

**ASSAM ELECTRICITY REGULATORY COMMISSION  
GUWAHATI**

**NOTIFICATION**

Dated Guwahati the 3<sup>rd</sup> July, 2009

**No.AERC/-** 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 (36 of 2003) and all other powers enabling it in that behalf, and after previous publication, the Assam Electricity Regulatory Commission makes the following regulations:-

**REGULATIONS**

- 1. Short title, extent and commencement:-** (1) These regulations may be called the Assam Electricity Regulatory Commission (Co-generation and Generation of Electricity from Renewable Sources of Energy) Regulations, 2009.
  - (2) These regulations shall extend to the whole of the State of Assam.
  - (3) These regulations shall come into force from the date of their publication in the Assam Gazette.
- 2. Definitions:-** In these regulations, unless the context otherwise requires,-
  - (a) "Act" means the Electricity Act, 2003 (Act 36 of 2003);
  - (b) "Commission" means the Assam Electricity Regulatory Commission;
  - (c) "Empowered Committee" means a committee constituted under regulation 4;
  - (d) "generator" means the person(s) generating or intending to generate energy from renewable sources and co-generation;
  - (e) "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;
  - (f) "AEDA" means the Assam Energy Development Agency set up by the Government of Assam for coordinating all activities relating to Renewable Energy Development including generation of power using non-conventional energy sources;
  - (g) "interconnection facilities" means all the facilities which shall include, without limitation, switching equipment, control, protection and metering devices etc. for the incoming bay (s) for the project line(s), to be installed and maintained by the licensee at the Inter-Connection Point at the cost of the generator to enable evacuation of electrical output from the Project;

- (h) “interconnection point”: means the physical touch point where the project line(s) and the allied equipment forming a part of the interconnection facilities are connected to the licensee’s power system;
- (i) “licensee” means a person who is granted a license or is a deemed licensee under section 14 of the Act;
- (j) “project” means the generation project for producing power from renewable sources and co-generation and shall also include the project line(s) and inter-connection facilities;
- (k) “project line(s)” means the transmission line(s) from the generating station to the interconnection point which shall be constructed, operated and maintained as a part of the project by the generator, but shall not include the inter-connection facilities;
- (l) “regulation” means the Assam Electricity Regulatory Commission (Power Procurement from Renewable Sources and Co-generation by the Distribution Licensee) Regulations, 2007;
- (m) “renewable sources and co-generation” in this context means non-conventional renewable electricity generating sources such as mini/micro/small hydro power projects, wind, solar, biomass, urban/municipal waste, or other such sources as approved by the Central Government upto and including 25 MW capacity;
- (n) “Biomass” means rice husk or any other biomass made available by the additional energy plantation by the owner of the biomass plant. A maximum fuel mixture of 15% of conventional fossil fuel shall be allowed on yearly basis for such plants.
- (o) "State" means the State of Assam; and
- (p) 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.

**3. Promotion of renewable sources of energy:-** (1) Any generator irrespective of installed capacity, shall have open access to any licensee's transmission system and/or distribution system or grid, as the case may be under the AERC (Terms and Conditions of Open Access) Regulations, 2005. On an application from such person, the licensee shall provide appropriate inter-connection facilities, and such facilities will be consistent with the grid connectivity standards as may be specified by the Authority or as specified in the grid code;

Provided that the generator shall bear the expenditure incurred for connectivity upto inter-connection point.

(2) The licensees shall provide interconnection of the project line(s) at its nearest control sub-station;

Provided that where it is not feasible for the licensee to provide inter-connection at the nearest control sub-station, it shall propose to the generator, other feasible interconnection sub-station(s) and the said proposal, alongwith the reasons for not allowing interconnection at the nearest sub-station, shall be submitted by the licensee for approval of the Commission;

- (3) Where there are right of way problems or there are space limitations at the sub-stations of the licensee or where the generator opts on his own, the generator may, with the approval of the Commission, enter into a suitable arrangement for joint project lines for two or more projects and inject power into the grid through the joint evacuation system.
- (4) For evacuation of power from renewable sources and co-generation beyond the interconnection point, the licensee shall, in consultation with the AEDA or any other person whom it may deem fit to consult prepare for the Eleventh Five Year Plan a comprehensive plan for augmenting and establishing the transmission/sub-transmission system corresponding to the commissioning of the projects indicating therein, the year- wise time lines to match the commissioning of the project with the establishment of the related evacuation system and the plan for the projects expected to be commissioned during the subsequent Five Year Plan period shall be prepared by the licensee at least one year in advance of the corresponding Five Year Plan.

Provided that where the time lines laid down in the plan approved under this sub-regulation are not adhered to, the defaulting licensee or the generator, as the case may be, shall be liable to pay such penalty as the Commission may, after affording opportunity, impose.

- (5) The plan prepared under sub-regulation (4) shall be submitted by the licensee for the approval of the Commission and any expenditure on account of such plan shall be a pass through to the licensee.
  - (6) The generators may, in consultation with the licensee and with the prior approval of the Commission, augment or establish, on behalf of the licensee, the transmission system beyond, interconnection point, on build and transfer basis, and the expenditure so incurred by the generators shall be repaid by the licensee alongwith interest in five equal installments, spread over a period of 5 years commencing from one year after the date of commissioning of the project, and such expenditure shall be allowed as a pass through to the licensee.
- 4. Empowered Committee:-** (1) For the purpose of regulation 3, the Commission shall constitute an Empowered Committee comprising of one representative, each from the Commission, the State Transmission Utility (STU), the distribution licensee. Members from STU and distribution licensee shall not be below the rank of General Manager or equivalent.
- (2) The member of the Empowered Committee representing the Commission shall be its Convenor;
  - (3) The functions of the Empowered Committee shall be -

- (a) to examine the change in the inter-connection sub-station under sub-regulation (2) of regulation 3 before the Commission accords approval to it;
- (b) to examine the proposals for the joint evacuation system under sub-regulation (3) of regulation 3 with respect to the overall transmission/ sub-transmission plan of the licensee before the Commission accords approval to it;
- (c) to monitor the adherence to the approved time lines, and submission of quarterly reports to the Commission under sub-regulation (4) of regulation 3;
- (d) to monitor the augmentation or establishment of the transmission/ sub-transmission system as per the best industry practices under sub-regulation (6) of regulation 3.

**5. Quantum of purchase of electricity from renewable sources:-** (1) Energy from renewable sources and cogeneration, available after the captive use and third party sale outside the State, shall be purchased by the distribution licensee(s):

Provided that subject to the availability of renewable energy and co-generation within the area of a distribution licensee, the quantum of purchase of energy from renewable sources and cogeneration by a distribution licensee, under these regulations shall be minimum 5% of its total energy handled during a year which will be 10% by the year 2012 and which would be progressively increased to 15% by the year 2015;

**Explanation:-** For the purposes of this regulation the “quantum of purchase” would be the sum of all direct purchase from cogeneration, generating stations based on renewable energy sources and purchase from any other distribution licensees, which would arise from renewable sources and cogeneration.

- (2) The distribution licensee shall indicate, alongwith sufficient proof thereof, the quantum of purchase of energy from renewable sources and cogeneration for the ensuing year in the Annual Revenue Requirement (ARR) filing.
- (3) The Commission may review the quantum of purchase of energy from renewable sources and cogeneration by a distribution licensee, once in every 3 years.
- (4) Subject to supply constraints or any other uncontrollable factors, the Commission may, at the request of the distribution licensee, waive off the quantum of purchase laid down under sub-regulation(1).

**6. Determination of Tariff for electricity from Renewable sources and Cogeneration:-**

- (1) Tariff for purchase of electricity from cogeneration and renewable sources shall be mutually agreed by the licensees and the suppliers at a level not above the price cap specified by the Commission in these regulations.
- (2) To facilitate examination of reasonableness of price at which a licensee shall procure energy from cogeneration and renewable sources, the prospective purchaser may require the seller to submit all cost data and financial charges to the purchaser. MOU / PPA as agreed between the seller and the purchaser shall

be submitted to the Commission. The Commission at this stage does not debar a licensee from agreeing to a negotiated price within the capped price. However, competitive price within the capped level will be the preferred alternative. The Commission may accept the same for the present if the PPA is made as per these regulations. PPA, if any, entered into between the seller / developer and purchaser before the Act came into force, shall remain valid so far it is not inconsistent with the provisions of these regulations. However, the licensee shall not decline to purchase energy from such sources within the specified capped price until the minimum purchase obligation is achieved each year provided that connectivity and all other conditions are consistent with these regulations.

## **7. Price Capping for Energy from Cogeneration and various Renewable Sources:-**

### **(1) Biomass:**

The price at which the renewable energy from biomass source can be sold to a licensee is capped at Rs. 4.00 per kwh and shall remain fixed for three years from the date of coming into force of these regulations. The Commission may re-fix the capped price and the validity period *suo moto* in consideration of information from market sources or on the basis of any petition filed in this regard.

### **(2) Small Hydro:**

For energy from small hydro projects, the price cap is fixed at Rs. 3.20 per kwh for five years from the date of coming into force of these regulations. The Commission may re-fix the capped price and the validity period *suo moto* in consideration of information from market sources or on the basis of any petition filed in this regard.

### **(3) Cogeneration:**

For energy from cogeneration, the price cap shall be Rs. 3.20 per kwh for five years from the date of coming into force of these regulations. The Commission may re-fix the capped price and the validity period *suo moto* in consideration of information from market sources or on the basis of any petition filed in this regard.

### **(4) Municipal Solid Waste (MSW):**

For energy from MSW, the price cap shall be Rs. 4.40 per kwh for five years from the date of coming into force of these regulations. The Commission may re-fix the capped price and the validity period *suo moto* in consideration of information from market sources or on the basis of any petition filed in this regard.

### **(5) Solar PV:**

(a) Eligible grid connected Solar PV power plant of capacity ranging from 1.0 MW (peak) to 5.0 MW (peak), if set up in the licensed area of supply of a licensee, shall avail the generation based incentive sanctioned under letter No. 32/61/2007-08/PVSE dated 24.1.2008 of the Ministry of New and

Renewable Energy, Govt. of India, and the solar energy generated by such grid connected solar PV projects shall be sold to the connected licensees at a tariff not exceeding the highest capped price allowed by the Commission for that year for the purchase of energy by a licensee from among the various categories of renewable sources (other than any solar PV source) as specified in these regulations subject to other terms and conditions contained in the guidelines for generation based incentive of MNRE mentioned above till such date the aforesaid incentive of MNRE continues. On withdrawal of the aforesaid incentive by MNRE for reasons not attributable to the grid connected Solar PV plant authorities, the capped price for sale of such energy to the licensee shall be reviewed by the Commission on application to the Commission for such solar PV projects only which are commissioned upto 2011-12. The capped price of energy for grid connected solar PV plants (including those plants which are availing accelerated depreciation benefit under section 32 of the Income-tax Act, 1961) which are not eligible for aforesaid incentive declared by MNRE, shall be Rs.11.00 / kWh for sale to the distribution licensees and such tariff will be applicable for the grid connected solar PV projects commissioned upto 2009-10 and shall remain valid for ten years from the date of coming into force of these regulations. The capped price of energy for grid connected solar PV plants (including those plants which are availing accelerated depreciation benefit under section 32 of Income-tax Act, 1961) which are not eligible for aforesaid incentive declared by MNRE and commissioned after 2009-10 but on or before 31st March, 2012 shall be Rs.10/ kWh which shall remain valid for ten years from the date of coming into force of these regulations. If at any stage in future such a Solar PV Plant which was ineligible to avail the aforesaid generation based incentive becomes eligible for incentive declared by MNRE or by State or Central Government, the Commission may review the rate of Rs.11.00/ Kwh or Rs.10.00/ kWh, as the case may be, for sale to the licensees and fix a new rate duly taking into consideration the allowable incentive to such Solar PV plants. Any incentive received by the licensee from MNRE on this account shall be passed on to their purchasers of electricity. The Commission will take a fresh view on the price cap for grid connected Solar PV projects commissioned from 2012-13 onwards. The total purchase of energy of a licensee from grid connected Solar PV source in a financial year shall be limited in such a manner that the impact of purchase of such energy on the average cost of supply of the licensee as determined by the Commission in the respective tariff order of the year is less than 1 Paise / kWh in a year. Each proposal for addition of grid connected Solar PV power plant to the licensee's system will be examined and monitored by the licensee itself and the Commission is to be informed by the licensee about the aforesaid impact of cumulative capacity of solar PV projects in its licensed area on the average cost of supply of the licensee on the basis of actual data of a full financial year before finalizing any PPA or MOU with the developer of such solar PV power plant in the aforesaid area of supply of the licensee.

(b) Roof-top Solar PV sources of capacity ranging from 2 KW (peak) to 100 KW (peak) if installed for injecting into the distribution system of a licensee only by such institutional consumer(s) like Government hospitals and health centres, Government and Government aided schools and academic institutions, Government offices and organizations, any housing complex already promoted for this purpose by Government or any Government agency for the development of renewable sources, local bodies like municipalities, panchayats and cooperative societies of consumers located in the same premises, such injection from roof-top solar PV sources of the above mentioned consumer(s) shall not be more than 90% of the consumption from the licensee's supply by the above mentioned consumer(s) in a financial year. Such injection from roof-top solar PV sources of the above mentioned consumer(s) shall be settled on net energy basis at the end of each financial year. Any excess energy injected by the above mentioned consumer(s) from the roof-top solar PV sources being more than the 90% of the consumption of energy by that consumer(s) from the licensee's supply in each billing period shall be carried over to the next billing period within that financial year. Slab tariff, as per tariff order, shall be applicable for the net energy supplied by the licensee in a billing period if the supplied energy by the licensee is more than the injected energy by the roof-top solar PV sources of the consumer(s) after taking into account the quantum of energy, if any, carried forward from earlier billing period(s) of that financial year. If in a billing period the supplied energy by the licensee is less than or equal to energy injected by the roof-top solar PV sources of the consumer(s) after adding the cumulative carried over injected energy from previous billing period(s) of that financial year the billed amount for energy will be nil for that billing period(s). At the end of the financial year, if the total energy supplied by the licensee to the consumer(s) for that financial year is found to be less than the energy injected by the roof-top solar PV sources of that consumer(s) for that financial year, the licensee shall not pay any charge to the consumer(s) for that net energy, injected by the consumer(s), in excess of 90% of consumption of that consumer(s) from the licensee's supply in that financial year and the same shall be treated as unwanted/inadvertent injunction. At the beginning of each financial year, cumulative carried over injected energy will be reset to zero. Payment in a billing period by the consumer(s) (owning roof-top solar PV sources) to the licensee shall be guided by the provisions of the regulations made by the Commission under section 50 of the Act. For each billing period in a financial year the licensee shall show the quantum of injected energy from roof-top Solar PV sources in the billing period, supplied energy from it source in the billing period, net billed energy for payment by the consumer(s) for that billing period and net carried over energy to the next billing period separately. Any delay in payment shall attract surcharge at the agreed rate. The MOU/PPA to be signed between the licensee and developer of roof-top Solar PV sources shall include necessary terms & conditions of meter reading, billing, payment, payment of security arrangements, rate of delayed payment surcharge etc.

- 8. Overriding effect:-** Notwithstanding anything contained contrary--
- (a) in the AERC (Terms and Conditions for Determination of Tariff) Regulations, 2006; and
  - (b) in the AERC (Terms and Conditions for Open Access) Regulations, 2005;
- framed by the Commission under section 181 of the Electricity Act, 2003, these regulations will have overriding effect.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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 the order of the Commission)

Sd/-  
Secretary  
Assam Electricity Regulatory Commission