

**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION  
MUMBAI**

**MAHARASHTRA ELECTRICITY REGULATORY COMMISSION  
(RENEWABLE PURCHASE OBLIGATION, ITS COMPLIANCE AND  
IMPLEMENTATION OF RENEWABLE ENERGY CERTIFICATE  
FRAMEWORK) REGULATIONS, 2016**

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**ELECTRICITY ACT, 2003.**

No. [.....]- In exercise of the powers conferred under Sections 61, 66, 86(1)(e) and 181 of the Electricity Act, 2003 and all other powers enabling it in this behalf, and after previous publication, the Maharashtra Electricity Regulatory Commission hereby makes the following Regulations:

**1 Short title, extent and commencement**

- 1.1 These Regulations may be called the Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2016.
- 1.2 These Regulations shall extend to the whole of the State of Maharashtra and to all matters within the jurisdiction of the State Commission.
- 1.3 These Regulations shall come into force from the date of their publication in the Official Gazette.

**2 Definitions**

- 2.1 In these Regulations, unless the context otherwise requires:
  - (a) "Act" means the Electricity Act, 2003 (36 of 2003), including amendments thereto;
  - (b) "Captive User" means a person or member within the meaning of Section 2(8) of the Act, being the end user of the electricity generated in a Captive Generating Plant primarily for his own use, and the term "captive use" shall be construed accordingly.
  - (c) "Central Agency" means such entity as the Central Commission may designate;
  - (d) "Central Commission" means the Central Electricity Regulatory Commission referred to in sub-section (1) of section 76 of the Act;
  - (e) "Certificate" means the Renewable Energy Certificate (or "REC") issued by the Central Agency in accordance with the procedures prescribed and under the provisions of 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 ("the Central Commission's REC Regulations");

- (f) "Floor price" means the minimum price, as determined by the Central Commission in accordance with the Central Commission's REC Regulations, at and above which the Certificate can be traded on a Power Exchange;
- (g) "Forbearance price" means the ceiling price, as determined by the Central Commission in accordance with the Central Commission's REC Regulations, within which the Certificate can be traded on a Power Exchange;
- (h) "Inter-connection Point" shall mean the interface point of a Renewable Energy generating facility with the transmission system or distribution system, as the case may be:
- (i) in relation to Wind Energy Projects and Solar Photo Voltaic (PV) Projects, the inter-connection point shall be the line isolator on the outgoing feeder on the HV side of the Pooling Sub-station;  
*Explanation:-*The Pooling Sub-station shall mean the sub-station at the site of the wind farm or Solar power plant, which shall include step-up transformer and associated switchgear, and to the LV side of which multiple Generating Units (i.e. Wind Turbine Generators or Solar PV modules/arrays/inverter units) are connected;
  - (ii) in relation to Mini and Micro Hydro power, Small Hydro power, Biomass power, non-fossil fuel-based Co-generation power and Solar Thermal power Projects, the inter-connection point shall be the line isolator on the outgoing feeder on the HV side of the generator transformer.
- (i) "MNRE" refers to the Ministry of New and Renewable Energy, Government of India;
- (j) "Obligated Entity" means a Distribution Licensee, a user owning a captive power plant, and Open Access Consumer in the State of Maharashtra required to comply with the Renewable Purchase Obligation ("RPO") under these Regulations subject to fulfilment of conditions in Regulation 5;
- (k) "Open Access Consumer" means a person availing power using Open Access pursuant to the Regulations of the State Commission governing the terms and conditions for Transmission Open Access or Distribution Open Access;
- (l) "Power Exchange" means an entity operating as a Power Exchange for electricity in terms of orders issued by the Central Commission;

- (m) "Preferential Tariff" means the Tariff fixed by the State Commission for sale of energy-based on Renewable Energy sources from a Generating Station to a Distribution Licensee in accordance with Regulations of the State Commission governing the terms and conditions for determination of Renewable Energy Tariff;
- (n) "Renewable Energy Sources" means the renewable sources such as mini hydro, micro hydro, small hydro, wind, Solar, biomass including bagasse, bio fuel cogeneration, urban or municipal waste and such other sources as are recognized or approved by MNRE;
- (o) "State Agency" means the Maharashtra Energy Development Agency, or such other entity as may be designated by the State Commission to act as the agency for accreditation and recommending Renewable Energy Projects for registration and to undertake functions under these Regulations;
- (p) "State Commission" means the Maharashtra Electricity Regulatory Commission;
- (q) "Year" means a financial year ("FY").

2.2 Words and expressions used in these Regulations and not defined herein but defined in the Act or the Regulations of the Central Commission or the State Commission shall have the same meaning as assigned to them in the Act or such Regulations.

## **PART A: GENERAL**

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### **3 Scope of Regulations and extent of application**

- 3.1 These Regulations shall apply in all cases where the State Commission is to promote Co-generation from renewable sources and generation of electricity from renewable sources and is to specify a percentage for procurement of energy generated from such sources on the basis of total consumption of electricity within the area of a Distribution Licensee.
- 3.2 These Regulations shall apply to:
  - (a) Distribution Licensees in the State of Maharashtra;
  - (b) Captive Users in Maharashtra, subject to the conditions in Regulation 5;
  - (c) Open Access Consumers in Maharashtra, subject to the conditions in Regulation 5.

## **PART B: RENEWABLE ENERGY PURCHASE OBLIGATION**

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### **4 Eligible Renewable Energy sources**

4.1 For the purposes of these Regulations, energy generation from all types of Renewable Energy (“RE”) sources as recognised or approved by the MNRE shall be considered:

Provided that any new technology may qualify as ‘renewable’ only after the State Commission has approved such technology based on approval by the MNRE.

4.2 The eligible RE sources shall include without limitation the following :

- (a) Non-fossil fuel (including bagasse) based Co-generation (both qualifying and non-qualifying Co-generation)
- (b) Wind Energy
- (c) Biomass Power based on Rankine Cycle technology
- (d) Small Hydro, Mini Hydro, Micro Hydro Power
- (e) Waste to Energy based on technologies approved by MNRE
- (f) Solar Power
- (g) Hybrid RE based on RE technologies and sources approved by MNRE and the State Commission
- (h) Any other source recognised or approved by MNRE and the State Commission;

Provided that generation from grid-connected RE sources with installed capacity of 250 kW and above, or such other minimum capacity as may be specified by the Central Commission from time to time, shall be considered as generation from eligible RE sources;

Provided further that the generation from grid-connected RE sources with installed capacity below 250 kW, or such other minimum capacity as may be specified by the State Commission from time to time, shall be considered as ‘eligible RE source’ provided suitable metering and communication arrangements with the Maharashtra State Load Despatch Centre (“MSLDC”) is established by the concerned RE Project;

Provided also that eligible generation from Roof-top Solar PV systems within the ambit of the Maharashtra Electricity Regulatory Commission (Net Metering for Roof-top Solar Photo Voltaic Systems) Regulations, 2015 shall qualify for the purpose of RPO compliance.

4.3 Procurement of RECs issued for RE generation within and outside Maharashtra shall be considered as eligible instruments for the purpose of RPO compliance by Obligated Entities within Maharashtra over the Operating Period specified in Regulation 6.

## 5 Obligated Entities

5.1 The percentage specified in Regulation 7.1 shall be applicable to all Distribution Licensees, Open Access Consumers and captive users within Maharashtra, subject to the following conditions:

- (a) Any person who owns a grid-connected Captive Generating Plant based on conventional fossil fuel with installed capacity of 5 MW and above, or such other capacity as may be stipulated by the State Commission from time to time, and consumes electricity generated from such Plant for his own use shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel-based captive source;
- (b) Any person having a Contract Demand of not less than 5 MVA and who consumes electricity procured from conventional fossil fuel-based generation through Open Access shall be subject to RPO to the extent of a percentage of his consumption met through such fossil fuel-based Open Access source:

Provided that the State Commission may, by order, revise the minimum capacity referred to in sub-clauses (a) and (b) above from time to time;

Provided further that the condition under sub-clause (a) above shall not be applicable in case of stand-by (or emergency back-up) captive generating facilities.

## 6 Operating Period

The Operating Period of the RPO framework specified under these Regulations shall commence from 1 April, 2016 and shall be valid until 31 March, 2020.

## 7 Renewable Purchase Obligation target

7.1 Every Obligated Entity shall procure electricity generated from eligible RE sources to the extent of the percentages, out of its total procurement of electricity from all sources in a year, set out in the following Table:

Year	Quantum of purchase (in %) from Renewable Energy sources (in terms of energy equivalent in kWh)		
	Solar	Non-Solar (other RE)	Total
	(a)	(b)	(c)
2016-17	1.00%	10.00%	11.00%
2017-18	2.00%	10.50%	12.50%
2018-19	2.75%	11.00%	13.75%
2019-20	3.50%	11.50%	15.00%

Provided that each Distribution Licensee shall meet 0.2% per year of its Non-solar (other RE) RPO target percentage for the period from FY 2016-17 to FY 2019-20 by way of purchase from Mini Hydro or Micro Hydro Power Projects;

Explanation : The Non-Solar RPO target percentage is inclusive of the 0.2 % target for purchase from Mini and Micro Hydro Power Projects.

Provided that, in case a Distribution Licensee demonstrates that it is unable to meet the target of 0.2% per year for procurement of power from Mini Hydro or Micro Hydro Projects despite its best efforts, the Commission shall allow it to be met by way of purchase of Non-Solar RECs;

Provided further that any variation in the fulfilment of RPO targets by the Obligated Entity within a band of +/- 5% of the applicable RPO target (in terms of Energy Units or MWh) for the respective years shall be allowed under exceptional circumstances subject to detailed scrutiny;

Provided further that a Distribution Licensee with peak demand of 5 MW and above but less than 10 MW, a Captive User of a Captive Generating Plant with installed capacity of 5 MW and above but less than 10 MW and Open Access Consumers with Contract Demand of 5 MVA and above but less than 10 MVA, shall be required to meet only their composite RPO target set out in column (c) of the Table above annually;

Provided also that each Distribution Licensee shall include its plan for procurement of power from RE sources in its long-term power procurement plan such as would meet the RPO target specified above.

7.2 An Obligated Entity may meet its RPO target by way of its own generation or procurement of power from another RE Project or by purchase from a Licensee or by purchase of RECs or by a combination of these options:

Provided that procurement of RE power generated within Maharashtra by a Distribution Licensee at a rate other than that approved by the State Commission directly from a Generator or a Trading Licensee shall not be considered as eligible quantum for fulfilment of the RPO of such Distribution Licensee;

Provided further that procurement by a Distribution Licensee of RE power generated within Maharashtra under a scheme of or approved by MNRE may be considered by the State Commission as eligible quantum for fulfilment of the RPO of such Distribution Licensee considering the nature of such scheme.

## **8 Certificates under the Regulations of the Central Commission**

Subject to the terms and conditions contained in these Regulations, the Certificates issued under the Central Commission's REC Regulations shall be valid instruments for the discharge of the Obligations set out in these Regulations for the Obligated Entities to purchase electricity from RE sources:

Provided that, in the event of an Obligated Entity seeking to fulfil its RPO by purchase of Certificates, the obligation to purchase electricity from Solar generation may be fulfilled only by purchase of Solar Certificates, and the obligation to purchase electricity from generation based on RE other than Solar may be fulfilled only by purchase of non-Solar Certificates.

## **9 State Agency**

- 9.1 The State Agency shall function in accordance with the directions of the State Commission, and shall act in a manner consistent with the procedures and rules of the Central Agency for discharge of its functions under the Central Commission's REC Regulations.
- 9.2 The State Agency shall devise an appropriate protocol for collection of information from various sources such as RE Generating Companies, Obligated Entities, MSLDC, etc., and compute the compliance of RPO targets by Obligated Entities.
- 9.3 The summary statement of RE procurement and RPO compliance by each Obligated Entity shall be published by the State Agency on a cumulative basis every quarter on its website.
- 9.4 The statement shall cover RE procurement by each Obligated Entity comprising RE procurement under the preferential Tariff route or other modality approved by the State Commission with regard to RPO as well as RE procurement through the REC mechanism.
- 9.5 The State Agency shall submit to the State Commission the quarterly status of compliance of RPO by the Obligated Entities in the stipulated format and may suggest appropriate measures as may be necessary for compliance of such Obligation.
- 9.6 The State Commission may from time to time stipulate the fees and charges payable to the State Agency for discharge of its functions under these Regulations.
- 9.7 If the State Commission is satisfied that the State Agency is not able to discharge its functions satisfactorily, it may, by general or special order, designate any other entity to function as the State Agency.

## **10 Distribution Licensees**

- 10.1 Each Distribution Licensee shall indicate, with evidence, the estimated quantum of purchase from RE sources for each year of the Operating Period in its Multi Year Tariff Petition and shall accordingly enter into arrangements to meet its RPO.

- 10.2 The estimated quantum of RE purchase shall be in accordance with Regulation 7.1 corresponding to the approved power purchase quantity for each year of the Operating Period.
- 10.3 Each Distribution Licensee shall furnish a summary statement of energy procured from different RE sources on a monthly basis to the State Agency.
- 10.4 As soon as may be after the close of the financial year, each Distribution Licensee shall submit a detailed statement of energy procurement from various RE sources, duly certified by the statutory auditor.
- 10.5 Distribution Licensees who are unable to fulfil their RPO shall be liable to RPO Regulatory Charges as specified in Regulation 12.1.

## **11 Captive Users and Open Access Consumers**

- 11.1 Subject to the conditions specified in Regulation 5, Captive Users and Open Access Consumers shall submit details of their consumption of electricity and power purchase from RE sources towards fulfilment of their respective RPO on a monthly basis to the State Agency.
- 11.2 Captive Users and Open Access Consumers shall purchase RE as specified in Regulation 7.1 and shall accordingly enter into arrangements to meet their respective RPO.
- 11.3 Captive Users and Open Access Consumers who are unable to fulfil their respective RPO shall be liable to pay RPO Regulatory Charges as specified in Regulation 12.
- 11.4 Captive Users and Open Access Consumers may fulfil their RPO through procurement of RECs as provided in Regulation 8.
- 11.5 Subject to fulfilment of conditions for captive usage and eligibility criteria under Regulation 5.1 (a), the sale of surplus electricity from a RE-based Captive Power Project over and above the captive consumption will qualify for availing RECs as provided in Regulation 8.

## **12 RPO Regulatory Charges**

If an Obligated Entity fails to comply with the RPO target specified in these Regulations in any year and fails to purchase the required quantum of RECs, the State Commission may direct it to deposit into a separate Fund, to be created and maintained by such Obligated Entity, such amount as the State Commission may determine on the basis of the shortfall in units of RPO, RPO Regulatory Charges separately in respect of Solar and non-Solar RPO:

Provided that, in case of an Obligated Entity other than a Distribution Licensee, such Obligated Entity shall deposit the RPO Regulatory Charges in a Fund to be maintained and administered by the State Agency or as may be directed by State Commission.

Provided further that RPO Regulatory Charges shall be equivalent to the highest applicable preferential Tariff during the year for Solar or non-Solar RE generating sources, as the case may be, or Forbearance Price decided by the Central Commission, or any other rate as may be stipulated by the State Commission;

Provided further that the Fund so created shall be utilised as may be directed by the State Commission;

Provided also that the State Commission may not allow, upon considering the circumstances, all or part of the RPO Regulatory Charges and associated costs to be passed on to Consumers.

### **13 Monitoring and Implementation Framework**

13.1 A Monitoring Committee shall be constituted under the aegis of the Grid Co-ordination Committee (“GCC”) within thirty days of notification of these Regulations, which shall include every member of the GCC.

13.2 The Monitoring Committee shall be responsible for the following matters, namely;

- (a) addressing issues of energy accounting and monitoring of RE transactions;
- (b) facilitating the implementation of these Regulations and the rules and procedures developed under them;
- (c) assessing and recommending remedial measures for issues that might arise during the course of implementation of these Regulations and the rules and procedures developed under them;
- (d) guiding the State Agency in matters relating to implementation of these Regulations;
- (e) such other matters as may be directed by the State Commission from time to time.

## **PART C: RENEWABLE ENERGY PRICING**

### **14 Pricing Principles for Renewable Energy Projects commissioned during the Operating Period**

All RE Projects commissioned during the Operating Period specified in these Regulations shall have the option of following either the Tariff structure and other conditions as specified in the Regulations of the State Commission governing the terms and conditions for determination of RE Tariff or adopt the REC mechanism for pricing of the electricity generated from such Projects:

Provided that Projects that choose one or the other option shall have to continue with that option during the entire Tariff Period or until validity of the Power Purchase Agreement, whichever is later, as set out in the

Regulations of the State Commission governing the terms and conditions for determination of RE Tariff ;

Provided also that such RE Projects shall exercise their choice of pricing mechanism prior to execution of the PPA with a Distribution Licensee or an Open Access Consumer, as the case may be.

## **PART D: OTHER MATTERS**

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### **15 Grid Connectivity Framework**

The concerned Licensee shall be responsible for development of evacuation infrastructure beyond the inter-connection point, while the Generating Company shall develop evacuation infrastructure from the generation facility up to the inter-connection point at its own expense:

Provided that the evacuation infrastructure cost beyond the inter-connection point shall be borne by the Licensee and shall be recovered from its Consumers as per the pricing framework developed by the State Commission.

### **16 Power to Relax**

The State 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, relax or waive any of the provisions of these Regulations on its own motion or on an application made by an interested person.

### **17 Issue of Orders and Practice Directions**

Subject to the provisions of the Act, the Commission may issue Orders and Practice Directions with regard to the implementation of these Regulations.

### **18 Power to Amend**

The State Commission may, at any time, vary, alter, modify or amend any provisions of these Regulations, for reasons to be recorded in writing.

### **19 Power to Remove Difficulties**

If any difficulty arises in giving effect to the provisions of these Regulations, the State Commission may, by general or specific order, make such provisions not inconsistent with the provisions of the Act as may appear to be necessary for removing the difficulty.

Mumbai  
Dated: 30 March, 2016

**ASHWANI KUMAR,**  
Secretary,  
Maharashtra Electricity Regulatory Commission