

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
Maharashtra Electricity Regulatory Commission
(RENEWABLE PURCHASE OBLIGATION, ITS COMPLIANCE AND
IMPLEMENTATION OF RENEWABLE ENERGY CERTIFICATE FRAMEWORK)
REGULATIONS, 2019

ELECTRICITY ACT, 2003.

No. MERC/Tech/Regulation/2019/1232- 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, 2019.
- 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) "Generic Tariff" means the Generic Tariff approved or adopted by the Commission for generation from different Renewable Energy sources in accordance with the Maharashtra Electricity Regulatory Commission (Terms and Conditions for Determination of Renewable Energy Tariff) Regulations, 2015, or as amended from time to time;
- (g) "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.

- (h) "MNRE" refers to the Ministry of New and Renewable Energy, Government of India;
- (i) "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;
- (j) "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;
- (k) "Power Exchange" means an entity operating as a Power Exchange for electricity in terms of orders issued by the Central Commission;
- (l) "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;
- (m) "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;
- (n) "State Commission" means the Maharashtra Electricity Regulatory Commission;
- (o) "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

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 minimum percentage for procurement of energy generated from such sources on the basis of total consumption of electricity within the area of a Distribution Licensee.

Provided that total consumption of electricity shall exclude the electricity procured from Hydro power.

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

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) Power generated from co-firing of biomass in the thermal power plants
- (i) Any other source recognised or approved by MNRE and the State Commission.

4.3 Generation from grid-connected RE sources having suitable metering and communication arrangement with Distribution Licensee / Maharashtra State Load Despatch Centre ("MSLDC") shall be considered as generation from eligible RE sources ;

Provided that generation from off-grid RE sources setup by Distribution Licensee for meeting its universal service obligations, shall be considered as generation from eligible RE sources only if suitable metering and communication arrangement in accordance with CEA (Installation and Operation of Meters) Regulations, 2006 as amended from time to time exists and Distribution Licensee communicate details of such generation on monthly basis to State Agency.

4.4 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 Obligated Entities covering 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 1 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 1 MW 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, modify/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, 2020 and shall be valid until 31 March, 2025.

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 excluding energy from Hydro power 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)
2020-2021	4.50%	11.50%	16.00%
2021-2022	6.00%	11.50%	17.50%
2022-2023	8.00%	11.50%	19.50%
2023-2024	10.50%	11.50%	22.00%
2024-2025	13.50%	11.50%	25.00%

- 7.2 RPO target stipulated above are minimum target to be achieved. Obligated Entity shall endeavour to achieve RPO target notified by the Central Government from time to time for which it will be eligible for incentive as per Regulation 12.
- 7.3 Obligated Entity can use surplus Solar energy upto 15% of total RPO target to meet short fall in non-Solar RPO target and vice-versa ;

Provided that Obligated Entity by providing detailed justification may seek prior approval of the Commission for adjusting more than 15% surplus energy from one category against short fall in other RPO category.

- 7.4 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 for carry forward to subsequent year under exceptional circumstances subject to detailed scrutiny.
- 7.5 Distribution Licensee with peak demand less than 10 MW, a Captive User of a Captive Generating Plant with installed capacity of 1 MW and above, and Open Access Consumers with Contract Demand of 1 MW and above, shall be required to meet only their composite RPO target set out in column (c) of the Table above annually :

Provided that in case of Captive User of a Captive Generating Plant commissioned before 1 April 2016, the composite RPO target with respect to the energy procured from such Captive Generating Plant shall be 9% :

Provided further that in case of Captive Generating Plant commissioned on or after 1 April 2016, the composite RPO target shall be equal to the target applicable for the year in which project is commissioned :

Provided further that in case of any augmentation of the Captive Generating Plant, the RPO target for augmented capacity shall be equal to the RPO target applicable for the year in which such augmented capacity has been commissioned :

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.

- 7.6 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 by a Distribution Licensee at a Generic Tariff rate approved by the State Commission or at a rate discovered through transparent process of competitive bidding and duly approved/adopted by the Commission shall be considered as eligible quantum for fulfilment of the RPO of such Distribution Licensee :

Provided further that RE power procurement as per agreement signed before notification of MERC (Renewable Purchase Obligation, its compliance and implementation of REC) Regulations, 2010 shall be considered as eligible quantum for fulfilment of the RPO of such Distribution Licensee.

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 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.
- 9.4 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.
- 9.5 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 excluding Hydro power 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 Within 60 days of 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.

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 corresponding to power purchase quantity excluding Hydro power for each year of the Operating Period and shall accordingly enter into arrangements to meet their respective RPO.
- 11.3 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 :

Provided that on availing REC, such surplus energy shall not be eligible for incentive as specified in Regulation 12.

12 Incentives and Penalty

- 12.1 Regulation 7 provides minimum percentage of RE to be procured in each year by Obligated Entity.
- 12.2 Distribution Licensee shall endeavour to achieve total RPO target notified by the Central Government and for doing so it will get incentive of Rs 0.25 per kWh for RE procured above the minimum percentage specified in Regulation 7 upto the percentage notified by the Central Government as under or as may be notified from time to time:

Year	Solar	Non-Solar	Total
2020-2021	8.75%	10.25%	19.00%
2021-2022	10.50%	10.50%	21.00%

Provided such incentive will not be applicable if Distribution Licensee have not fulfilled Renewable Purchase Obligations on cumulative basis;

Provided further that RE procured during the year for meeting RPO of previous years shall be deducted while determining eligible RE quantum for incentives.

- 12.3 Any shortfall in meeting the minimum percentage of RE as specified in Regulation 7 may be carried forward from FY 2020-21 and FY 2021-22 to FY 2022-23 and from FY 2023-24 to FY 2024-25 and Obligated Entity shall meet such shortfall on cumulative basis by 31 March 2023 and 31 March 2025, respectively;

Provided that Distribution Licensee shall be subjected to reduction in Annual Revenue Requirement at a rate of Rs 0.10 per kWh for cumulative shortfall in total RE procurement target for each year;

Provided further that other Obligated Entities shall be subjected to penalty of Rs. 0.10 per kWh for cumulative shortfall in total RE procurement target for each year;

Provided further that any cumulative shortfall in RE procurement as on 31 March 2023 and/or 31 March 2025 shall not be carried forward for next year and be adjusted by imposing reduction in ARR for Distribution Licensees and imposing penalty for other Obligated Entities, at rate of floor price of respective REC as on that date;

Provided further that if Obligated Entity is able to demonstrate that even after taking all possible measures including procurement of RECs, it is not able to meet RPO then the Commission may reduce the penalty amount subject to conditions as may be stipulated in that Order.

- 12.4 Incentives and Penalties for Distribution Licensees shall be determined and approved/levied by the Commission in ARR determination process.

- 12.5 Penalties for other Obligated Entities shall be collected by the State Agency through RPO Web-portal;

Provided that State Agency shall maintain separate account in the name of RPO Fund for this purpose;

Provided further that with prior approval of the Commission, the State Agency may utilise such amount for meeting its expenses for creating and maintaining RPO Web-portal, and any surplus left thereafter shall be deposited in to the State Deviation Pool Account created as per MERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2019 on quarterly basis and shall be utilised as per Regulation 15(D) of those Regulations;

Provided further that at the end of each Financial Year, State Agency shall submit certified details of all transaction under RPO Fund.

13 Monitoring and Implementation Framework

- 13.1 Within three months from notification of this Regulations, State Agency shall develop RPO Web-portal for RPO compliance monitoring and reporting.
- 13.2 Within one month of development of RPO Web-portal, all Obligated Entities shall register themselves on RPO Web-portal and submit requisite information monthly or for any other specified period to State Agency through this Web-portal only.
- 13.3 State Load Despatch Centre and Chief Electrical Inspector who will be assisting the State Agency in verification of RPO compliance of Distribution Licensees and Captive Consumers, respectively, shall also register themselves on RPO Web-portal within a month.
- 13.4 Every Obligated Entity shall submit its electricity consumption and details of RE procured in a month within 30 days from end of the month on the Web based portal.
- 13.5 Details of electricity consumption of Distribution Licensee shall be verified by MSLDC and that of other Obligated Entities shall be verified by concerned Distribution Licensee or Electrical Inspector, whichever is applicable.
- Provided such verification of the web based data shall be completed within 45 days from end of the month.
- 13.6 Within 60 days from end of each quarter, State Agency shall publish RPO compliance status of Obligated Entities on RPO Web-portal.
- 13.7 At the end of Financial Year, Obligated Entities shall upload/submit documentary evidence of procurement of RE or REC to State Agency through RPO Web-portal;
- Provided that such document shall be submitted within 45 days from end of Financial Year;
- Provided further that State Agency shall complete verification process within 60 days from end of Financial Year.
- 13.8 Any delay in performing activities stipulated in Regulation 13 shall attract penalty of Rs. 100 per day of delay;
- Provided that continuous or repeated default or delay in performing activities shall be treated as non-compliance of the Regulations and may attract action under Section 142 of the EA.
- 13.9 Subsequent to completion of verification process, State Agency shall publish RPO compliance of each of Obligated Entity on RPO Web-portal.
- 13.10 Based on RPO compliance status within 60 days from end of Financial Year, State Agency shall compute incentive or penalty to be levied to Obligated Entity using RPO Web-portal;
- Provided that incentive or penalty leviable to Distribution Licensee shall be finalised and communicated through RPO Web-portal for adjustment in Annual Revenue Requirement;
- Provided further that penalty payable by Other Obligated Entity shall be finalised and communicated through RPO Web-portal for payment within 15 days which shall be deposited in RPO Fund through online payment facility on RPO Web-portal;
- Provided further that non-payment of penalty within 15 days shall attract delayed payment charges on simple interest basis at the one-year Marginal Cost of Funds-based

Lending Rate ('MCLR') as declared by the State Bank of India applicable as on 1st of the respective month plus 350 basis points per annum on the penalty amount for the period of delay.

- 13.11 Non-payment of penalty or non-submission of required details by Obligated Entity shall be treated as non-compliance of Regulations and the Commission on suo motu or on the recommendation from the State Agency may initiate action against such Entity under Section 142 of the Act.

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 participate in competitive bidding process or following 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;

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

15 Grid Connectivity Framework

Development of evacuation infrastructure shall be responsibility of concerned Generating Company and it shall be treated as integral part of project for the purpose of tariff determination.

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 the 27th December 2019.

ABHIJIT DESHPANDE,
Secretary,
Maharashtra Electricity Regulatory Commission.