MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

NOTIFICATION (DRAFT)

ELECTRICITY ACT, 2003.

No. MERC/Tech/Regulation/____. In exercise of the powers conferred under Section 61 and Section 86(3) read with Section 181 of the Electricity Act, 2003 (36 of 2003) and in pursuance to Clause 5.3 of the Tariff Policy, 2016 and all other powers enabling it in this behalf, and after previous publication, the Maharashtra Electricity Regulatory Commission makes the following Regulations to amend the Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019 ('the Principal Regulations'), namely:

Preamble

As per Section 86 (1) (e) of the Electricity Act, 2003 ("EA 2003" or "the Act"), the State Electricity Regulatory Commissions ("SERCs" or "Commissions") have been assigned the function of promoting generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person. Also, SERCs shall fix a minimum percentage of the total consumption of electricity in the area of a Distribution Licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. The Maharashtra Electricity Regulatory Commission notified the Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019 on 27 December 2019. The Ministry of Power (MoP) has issued the 'Renewable Purchase Obligation (RPO) and Energy Storage Obligation Trajectory till 2029-30' Order and the Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022. These changes have been appropriately incorporated in the Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019.

Short title and commencement

2.1. These Regulations may be called the Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) (First Amendment) Regulations, 2023.

2.2. These Regulations shall come into force from the date of their publication in the Official Gazette.

Amendment to Regulation 2 of the Principal Regulations:-

Introduction of Regulation 2.1(f)(a) after Regulation 2.1(f) of the Principal Regulations:—

"2.1(f)(a) "HPO" means Hydro Purchase Obligation:"

Introduction of Regulation 2.1(j)(a) after Regulation 2.1(j) of the Principal Regulations:—

"2.1(j)(a) "Other RPO" means Renewable Purchase Obligation that may be met by energy produced from any Renewable Energy project not covered under Regulation 2.1(f)(a) and 2.1(n)(a);"

Introduction of Regulation 2.1.(n)(a) after Regulation 2.1(n) of the Principal Regulations:—

"2.1(n)(a) "Wind RPO" means Renewable Purchase Obligation that shall be met by energy produced from Wind Power Projects (WPPs) commissioned after 31st March 2022 and the wind energy consumed over and above 7% from WPPs commissioned till 31 March 2022;"

Amendment to Regulation 4 of the Principal Regulations:

Amendment to sub-clause 'd' and introduction of new sub-clause '(h)(a)' in Regulation 4.2 of the Principal Regulations:

- "4.2 (d) All Hydro Power Projects (HPPs) including Large Hydro Power Projects (LHPs), Pumped Storage Projects, Small Hydro, Mini Hydro and Micro Hydro Power
- 4.2 (h)(a) Green Hydrogen and Green Ammonia"

Introduction of Regulation 4.3(A) after Regulation 4.3 of the Principal Regulations:

- **"4.3(a) HPO Target:**
 - a) HPO shall be met only by energy produced from all Hydro Projects (including Pumped Storage Projects (PSPs) and Small Hydro Projects (SHPs)) commissioned on and after 8 March 2019 to 31 March 2030;

- b) Energy from all other Hydro Power Projects (HPPs) including free power from HPPs commissioned before 8 March 2019 will be considered under category of 'Other RPO';
- c) HPO of the Distribution Licensee may be met out of the free power being provided to the State from Large Hydro Projects (including PSPs and Small Hydro Projects (SHPs)), commissioned after 8 March, 2019 as per agreement at that point of time excluding the contribution towards Local Area Development, if consumed within the Distribution Licensee area;
- d) In case, the free power mentioned above is insufficient to meet the HPO target, then the Distribution Licensee would have to buy the additional hydro power to meet its HPO target or may have to buy the corresponding amount of Renewable Energy Certificates corresponding to Hydro Power;
- e) Hydro Power imported from outside India shall not be considered for meeting HPO."

Amendment to Regulation 6 of the Principal Regulations:

Substitution of Regulation 6 of the Principal Regulations:

"The Operating Period of the RPO framework specified under these Regulations shall commence from 1 April, 2020 and shall be valid until **31 March, 2030**"

Amendment to Regulation 7 of the Principal Regulations:

Deletion of RPO targets for FY 2024-25:

RPO targets for FY 2024-25 specified in the Table under Regulation 7.1 of the Principal Regulations stands deleted. RPO targets for FY 2024-25 to FY 2029-30 have been specified under Regulation 7.5 (A).

Introduction of Regulation 7.5 (A) after Regulation 7.5 of the Principal Regulations:

"7.5(A) 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)				
	Wind RPO	НРО	Other RPO	Total RPO	
	(a)	(b)	(c)	(d)	
2024-25	2.46%	1.08%	26.37%	29.91%	
2025-26	3.36%	1.48%	28.17%	33.01%	
2026-27	4.29%	1.80%	29.86%	35.95%	
2027-28	5.23%	2.15%	31.43%	38.81%	
2028-29	6.16%	2.51%	32.69%	41.36%	
2029-30	6.94%	2.82%	33.57%	43.33%	

Provided that any shortfall in achievement of 'Other RPO' category in a particular year can be met with either the excess energy consumed from Wind Power Projects (WPPs) commissioned after 31 March 2022 beyond 'Wind RPO' for that year or with excess energy consumed from eligible Large Hydro Projects (including PSPs and Small Hydro Projects (SHPs)), commissioned after 8 March 2019 beyond 'HPO' for that year or partly from both.

Provided further that any shortfall in achievement of 'Wind RPO' in a particular year can be met with excess energy consumed from Hydro Power Plants, which is in excess of 'HPO' for that year and vice versa."

Provided also that 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 (d) of the Table above annually:

Substitution of Regulation 7.6 of the Principal Regulations:

"7.6 An Obligated Entity may meet its RPO target by one or more of the following methods:

(a) Own generation from Renewable energy sources

(b) By procuring Renewable Energy through Open Access from any Developer either directly or through a trading licensee or through power markets.

(c) By Requisition from Distribution Licensee:

(i) Any entity may elect to purchase green energy either upto a certain percentage of the consumption or its entire consumption and they may place

- a requisition for this with their Distribution Licensee, which shall procure such quantity of green energy and supply it;
- (ii) The consumer may purchase on a voluntary basis, more renewable energy, than he is obligated to do and for ease of implementation, this may be in steps of Twenty-five per cent and going upto Hundred per cent;
- (iii) The tariff for the green energy shall be determined separately by the Commission, which shall comprise of the Average Pooled Power Purchase Cost of the renewable energy, cross-subsidy charges if any, and service charges covering the prudent cost of the Distribution Licensee for providing the green energy;
- (iv) Any requisition for green energy from a Distribution Licensee shall be for a minimum period of one year;
- (v) The quantum of green energy shall be pre-specified for at least one year
- (vi) The green energy purchased from Distribution Licensee or from Renewable Energy sources other than Distribution Licensee in excess of Renewable Purchase Obligation of obligated entity shall be counted towards Renewable Purchase Obligation compliance of the Distribution Licensee;
- (vii) The Accounting of renewable energy supplied by Distribution Licensee level shall be on a monthly basis;
- (d) By consuming renewable energy from captive power plant
- (e) By purchasing of Renewable Energy Certificates (RECs).
- (f) By Purchase of green hydrogen or green ammonia;

The quantum of green hydrogen or green ammonia would be computed by considering the equivalence to the green hydrogen or green ammonia produced from one MWh of electricity from the renewable sources or its multiples and norms in this regard shall be notified by the Central Commission.

(g) Any other sources, as may be, determined by the Central Government:

Provided that procurement of RE power by a Distribution Licensee at a Generic Tariff rate approved by the 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."

Introduction of Regulation 7.7 after Regulation 7.6 of the Principal Regulations:

"7.7 Energy Storage Obligation

- (a) The Energy Storage Obligation shall be calculated in energy terms as a percentage of total consumption of electricity and shall be treated as fulfilled only when at least 85% of the total energy stored in the Energy Storage System (ESS), on an annual basis, is procured from renewable energy sources.
- (b) The following percentage of total energy consumed shall be solar/wind energy along with/through storage:

Year	Storage (on Energy basis)
2024-25	1.5%
2025-26	2.0%
2026-27	2.5%
2027-28	3.0%
2028-29	3.5%
2029-30	4.0%

- (c) The Energy Storage Obligation to the extent of energy stored from RE sources shall be considered as a part of fulfilment of the total RPO as mentioned in Regulation 7.5(A).
- (d) the Energy Storage Obligation shall be reviewed periodically considering the commissioning/operation of PSP capacity, to accommodate any new promising commercially viable Energy Storage technologies and also reduction in cost of Battery Energy Storage Systems (BESS")."

Amendment to Regulation 8 of the Principal Regulations:

Substitution of proviso of Regulation 8 of the Principal Regulations:

"Provided that, in the event of an Obligated Entity seeking to fulfil its RPO by purchase of Certificates, the obligation to purchase electricity from various Renewable Energy Sources as stipulated in Regulation 7.1 and

7.5(A) may be fulfilled by purchase of appropriate Certificates as per Central Commission's REC Regulations."

Amendment to Regulation 12 of the Principal Regulations:

Substitution of Regulation 12.1 to 12.3 of the Principal Regulations:

- 12.1 Regulation 7.1 provides minimum percentage of RE to be procured in each year by the 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 7.1 up to the percentage notified by the Central Government as under or as may be notified from time to time:

Year	Solar	Non-Solar	Total
2020-21	8.75%	10.25%	19.00%
2021-22	10.50%	10.50%	21.00%

Provided that such incentive will not be applicable if Distribution Licensee has not fulfilled Renewable Purchase Obligations on cumulative basis:

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

12.3 Any shortfall in meeting the minimum percentage of RE as specified in Regulation 7.1 or 7.5(A) may be carried forward from FY 2020-21 and FY 2021-22 to FY 2022-23, from FY 2023-24 to FY 2024-25, from FY 2025-26 and FY 2026-27 to FY 2027-28 and from FY 2028-29 to FY 2029-30 and Obligated Entity shall meet such shortfall on cumulative basis by 31 March 2023, 31 March 2025, 31 March 2028 and 31 March 2030, respectively:

Provided that Distribution Licensee shall be subjected to reduction in Aggregate 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:

Maharashtra Electricity Regulatory Commission

Provided also that any cumulative shortfall in RE procurement as on 31 March 2023 and/or

31 March 2025 and/or 31 March 2028 and/or 31 March 2030 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 also 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 target, then

the Commission may reduce the penalty amount subject to conditions as may be stipulated

in that Order.

Mumbai

(Dr. Rajendra G. Ambekar)

Dated: ____, 2023

Secretary,

Maharashtra Electricity Regulatory Commission