

MAHARASHTRA ELECTRICITY REGULATORY COMMISSION

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MAHARASHTRA ELECTRICITY REGULATORY COMMISSION (RENEWABLE PURCHASE OBLIGATION, ITS COMPLIANCE AND IMPLEMENTATION OF RENEWABLE ENERGY CERTIFICATE FRAMEWORK) (FIRST AMENDMENT) REGULATIONS, 2024

STATEMENT OF REASONS

Dated: 23 February 2024

Introduction

The Maharashtra Electricity Regulatory Commission (“MERC” or “the Commission”) has notified the Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, its Compliance and Implementation of Renewable Energy Certificate Framework) Regulations, 2019 [“MERC RPO Regulations, 2019”] on 27 December 2019. As per Section 86 (1) (a) 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.

The Commission proposed the Draft MERC RPO (First Amendment) Regulations, 2023 with the rationale for the various provisions proposed in the Draft (First Amendment) Regulations, 2023 elaborated in the Explanatory Memorandum (EM) published along with the Draft (First Amendment) Regulations, 2023.

Accordingly, the Draft (First Amendment) Regulations, 2023 and the associated Explanatory Memorandum were published on the Commission’s website www.merc.gov.in in downloadable format on 5 August 2023. A Public Notice was also published in daily newspapers Marathi (Maharashtra Times and Loksatta) and English (Indian Express and Times of India), inviting comments, objections and suggestions from all stakeholders to be submitted to the office of Commission on or before 25 August 2023, which was subsequently extended till 4 September, 2023.

A total of 15 stakeholders have submitted their comments/suggestions/objections on the Draft MERC (First Amendment) Regulations, 2023. The list of stakeholders who offered their comments/suggestions/ objections on the Draft First Amendment to MERC RPO Regulations,

2023, which have been considered by the Commission while finalising the Regulations, is placed at **Annexure-I**.

Further, in exercise of the powers conferred by the Energy Conservation Act, 2001, the Central Government in consultation with the Bureau of Energy Efficiency, vide notification dated 20 October 2023 has specified the minimum share of consumption of non-fossil sources (renewable energy) by designated consumers as energy or feedstock and different share of consumption for different types of non-fossil sources for different designated consumers as a percentage of their total share of energy consumption. Said notification has also been considered by the Commission while finalizing the Regulations.

The main comments/suggestions/objections and views expressed by the stakeholders through their written submissions and the Commission's views thereon have been summarized in the following paragraphs. It may be noted that all the suggestions given by the stakeholders have been considered and the Commission has attempted to elaborate all the suggestions as well as the Commission's decisions on each suggestion in this Statement of Reasons (**SOR**). However, in case any suggestion is not specifically elaborated, it does not mean that the same has not been considered. Further, some stakeholders have suggested changes on Syntax/phrase/addition of word(s)/rewording related changes, etc., which have been suitably incorporated, wherever necessary.

Wherever possible, the comments and suggestions or objections have been summarised clause-wise, along with the Commission's analysis and ruling on the same. However, in some cases, due to overlapping of the issues/comments, the clauses have been combined in order to minimise repetition.

Some comments and suggestions were not directly related to the Draft Regulations on which inputs were invited. While the Commission has summarised such comments and suggestions or objections briefly in this Statement of Reasons (SOR), specific rulings on the same have not been provided, as the same are outside the scope of these Regulations.

The SOR is organised in the following Chapters, along the same lines as the Draft MERC RPO (First Amendment) Regulations, 2023, summarising the main issues raised during the public consultation process, and the Commission's analysis and decisions on them which underlie the Regulations as finally notified:

Chapter 1: MoP Order on RPO and Energy Storage Obligation Trajectory till 2029-30 issued in July 2022 read with Corrigendum dated 19 September 2022 and Central Government's notification dated 20 October 2023 issued under Energy Conservation Act 2001.

Chapter 2: The Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, issued by MoP in June 2022.

Chapter 3: Additional Points.

1 MoP Order on RPO and Energy Storage Obligation Trajectory till 2029-30 issued in July 2022 read with Corrigendum dated 19 September 2022 and Central Government's Notification dated 20 October 2023 issued under Energy Conservation Act 2001.

1.1 Central Government's Notification dated 20 October 2023 issued under Energy Conservation Act 2001.

The MoP vide Order dated 22 July 2022 read with subsequent corrigendum dated 19 September 2022 has notified the 'Renewable Purchase Obligation (RPO) and Energy Storage Obligation Trajectory till 2029-30'. This trajectory has introduced new RPO categories, viz., 'Wind RPO', Hydro Power Obligation ('HPO'), and 'Other RPO' along with 'Energy Storage Obligation'. As MERC RPO Regulations, 2019, has only two RPO categories, viz., Solar and Non-solar and the Central Electricity Regulatory Commission (CERC) has also removed the distinction between Solar and Non-Solar RPO, in order to be consistent with the approach being followed in the country, the Commission has prepared draft Amendment to its RPO Regulations, 2019 and floated for public consultation process. Said draft Regulations has proposed following RPO trajectory which is in line with MoP Order dated 22 July 2022 read with corrigendum dated 19 September 2022:

Year	Quantum of purchase (in %) from Renewable Energy sources (in terms of energy equivalent in kWh)			
	Wind RPO	HPO	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%

However, the Central Government vide notification dated 20 October 2023 under Energy Conservation Act 2001 has specified new renewable energy trajectory for designated consumers with effect from 1 April 2024 as follows:

Year	Wind renewable energy	Hydro renewable energy	Distributed renewable energy	Other renewable energy	Total renewable energy
2024-25	0.67%	0.38%	1.50%	27.35%	29.91%
2025-26	1.45%	1.22%	2.10%	28.24%	33.01%
2026-27	1.97%	1.34%	2.70%	29.94%	35.95%
2027-28	2.45%	1.42%	3.30%	31.64%	38.81%
2028-29	2.95%	1.42%	3.90%	33.10%	41.36%
2029-30	3.48%	1.33%	4.50%	34.02%	43.33%

As can be seen, the Central Government in its notification dated 20 October 2023 has kept the total renewable energy to be procured as same as that mentioned in its Order dated 22 July 2022

and re-allocated percentage for each category for accommodating new category of ‘distributed renewable energy’. Further, this new notification has allowed higher flexibility to designated consumers to meet category wise renewable energy procurement targets.

The Commission also notes that Obligated Entities under its RPO Regulations are also designated consumers under Energy Conservation Act 2001 and would be mandated to meet renewable energy procurement target as notified by the Central Government. Therefore, if the Commission specifies RPO Trajectory which different from that notified by the Central Government under Energy Conservation Act 2001, then such designated consumers which includes Distribution Licensees shall be mandated to meet two different trajectories. Considering this vital aspect, the Commission has aligned its RPO Regulations with the Central Government’s notification under Energy Conservation Act 2003.

1.2 Regulation 2.1 (n)(a): Wind RPO

1.2.1 Introduction of Regulation 2.1 (n)(a) after Regulation 2.1 (n) – Definition of Wind RPO

The Regulation 2.1 (n)(a) was proposed to be introduced as under:

“Wind RPO” means Renewable Purchase Obligation that shall be met by energy produced from Wind Power Projects (WPPs) commissioned after 31 March, 2022 and the wind energy consumed over and above 7% from WPPs commissioned till 31 March, 2022.”

1.2.2 Comments Received

The Indian Wind Turbine Manufacturers Association (IWTMA) and Indian Wind Energy Association (InWEA) submitted that the Commission has proposed separate Wind RPO obligation from FY 2024-25 onwards, which is not in line with the RPO Trajectory notified by the Ministry of Power (MoP) Rules. However, on the other hand, the Commission is specifying that the Wind RPO has to be met by energy produced from Wind Power Projects (WPPs) commissioned after 31 March 2022 and the wind energy consumed over and above 7% from WPPs commissioned till 31 March 2022, which is in accordance with the MoP Rules.

IWTMA and InWEA suggested that the definition of Wind RPO should be modified as under:

“Wind RPO” means Renewable Purchase Obligation that shall be met by energy produced from Wind Power Projects (WPPs) commissioned after 31st March 2024 and the wind energy consumed over and above 10% from WPPs commissioned till 31st March 2022;”

The Maharashtra State Electricity Distribution Company Limited (MSEDCL) submitted that Wind Projects should not be differentiated based on their commissioning dates. Instead, MSEDCL suggested that the energy generated from all Wind Projects should contribute towards achieving the Wind RPO Target, irrespective of their commissioning dates.

1.2.3 Analysis and Commission’s Decision

The definition of "Wind RPO" and the RPO trajectory specified from FY 2024-25 in the proposed Amendment was exactly in accordance with the MoP Order. However, the Central Government notification dated 20 October 2023 has made certain changes in Wind Renewable Energy category. Accordingly, the Commission has modified definition of ‘Wind RPO’ as follows:

“2.1(n)(a) “Wind RPO” means Renewable Purchase Obligation that shall be met by energy produced from Wind Power Projects (WPPs) commissioned after 31 March 2024;”

The RPO targets have been specified in accordance with the Central Government’s notification from prospective date, i.e., FY 2024-25, since the Obligated Entities cannot be expected to comply with revised RPO targets retrospectively. Further, it is clarified that the existing Wind PPAs would be considered under ‘Other RPO’ category from FY 2024-25 onwards, as per Central Government’s notification.

1.3 Amendment to Regulation 4 of the Principal Regulations

1.3.1 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.”

1.3.2 Comments Received

TPC-D submitted that all these new RE sources need to be considered under Non-Solar Category up to FY 2023-24.

1.3.3 Analysis and Commission’s Decision

The Commission notes that the Central Government in its notification dated 20 October 2023 has included ‘distributed renewable energy’ as one of the categories for meeting renewable energy targets. Accordingly, the Commission has modified the Regulation as below to include distributed renewable energy:

Amendment to sub-clause ‘d’ and introduction of new sub-clause ‘(h)(a)’ and ‘(h)(b)’ 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*”

(h) (b) *Distributed Renewable Energy Generating System of size less than 10 MW.*

The Commission has proposed the revised RPO targets from FY 2024-25 onwards. It is clarified all the new sources like all Hydro Power Projects (HPPs) including Large Hydro Power Projects (LHPs), Pumped Storage Projects, Small Hydro, Mini Hydro and Micro Hydro Power, Green Hydrogen and Green Ammonia shall be considered under Non-Solar Category up to FY 2023-24, as there are only 2 baskets of RPO till FY 2023-24, viz., Solar RPO and Non-Solar RPO.

1.4 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.”*

1.4.1 Comments Received

MSEDCL submitted that power sourced from existing Large Hydro Plants should be allowed for fulfilling HPO compliance, while power derived from pre-existing small hydro plants could contribute towards meeting ‘Other RPO’ compliance and excess energy consumed from Large Hydro Power Projects can be allowed for complying with ‘Other RPO’ target. MSEDCL requested that the Hydro Projects should not be differentiated based on their commissioning dates.

The Indian Energy Exchange (IEX) submitted that it needs to be clarified that for complying with HPO, the Obligated Entity can purchase equivalent RECs (1 MWH HPO = 1 REC) with ‘hydro power commissioned after 08 March, 2019’ as the source of origin.

The Tata Power Company (TPC-D) submitted that the following additional point should be included in Clause 4.3 (a) for better clarity:

“f) HPO can also be met through power purchased from GDAM Hydro segment.”

1.4.2 Analysis and Commission’s Decision

As elaborated in Explanatory Memorandum, the MoP in its Order had specified that power procured from all Hydro Power Projects including Large Hydro Power Project and Pumped Storage Projects commissioned on and after 8 March, 2019 to 31 March, 2030, shall be considered towards HPO and 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’. The Central Government in its notification dated 20 October 2023 has stipulated that all Hydro projects commissioned after 31 March 2024 shall be considered for HPO. Therefore, the Commission has modified the Regulations to make it consistent with Central Government’s notification as follows:

“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 after 31 March 2024;

Provided that the HPO component may also be met out of the free power being provided to the State/Discom from the Hydro Power Projects commissioned after the 31 March 2024.

b) Energy from all other Hydro power Projects (HPPs) including free power from HPPs commissioned before 31 March 2024 shall be considered under category of ‘Other RPO’;

c) Hydro Power imported from outside India may also be considered for meeting HPO subject to approval of the Central Government on a case-to-case basis.”

It is clarified that as CERC has removed the distinction between Solar and Non-Solar REC and single REC is presently available irrespective of RE source, thus, purchase of REC shall be allowed against all baskets of RPO, and considered against the RPO basket indicated by the Obligated Entity.

As regards the request to specify that HPO can also be met through power purchased from GDAM Hydro segment, the Commission is of the view that Regulation 7.6 (b) already specifies that the RPO can be met through the power markets, hence, there is no need to further clarify this issue.

1.5 Amendment to Regulation 6 of the Principal Regulations:

1.5.1 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”

1.5.2 Comments Received

MSEDCL submitted that the amendment in RPO Regulations should be made effective from the next MYT Control Period, i.e., 01 April 2025.

AEML submitted that the Commission has proposed revision in the RPO targets for FY 2024-25, potentially impacting Distribution Licensees ability to realign purchases. The revision in the RPO mandate would unnecessarily increase power purchase costs and result in FAC for consumers and the Commission may consider implementing revised targets from FY 2025-26 to allow sufficient lead time for alignment and minimize tariff impact.

1.5.3 Analysis and Commission’s Decision

The Commission has proposed the draft amendments and the revised RPO targets, in order to ensure consistency with the RPO targets stipulated at the Central level. The Commission has proposed that the amendment to the Regulations shall come into force from the date of notification of the amendments, and the revised RPO targets have been made applicable prospectively, i.e., from 1 April 2024. There is no need to link the revised RPO targets with the duration of the MYT Control Period. As existing RPO Regulations, has provision of incentivising obligated entities to achieve RPO target set by the Central Government and such trajectory has been issued by the Central Government in the year 2022, Distribution Licensees had sufficient time to plan its power procurement in that direction. Hence, the Commission is not inclined to differ implementation of this Regulations to FY 2025-26.

The Commission has therefore, not made any modifications in the Draft First Amendment RPO Regulations, 2023 in this regard.

1.6 Amendment to Regulation 7 of the Principal Regulations

1.6.1 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).”

1.6.2 Comments Received

Mindspace Business Parks Pvt. Ltd. (MBPPL), Gigaplex Estate Private Limited (GEPL), and KRC Infrastructure and Power Pvt. Ltd. (KRCIPPL) submitted that the tariff is determined for FY 2024-25 considering RPO targets of 25% as specified in RPO Regulations, 2019. Therefore, new RPO targets should be made applicable from FY 2025-26 onwards, i.e., from the upcoming 5th MYT Control Period.

1.6.3 Analysis and Commission’s Decision

The Commission has proposed the draft amendments and the revised RPO targets, in order to ensure consistency with the RPO targets stipulated at the Central level. The Commission has proposed that the amendment to the Regulations shall come into force from the date of notification of the amendments, and the revised RPO targets have been made applicable prospectively, i.e., from 1 April 2024. There is no need to link the revised RPO targets with the duration of the MYT Control Period. As existing RPO Regulations, has provision of incentivising obligated entities to achieve RPO target set by the Central Government and such trajectory has been issued by the Central Government in the year 2022, Distribution Licensees had sufficient time to plan its power procurement in that direction. Hence, the Commission is not inclined to differ implementation of this Regulations to FY 2025-26.

The Commission has therefore, not made any modifications in the Draft First Amendment RPO Regulations, 2023 in this regard.

1.6.4 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	HPO	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%

Year	Quantum of purchase (in %) from Renewable Energy sources (in terms of energy equivalent in kWh)			
	Wind RPO	HPO	Other RPO	Total RPO
	<i>(a)</i>	<i>(b)</i>	<i>(c)</i>	<i>(d)</i>
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.”

1.6.5 Comments Received

BEST submitted that the time available for arranging RE power for compliance with RPO Target for FY 2024-25 is very less. BEST added that any shortfall in meeting the RPO up to 2024-25, may be carried forward to FY 2025-26 without any penalty.

As regards the 2nd proviso of Regulation 7.5 (A), IWTMA submitted that any shortfall in achievement of ‘Wind RPO’ in a particular year should be met with purchase of Wind RECs and Obligated Entities should be penalized if RPO not met, rather allowing shortfall in Wind RPO to be met by hydro purchase in excess of target HPO. IWTMA added that delaying the separate Wind RPO concept for two more years shall cause a serious shortfall of wind energy and the MoP RPO trajectory should be adopted in its true spirit and the minimum RPO should be revised for Obligated Entities from FY 2022-23. InWEA submitted that allowing fulfilment of Wind RPO with Hydro Power goes against the very objective of the introduction of Wind RPO.

EON submitted that Distribution Licensee with peak demand less than 25 MW should be required to meet only their composite RPO target set out in column (d) of the Table under Regulation 7.5(A).

IEX submitted that the revised RPO framework should ensure complete fungibility between solar, wind, biomass, and similar sources in accordance with MoP Orders and CERC REC

Regulations 2022. Hence, this amendment should provide RPO fungibility to Obligated Entities w.e.f. FY 2023-24 onwards.

Prayas Energy submitted that there is no need for introduction of new RPO categories and the Commission should move towards a composite RPO target.

MBPPL, GEPL and KRCIPPL submitted that the MoP Order provides clarity on RPO targets up to FY 2029-30, but there is no clarity on the targets to be fulfilled by the Distribution Licensee. The Distribution Licensees suggested that the following new proviso may be incorporated “*Energy from all other Wind Power Projects (WPPs) commissioned after 31 March 2022 and the wind energy consumed over and above 7% from WPPs commissioned till 31 March 2022 will be considered under category of 'Other RPO'.*”. Further, the existing relaxation of fulfillment of composite RPO Targets for the Distribution Licensees with Peak Demand upto 10 MW, may be extended upto 15 MW for small Distribution Licensees who cater to the demand within their specific notified area (e.g. SEZ).

TPC-D submitted that currently, there are lower number of avenues available for Obligated Entities for achieving Wind RPO and HPO. Since, the surplus after meeting the 'Other RPO' obligation is not being allowed to fulfil Wind RPO or HPO, the entities while being surplus in this category may have to incur additional cost by procuring RECs to comply with the targets for Wind RPO and HPO categories. This would lead to burdening the consumers with this additional cost.

MSEDCL submitted that the existing RPO targets should be retained as specified in the Principal Regulations for FY 2024-25, and State-specific target based on the RE potential of Maharashtra should be specified instead of adhering to MoP RPO Target trajectories. Also, some incentives should be provided to Distribution Licensees for the overachievement of the RPO targets and/or meeting MoP Targets as per the Principal RPO Regulations.

NIDAR Utilities submitted that Distribution Licensee with Peak Demand less than 50 MW should be required to meet only their composite RPO target.

Amplus Solar Energy Solutions Private Limited submitted that fulfilment of HPO targets for Open Access (OA) and captive consumers would be difficult due to absence of market for procurement of hydro power and suggested to add a provision either stating that HPO shall be included as a qualifying technology for crediting RECs and the same would be available to the Obligated Entities to meet their obligation in a cost-effective manner or a suitable mechanism similar to REC mechanism shall be notified to facilitate fulfilment of HPO.

1.6.6 Analysis and Commission’s Decision

The Commission has proposed the draft amendments and the revised RPO targets, in order to ensure consistency with the RPO targets stipulated at the Central level. Hence, the Commission

has proposed that the amendment to the Regulations shall come into force from the date of notification of the amendments, and the revised RPO targets have been made applicable prospectively, i.e., from 1 April 2024, which gives the Obligated Entities sufficient time to plan their power procurement appropriately for meeting the specified RPO targets. It is also clarified that the Commission has not 'delayed' the implementation of the RPO targets as stipulated in the MoP Order, rather it has adopted the practical approach of specifying the revised RPO targets prospectively.

The suggestion that the Commission should specify State-specific RPO targets based on the RE potential of Maharashtra cannot be accepted, as RPO targets have been specified in line with the Central level trajectory for meeting national goal of renewable energy. Similarly, the suggestion to specify a composite RPO rather than separate targets for Wind RPO, Hydro RPO and Other RPO baskets, cannot be accepted, as the separate RPO targets have been specified in line with the Central level trajectory. The Commission is of the opinion that separate RPO Targets for wind is justified on account of the fact that it is cost effective as well as complementary to Solar. Proper solar and wind mix will help to reduce balancing requirement for integration of RE in to the grid. Similarly, separate HPO is necessary in order to integrate the increased share of RE in overall energy mix.

As regards the request of small sector-specific Distribution Licensees that Distribution Licensees with peak demand less than 15 MW/25 MW/50 MW should be required to meet only their composite RPO target, the Commission is of the view that such small Distribution Licensees would not be in a position to procure the small quantum of RE power against individual RPO baskets. The current peak demand of these small Distribution Licensees is lower than 20 MW, as seen in the latest InSTS Mid-term Review (MTR) Order issued by the Commission in Case No. 233 of 2022 on 31 March 2023. Hence, the Commission has increased the peak demand to 20 MW.

As regards the request that Distribution Licensees should be entitled to incentive for achieving RPO in excess of target RPO, the Principal Regulations specified incentive for achieving RPO above the minimum RPO target specified by the Commission and up to the RPO targets stipulated by the Central Government. In the Amendment, the RPO targets have been revised from FY 2024-25 onwards and the RPO targets stipulated by the Central Government have been adopted for Maharashtra also. Thus, from FY 2024-25 onwards, there will be no difference in RPO target stipulated by the Commission and trajectory specified by the Central Government, hence, incentive of Rs 0.25/kWh allowed for achieving RPO target above that specified in Regulation and up to Central Government target cannot be implemented. However, the Commission is of the view that although, the Commission is adopting higher RPO target as stipulated by Central Government, in order to achieve overall objective of higher RE penetration, in case the Distribution Licensees achieve RPO levels higher than that now being specified, they should be still entitled to some incentive. Hence, the Commission has introduced new Regulation 7.5(B).

Accordingly, the Commission has modified regulations to stipulate RPO trajectory in line with Central Government’s notification dated 20 October 2023 as follows:

Introduction of Regulation 7.5 (A), (B) and (C) 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	HPO	Distributed RPO	Other RPO	Total RPO
	(a)	(b)	(c)	(d)	(e)
2024-25	0.67%	0.38%	1.50%	27.35%	29.91%
2025-26	1.45%	1.22%	2.10%	28.24%	33.01%
2026-27	1.97%	1.34%	2.70%	29.94%	35.95%
2027-28	2.45%	1.42%	3.30%	31.64%	38.81%
2028-29	2.95%	1.42%	3.90%	33.10%	41.36%
2029-30	3.48%	1.33%	4.50%	34.02%	43.33%

Provided that any shortfall in achievement of stipulated Wind RPO in a particular year may be met with HPO which is in excess for that year and vice-versa. The balance excess energy consumption under Wind RPO or HPO component in that year, may be considered as part of the Other RPO component.

Provided further that any excess energy consumption under Other RPO in a particular year may be utilised to meet the shortfall in Wind RPO or HPO.

Provided also that Distribution Licensee with peak demand less than 20 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 (e) of the Table above annually.”

7.5(B) Distribution Licensee shall get incentive of Rs 0.10 per kWh for RE procured above the minimum percentage specified in Regulation 7.5 (A).

7.5(C) Obligated Entities other than Distribution Licensee shall get incentive of Rs 0.10 per kWh for RE procured above the minimum percentage specified in Regulation 7.5 (A), which shall be paid by the Distribution Licensee supplying electricity to such consumer and recovered from the Aggregate Revenue Requirement of the Supply Business of that Distribution Licensee.”

It is clarified that the 3rd proviso of Regulation 7.5(A) already specifies that Captive and Open Access consumers shall be required to meet only their composite RPO target set out in column (e) of the Table specified under Regulation 7.5(A), hence, there should be no difficulty as regards meeting separate HPO targets.

As regards the objection to allowing shortfall in Wind RPO to be met by hydro purchase in excess of target HPO, the same has been proposed in accordance with the MoP Orders / notification in this regard.

As clarified earlier, all the new sources like all Hydro Power Projects (HPPs) including Large Hydro Power Projects (LHPs), Pumped Storage Projects, Small Hydro, Mini Hydro and Micro Hydro Power, Green Hydrogen and Green Ammonia will be considered under Non-Solar Category up to FY 2023-24, as there are only 2 baskets of RPO till FY 2023-24, viz., Solar RPO and Non-Solar RPO.

As regards the request for carry-forwarding the shortfall in RPO targets of FY 2024-25 to FY 2025-26 without any penalty, Regulation 12.3 of the draft Amendment specified as under:

*"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.**"*

The Commission has reconsidered the above Regulation 12.3 and is of the view that automatic carry-forward of RPO targets would defeat the main purpose of specifying increased RPO targets, i.e., to achieve higher penetration of RE in the purchase portfolio of Obligated Entities. Hence, the Commission has decided to delete the above Regulation 12.3 proposed in the draft Amendment.

Further, the 2nd and 3rd provisos to the newly numbered Regulation 12.3 have been modified as under, to reflect the revised dispensation:

"Provided further that post FY 2023-24, any cumulative shortfall in RE procurement shall not be carried forward for next year and shall be adjusted by imposing reduction in Aggregate Revenue Requirement for Distribution Licensees and imposing penalty for other Obligated Entities:

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 or allow carry forward of shortfall subject to conditions as may be stipulated in that Order."

1.7 Amendment to Regulation 7 of the Principal Regulations

1.7.1 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

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

(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”).”

1.7.2 Comments Received

BEST submitted that the regulatory framework for energy storage systems should be in place while fixing the Energy Storage Obligation. The challenge regarding dependence of regulatory treatment on the ownership of energy storage assets, which include market entry fee, cost structures/ mechanisms (pricing), grid integration, use of Licensee assets, and revenue sharing should also be explored. The Distribution Licensee may be allowed to meet the targeted Energy Storage Obligations by utilizing the energy for charging of the EV Buses/Vehicles, which is nothing but a type of storage of energy.

MSEDCL submitted that the Commission should revisit the clause and reduce the Energy Storage Obligation Target and/or delay its implementation till the technology becomes mature and competitive.

Prayas Energy submitted that the mandate for ESO is crucial for integrating low-cost renewables into the grid. Further, the Commission should clarify whether the ESO should be measured at the output from the storage system and develop clear energy accounting rules.

TPC-D submitted that the Commission should clarify, whether the ESO will be considered under Wind RPO or HPO or Other RPO, or it will depend on the RE source used for storing the total energy in the Energy Storage System (ESS). TPC-D also requested the Commission to clarify, in case of Hydro Pumped Storage unit, if the water is pumped using wind power, then the Energy Storage obligation will be considered under Wind RPO or HPO?

1.7.3 Analysis and Commission’s Decision

The ESO trajectory specified from FY 2024-25 in the proposed Amendment is exactly in accordance with the MoP Order. The Commission also notes that the Central Government’s notification dated 20 October 2023 does not have such ESO trajectory. But considering the importance of Energy Storage Systems for integration of renewable energy into the Grid, the Commission has decided to continue with such proposed trajectory for ESO.

It is clarified that the ESO will be considered and accounted depending on the RE source used for storing the energy under Energy Storage. Further, as stated in Regulation 7.7 (c), ESO is part of total RPO and not addition to total RPO. Therefore, Green Energy stored in Energy Storage system shall be counted towards respective source of Green Energy and its percentage is considered for ESO. If Pump Hydro Station is used for storing green energy, then stored energy shall be counted towards respective green energy and subsequent generated hydro energy shall not be considered towards RPO fulfilment as it would led to double accounting of green energy.

The Commission has therefore, not made any modifications in the Draft First Amendment RPO Regulations, 2023 in this regard.

1.8 Amendment to Regulation 12 of the Principal Regulations:

1.8.1 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%
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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:

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.”

1.8.2 Comments Received

IWTMA and InWEA submitted that the Commission must enforce compliance with the Wind RPO targets, requiring entities to purchase Wind RECs for any shortfall. Failure to comply should result in a penalty and a separate fund for REC purchases and transmission infrastructure development.

EON submitted that the rate of reduction of ARR is too high in the proviso, and should be reduced from Rs. 0.10 per kWh to Rs 0.05 per kWh for cumulative shortfall in total RE procurement target for each year.

IEX submitted that there is need to remove references of ‘floor price of RECs’ in view of implementation of the CERC REC Regulations 2022.

Prayas Energy submitted that carry forward should not be allowed as a routine measure as has been the practice and the Commission should insist on annual compliance and question the reluctance to procure RECs, green power through market instruments (GTAM and GDAM) for short-term power procurement, instead of providing a perpetual escape route to Obligated Entities in the form of carry forward. However, in case any carry forward is to be allowed for unforeseen circumstances, the same should be capped (up to 10% of total RPO targets, which should further reduce gradually). Also, the Commission should enhance transparency about the Regulatory Fund. The Commission should direct that information about the Fund creation and amount / penalty collected in the Fund and utilization of that amount should be published annually by MEDA or the State Government. Further, the Commission should direct timely utilization of the Fund and given the new ESO in place, these funds could be used towards supporting storage procurement and RE transmission deployment.

AEML submitted that as far as a given Control Period is concerned, the Distribution Licensee should be allowed to meet any shortfall in RPO generated during any one of more years of the Control Period on a cumulative basis, till the last year of the Control Period, instead of specifying accumulation separately for different periods, as has been proposed.

TPC-D submitted that after the implementation of the proposed draft amendments, the RPO categories for FY 2023-24 and FY 2024-25 shall be different. Hence, it is unclear how the calculations would take care of this to incorporate the surplus from FY 2023-24 into FY 2024-25. Details for carrying over the shortfall from FY 2023-24 to FY 2024-25 should be specified in the Regulations. Further, if Obligated Entity (including Distribution Licensee) 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.

Further, TPC-D suggested that the RPO targets as per current MERC RPO Regulations shall be applicable till FY 2023-24 but Regulation 12.2 does not mention about incentive applicability for FY 2022-23 and FY 2023-24. Further, the Commission should provide incentive from FY 2024-25 to FY 2029-30 for achieving the RPO targets above the level stipulated by the Central Government.

MSEDCL submitted that the capacity tied-up in MW and its optimal generation should be considered while verifying the RPO compliance along with actual consumption of RE Power and not to impose any penalties for non-achievement of RPO targets until FY 2029-30.

1.8.3 Analysis and Commission's Decision

As regards the concern that compliance of the Wind RPO should be enforced, the draft Amendment already provides for levy of charges for non-compliance of RPO targets, in accordance with the Central level targets. The penalty of Rs. 0.10 per kWh for non-compliance of RPO targets has been specified in the Principal Regulations in order to ensure compliance with the RPO targets, hence, the Commission has not accepted the request for reducing the same to Rs. 0.05 per kWh.

The reference to 'floor price of RECs' was proposed in the 3rd proviso to Regulation 12.3 of the draft Amendment, as penalty for non-achievement of RPO targets by Obligated Entities. At the same time, the 2nd proviso to Regulation 12.3 provides 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. The Commission is of the view that there should not be double penalty for non-achievement of RPO targets by Obligated Entities. Hence, the penalty of Rs. 0.10 per kWh for cumulative shortfall in total RE procurement target for each year by other Obligated Entities has been retained and the reference to penalty at 'floor price of RECs' has been deleted in the Regulations.

As stated earlier, the Commission has reconsidered the above Regulation 12.3, and is of the view that automatic carry-forward of RPO targets would defeat the main purpose of specifying increased RPO targets, i.e., to achieve higher penetration of RE in the purchase portfolio of Obligated Entities. Hence, the Commission has decided to delete the above Regulation 12.3 proposed in the draft Amendment.

Further, the 2nd and 3rd provisos to the newly numbered Regulation 12.3 have been modified as under, to reflect the revised dispensation:

“Provided further that post FY 2023-24, any cumulative shortfall in RE procurement shall not be carried forward for next year and shall be adjusted by imposing reduction in Aggregate Revenue Requirement for Distribution Licensees and imposing penalty for other Obligated Entities:

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 or allow carry forward of shortfall subject to conditions as may be stipulated in that Order.”

As stated earlier, as regards the request that Distribution Licensees should be entitled to incentive for achieving RPO in excess of target RPO, the Commission is of the view that in case the Distribution Licensees achieve RPO levels higher than that specified by the Commission, they should be entitled to some incentive, so that the overall objective of higher

RE penetration is achieved. Hence, the Commission has introduced new Regulation 7.5(B) as under:

“7.5 (B) Distribution Licensee shall get incentive of Rs 0.10 per kWh for RE procured above the minimum percentage specified in Regulation 7.5.”

As the RPO categories for FY 2023-24 and FY 2024-25 are different (in case of carrying forward the surplus achievement of RPO from FY 2023-24 to FY 2024-25), the calculations to incorporate the surplus from FY 2023-24 into FY 2024-25 shall be provided in the Order in which the RPO compliance is assessed.

In the Principal Regulations, the Commission had not specified RPO targets specified by the Central Government for FY 2022-23 and FY 2023-24, as the targets had been specified by the Central Government only up to FY 2021-22. Now, Central Government’s RPO trajectory for FY 2022-23 and FY 2023-24 is available, however, RPO targets specified by the Commission for FY 2022-23 and FY 2023-24 are different with the RPO baskets themselves being different. Hence, the Commission has introduced a new Table under Regulation 12.2 and a new 3rd proviso under Regulation 12.2 as under, so that the Distribution Licensees are entitled to incentive of Rs. 0.25 per kWh for achievement of Total RPO higher than the Total RPO target specified by the Commission for FY 2022-23 and FY 2023-24 up to the Total RPO target stipulated by the Central Government for these years:

“

Year	Wind RPO	HPO	Other RPO	Total RPO
	<i>(a)</i>	<i>(b)</i>	<i>(c)</i>	<i>(d) = a+b+c</i>
2022-23	0.81%	0.35%	23.44%	24.61%
2023-24	1.60%	0.66%	24.81%	27.08%

“Provided also that the Distribution Licensee shall be eligible for incentive for FY 2022-23 and FY 2023-24 in case of achievement of Total RPO higher than the Total RPO target specified by the Commission in the Principal Regulations for FY 2022-23 and FY 2023-24 up to the Total RPO target stipulated by the Central Government as shown in the Table above.”

2 The Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, issued by MoP in June 2022

2.1 Amendment to Regulation 7 of the Principal Regulations

2.1.1 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.”

2.1.2 Comments Received

TPC-D submitted that the Commission should modify the draft Regulation 7.6 (g), to also consider the RE power procurement as per the methodologies approved by the State Commission for fulfilment of the RPO of such Distribution Licensee, in line with the current practice.

Hygenco submitted that as per Regulation 7.6, green hydrogen / ammonia is considered eligible for offsetting RPO obligation of Obligated Entity. However, the same Regulation specifies that the green energy purchased above RPO shall be counted towards RPO obligation of local Distribution Licensee. Hygenco stated that this will defeat the purpose of promoting green hydrogen/ammonia consumption in Maharashtra. If green attributes associated with produced green hydrogen above RPO of Obligated Entity are considered towards RPO of local Distribution Licensee, then green hydrogen consumed above RPO of obligated entity will no longer remain “green”. Indirectly hydrogen delivered to end user above RPO is “grey”. Hence, Hygenco submitted that in Regulation 7.6 (c)(vi), the Commission may accommodate the following change:

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

(vi) The green energy (not including green hydrogen & green ammonia) 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.

Amplus Solar Energy Solutions Private Limited submitted with reference to Regulation 7.6 (c)(vi) that the energy generated by RE generators have two components, i.e., electricity component (brown component) and the environmental attribute (green component). The green attribute can be exchanged in the form of REC. Accordingly, any consumer purchasing green energy from sources other than DISCOMs beyond its stipulated RPO should be allowed to retain or monetize the green attribute emanating from such procurement. Further, when consumer purchases green energy from sources other than DISCOMs, and this purchase goes beyond their stipulated RPO, it assists DISCOMs in meeting their RPO compliance, hence, the DISCOMs should provide incentives to these consumers.

MBPPL, GEPL, and KRCIPPL submitted that there is no current mechanism in the Power Exchange to bifurcate the procured power from GDAM/GTAM into "Wind", "Hydro" and "Other RPO" as Exchanges need to develop their software/mechanism line with the RPO Categories. Till the time there are no specific RECs or bifurcation of power procured through GDAM/GTAM products into "Wind", "Hydro" and "Other RPO", exemption should be provided.

MBPPL, GEPL, and KRCIPPL submitted that while allowing Green Energy Tariff, no restrictions/limitations have been provided in terms of categorization of power or year of commissioning of the plant. Hence, clarity may be provided in this regard, as the revised RPO targets link achievement to year of commissioning of plant. If an Obligated Entity asks for Green Energy from Distribution Licensee by paying Green Energy Tariff, then in that case, the power procured from Wind plants, which are commissioned before 31.03.2022, should be allowed for fulfilling the RPO requirements.

TPC-D submitted with reference to Regulation 7.6 (c)(iii), that in case the consumer places requisition with Distribution Licensee to procure the RE power for fulfillment of Wind RPO or HPO and if cost incurred for the same is more than the Green Energy Tariff approved by the Commission, then the Distribution Licensee should be allowed to charge the consumer accordingly to recover the complete cost of such power purchase for the consumer.

2.1.3 Analysis and Commission's Decision

The methodologies approved by the Commission for fulfilment of RPO are being specified in the present Regulations, hence, no further clarification is required.

As regards the request to exempt green hydrogen and green ammonia from Regulation 7.6 (c)(vi), the Commission is of the view that the concern is not justified, and the Obligated Entity is free to purchase such power, and the same will not lose the characteristic of Green Power, merely because they are being used to meet the RPO of the Distribution Licensee. Such provision of counting green energy in excess of RPO of obligated entity towards RPO of Distribution Licensee is stipulated in MoP Green Open Access Rules itself.

In case other Obligated Entities exceed the specified RPO target from FY 2024-25 onwards, the excess portion shall be used to meet RPO target of the Distribution Licensee. The Commission is of the view that such Obligated Entities should be entitled to incentive at 10 paise/kWh, i.e., the rate equal to the penalty imposed on the Distribution Licensee for shortfall in achieving RPO target, as the Distribution Licensee is benefited to that extent. The Distribution Licensee shall be allowed to recover this amount through its ARR. Accordingly, a new Regulation 7.5(C) has been introduced as under:

“7.5(C) Obligated Entities other than Distribution Licensee shall get incentive of Rs 0.10 per kWh for RE procured above the minimum percentage specified in Regulation 7.5, which shall be paid by the Distribution Licensee supplying electricity to such consumer and recovered from the Aggregate Revenue Requirement of the Supply Business of that Distribution Licensee.”

The submission that the existing mechanism available in the Power Exchange does not differentiate between 'Wind', 'Hydro' and 'Other RE' is correct. The distinction between Solar and Non-Solar RECs has also been removed by CERC. In order to overcome this issue, it is clarified that the RECs as well as RE purchased from the Exchange shall be considered against the specific RPO basket as indicated by the Distribution Licensee.

It is clarified that while providing additional Green Energy by charging Green Energy Tariff, the Distribution Licensees can procure power from Wind Plants commissioned before 31.03.2024 also, and there is no bar on the same. For meeting the RPO requirements, such power procured from Wind Plants commissioned before 31.03.2024 would be considered against the 'Other RPO' basket.

It is clarified that the Commission has approved the Green Energy Tariff of Rs. 0.66 per kWh, which is to be charged over and above the applicable Retail Supply Tariff. There is no scope for charging any other amount for the consumer, even in case the effective cost of such additional RE power is higher than the sum of Retail Supply Tariff and Green Tariff. Any shortfall or surplus on this account shall be adjusted at the time of truing up based on the overall power purchase cost and the additional revenue earned through levy of Green Energy Tariff.

3 Additional Points

3.1 Enforcement of RPO as per Timelines

3.1.1 Comments Received

IWTMA and InWEA submitted that Distribution Licensees should be directed to make a road map for achieving the RPO targets and RPO compliance should be monitored on a quarterly basis and data should be made available on public platform for transparency purposes.

3.1.2 Analysis and Commission's Decision

The Principal Regulations already specifies regarding creation of a web portal by Maharashtra Energy Development Agency (MEDA) for quarterly monitoring of compliance with RPO targets. This web-portal is already in place and the Reports of RPO compliance are available in the public domain.

The Commission has therefore, not made any modifications in the Draft First Amendment RPO Regulations in this regard.

3.2 Incentive for over-achievement should be continued

3.2.1 Comments Received

Prayas Energy submitted that the amendment has not included provision for incentive for over-achievement of RPO procurement beyond FY 2023-24 and to provide the incentive (say Rs 0.25/kWh of over-achievement) in case the Obligated Entity has no cumulative shortfall, achieves at least 110% of targets and the incentive can be limited to 150% of targets.

3.2.2 Analysis and Commission's Decision

As clarified earlier, in case the Distribution Licensee exceeds specified RPO target from FY 2024-25 onwards, the DISCOM shall be entitled to incentive of 10 paise/kWh for excess RPO achievement; in order to incentivize additional RE purchase.

Also, in case other Obligated Entities exceeds specified RPO target from FY 2024-25 onwards, the excess portion shall be used to meet RPO target of DISCOM, hence, such Obligated Entities shall be entitled to incentive at 10 paise/kWh, i.e., rate equal to the penalty imposed on DISCOM for shortfall in achieving RPO target.

The necessary provisions have been added as Regulation 7.5(B) and (C) as under:

“7.5(B) Distribution Licensee shall get incentive of Rs 0.10 per kWh for RE procured above the minimum percentage specified in Regulation 7.5 (A).”

“7.5(C) Obligated Entities other than Distribution Licensee shall get incentive of Rs 0.10 per kWh for RE procured above the minimum percentage specified in Regulation 7.5 (A),

which shall be paid by the Distribution Licensee supplying electricity to such consumer and recovered from the Aggregate Revenue Requirement of the Supply Business of that Distribution Licensee.”

3.3 Making compliance verification process timebound and adding forward looking aspects

3.3.1 Comments Received

Prayas Energy suggested that the Commission has not verified the RPO compliance for Open Access and Captive consumers since 2011. Prayas suggested that there should be an annual RPO compliance order for these entities. The verification process should be simplified and compliance status should be publicly accessible.

In addition to this, the Commission can ask for public reporting of RPO compliance status on quarterly basis within 15 days of end of each quarter by MEDA and by each Obligated Entity on their website.

3.3.2 Analysis and Commission’s Decision

The Principal Regulations already specifies regarding creation of a web portal by Maharashtra Energy Development Agency (MEDA) for quarterly monitoring of compliance with RPO targets. This web-portal is already in place and the Reports of RPO compliance are available in the public domain for compliance by Distribution Licensees, Open Access consumers, and Captive consumers.

In year 2018, the Commission conducted verification of RPO compliance by CPP and OA consumers till FY 2013-14. The Commission has already initiate process for verification of the RPO compliance of other Obligated Entities (Open Access and Captive consumers) from FY 2014-15 onwards and will be concluded soon.

The Commission has therefore, not made any modifications in the Draft First Amendment RPO Regulations in this regard.

3.4 Green Hydrogen

3.4.1 Comments Received

Prayas Energy submitted that the Commission should clarify the accounting framework in the absence of CERC norms and whether the renewable energy used for Green Ammonia/hydrogen production would be considered only in the RE procurement or also as part of the total gross consumption analysis.

3.4.2 Analysis and Commission's Decision

Regulation 7.6(f) of the draft Amendment already specifies as under:

“7.6(f) 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.”

The Commission has therefore, not made any modifications in the Draft First Amendment RPO Regulations in this regard. It is further clarified that green energy used for production of Green Hydrogen / Ammonia shall be part of total consumption on which RPO are to be met.

3.5 Para 3 of Chapter 2 of Explanatory Memorandum

3.5.1 Comments Received

TPC-D submitted that in Para 3 of Chapter 2 of the Explanatory memorandum (Status of RPO Achieved by Distribution Licensees from FY 2019-20 to FY 2021-22) on the Draft First Amendment, the gross energy considered for TPC-D is including the Hydro energy purchase for the year. For other Licensees, gross energy consumption has been considered after subtracting Hydro energy purchase.

TPC-D submitted that for comparison for FY 2019-20 to FY 2021-22, gross energy consumption for TPC-D should be considered for all the Licensees based on the same philosophy.

3.5.2 Analysis and Commission's Decision

The Commission in Explanatory Memorandum has mentioned Distribution Licensee-wise RPO compliance status based on recent Mid Term Review Order in respect of each of Distribution Licensee. If TPC-D has any grievance regarding computation methodology, it may raise the same in appropriate proceeding before the Commission.

(Surendra J. Biyani)
Member

(Anand M. Limaye)
Member

(Sanjay Kumar)
Chairperson

Annexure - I

Sl. No.	Name of Stakeholders
1	Indian Wind Turbine Manufacturers Association (IWTMA)
2	Indian Wind Energy Association (INWEA)
3	EON (Distribution Licensee)
4	Indian Energy Exchange (IEX)
5	NIDAR Utilities (Distribution Licensee)
6	HYGENCO
7	BEST (Distribution Licensee)
8	AMPLUS ENERGY SOLUTIONS PVT. LTD.
9	Prayas (Energy Group), Pune
10	Tata Power Company -Distribution (Distribution Licensee) (TPC-D)
11	Mindspace Business Parks Pvt. Ltd. (MBPPL) (Distribution Licensee)
12	Gigaplex Estate Pvt. Ltd. (GEPL) (Distribution Licensee)
13	KRC Infra and Power Pvt. Ltd. (KRCIPPL) (Distribution Licensee)
14	Adani Electricity Mumbai Ltd. (AEML-D) (Distribution Licensee)
15	Maharashtra Electricity Distribution Co. Ltd. (MSEDCL) (Distribution Licensee)