



# THE ASSAM GAZETTE

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GOVERNMENT OF ASSAM

ORDERS BY THE GOVERNOR

ASSAM ELECTRICITY REGULATORY COMMISSION

## NOTIFICATION

Dated the 2nd May, 2015

### **CO-GENERATION AND GENERATION OF ELECTRICITY FROM RENEWABLE SOURCES OF ENERGY REGULATIONS, 2015**

**No. AERC.299/2008/Pt-I/58** In exercise of the powers conferred under sub-section (1) of section 62, clauses (a), (b) and (e) of sub-section (1) of section 86 and sub-section (1) of section 181 of the Electricity Act 2003 and all powers enabling in that behalf, and after previous publication, the Assam Electricity Regulatory Commission makes the following regulations:-

#### **REGULATIONS**

##### **1. SHORT TITLE AND COMMENCEMENT:**

- 1.1. These regulations may be called the Assam Electricity Regulatory Commission (Co-generation and Generation of Electricity from Renewable Sources of Energy) Regulations, 2015
- 1.2. These regulations shall extend to the whole of the State of Assam.
- 1.3. These regulations shall come into force from the date of their publication in the Assam Gazette.

##### **2. INTRODUCTION:**

Under Section 86(1) (e) of Electricity Act 2003 a State Regulatory Commissions has a mandate to - 'promote cogeneration and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with grid and sale of electricity to any person and also specify the percentage of renewable energy to be procured by licensees.....'

In keeping with the above mandate, the Commission made and notified the 'AERC (Co-generation and Generation of Electricity from Renewable Sources of Energy) Regulations, 2009, covering all the matters mentioned under section 86(1)(e) of EA 2003 above.

Subsequently the Commission made the AERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010 and the AERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012. With notification of these two Regulations the provisions in the 'Co-generation and Generation of Electricity from Renewable Sources of Energy Regulations 2009' related to matters covered by these two subsequent Regulations were deleted from the 'Co-generation and Generation of Electricity from Renewable Sources of Energy Regulations 2009'.

Further, during last five years there were number of major developments in the renewable energy based power generation scenario in the country, particularly after launching of the ambitious National Solar Mission (Jawaharlal Nehru National Solar Mission).

The present revision of the AERC 'Co-generation and Generation of Electricity from Renewable Sources of Energy Regulations 2009' is done duly taking into consideration all above matter.

With Notification of these Regulations the (Co-generation and Generation of Electricity from Renewable Sources of Energy) Regulations, 2009 shall stand repealed.

### 3. DEFINITIONS:

3.1. In these regulations, unless the context otherwise requires –

- (a) **'Act'** means the Electricity Act, 2003 (Act 36 of 2003);
- (b) **'AEDA'** means the Assam Energy Development Agency set up by the Government of Assam for coordinating activities relating to Renewable Energy Development and a nodal agency for renewable energy based power generation in the state.
- (c) **'AEGCL'** means Assam Electricity Generation Company Ltd.
- (d) **'APDCL'** means Assam Power Distribution Company Ltd., state government power distribution company and a nodal agency for renewable energy based power generation in the state.
- (e) **'Banking'** means the process under which a captive generating station supplies power to the grid not with the intention of selling it either to a third party or to a licensee, but with the intention of exercising his eligibility to draw back this power from the grid for its own use;
- (f) **'Biomass'** means wastes produced during agricultural and forestry operations (for example straws and stalks) or produced as a bye - product of processing operations of agricultural produce (e.g., husks, shells, deoiled cakes, etc); wood produced in dedicated energy plantations or recovered from wild bushes/weeds; and the wood waste produced in some industrial operations;

- (g) **‘Biomass gasification’** means a process of incomplete combustion of biomass resulting in production of combustible gases consisting of a mixture of Carbon monoxide (CO), Hydrogen (H<sub>2</sub>) and traces of Methane (CH<sub>4</sub>), which is called producer gas;
- (h) **‘Biogas’** means a gas created when organic matter like crop residues, sewage and manure breaks down in an oxygen-free environment(ferments);
- (i) **‘Capacity Utilization Factor or ‘CUF’** for a given period, means the total electricity sent out corresponding to gross A.C generation during the reference period, expressed as a percentage of sent out electricity corresponding to installed capacity in that reference period and shall be computed in accordance with the following formula:

$$\text{CUF} = \frac{\text{Gross AC Generation over the reference period} \times 100}{\text{Installed Capacity} \times \text{Total Hours During the reference period (Including in outage hours )}}$$

- (j) **‘Cogeneration’** means a process, which simultaneously produces two or more forms of useful energy (including Electricity);
- (k) **‘Capital cost’** means the capital cost as defined in relevant regulations;
- (l) **‘Captive Generating Plant’** means a power plant set up by any person to generate electricity (which includes a power plant set up by any cooperative society or association of persons) primarily for his/their own use , where not less than twenty six percent of the ownership is held by the captive user(s), and not less than fifty one percent of the aggregate electricity generated in such plant, determined on an annual basis, is consumed for the captive, fulfilling the requirements of the Rule 3 of the ‘ Electricity Rules, 2005’ made by the Central Government.
- (m) **‘Captive User’** means the end user of the electricity generated in a Captive Generating Plant primarily for his own use from a ‘Captive Generating Plant’
- (n) **‘CERC’** means the Central Electricity Regulatory Commission
- (o) **‘Commission’** means the Assam Electricity Regulatory Commission;
- (p) **‘Conduct of Business Regulations’** means the Assam Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 as amended from time to time;
- (q) **“Date of commercial operation or Commissioning”(DCO)”** in relation to a unit means the date declared by the generator on achieving maximum continuous rating through a successful trial run and in relation to the generating station, the date of commercial operation means the date of commercial operation of the last unit or block of generating station and expression, “commissioning” shall be construed accordingly. In case of Small Hydro Plants the date of commissioning shall, however, not be linked to achieving maximum continuous rating, but the generator will have to demonstrate the same within three years of commissioning;

- (r) **‘DISCOM’** means a Power Distribution Company such as, Assam Power Distribution Company(APDCL);
- (s) **‘Empowered Committee’** means a committee constituted under regulation;
- (t) **‘Firm Power’** means injecting of at least 700 units in to the grid by the generator per hour per scheduled MW. [This calculation is based on a normative load factor of 70% (i.e. 1000 kWh x 70% Load Factor = 700 units per hour)];
- (u) **‘Infirm Power’** means the energy supplied that is not firm power, which is interruptible on a very short notice;
- (v) **‘Generator’** means the person(s) generating or intending to generate energy from a renewable source;
- (w) **‘Grid Code’** means the grid code specified by the Central Commission under clause(h) of sub-section (1) of section 79 of the Act and includes the State Code specified by the State Commission under clause (h) of sub-section (1) of section 86 of the Act;
- (x) **‘Grid Interactive System’** means a system that connects the power generating plant (commonly Solar) in a electricity consumer’s premises to an utility grid, so as to supply excess electricity to the distribution company’s Grid, after meeting the need of consumer and also to draw electricity from the grid to meet the short fall, when sufficient electricity not produced by the generating plant. Import-export and net energy consumed or injected is measured by ‘net metering’.
- (y) **‘Installed capacity’** or ‘IC’ means the summation of the name plate capacities of all the units of the generating station or the capacity of the generating station (reckoned at the generator terminals).
- (z) **‘Inter-connection Point’** shall mean interface point of renewable energy generating facility with the transmission system or distribution system, as the case may be:
  - a) In relation to Wind Energy Projects and Solar Photovoltaic Projects, inter-connection point shall be line isolator on outgoing feeder on HV side of the pooling sub-station;
  - b) In relation to small hydro power, biomass power and non fossil fuel based cogeneration power projects and Solar Thermal Power Projects the, inter-connection point shall be line isolator on outgoing feeder on HV side of generator transformer;
  - c) In case of ‘Grid interactive projects’ shall mean interface point of renewable energy generating facility with the distribution system of a licensee as the case may be.
- (aa) **‘licensee’** means a person who is granted a license or is a deemed licensee under section 14 of the Act;

- (bb) **'Interface line'** means the electric line between the interconnection point and the nearest point at which the electric line could technically be connected to the existing grid or distribution system.
- (cc) **'MNRE'** means the Ministry of New and Renewable Energy of the Government of India.
- (dd) **'Net metering'** means an arrangement under which a grid interactive solar system installed at an eligible consumer premises delivers surplus electricity, if any, to the Distribution Licensee after meeting his own need. Such injection shall be accounted for off-setting the electricity supplied by distribution licensee during the applicable billing period.
- (ee) **'Non-firm power'** means the power generated from renewable sources, the hourly variation of which is dependent upon nature's phenomenon like sun, cloud, wind etc., that cannot be accurately predicted.
- (ff) **'Non fossil fuel based co-generation'** means the process in which more than one form of energy (such as steam and electricity) are produced in a sequential manner by use of non fossil fuel.
- (gg) **'Open Access'** means the non-discriminatory provision for the use of transmission lines or distribution system or associated facilities with such lines or system by any licensee or consumer or a person engaged in generation in accordance with the regulations specified by the Appropriate Commission;
- (hh) **'Power Purchase Agreement or PPA'** means a long term agreement between a generating company and a distribution licensee for supply of power on the terms and conditions specified therein and with the provision that the tariff for sale of power shall be as determined by the Commission from time to time;
- (ii) **'Project'** means a generating station or the evacuation system upto inter-connection point, as the case may be, and in case of a small hydro generating station includes all components of generating facility such as dam, intake water conductor system, power generating station and generating units of the scheme, as apportioned to power generation;
- (jj) **'Renewable Energy'** means the grid quality electricity generated from renewable energy sources.
- (kk) **'Renewable Energy Power Plants'** or **'RE Power Plants'** means the power plants in which grid quality electricity is generated from renewable energy sources. such as small hydro, wind, solar. Biomass, bio fuel cogeneration, urban or municipal waste and other such sources as approved by the MNRE and shall also cogeneration from such sources.
- (ll) **'Renewable Energy Generator'** or **'RE Generator'** or **'Generator'** means a person who generates electricity from renewable sources.
- (mm) **'Small Hydro'** means Hydro Power projects with a station capacity upto and including 25 MW.

- (nn) **‘Solar Mission’** or **JNNSM** means- Jawaharlal Nehru National Solar Mission launched by the Govt. of India in the year 2010.
- (oo) **‘Solar PV power’** means the Solar Photo Voltaic power project that uses sunlight for direct conversion into electricity through Photo Voltaic technology.
- (pp) **‘Solar Thermal power’** means the Solar Thermal power project that uses sunlight for direct conversion into electricity through Concentrated Solar Power technology based on either line focus or point focus principle.
- (qq) **‘TRANSCO’** means a power transmission company such as, Assam Electricity Grid Corporation Ltd (AEGCL).
- (rr) **‘Tariff period’** means the period for which tariff is to be determined by the Commission on the basis of norms specified under these Regulations;
- (ss) **‘State’** means the State of Assam;

The words and expressions used and not defined in these regulations but defined in the Act shall have the meanings assigned to them in the Act; expressions used herein but not specifically defined in these regulations or in the Act but defined under any law, passed by a competent legislature and applicable to the electricity industry in the State shall have the meaning assigned to them in such law, expressions used herein but not specifically defined in the regulations or in the Act or any law passed by a competent legislature shall have the meaning as is generally assigned to them in the electricity industry.

#### 4. ELIGIBILITY CRITERIA:

Power projects using the following renewable energy resources and technologies, and also using new plant and machinery shall be covered under these Regulations, provided these are based on Technologies approved by the Ministry of New and Renewable Energy (MNRE), Government of India –

- a) Small Hydro Projects upto 25 MW
- b) Solar PV Power Projects, including rooftop and other small plants
- c) Solar Thermal Power Projects
- d) Biomass based projects using gasification technology
- e) Biomass based projects using ranking cycle technologies.
- f) Biogas based Power Project that uses 100% Biogas fired engines
- g) Waste to Energy Project
- h) Cogenerating plants using non fossil based fuel
- i) Wind Power Projects.
- j) Hybrid projects such as Wind Solar, Diesel-Solar, Hydro-Solar etc.
- k) Any other new and techno-economically viable technology in the State as accepted by the MNRE.

**5. CATEGORY OF PROJECT:**

The Renewable Energy power projects under these Regulations cover the following categories-

- a) MW size renewable power generating units connected to the grid like any other power generating plant. Such projects may be taken up either by State agencies, private developer or implemented in public- private partnership mode.
- b) Grid interactive Small Solar PV power plants including Roof top plants (from 1KWp to 1000 KWp).
- c) Captive power generating plants in industrial and other premises, running off grid or connected to grid.
- d) Grid quality RE power generated and supplied off grid in the Decentralised Distributed Generation (DDG) projects in Off Grid Rural areas under provision of section 5 of EA 2003 . Such project may be set up and managed by Panchayati Raj Institutions , Users Associations, Co-operative Societies non-Governmental organizations or franchisees. Such projects may also be connected to grid if such exigencies arises (such as extension of grid) fulfilling technical, safety, regulatory and commercial requirements as per these regulations.

**6. NODAL AGENCY AND IMPLEMENTING AGENCY:**

The State Government may declare by notification one or more Nodal Agency for implementation of renewable energy power generation programmes in the state. Type / category of Project to be taken up by such agencies and their respective jurisdiction and responsibilities shall also be specified by the State Government.

**7. ROLE OF NODAL AGENCY:**

- (i) The concerned Nodal Agency shall take all necessary action to promote renewable energy project and facilitate setting up such projects .
- (ii) The Nodal agency shall provide all assistances and support to the Project Developers and others for setting up and running R.E based projects as detailed under these Regulations.

**8. TECHNICAL PARAMETERS AND OTHER TECHNICAL CONSIDERATIONS:**

The guiding technical parameter of such projects are underlined below-

**a) Evacuation power and connectivity**

The DISCOM/TRANSCO will determine the voltage at which the RE Generators installation shall be connected to the Grid .

The DISCOM/TRANSCO will also determine the specifications of the interconnecting facilities required upto the interconnecting point and the same would be provided by the RE Generator at its own cost . Such facility with all control, metering & safety devices and equipments should be installed by the RE Generators at their own cost to the full satisfaction of the concerned DISCOM/ TRANSCO.

**b) Interface line**

The DISCOM/TRANSCO will construct the interface line (line between the interconnection point and the existing grid or distribution system) if the line is 5 Km or less. The cost of the interface line in excess of 5 km shall be borne by the DISCOM/TRANSCO and the generators on 50: 50 basis. The DISCOM/ TRANSCO will construct such lines and also maintain the same.

**c) Metering**

Metering equipments for the power generation and sale will be installed at site by the power generator at their own cost as per specifications of power utility or the same may be provided by the utility at the cost of the generator. Testing of these equipments will be carried out by power utility at a cost. The meter and metering arrangement shall be as per CEA Metering Regulations. Net metering shall be allowed for grid interactive SPV plants and such metering arrangement shall be as per provisions of the AERC 'Grid Interactive Solar PV systems Regulation 2015'.

**d) Safety aspects**

- i) All Control, Protective and Safety Devices shall be as approved by the concerned TRANSCO/DISCOM. The installation of the Developer will be tested by the TRANSCO/DISCOM before connecting to their system.
- ii) The developer is to obtain the necessary clearance/ approval for commissioning a solar generating system/ commence power from a such system, depending on size of solar generator and voltage of supply, from State Electrical Inspectorate, as required under Regulation 32 and Regulation 43 the Central Electricity Authority(Measures related to safety and electric supply regulations) 2010, read with connected notification of the State Govt.

**9. REGULATORY ISSUES:****a) Sale of Power :**

- i. A RE Generators may sell power to a distribution licensee or to any consumer (provided that such consumer has been allowed Open Access under Open Access Regulations) or to any person within the State or outside the State at mutually agreed rates provided that such sale outside the State is not in contravention to any Policy notified by the State Government.
- ii. The distribution licensee or any other person shall enter into a power purchase agreement in conformity with these Regulations and relevant provisions of other Regulations and the Act.
- iii. The distribution licensee shall make an application to the Commission for approval of the power purchase agreement entered into with the generating station in such form and manner as may be specified by the Commission.
- iv. A RE Generator may also sell power to a DISCOM at average pooled price as determined by the Commission and participate in the REC Mechanism as provided in the AERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010 and the CERC (Terms and Condition of Issuance of Renewable

Energy Certificates for Renewable Energy Generation) Regulations, 2010, as amended.

**b) Tariff**

- (i) Tariff for Power generated through Renewable Energy Sources shall be as determined by the AERC as per provisions of the AERC (Terms and conditions for determination of Tariff from Renewable Energy Sources) Regulations, 2012 with latest amendment and notifications on these Regulations.
- (ii) For Projects under the Solar Mission, the tariff will be as specified in the Project Document for a specific programme under which a Project sanctioned.

**c) Third party sale:**

Third party sale by RE generators shall be allowed to a party within the State, on such terms and condition (including tariff) as may be agreed upon by the two parties.

**d) Open access:**

- (i) Non-discriminatory Open access in State Transmission/Distribution System shall be allowed to all RE based Generating stations as per the provisions of the AERC (Terms and Conditions for Open Access) Regulations, 2005 subject to the availability of surplus capacity in the State Transmission/ Distribution System.
- (ii) If any question arises as to the availability of surplus capacity in the State transmission system or the State distribution system, the matter shall be adjudicated and decided by the Commission.

**e) Charges for Open Access.**

All open access charges shall be payable as per AERC (Terms and Condition of Open Access) Regulations, 2005 and Tariff Regulations except that -

**i) Transmission Charges:**

Transmission charges payable for open access availed by renewable energy power generation shall be two-third of the rate of such charges applicable for open access customers for long term and short term open access as determined in relevant tariff order.

**ii) Wheeling Charges:**

Wheeling charges applicable for use of distribution system or associated facilities of a licensee by open access customers for conveyance of electricity from renewable energy power generation shall be one-third of the wheeling charges calculated as per tariff order under Tariff Regulations

All solar generations in the State achieving commercial operation date (COD) within three years of notification of these Regulations and selling power to

consumer within the State on open access or wheeling shall be exempted from payment of transmission, wheeling and banking charges and cross subsidy surcharge within the state for a period of ten years from the date of commissioning. This is also applicable for captive solar power plants availing open access within the state.

However, all renewable generation opting for Renewable Energy Certificate shall pay the normal wheeling and other charges, as may be determined by the AERC.

No Wheeling/ Transmission charges are applicable in case all saleable power (i.e. power generated less auxiliary consumption less captive use) is sold to the State DISCOM/TRANSCO.

The TRANSCO/DISCOM will prepare a standard transmission/wheeling and banking agreement draft in consistent with these Regulations, as per AERC (Terms and Conditions for Open Access) Regulations, 2005.

#### **f) Banking of Power:**

The Generator shall be allowed to bank power within a period of one calendar year, for the purpose of withdrawal of the banked power in the event of emergency or shut down or maintenance of the plant.

Provided that for Small Hydro Projects shall be allowed to bank power for a period upto six months as provided in the Assam 'Small Hydro Policy, 2007'

Banking of power shall subject to following conditions:

- (i) Banking of energy upto 100%, as agreed between generator and the distribution licensee, shall be allowed during the period declared by the Commission as peak hours from time to time.
- (ii) Withdrawal of power shall be allowed only during the period other than the period declared by the Commission as peak hours from time to time in its Tariff Orders.

The plants shall provide ABT compliant Special Energy Meters and the monthly settlement of energy sales shall be done based on Power supplied during the peak hours as per SEM meter readings shall be considered as banked power.

Banking charge for wind and small hydro 2% energy injected. For solar power generation- there will be no banking charges.

#### **g) Promotional Incentives to Cogenerating Plants:**

Provisions of Regulations 15(c) and 15(f) shall also be available to all co-generating plants irrespective of fuel used subject to fulfillment eligibility conditions as may specified by the Commission.

**h) Start up and auxiliary consumption power:**

The power generator shall be entitled to draw start up Power and also auxiliary consumption power from the Distribution Licensee's network. The drawal of energy by the generator during the start up from the DISCOM shall be adjusted against the generated energy.

Provided that, supply of such power will be subject to prior intimation of the requirement to the supplier and availability of required power.

**i) Power supply on priority basis:**

Concerned licensee shall provide power supply to the new solar power plants for meeting construction, auxiliary power and other power requirement on the priority basis.

**j) Drawing of power during shut down:**

The solar PV and solar thermal power generator shall be entitled to draw power from the DISCOM's network during shutdown period of its plant or other emergencies. The energy consumed shall be billed at the temporary rate applicable to the category of consumer. The drawl of such power shall not normally exceed 10 % of the peak MW capacity it delivers to the TRANSCO/ DISCOM.

Provided that, supply of such power will be subject to prior intimation of the requirement to the supplier and availability of required power.

**k) Sharing of CDM benefit :**

CDM benefits between Developer and Beneficiaries will be as follows:

- i) The CDM proceedings to be taken up by the Developer. 100% of gross proceeds on account of CDM benefits to be retained by the project developer in the first year after the date of commercial operation of the generating station.
- ii) In the second year, the share of the beneficiaries shall be 10 % which shall be progressively increased by 10% every year till it reaches 50%, where after the proceeds shall be shared in equal proportion, by the generating company and the beneficiary.

**l) Scheduling:**

All renewable energy power plants, except -

- a) Biomass power plants with installed of capacity of 10 MW and above
- b) Non-fossil fuel based cogeneration plants
- c) Wind power generation plants capacity of 10 MW and above
- d) Solar generating plants with capacity of 5 MW and above

shall be treated as 'MUST RUN' power plants and shall not be subjected to 'merit order dispatch' principles.

(2) The biomass power generating station with an installed capacity of 10 MW and above and non-fossil fuel based co-generation projects shall be subjected to scheduling and despatch code as specified under Indian Electricity Grid Code (IEGC) and Central Electricity Regulatory Commission (Unscheduled Interchange and related matters) Regulations, 2009 including amendments thereto.

(3) Wind power generation plants where the sum of generation capacity of such plants connected at the connection point to the transmission or distribution system is 10 MW and above and connection point is 33 KV and above shall be subjected to scheduling and despatch code as specified under Indian Electricity Grid Code (IEGC) -2010, as amended from time to time.

(4) Solar generating plants with capacity of 5 MW and above and connected at the connection point of 33 KV level and above shall be subjected to scheduling and despatch code as specified under Indian Electricity Grid Code (IEGC) -2010, as amended from time to time.

However, System Operator (i.e. SLDC) may instruct the any renewable energy generator to back down generation on consideration of grid security or safety of any equipment or personnel is endangered and the generator shall comply with the same. For this, Data Acquisition System facility shall be provided for transfer of information to SLDC.

#### **(m) Role of SLDC**

- i. The RE Generating Stations shall be under obligation to comply with the directions issued to it by the State Load Dispatch Centre failing which the plant shall be liable to a penalty as specified in the Act for each such non-compliance..
- ii. In case of dispute with reference to quality of electricity or safe, secure and integrated operation of the grid or in relation to any direction issued by the State Load Dispatch Centre, the matter shall be referred to the Commission for adjudication
- iii. The RE Generators shall pay fee and charges to the State Load Dispatch Centre as may be determined by the Commission .

### **10. COMMERCIAL ISSUES:**

#### **a) Power purchase agreement**

After allotment of a Project the RE Generator intending to sell power to TRANSCO/DISCOM, and to wheel /bank power shall execute Power Purchase Agreement (PPA) and wheeling and banking agreement for a minimum period as mutually agreed upon ,subject to compliance of any Regulations/Order of Commission in this behalf.

**b) Metering and billing**

The metering and communication arrangements shall be provided in accordance with the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 in consultation with DISCOM/ TRANSCO. The periodicity of testing, checking, calibration etc., will also be governed by the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006.

Main and Check Meters shall have facility to communicate its reading to State Load Dispatch Centre on real time basis or otherwise as may be specified by the Commission. Meter reading shall be taken as per the procedure devised by the Distribution Licensee/State Load Despatch Centre. The term 'Meter' shall include Current transformers, voltage/potential transformers, wiring between them and meter box/panel etc.

Billing of the metered energy shall be carried out on a monthly basis.

**c) Payment mechanism**

The settlement period should not be more than 30 days from the date of presentation of the bill for the net energy sold after deducting the charges for start up power and reactive power to the concerned Distribution Licensee where the power is injected, in order to ensure that the generating company has an assurance of cash inflow for the energy delivered to the grid.

In case of delay beyond the 30 days payment period, the Distribution Licensee shall pay a late payment surcharge at the rate of 1.25% per month to the generating company.

In case the DISCOM makes the payment within 15 days from the date of presentation of bills by the generating company, a rebate of 1% billed amount shall be allowed by the generating company.

In case where payments of bills of the generating company are made through letter of credit, a rebate of 2% shall be allowed to the Distribution Licensee.

**11. NEWABLE PURCHASE OBLIGATION (RPO):**

The Distribution licensee and the other obligated entities are required to fulfill Renewable Purchase Obligation as per the provision of the AERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010.

**12. OBLIGATIONS AND DUTIES OF THE GENERATING STATION:**

- (1) The RE Generators and Captive Generators will have to fulfill requirements, duties and obligations applicable to such entities respectively prescribed under Section 10 and 9 of the EA 2003.
- (2) A generating company shall submit technical details of its generating stations to the Commission in such form and manner as may be required by the Commission.

- (3) The RE Generating Stations shall be under obligation to comply with the directions issued to it by the State Load Dispatch Centre, failing which the plant shall be liable to a penalty as may be fixed by the Commission for each such non-compliance.
- (4) The RE Generator shall establish, operate and maintain generating station and the associated substation in accordance with the provision of :
  - (a) The technical standards for construction of electrical plants, electric lines and connectivity with the grid as specified in-
    - i) Central Electricity Authority (Technical Standard for Connectivity to the Grid) Regulations, 2007 for connectivity and voltage 33 KV and above. or
    - ii) Central Electricity Authority (Technical Standard for Connectivity of Distributed Generation Resources) Regulation, 2013 for the connectivity and voltage below 33 KV, as may be applicable.
  - (b) Safety requirements for construction, operation and maintenance of electrical plants and electric lines shall be as specified by the Central Electricity Authority's (CEA) (Measures Relating to Safety in Electrical installation) Regulations, 2010.
  - (c) Grid standards for operation and maintenance of transmission lines as specified by Central Electricity Regulatory Commission/Central Electricity Authority or the State Transmission Utility (section 73 (d) of the EA 2003).

### **13. GRID INTERACTIVE SOLAR PV SYSTEM (GISPVS) INCLUDING ROOF TOP PLANTS:**

#### **13.1. Promotion of Grid Interactive System:**

The Government of Indian has now assigned high priority on Grid Interactive Solar PV System (GISPS) including Rooftop Plants.

Grid interactive plants can contribute a significant amount of energy for meeting day time load, reducing day time peak system demands in urban homes. As between 40% to 70% of day time electrical load in offices, Educational Institutes, Commercial establishments etc. can be met from grid interactive Solar systems, setting up of such systems shall be encouraged.

#### **13.2. Eligible consumer individual project capacity and interconnection voltage**

- a) All eligible consumers of electricity in the area of supply of the distribution licensee can participate in the grid interactive net metering arrangement.
- b) The inter-connecting voltage level of the GIS for various capacity ranges shall be as per relevant provision of the AERC (Supply Code and related matters Regulations) 2004.
- c) The aggregate solar panel capacity of Grid interactive system to be installed

at any eligible consumer premises shall be between of 1 KWp to 1000 KWp, restricted to 40% of contract demand of the eligible consumer with the licensee, subject to feasibility of inter-connection of the solar system to the grid.

**13.3.** However, there shall be no restriction on state power utilities installing bigger plants, subject to their compatibility with the system and necessary safety measures taken.

**13.4. Regulation for Grid Interactive system with net metering:**

The technical parameters of grid interactive systems, net metering, billing and safety requirements of such projects shall be as per the provisions of the AERC 'Grid Interactive Solar PV Systems Regulation, 2015'

**14. OVERRIDING EFFECT:**

**Notwithstanding anything contained in contrary—**

- (a) In the AERC (Terms and Conditions for Determination of Tariff from Renewable Energy Sources) Regulations, 2012; and
- (b) In the AERC (Terms and Conditions for Open Access) Regulations, 2005;
- (c) In the AERC (Renewable Purchase Obligation and its Compliance) Regulations, 2010 and framed by the Commission under section 181 of the Electricity Act, 2003,
- (d) In the AERC (Supply Code and Related matters) Regulations, 2004

**framed by the Commission under section 181 of the Electricity Act, 2003, these Regulations will have overriding effect in respect of matters related to Generation of Electricity from Renewable Sources of Energy.**

**15. REPEAL AND SAVING:**

The Assam Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewable Sources of Energy) Regulations, 2009, issued under Notification dated 3rd July 2009 and published in the Assam Gazette Extraordinary dated 22.01.2010 are hereby repealed.

Notwithstanding such repeal, anything done or any action already taken under the repealed Regulations, shall in so far as it is not inconsistent with these Regulations, be deemed to have been done or taken under the corresponding provisions of these Regulations.

**15. POWER TO REMOVE DIFFICULTIES:**

If any difficulty arises in giving effect to any of the provisions of these regulations, the Commission may, either suo motu or on an application made to it, by general or special order, direct the licensee/ generator or any other person to take suitable action, not being inconsistent with the Act, which appears to the Commission to be necessary or expedient for the purpose of removing the difficulty.

**16. ISSUE OF ORDERS AND DIRECTIONS:**

Subject to the provisions of the Act and these Regulations, the Commission may, from time to time, issue orders and practice directions with regard to the implementation of these Regulations and procedure to be followed for such implementation and matters incidental or ancillary thereto.

**17. POWER TO RELAX:**

The Commission may by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected may relax any of the provisions of these Regulations on its own motion or on an application made before it by an interested person

**18. POWER TO AMEND:**

The Commission may from time to time add, vary, alter, suspend, modify, amend or repeal any provisions of these Regulations

**19. SAVING OF INHERENT POWERS OF THE COMMISSION:**

Nothing contained in these Regulations shall limit or otherwise affect the inherent powers of the Commission to adopt a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of the matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient to depart from the procedure specified in these regulations.

**20. INTERPRETATION:**

All issues arising in relation to interpretation of these Regulations shall be determined by the Commission and the decision of the Commission on such issues shall be final.

(By order of the Commission)

S.K. ROY  
Secretary  
Assam Electricity Regulatory Commission