

JHARKHAND STATE ELECTRICITY REGULATORY COMMISSION

In exercise of the powers conferred by Sections 61, 66, 86 (1) (e) and Section 181of 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 Regulations for stipulating the Renewable Energy Purchase Obligation for the Obligated Entities within the State of Jharkhand, since the period of earlier Regulations issued, viz., Jharkhand State Electricity Regulatory Commission (Renewable Energy Purchase Obligation and its compliance) Regulations, 2010 and Jharkhand State Electricity Regulatory Commission (Renewable Energy Purchase Obligation and its compliance) Regulations, 2016, expired in March 2020 and in light of the Letter No. 30/04/2018-R&R issued by the Ministry of Power on February 1, 2019,and in order to fix a minimum percentage of total consumption of the electricity of the Obligated Entities for purchase of energy from Renewable Energy Sources and to achieve long term growth trajectory of Renewable Purchase Obligation (RPO) from Solar as well as Non-Solar Energy:

### 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, 2020'.
- 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.

#### **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) "Assessment Year" means the Financial year following the relevant Financial Year
  - (c) "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;

- (d) "Captive Generating Plant" means a power plant set up by any person/ entity 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;
- (e) "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;
- (f) "Central Commission" means the Central Electricity Regulatory Commission referred to in subsection (1) of section 76 of the Act;
- (g) "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;
- (h) "Commission or JSERC" means the Jharkhand State Electricity Regulatory Commission;
- (i) "Existing Renewable Energy Project" means the renewable energy generating project declared under commercial operation from a date prior to April 01, 2020;
- (j) "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);
- (k) "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);

- (l) "MNRE" means the Ministry of New and Renewable Energy, Government of India(GoI);
- (m) "New Renewable Energy Project" means the renewable energy project whose date of commercial operation shall be on or subsequent to April 01, 2020;
- (n) "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;
- (o) "Open Access Consumer(s)" means a means a person/entity availing power using open access as permitted under the JSERC (Terms and Conditions for Intrastate Open Access) Regulations, 2016 and subsequent amendments thereof;
- (p) "Power Exchange(s)" means any exchange operating as the power exchange for electricity in terms of the orders issued by the Central Commission;
- (q) "**Prosumer**" is a consumer who simultaneously produces RE Power;
- (r) "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;
- (s) "Renewable Energy 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:
- (t) "Relevant Financial Year" means the year in which the RPO was to be complied;
- (u) "State" means the State of Jharkhand;
- (v) "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;

- (w) "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;
- (x) "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 REGULATIONS**

- 3.1 These Regulations shall apply to:
  - (a) Distribution Licensees within the State;
  - (b) Captive Users within the State subject to conditions outlined under sub-clause (a) of Clause 5.1of these Regulations;
  - (c) Open Access Consumers 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 repealed by the Commission.

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

5.1 The minimum percentage of Renewable Energy Purchase Obligation(RPO) as specified under Clause 5.2of 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 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, excluding the captive power consumers who consume power from renewable energy based captive plants.
- (b) Any person 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 RPO (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) above from time to time.

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	Total
2020-21	8.75%	10.25%	19.00%
2021-22	10.50%	10.50%	21.00%
2022-23	11.50%	11.50%	23.00%
2023-24	12.50%	12.50%	25.00%

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 that the RPO specified for FY 2021-22 shall continue till the applicability of these Regulations until any such revision is effected by the Commission in this regard.

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.

Provided also that RPO shall be calculated on the power consumption subtracted by the Hydro Power Consumption for that year as per the provisions of the National Tariff Policy, 2016.

Provided further that Renewable Energy purchased through bundled power shall qualify for Renewable Purchase Obligation compliance to the extent of Renewable Energy content in the bundled power.

- 5.3 On achievement of Solar RPO Compliance to the extent of 85% and above, remaining shortfall if any, can be met by excess Non-Solar energy purchased beyond specified Non-Solar RPO for that particular year.
- 5.4 On achievement of Non-Solar RPO Compliance to the extent of 85% and above, remaining shortfall if any, can be met by excess Solar energy purchased beyond specified Solar RPO for that particular year.
- 5.5 The Distribution Licensees shall compulsorily procure 100% power generated from the Waste-to-Energy plants in their License Area at the tariff approved by the Commission.
- 5.6 For a Distribution Licensee own consumption shall mean gross energy consumed or purchased by the obligated entity from all sources for its own use or for the purpose of supply to its consumers within its area of supply, excluding any bilateral sale of electricity among the Licensees of the State.

Provided that the above exemption on bilateral sale shall be allowed only in case such the other Licensee procures the power as a Licensee and not as a consumer.

Distribution Licensee shall be eligible to utilise the gross solar energy generated from Prosumers supplying power to such Licensee under the Gross and Net Metering Scheme as RPO compliance.

5.7 The Commission may, suo-motu or at the request of a Licensee, revise the percentage targets for a year as per Clause 5.2 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 there of 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, subject to the swapping allowed under Clause 5.3 and Clause 5.4 of these regulations, 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 within 15<sup>th</sup> of the ensuing month after completion of a Financial Quarter to the Commission in respect of compliance of renewable energy purchase obligation by the obligated entities in the format as stipulated by the Commission as annexed as **Annexure I** to these Regulations 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 5.2of 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 regulatory charges as per Clauses 10.4 and 10.6 of these Regulations.

#### A9: CAPTIVE USERS ANDOPEN ACCESS CONSUMERS

- 9.1 Every Captive and Open Access Consumer/ User shall have to submit necessary details regarding and total consumption of electricity under Captive Use/ 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 Consumers/ Users shall purchase renewable energy as a proportion of Captive Use/ Open Access consumption as stated in Clause 5.2 of these Regulations. If the Captive user/ Open Access consumer fails to fulfil the criteria, the shortfall of the targeted quantum would attract payment of regulatory charge as per Clauses 10.4 and 10.6 of these Regulations.
- 9.3 Captive/ Open Access Consumers/ Users 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 The Obligated Entity(ies) shall submit the details of their compliance of RPO to the State Agency on a quarterly basis. The final accounts shall be submitted by 31stJuly of the Assessment Year along with the detailed statement of energy procurement from renewable energy sources and RECs purchases (if any), duly certified by the auditors. In case of delay by any Obligated Entity(ies), the State Agency may issue notice to suchObligated Entity(ies) to submit the same at the latest by 31st of August of the Assessment Year.

- 10.2 After receiving the compliance from the obligated entities as per Clause 10.1above, the State Agency shall assess the shortfall, if any, in meeting the RPO by the obligated entities in the State for the relevant Financial Yearalong with the RPO charge as per Clause 10.4and submit the Annual Compliance Report by 30<sup>th</sup> September of the Assessment Year. In case of default by any of the obligated entities, the Commission may suo-moto initiate proceedings against the Obligated Entity(ies) in default under Section 142 of the Act.
- 10.3 The Commission shall serve the notices to the Obligated Entity(ies) identified as defaulter(s) in the assessment done under Clause 10.2above by 30<sup>th</sup>October of the Assessment Year requiring them to create anRPO fund based on the chargesdetermined in the manner mentioned under Clause 10.4.
- 10.4 The Obligated Entity(ies) in default shall pay, by 30<sup>th</sup> November of the Assessment Year, the RPO charge determined on the basis of the shortfall in units of renewable energy purchase obligation and the forbearance price decided by the Central Commission to the fund created.

Provided that the fund so created shall be utilised, as may be directed by the Commission, from time to time;

Provided that the details of such fund created and the compliance using the same shall be submitted by the Obligated Entity(ies) which are Licensees in the Tariff Orders of the respective year;

- 10.5 An obligated entity shall be allowed to comply with the RPO targets through procurement of certificates by 1<sup>st</sup>quarter of the year following the Assessment Year.
- 10.6 Where any Obligated Entity(ies)still fail to comply with the obligation to purchase the required percentage of power from renewable energy sources or the renewable energy certificates by 1<sup>st</sup>quarter of the year following the Assessment Year, they 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 appropriate relief;

Provided that where the Commission provides relief to the Licensee in terms of Clause 10.6of these Regulation or the penal action under section 142 of the Act shall not be invoked for that specific year.

10.7 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 technology specific tariff as approved by the Commissionor 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).

Provided that the electricity component for consumers under net and gross metering shall be notified separately by the Commission from time to time in terms of JSERC (Rooftop Solar PV Grid Interactive Systems and Net/Gross Metering) Regulations, 2015 as amended from time to time.

**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: REPEAL AND SAVINGS**

- 16.1 With these regulations coming into effect, the JSERC (Renewable Energy Purchase Obligation and its compliance) Regulations, 2010 and JSERC (Renewable Energy Purchase Obligation and its compliance) Regulations, 2016 along with all amendments thereto, shall stand repealed.
- 16.2 Notwithstanding such repeal, anything done or any action taken or purported to have been taken including any notification, order or notice made or issued or exemption granted or an direction given under the repealed regulations shall be valid for the relevant period of the repealed regulations and be deemed to have been done or taken validity.

#### **A17: INHERENT POWERS OF THE COMMISSION**

- 17.1 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.
- 17.2 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.
- 17.3 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)
(Rajendra Prasad Nayak)
Secretary
JharkhandState Electricity Regulatory Commission

## **ANNEXURE I**

## HalfyearlyFormats to be submitted by State Agency to the Commission:

Name of the Obligated Entity	UoM	Value
Total Power Purchased	MU	
Hydro Power Purchased	MU	
Solar RPO Target	%	
Non Solar RPO Target	%	
Solar RPO Carried Forward	MU	
Non Solar RPO Carried Forward	MU	
Solar RPO Target	MU	
Non Solar RPO Target	MU	
Solar Purchase	MU	
Non-Solar Purchase	MU	
Solar REC Purchased	Nos.	
Non Solar REC Purchased	Nos.	
Equivalent Solar RPO	MU	
Equivalent Non Solar RPO	MU	
Total Solar RPO Complied	MU	
Total Non Solar RPO Complied	MU	
Non Compliance (Solar)	MU	
Non Compliance (Non Solar)	MU	
Solar REC (Forbearance)	Rs./kWh	
Non Solar REC (Forbearance)	Rs./kWh	
Compensation	Rs. Crore	