 kW ----- Rs. 18000/-
  - (vi) Capacities more than 1000 kW ------ Rs. 18000/- per MW
- 15.2 Those who have started such project works prior to notification of the policy shall also get registered with necessary documents sought by APDCL.

## 16. 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.

## 17. 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.

> JISHNU BARUA, Principla Secretary to the Government of Assam, Power (Electricity) Department.

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