

JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION

In exercise of the powers conferred by Sections 61, 66, 86 (1) (e) and Section 181 of the Electricity Act 2003 and its amendments thereof and all other powers enabling it in this behalf, the Jharkhand State Electricity Regulatory Commission hereby makes the following Regulation:-

#### A1: SHORT TITLE, COMMENCEMENT AND INTERPRETATION

- 1.1 This Regulation may be called the 'Jharkhand State Electricity Regulatory Commission (Renewable Energy Purchase Obligation and its compliance) Regulations, 2016'.
- 1.2 These Regulations shall extend to the whole State of Jharkhand.
- 1.3 These Regulations shall come into force on the date of its publication in the Jharkhand Gazette and unless reviewed or amended or extended by the Commission, and shall remain in force upto 31<sup>st</sup> March, 2020.

#### **A2: DEFINITION**

- 2.1 In this Regulation unless the context otherwise requires:
  - (a) "Act" means the Electricity Act, 2003 (36 of 2003) and subsequent amendment thereof:
  - (b) "Captive User(s)" means the end user of the electricity generated in a Captive Generating Plant and the term "Captive Use" shall be construed accordingly;
  - (c) "Captive generating plant" means a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity primarily for use of members of such cooperative society or association;
  - (d) "Central Agency" means the agency operating the National Load Dispatch Centre or such other agency as the Central Electricity Regulatory Commission may designate from time to time;
  - (e) "Central Commission" means the Central Electricity Regulatory Commission referred to in subsection (1) of section 76 of the Act;
  - (f) "Certificate" means the renewable energy certificate issued by the Central Agency in accordance with the procedures prescribed by it and under the provisions specified in the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendment thereof;

- (g) "Commission or JSERC" means the Jharkhand State Electricity Regulatory Commission;
- (h) "Existing Renewable Energy Project" means the renewable energy generating project declared under commercial operation from a date prior to April 01, 2016;
- (i) "Floor Price" means the minimum price as determined by the Central Commission in accordance with the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, as amended from time to time, at and above which the certificate can be dealt in Power Exchange(s);
- (j) "Forbearance price" means the ceiling price as determined by the Central Commission in accordance with the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, as amended from time to time, up to which the Certificate can be dealt in Power Exchange(s);
- (k) "MNRE" means the Ministry of New and Renewable Energy, Government of India (GoI);
- (l) "New Renewable Energy Project" means the renewable energy project whose date of commercial operation shall be on or subsequent to April 01, 2016;
- (m) "Obligated entity" means the distribution licensee, consumer owning the captive generating plants and open access consumers in the State of Jharkhand, who have to mandatorily fulfil renewable purchase obligation under these Regulations;
- (n) "Open access consumer(s)" means a means a person availing power using open access as permitted under the JSERC (Terms and Conditions for Intra-state Open Access) Regulations, 2016 and subsequent amendments thereof;
- (o) "Power Exchange(s)" means any exchange operating as the power exchange for electricity in terms of the orders issued by the Central Commission;
- (p) "Preferential tariff" means the tariff fixed by the Commission for sale of energy from a generating station based on renewable energy sources to a distribution licensee;
- (q) "Renewable energy sources" means renewable sources such as small hydro, wind, solar including its integration with combined cycle, biomass including bagasse, bio fuel cogeneration, urban or municipal solid waste and such other sources as recognized or approved by MNRE;
- (r) "**State**" means the State of Jharkhand;

- (s) "State Agency" means the agency in the State of Jharkhand to be designated by the Commission to act as the agency for accreditation and recommending the renewable energy projects for registration and to undertake functions under these regulations;
- (t) "State Transmission Utility (STU)" means the Board or the Government Company specified as such by the State Government under sub-section (1) of section 39 of the Act;
- (u) "Year" means a financial year.
- 2.2 All other expressions used herein although not specifically defined herein, but defined in the Act, shall have the meaning assigned to them in the Act. The other expressions used herein but not specifically defined in this Regulation or in the Act but defined under any law passed by the Parliament applicable to electricity industry in the State shall have the meaning assigned to them in such law. Subject to the above the expression used herein but not specifically defined in this regulation or in the Act or any law passed by the Parliament shall have the meaning as is generally assigned in the electricity industry.

#### A3: APPLICABILITY OF THE ORDER

- 3.1 These Regulations shall apply to:
  - (a) Distribution Licensee(s) within the State;
  - (b) Captive User(s) within the State subject to conditions outlined under sub-clause (a) of Clause 5.1 of these Regulations;
  - (c) Open Access Consumer(s) within the State subject to conditions outlined under sub-clause (b) of Clause 5.1 of these Regulations.

#### A4: OPERATING PERIOD

4.1 The RPO framework stipulated under these Regulations shall commence from the date of notification of these Regulations and shall be valid until March 31, 2020.

#### **A5:** RENEWABLE ENERGY PURCHASE OBLIGATION (RPO)

5.1 The minimum percentage of Renewable Energy Purchase Obligation (RPO) as specified under Clause 5.2 of these Regulations shall be applicable to all Distribution Licensees in the State as well as to open access consumers and captive users within the State, subject to following conditions:

- (a) Any person who owns a grid connected Captive generating plant with installed capacity of 5 MW and above (or such other capacity as may be stipulated from time to time) and consumes electricity generated from such plant for his own use; shall be subjected to minimum percentage of RPO (as specified in Clause 5.2 of these Regulations) to the extent of his consumption met through such captive source;
- (b) Any person having a contract demand of not less than 1 MVA and who consumes electricity procured from conventional fossil fuel based generation through open access as per Section 42 (2) of the Act shall be subjected to minimum percentage of REPO (specified in Clause 5.2 of these Regulations) to the extent of his consumption met through such open access source.

Provided that the Commission may, by order, revise the capacity referred to under subclause (a) and sub-clause (b) above from time to time.

Provided further that condition under sub-clause (a) above, shall not be applicable in case of Standby (or Emergency back-up) captive generating plant facilities.

5.2 Every Obligated entity shall purchase electricity (in kWh) from renewable energy sources, at a defined minimum percentage of its total consumption as an Obligated Entity during a Year shown as under:

Year	Minimum Quantum of purchase in (%) from renewable energy sources (in terms of energy in kWh)		
	Solar	Non-solar	<b>Total</b>
2016-17	1.50%	<mark>3.50%</mark>	<mark>5.00%</mark>
2017-18	2.25%	<mark>4.25%</mark>	<mark>6.50%</mark>
2018-19	3.25%	<del>5.25%</del>	<mark>8.50%</mark>
2019-20	<mark>4.50%</mark>	<mark>6.50%</mark>	11.00%

Provided that, such obligation to purchase renewable energy shall be inclusive of the purchases, if any, from renewable energy sources already being made by concerned Obligated entity.

Provided further that the power purchases under the power purchase agreements for the purchase of renewable energy sources already entered into by the Distribution Licensees and consented to by the Commission shall continue to be made till their present validity, even if the total purchases under such agreements exceed the percentage as specified hereinabove.

5.3 The Commission may, suo-motu or at the request of a Licensee, revise the percentage targets for a year as per Clause **Error! Reference source not found.** of these Regulations keeping in view supply constraints or other factors beyond the control of the Licensee.

## A6: CERTIFICATES UNDER THE REGULATIONS OF CENTRAL COMMISSION

6.1 Subject to the terms and conditions contained in these Regulations the Certificates issued under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendments thereof shall be the valid instruments for the discharge of the mandatory obligations set out in these Regulations for the Obligated entities to purchase electricity from renewable energy sources.

Provided that in the event of the Obligated entity fulfilling the renewable purchase obligation by purchase of Certificates, the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled by purchase of solar certificates only, and the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled by purchase of non-solar certificates only.

- 6.2 Subject to such direction as the Commission may give from time to time, the Obligated entity shall act consistent with the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendments thereof, notified by the Central Commission in regard to the procurement of the Certificates for fulfilment of the renewable purchase obligation under these Regulations.
- 6.3 The Certificates purchased by the Obligated entities from the power exchange in terms of the regulation of the Central Commission mentioned in Clause 6.1 of these Regulations shall be deposited by the Obligated entities with the Commission in accordance with the detailed procedure issued by the Central Agency.

#### **A7: STATE AGENCY**

- 7.1 The Commission shall designate an agency as State Agency for accreditation and recommending the renewable energy projects for registration and to undertake functions under these Regulations.
- 7.2 The State Agency shall function in accordance with the directions issued by the Commission and shall act in accordance with the procedures rules laid by Central Agency for discharge of its functions under the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 and subsequent amendments thereof.

- 7.3 The State Agency shall submit quarterly status to the Commission in respect of compliance of renewable energy purchase obligation by the obligated entities in the format as stipulated by the Commission and may suggest appropriate action to be taken by the Commission if required for compliance of the RPO.
- 7.4 The Commission may from time to time fix the remuneration and charges payable to the State Agency for discharge of its functions under these Regulations.
- 7.5 If the Commission is satisfied that the State Agency is not able to discharge its functions satisfactorily, it may by general or special order, and by recording reasons in writing, designate any other agency to function as State Agency as it considers appropriate.

#### **A8: DISTRIBUTION LICENSEE**

- 8.1 Each Distribution Licensee shall indicate, along with sufficient proof thereof, the estimated quantum and source of purchase of renewable energy for the ensuing year in tariff/ annual performance review petition in accordance with Regulations notified by the Commission.
- 8.2 The estimated quantum of purchase shall be in accordance with Clause 5.2 of these Regulations, or any revised target, of the approved power purchase quantity for the ensuing year(s).
- 8.3 The Distribution Licensee shall furnish the statement of energy procured from different renewable energy sources on quarterly basis to the State Agency.
- 8.4 At the end of each financial year, the Distribution Licensee shall submit a detailed statement of energy procurement from renewable energy sources, duly certified by the auditors.
- 8.5 If the Distribution Licensee fails to fulfil the minimum quantum of purchase from renewable energy sources, it shall be liable to pay compensation as per Clause 10.1 of these Regulations.

#### **A9:** CAPTIVE USER (S) AND OPEN ACCESS CONSUMER (S)

9.1 Every Captive and Open access consumer(s)/ user(s) shall have to submit necessary details regarding total consumption of electricity under Captive User/ Open Access and purchase of energy from renewable energy sources for fulfilment of RPO on quarterly basis to the State Agency.

- 9.2 Captive and Open access Consumer(s)/ User(s) shall purchase renewable energy as a proportion of Captive User/ Open Access consumption as stated in Clause 5.2 of these Regulations. If the Captive user(s) and Open Access consumer(s) fails to fulfil the criteria, the shortfall of the targeted quantum would attract payment of regulatory charge as per Clause 10.1 and 10.2 of these Regulations.
- 9.3 Captive/ Open access consumer(s)/ User(s) may fulfil the RPO through the procurement of Renewable Energy Certificate as provided in Clause 6.1, 6.2 and 6.3 of these Regulations.

#### **A10: EFFECT OF DEFAULT**

10.1 If the Obligated entity does not fulfil the renewable energy purchase obligation as provided in these regulations during any year either by purchase of energy or through purchase of the Certificates, the Commission may direct the Obligated entity to deposit into a separate fund, to be created and maintained by such Obligated entity, such amount as the Commission may determine on the basis of the shortfall in units of renewable energy purchase obligation and the forbearance price decided by the Central Commission;

Provided that the fund so created shall be utilised, as may be directed by the Commission, for purchase of the Certificates;

Provided further that the Commission may empower an officer of the State Agency to procure from Power Exchange(s) the required number of Certificates to the extent of the shortfall in the fulfilment of the obligations, out of the amount in the fund;

Provided also that the Distribution Licensee shall be in breach of its licence condition if it fails to deposit the amount directed by the Commission within 15 days of the communication of the direction;

10.2 Where any Obligated entity fails to comply with the obligation to purchase the required percentage of power from renewable energy sources or the renewable energy certificates, it shall also be liable for penalty as may be decided by the Commission under section 142 of the Act:

Provided that in case of genuine difficulty in complying with the renewable energy purchase obligation because of non-availability of Certificates, the Obligated entity can approach the Commission for carry forward of compliance requirement to the next year;

Provided that where the Commission has consented to the carry forward of compliance requirement, the provision of Clause 10.1 of these Regulation or the provision of section 142 of the Act shall not be invoked.

10.3 The penalty enforced by the Commission on the Obligated entity shall not be a pass through in the Aggregate Revenue Requirement in case the Obligated entity is a Distribution Licensee.

#### **A11: PRIORITY FOR GRID CONNECTIVITY**

11.1 Any person generating electricity from renewable energy sources, irrespective of installed capacity, shall have priority for open access and connectivity with distribution system or transmission system as the case may be. On an application from such person, the transmission licensee or distribution licensee, as the case may be, shall provide appropriate inter-connection facilities, as far as feasible, before commissioning of the renewable energy project. Such interconnection shall follow the grid connectivity standards as specified in the Indian Electricity Grid Code, State Grid Code and/or the manner prescribed by the Central Electricity Authority.

#### **A12: RENEWABLE ENERGY PRICING**

### Pricing principles for new renewable energy projects to be commissioned during Operating Period

12.1 All new renewable energy projects commissioned during the Operating Period, shall have an option of following either the tariff structure and other conditions as stipulated in the relevant technology specific tariff regulations of the Commission, or adopt the REC mechanism for pricing of the electricity generated from the project.

Provided that such projects that opt for either preferential tariff or REC based mechanism shall have to continue with the selected pricing mechanism for the entire Tariff Period or until validity of Power Purchase Agreement (PPA), whichever is later;

Provided further that such new renewable energy project shall exercise its choice for selection of appropriate pricing mechanism prior to execution of the PPA with the Distribution Licensee or with Open Access Consumer, as the case may be.

#### Renewable energy pricing under REC mechanism

12.2 The REC mechanism entails pricing of two components, namely, electricity component and renewable energy component or REC representing environmental attributes of renewable energy generation. For the purpose of the Operating Period the effective electricity component price shall be equivalent to "Pooled Cost of Power Purchase" of the host Utility, whereas, the price of RECs shall be as discovered in the Power Exchange(s).

**Explanation** - for the purpose of these Regulations, "Pooled Cost of Power Purchase" means the weighted average pooled price at which the Distribution Licensee has purchased the electricity including cost of self-generation, if any, in the previous year from all the long-term and short-term energy suppliers, but excluding those based on renewable energy sources, as the case may be.

Provided that the Central Commission may, in consultation with the Central Agency and Forum of Regulators, from time to time, provide for the forbearance price separately for solar and non-solar RECs;

Provided further that, with the progressive development of the electricity sector, the pricing methodologies for electricity component and REC shall be reviewed at periodic intervals as may be considered appropriate by the Commission.

#### Pricing for existing Renewable energy projects during the operating period

12.3 The existing projects for which long term PPA are already put in place, may be allowed to participate in REC scheme only after the expiry of their existing PPA as per REC Regulations and amendments thereof;

Provided further that prior termination of PPA shall not entitle existing renewable energy projects to participate in the REC mechanism.

#### **A13: POWER TO RELAX**

13.1 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 or may waive any of the provisions of these Regulations on its own motion or on an application made before it by an interested person.

#### **A14: POWER TO AMEND**

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

#### **A15: POWER TO REMOVE DIFFICULTIES**

15.1 In case of any difficulty in giving effect to any of the provisions of this Regulation, the Commission may by general or special order, issue appropriate directions to Generators, Transmission Licensee(s), Distribution Licensee(s), Captive User(s), Open access consumers(s) etc., to take suitable action, not being inconsistent with the provisions of the Act, which appear to the Commission to be necessary or expedient for the purpose of removing the difficulty.

15.2 The Generators, Licensees, Captive User(s), Open access consumer(s) may make an application to the Commission and seek suitable orders to remove any difficulties that may arise in implementation of these Regulations.

#### A16: SAVINGS

- 16.1 Nothing in these Regulations shall be deemed to limit or otherwise affect the inherent power of the Commission to make such orders as may be necessary to meet the ends of justice or to prevent abuses of the process of the Commission.
- 16.2 Nothing in this Regulations shall bar the Commission from adopting in conformity with the provisions of the Act a procedure, which is at variance with any of the provisions of these Regulations, if the Commission, in view of the special circumstances of a matter or class of matters and for reasons to be recorded in writing, deems it necessary or expedient for dealing with such a matter or class of matters.
- 16.3 Nothing in these Regulations shall, expressly or impliedly, bar the Commission dealing with any matter or exercising any power under the Act for which no Regulations or Regulations have been framed, and the Commission may deal with such matters, powers and functions in a manner it thinks fit.

(By order of the Commission) (A.K. Mehta)

**Secretary** 

**Jharkhand State Electricity Regulatory Commission**