

Bhopal, the 16th January 2023

No. MPERC/2023/160 In exercise of the powers conferred by Section 61(h), 86(1)(e), read with Section 181(1) and Section 181(2)(zp) of the Electricity Act 2003, (36 of 2003) and all other powers enabling it in that behalf, the Madhya Pradesh Electricity Regulatory Commission, hereby makes the following Regulations to amend the Madhya Pradesh Electricity Regulatory Commission (Co-Generation and Generation of Electricity from Renewable Sources of Energy) (Revision-II) Regulations 2021[RG-33(II) of 2021], herein after referred to as "the Principal Regulations"namely :-

FIRST AMENDMENT TO MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION (CO-GENERATION AND GENERATION OF ELECTRICITY FROM RENEWABLE SOURCES OF ENERGY) (REVISION-II) REGULATIONS 2021

1. Short Title and Commencement-

- 1.1. These Regulations shall be called "Madhya Pradesh Electricity Regulatory Commission (Co Generation and Generation of Electricity from Renewable Sources of Energy) (Revision-II) Regulations 2021 (First Amendment) [ARG-33(II)(I) of 2023]".
- 1.2. These Regulations shall come into force from the date of their publication in the Madhya Pradesh Gazette.
- 1.3. These Regulations shall extend to whole of the State of Madhya Pradesh.

2. Amendment to Regulation 2 of the Principal Regulations:

2.1A new clause, namely, clause (x)(a) shall be inserted after clause (x) of the Regulation 2 of the Principal Regulations: -

"(x)(a) 'Entity' means any consumer who has contracted demand or sanctioned load of 100 kW or more except for captive consumers:

Provided that in case of captive consumers there shall not be any load limitation."

2.2A new clause, namely, clause (xi)(a) shall be inserted after clause (xi) of the Regulation 2 of the Principal Regulations: -

" (xi)(a) 'Green Energy' means the electrical energy from renewable sources of energy including hydro and storage (if the storage uses renewable energy) or any

other technology as may be notified by the Government of India from time to time and shall also include any mechanism that utilises green energy to replace fossil fuels including production of green hydrogen or green ammonia or any other sources, as may be prescribed by the Central Government;"

2.3 Clause (xiii) of the Regulation 2 of the Principal Regulations is amended as under: -

"(xiii) 'Obligated Entity' means the entities which are mandated under clause (e) of Sub-section (1) of Section 86 of the Act to fulfil renewable purchase obligation, which includes Distribution Licensee, Captive User and Open Access Consumer."

2.4 Clause (xvi) of the Regulation 2 of the Principal Regulations is amended as under:-

"(xvi)-'Renewable Energy based Captive Generating Plant' means a Renewable Energy Plant set up by any person to generate electricity primarily for its 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 co-operative society or association and satisfies the conditions contained in Rule 3 (1)(a) and 3(1) (b) of the Electricity Rules 2005, as amended from time to time;"

Amendment to Regulations 3 of the Principal Regulations:

3.1 Regulation 3.1 of the Principal Regulations shall be substituted as under:

"3.1 The minimum quantum of electricity to be procured by Obligated Entities from generators of Renewable Sources of Energy including Co-generation from Renewable Sources of electricity expressed as percentage of their total annual procurement of electrical energy during the following Financial Years shall be as under:

Financial Year	Wind RPO	HPO	Other RPO	Total RPO
2022-23	0.81%	0.35%	23.44%	24.60%
2023-24	1.60%	0.66%	25.13%	26.89%
2024-25	2.46%	1.08%	25.63%	29.17%
2025-26	3.36%	1.48%	26.13%	30.97%
2026-27	4.29%	1.80%	26.63%	32.72%
2027-28	5.23%	2.15%	27.13%	34.51%
2028-29	6.16%	2.51%	27.63%	36.30%
2029-30	6.94%	2.82%	28.13%	37.89%

(a) Wind RPO shall be met by energy procured from Wind Power Projects (WPPs) commissioned after 31st March 2022 and the wind energy procured over and above 7% from WPPs commissioned till 31st March 22.

(b) HPO shall be met only by energy procured from Hydro Power Projects [including Pumped Storage Projects (PSPs) and Small Hydro Projects (SHPs)] commissioned after 8th March 2019.

(c) Other RPO may be met by energy procured from any RE power project not mentioned in (a) and (b) above.

3.1.1 From FY 2022-23 onwards, the energy procured from all Hydro Power Projects (HPPs) shall be considered as part of RPO.

3.1.2 RPO shall be computed in energy terms as a percentage of total procurement of electricity.

3.1.3 HPO obligations may be met from the power procured from eligible Hydro Power Projects [including Pumped Storage Projects (PSPs) and Small Hydro Projects (SHPs)] commissioned on and after 8th March, 2019 to 31st March, 2030.

3.1.4 HPO Obligation of the State/ Discoms may be met out of the free power being provided to the State from Hydro Power Projects [including Pumped Storage Projects (PSPs) and Small Hydro Projects (SHPs), commissioned after 8th March 2019 as per agreement at that point of time excluding the contribution towards Local Area Development Fund (LADF), if consumed within the State/Discom. Free power (not that contributed for Local Area Development) shall be eligible for HPO benefit.

3.1.5 In case, the free power mentioned above is insufficient to meet the HPO obligations, then the State would have to procure the additional hydro power to meet its HPO obligations or may have to buy the corresponding amount of Renewable Energy Certificate corresponding to Hydro Power.

3.1.6 The Renewable Energy Certificate mechanism corresponding to Hydro Power to be developed by CERC to facilitate compliance of HPO Obligation would be applicable for HPO compliance.

3.1.7 The above HPO trajectory shall be tried up on an annual basis depending on the revised commissioning schedule of Hydro projects. The HPO trajectory for the period between 2030-31 and 2039-40 shall be notified subsequently.

- 3.1.8 Hydro imported from outside India shall not be considered for meeting HPO.
- 3.1.9 Any shortfall remaining in achievement of 'Other RPO' category in a particular year can be met with either the excess energy procured from Wind Power Projects (WPPs) commissioned after 31st March 2022 beyond 'Wind RPO' for that year and the wind energy procured over and above 7% from WPPs commissioned till 31st March 2022 or with excess energy procured from eligible Hydro Power Projects [including Pumped Storage Projects (PSPs) and Small Hydro Projects (SHPs)], commissioned after 8th March, 2019 beyond 'HPO' for that year or partly from both. Further, any shortfall in achievement of 'Wind RPO' in a particular year can be met with excess energy procured from Hydro Power Plants, which is in excess of 'HPO' for that year and vice versa.
- 3.1.10 The following percentage of total energy procured shall be solar/wind energy along with / through storage.

Financial Year	Storage (on Energy basis)
2023-24	Nil
2024-25	Nil
2025-26	1.0 %
2026-27	1.5 %
2027-28	2.0 %
2028-29	2.5 %
2029-30	3.0 %

- 3.1.11 The Energy Storage Obligation in 3.1.10 above shall be calculated in energy terms as a percentage of total procurement 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.
- 3.1.12 The Energy Storage Obligation to the extent of energy stored from RB sources shall be considered as a part of fulfilment of the total RPO as mentioned in 3.1 above.
- 3.1.13 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).

3.1.14 State Agency shall maintain data related to compliance of RPO Obligations."

3.2 Regulation 3.3 of the Principal Regulations shall be substituted as under: -

"3.3 There shall be uniform renewable purchase obligation, on all obligated entities in area of a Distribution Licensee."

3.3 New Regulations, namely Regulation 3.8 (A), 3.8 (B) and 3.8 (C) shall be added after Regulation 3.8 of the Principal Regulations, as under: -

"3.8(A) Any entity, whether obligated or not, may elect to generate, purchase and consume renewable energy as per their requirements by one or more of the following methods: -

- a. **Own Generation from renewable energy sources** - There shall not be any capacity limit for installation of power plants from renewable energy sources, by entities for their own consumption and such plants may be set up at any location in India and power shall be transmitted by using open access:

Provided that the generating plant may be set up by the entity itself or by a developer, with which the entity enters into a power purchase agreement.

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

Explanation:

- i. **Developer means the generating company who generate electrical energy from renewable sources of energy.**
- ii. **Trading Licensee means a person who has been granted a licence by the appropriate Commission, for purchase of electricity for resale thereof.**

- c. **By requisition from Distribution Licensee -**

- i. **Any entity may elect to purchase green energy either up to a certain percentage of the consumption or its entire consumption and it may place a requisition for this with their Distribution Licensee, which shall procure such quantity of green energy and supply it and the consumer**

shall have the flexibility to give separate requisition for solar and non-solar;

- ii. The consumer may purchase on a voluntary basis, more renewable energy, then he is obligated to do and for ease of implementation, this may be in steps of twenty five percent and going up to hundred percent;
 - 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 settlement of renewable energy supplied at Distribution Licensee level shall be on a monthly basis;
- d. By consuming green energy from captive power plant.
- e. **Purchase of green hydrogen or green ammonia:** -The obligated entity can also meet their Renewable Purchase Obligation by purchasing green hydrogen or green ammonia and the quantum of such 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.
- f. Any other sources, as may be determined, by the Central Government."

"3.3 (B) Green Certificate – The Distribution Licensee shall give green certificate on yearly basis to the consumers for the green energy supplied by the Licensee to consumer on his request beyond the renewable purchase obligation of the consumers."

"3.8 (C) Rating - The Commission may introduce the concept of rating of the consumers of the distribution licensee, based on the percent of green energy purchased by such consumer."

4. Amendment to Regulations 10 of the Principal Regulations: -

4.1 Regulation 10.1 of the Principal Regulations shall be substituted as below:

"10.1 The facility for Banking of the electric energy generated in each month from Renewable Energy Sources shall be provided on the following conditions:

- i. Banking shall be permitted at least on a monthly basis on payment of charges to compensate additional costs, if any, to the Distribution Licensee by the Banking and the Commission shall determine the applicable charges as per methodology approved by the Commission;**
- ii. The permitted quantum of banked energy by the Green Energy Open Access consumers shall be at least thirty percent of the total monthly consumption of electricity from the Distribution Licensee by the consumers;**

Provided that the credit for banked energy shall not be permitted to be carried forward to subsequent months and the credit of energy banked during the month shall be adjusted during the same month.

'Banking' means the surplus green energy injected in the grid and credited with the Distribution Licensee energy by the Green Energy Open Access consumers and which can be drawn along with charges to compensate additional, cost if any."

- 5. In 3rd line of clause (d) of the Regulation 11.2 of the Principal Regulations, the words "additional surcharge" are omitted.**

**By order of the Commission,
UMAKANTA PANDA, Secy.**