

# TAMIL NADU ELECTRICITY REGULATORY COMMISSION

WHEREAS the TAMIL NADU Electricity Regulatory Commission has published in the Tamil Nadu Government Gazette on different dates the following, namely:-

- Tamil Nadu Electricity Regulatory Commission (TNERC), (The Power Procurement from New and Renewable Sources of Energy Regulations, 2008, (Notification No. TNERC/NCES Regn./16/1, Dated: 08.02.2008)
  - A. Tamil Nadu Electricity Regulatory Commission (TNERC), (The Power Procurement from New and Renewable Sources of Energy Regulations, 2008, (First Amendment), 2008; (Notification No. TNERC/NCES Regn./16/2, Dated: 01.12.2008)
  - B. Tamil Nadu Electricity Regulatory Commission (TNERC), (The Power Procurement from New and Renewable Sources of Energy Regulations, 2008, (Second Amendment), 2008; (Notification No. : TNERC/NCES Regn./16/3, Dated: 24.12.2008)
  - C. Tamil Nadu Electricity Regulatory Commission (TNERC), (The Power Procurement from New and Renewable Sources of Energy Regulations, 2008, (Third Amendment), 2009 (Notification No. : TNERC/NCES Regn./16/4, Dated: 27.04.2009)
  - D. Tamil Nadu Electricity Regulatory Commission (TNERC), (The Power Procurement from New and Renewable Sources of Energy Regulations, 2008, (Fourth Amendment), 2009 (Notification No. : TNERC/NCES Regn./16/5, Dated: 08.06.2009)
  - E. Tamil Nadu Electricity Regulatory Commission (TNERC), (The Power Procurement from New and Renewable Sources of Energy Regulations, 2008, (Fifth Amendment), 2009 (Notification No. : TNERC/NCES Regn./16/6, Dated: 14.12.2009)
  - F. Tamil Nadu Electricity Regulatory Commission (TNERC), (The Power Procurement from New and Renewable Sources of Energy Regulations, 2008, (Seventh Amendment), 2010 (Notification No. : TNERC/NCES Regn./16/8, Dated: 20.07.2010)
  - G. Tamil Nadu Electricity Regulatory Commission (TNERC), (The Power Procurement from New and Renewable Sources of Energy Regulations, 2008, (Eighth Amendment), 2011

(Notification No. : TNERC/NCES Regn./16/10, Dated: 01.07.2011

H. Tamil Nadu Electricity Regulatory Commission (TNERC), (The Power Procurement from New and Renewable Sources of Energy Regulations, 2008, (Ninth Amendment), 2013

(Notification No. : TNERC/NCES Regn./16/11, Dated: 19.01.2013

- Inserted/ Replaced matter is shown as [ f<sup>A</sup> at appropriate place; wordings inserted/ replaced shown within square brackets;
  - In both of above cases; -<sup>A</sup> ; superscript A implies that change is caused by Amendment '1';
- 

## **Power Procurement from New and Renewable Sources of Energy Regulations, 2008**

### **Notification No. TNERC/NCES Regn./16/1, Dated: 8.2.2008**

WHEREAS under section 61 of the Electricity Act, 2003 (Central Act 36 of 2003) the State Electricity Regulatory Commission shall specify the terms and conditions for the determination of tariff;

AND WHEREAS the regulations providing for the terms and conditions for determination of tariff shall be subject to previous publication and accordingly undergone previous publication.

NOW, THEREFORE, in exercise of the powers conferred under section 61(h) read with section 86(1)(e) and section 181 of the said Electricity Act, 2003, and all other powers enabling it in that behalf, the Tamil Nadu Electricity Regulatory Commission hereby makes the following regulations.

#### **1. Short title and commencement, applicability and extent**

(1) These Regulations may be called "The Power Procurement from New and Renewable Sources of Energy Regulations, 2008."

(2) These regulations shall be deemed to have come into force on the 15<sup>th</sup> May 2006, the date on which the Commission's order No: 3 dated the 15<sup>th</sup> May 2006 had been issued.

(3) These regulations shall apply to all new and renewable sources based generating plants including co-generation plants located within the State of Tamil Nadu for which power purchase agreements/contracts were **signed on or after** the 15<sup>th</sup> May 2006. The

contracts and agreements between new and renewable sources based generators and the distribution licensees signed prior to the 15<sup>th</sup> May 2006 would continue to remain in force. However, the generators and the distribution licensees shall have the option to mutually re-negotiate the agreements / contracts signed prior to the 15<sup>th</sup> May 2006 in line with these regulations even before the expiry of the agreements / contracts. <sup>G</sup>~~[When the generator / distribution licensee opts to come under the new agreement / contract for availing the benefit, the generator / distribution licensee shall accept the option and shall execute revised agreement within thirty days from the date of such option.]~~<sup>G</sup> Any renewal of the said contracts / agreements, new contracts / agreements shall be in line with these regulations.

(4) They shall extend to the whole of State of Tamil Nadu.

## 2. Definitions

(1) In these Regulations unless the context otherwise requires,-

- (a) “**Act**” means the Electricity Act, 2003 (Central Act of 36 of 2003)
- (b) “**Cogeneration**” means a process, which simultaneously produces two or more forms of useful energy (including Electricity)
- (c) “**Commission**” means the Tamil Nadu Electricity Regulatory Commission;
- (d) “**Government**” means the Government of Tamil Nadu;
- (e) “**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)];
- (f) “**Infirm Power**” means the energy supplied that is not firm power, which is interruptible on a very short notice;

<sup>E</sup><sub>1</sub><sup>2</sup>(f1) *Inter connection point means the 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, interconnection point shall be line isolator on outgoing feeder on HV side of the pooling sub-station;*

---

<sup>1</sup> Omitted text starting with when the generation and end with such option of sub-Regulation (3) of regulation 1, vide seventh amendment (G), 2011

<sup>2</sup> Inserted clause f1 and f2 after clause (f) of sub-regulation (1) of Regulation 2, vide Fifth amendment (E), 2009

b) *in relation to small hydro power, biomass power and non fossil fuel based cogeneration power projects and Solar Thermal Power Projects, the interconnection point shall be line isolator on outgoing feeder on HV side of generator transformer ;*

(f2) *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.*<sup>F</sup>

(g) **“New and renewable sources”** means the non-conventional, renewable electricity generating sources such as mini / micro hydel, wind, solar, biomass, bagasse based cogeneration, urban/municipal waste, or other such sources as approved by the Government of India or Government of Tamil Nadu <sup>C</sup><sup>3</sup> **or Commission]**<sup>C</sup> which are generally inexhaustible and can be replenished in a short period of time;

Words or expressions occurring in these Regulations and not defined herein but defined in other Regulations published by the Commission or in the Act shall bear the same meanings respectively assigned to them in the Act / Regulations.

### **3. Promotion of new and renewable sources of energy**

(1) The minimum percentage of electrical energy which each distribution licensee shall purchase from new and renewable sources generators shall be as stipulated in the Commission’s order issued from time to time, subject to the availability of such power. The distribution licensee shall furnish the quantum of purchase of energy from new and renewable sources and cogeneration for the ensuing year in the Annual Revenue Requirement (ARR) filing.

(2) A maximum of **25% of conventional fuel** only is permitted to be used out of the total fuel used in a year, for start-up, stabilization and extended operational days in a year by the bagasse/biomass based generating plants.

(3) ~~<sup>H</sup><sup>4</sup>Evacuation facilities shall be provided by the State Transmission Utility (STU) /Distribution licensee as per the Commission’s **Intra State Open Access Regulations 2005**, Central Electricity Authority (Technical Standards for connectivity to the Grid) Regulations, 2007 and Tamil Nadu Electricity Grid Code. The cost of interfacing lines, switch gear, metering, protection arrangement and related other equipments up to the interconnection point shall have to be borne by the generators, but the work shall be~~

---

<sup>3</sup> Added wording in clause (g) of sub-regulation (1) of Regulation 2, vide Third amendment (c), 2009

executed by STU/distribution licensee.

~~<sup>A</sup> [6] Provided that, in the case of sale of entire power to the distribution licensee by any new and renewable source based generator, the cost of interfacing lines up to the interconnection point shall have to be borne only by the STU/ distribution licensee.~~

~~Provided further that in case where the new and renewable source based generator referred to in the first proviso who has entered into an EPA with the distribution licensee referred to therein for the sale of entire power to the said distribution licensee decides to use such power agreed to be sold to the said distribution licensee, for his captive use or for sale of such power to a third person or to a distribution licensee other than the distribution licensee referred to above before the expiry of the period referred to in such EPA, then he shall be bound to reimburse <sup>D</sup> [6] the entire cost of interfacing lines depreciated (Written down value) cost of interfacing lines<sup>D</sup> to the distribution licensee with whom he has executed such EPA, before the wheeling of power to his captive use or sale to third person or distribution licensee other than the distribution licensee with whom the said EPA has been executed by him.]<sup>A</sup>~~

Evacuation facilities from the point of generation to the interconnection point including the required metering, protection arrangement and related other equipments and the entire interface line shall be provided by the generator as per the Commission's Intra State Open Access Regulations, Central Electricity Authority (Technical Standards for connectivity to the Grid) Regulations and Tamil Nadu Electricity Grid Code, in force.]<sup>I</sup>

**(4)** The Commission may consider appropriate banking mechanism for generation of power from a particular kind of renewable source depending upon the inherent characteristics of such source.

**(5)** ~~The Licensee shall provide adequate payment security mechanism to the generators for purchase of power.~~

<sup>C</sup> [7] (5) The Commission may specify appropriate procedure for payment to the generators by the distribution licensee and payment to the distribution licensee by the captive / third party user.]<sup>C</sup>

#### **4. Determination of tariff**

(1) The Commission shall follow the process mentioned below for the determination of

---

<sup>4</sup> Omitted and inserted sub-regulation (3) of regulation 3, vide Eighth amendment (H), 2013

<sup>5</sup> Added provisos after sub-Regulation (3) of regulation 3, vide First amendment (A), 2008

<sup>6</sup> Omitted and inserted wordings in second proviso of Regulation 3, vide Fourth amendment (D), 2009

tariff for the power from new and renewable sources based generators, namely;-

- a) initiating the process of fixing the tariff either suo-motu or on an application filed by the distribution licensee or by the generator.
- b) inviting public response on the suo-motu proceedings or on the application filed by the distribution licensee or by the generator.
- c) ~~conducting public hearing on the above.~~<sup>8</sup>
- d) issuing general / specific tariff order for purchase of power from new and renewable sources based generators.

(2) While deciding the tariff for power purchase by distribution licensee from new and renewable sources based generators, the Commission shall, as far as possible, be guided by the principles and methodologies specified by:

- (a) Central Electricity Regulatory Commission
- (b) National Electricity Policy
- (c) Tariff Policy issued by the Government of India
- (d) Rural Electrification Policy
- (e) Forum of Regulators (FOR)
- (f) Central and State Governments

(3) The Commission shall, by a general or specific order, determine the tariff for the purchase of power from each kind of new and renewable sources based generators by the distribution licensee. In case of small hydro projects with a capacity of more than **5 MW but not exceeding 25 MW capacities**, Commission decide the tariff on case to case basis.

Provided where the tariff has been determined by following transparent process of bidding in accordance with the guidelines issued by the Central Government, as provided under section 63 of the Act, the Commission shall adopt such tariff.

(4) While determining the tariff, the Commission may, to the extent possible consider to permit an allowance / disincentive based on technology, fuel, market risk, environmental benefits and social impact etc., of each type of new and renewable source.

(5) While determining the tariff, the Commission shall adopt appropriate financial and operational parameters.

---

<sup>7</sup> Omitted and inserted sub-Regulation (5) of Regulation 3, vide Third amendment (C), 2009

<sup>8</sup> Omitted clause (c) of sub-Regulation (1) of Regulation 4, vide Third amendment (C), 2009

(6) While determining the tariff the Commission may adopt <sup>C</sup>[~~cost plus single part average tariff~~ *appropriate tariff methodology*]<sup>C</sup> which can be reviewed later.

## 5. Charges for adjustment of wheeled energy

The Commission may levy appropriate charges for adjustment of wheeled energy based on the load factor, power factor, voltage, total consumption of electricity during any specified period or the time at which the supply is required or the geographical position of any area of generation/supply, the nature of supply and the purpose for which the supply is adjusted.

## 6. Agreement and Control period

<sup>F</sup>[~~The tariff determined by the commission in the tariff order shall be applicable for the power purchase agreement period of twenty years. The tariff as determined by the Commission by a general or specific order for the purchase of power from each type of renewable source by the distribution licensee as referred to in clause 4(3) shall remain in force for such period as specified by the Commission in such tariff orders~~]<sup>F</sup>. The control period <sup>B</sup>[~~may be three years may ordinarily be two years.~~]<sup>B</sup>. When the Commission revisits the tariff and allied issues, the revision shall be applicable only to the generator of new and renewable energy sources commissioned after the date of such revised order.

## 7. Energy Purchase Agreement (EPA) and Energy Wheeling Agreement (EWA)

<sup>C</sup>[~~The distribution licensee shall file a model Energy Purchase Agreement for approval of the Commission within a period to be specified by the Commission. <sup>H</sup>[~~The format of the Energy Purchase Agreement (EPA) and Energy Wheeling Agreement (EWA) shall be evolved by the Commission after discussion with the generators and the distribution licensee~~]<sup>C</sup>. The distribution licensees shall file a model Energy Purchase Agreement (EPA)/ Energy Wheeling Agreement (EWA) after discussion with the generators/Open Access Customers for the approval of the Commission within one month of the issuance of tariff order by the Commission~~]<sup>H</sup>. Before 10<sup>th</sup> of succeeding month, the licensee / generator shall furnish the list of <sup>C</sup>[~~PPAs Energy Purchase Agreements~~]<sup>C</sup> executed during the preceding month and pay applicable fees as stipulated in the Tamil Nadu

---

<sup>9</sup> Omitted and inserted wordings sub-Regulation (6) of Regulation 4, vide Third amendment (C), 2009

<sup>10</sup> Omitted and inserted first sentence of Regulation 6, vide sixth amendment (F), 2010

<sup>11</sup> Modified wordings in regulation 6, vide Second amendment (B), 2008

<sup>12</sup> Omitted and inserted first sentence of Regulation 7, vide Third amendment (C), 2009

<sup>13</sup> Omitted and inserted second sentence of Regulation 7, vide Eighth amendment (H), 2013

Electricity Regulatory Commission's Fees and Fines Regulations, 2004. The distribution licensees/STU shall sign an Energy Wheeling Agreement taking cognizance of the energy wheeling principles elaborated in the general or special tariff order.

## **8. Issues related to captive use and third party sale**

While issuing the general or specific tariff order, the Commission may consider appropriate criteria/ procedure/parameters/charges for each type of new and renewable source, on the following issues, for sale of power to distribution licensee, captive use and third party sale of power by the new and renewable source generators.

- 1) Applicable demand charges
- 2) Applicable energy charges
- 3) Grid availability charges
- 4) Scheduling and system operation charges
- 5) Transmission & wheeling charges and line losses
- 6) <sup>C</sup>~~C~~<sup>15</sup> 5 A) Banking charges
- 6) Reactive power charges
- 7) Adjustment of peak and off peak power
- 8) Power factor <sup>H</sup>~~incentive~~<sup>H</sup> disincentive
- 9) Payment of security deposit by the captive/third party user
- 10) Billing and payment to the generators by distribution licensee
- 11) Applicable open access registration fee and open access agreement fee
- 12) Any other related issues.

## **9. Power to remove difficulties**

If any difficulty arises in giving effect to any of the provisions of these regulations, the Commission may, by general or special order, take action for removing the same consistent with the provisions of the Act.

## **10. Power to amend**

---

<sup>14</sup> Omitted and inserted wordings in second sentence of Regulation 7, vide Third amendment (C), 2009

<sup>15</sup> Added a new clause (5A) after clause (5) of Regulation 8, vide Third amendment (C), 2008

<sup>16</sup> Omitted "incentive" from sub-Regulation (8) of regulation8, vide Eighth amendment (H), 2013



The Commission may, at any time add, modify, delete or amend any of the provisions of these Regulations.

**(By the order of the Tamil Nadu Electricity Regulatory Commission)**

**R. Balasubramanian  
Secretary**