

**F. No. 09/13/2021-RCM**  
**Ministry of Power**  
**Government of India**

Shram Shakti Bhawan, New Delhi  
Dated 22 July, 2022

**ORDER**

**Subject: Renewable Purchase Obligation (RPO) and Energy Storage Obligation Trajectory till 2029-30 - regarding.**

In exercise of the powers conferred under section 3(3) of Electricity Act, 2003, the Central Government had notified the revised Tariff Policy, which was published in Gazette of India, Extraordinary, Part-I, Section-1 dated 28.01.2016.

2. Para 6.4(1) of the Tariff Policy 2016 provides as follows:

*"Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission 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. **Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.**"*

*Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs."*

3. Energy from Hydro Power Projects is Renewable Energy (RE) as has been recognized world over. On 8<sup>th</sup> March 2019, the Government of India had also recognized Large Hydro Power Projects (LHPs) including Pumped Storage Projects (PSPs), having capacity of more than 25 MW, as part of RE. It was further specified that energy from all LHPs, commissioned after 8<sup>th</sup> March 2019, will be considered as part of Renewable Purchase Obligation (RPO) through a separate obligation, i.e. Hydro power Purchase Obligation (HPO).

4. Accordingly, the Ministry of Power (MoP), after detailed consultation with Ministry of New and Renewable Energy (MNRE), notified the HPO trajectory for the period from 2021-22 to 2029-30 vide order dated 29<sup>th</sup> January, 2021 and subsequent clarification dated 1<sup>st</sup> April, 2021. The revised trajectory of RPOs for Solar and Other Non-Solar power was also notified for the period from 2019-20 to 2021-22. The aforesaid order also mentioned that the RPO trajectory beyond 2021-22 will be specified later.

5. To recommend RPO trajectory beyond 2021-22, a Joint-Committee under the Co-chairmanship of Secretary, Ministry of Power and Secretary, Ministry of New and Renewable Energy, was constituted on 17<sup>th</sup> December, 2020. Based on the recommendations of the Joint Committee and further discussions with MNRE, MoP hereby specifies the following RPO Trajectory beyond 2021-22:

Year	Wind RPO	HPO	Other RPO	Total RPO
2022-23	0.81%	0.35%	23.44%	24.61%
2023-24	1.60%	0.66%	24.81%	27.08%
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%

(a) **Wind RPO** shall be met only by energy produced from Wind Power Projects (WPPs), commissioned after 31<sup>st</sup> March 2022.

(b) **HPO** shall be met only by energy produced from LHPs (including PSPs), commissioned after 8<sup>th</sup> March 2019.

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

6. From F.Y. 2022-23 onwards, the energy from all Hydro Power Projects (HPPs) will be considered as part of RPO. The HPO trajectory, as has been notified earlier will continue to prevail for LHPs commissioned after 8<sup>th</sup> March 2019. All other HPPs will be considered as part of 'RPO' under category of 'other RPO'.

7. RPO shall be calculated in energy terms as a percentage of total consumption of electricity.

8. HPO obligations may be met from the power procured from eligible LHPs (including PSPs) commissioned on and after 8<sup>th</sup> March, 2019 to 31<sup>st</sup> March, 2030.

9. HPO obligation of the State/Discom may be met out of the free power being provided to the State from LHPs (including PSPs), commissioned after 8<sup>th</sup> March, 2019 as per agreement at that point of time excluding the contribution towards LADF, if consumed within the State/Discom. Free power (not that contributed for Local Area Development) shall be eligible for HPO benefit.

10. In case, the free power mentioned above is insufficient to meet the HPO obligations, then the State would have to buy 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.

11. The Renewable Energy Certificate mechanism corresponding to Hydro Power to be developed by CERC to facilitate compliance of HPO Obligation would have a capping price of Rs.5.50/Unit of electrical energy w.e.f. 8<sup>th</sup> March, 2019 to 31<sup>st</sup> March, 2021 and with an annual escalation @ 5% thereafter for the purposes of ensuring HPO compliance.

12. The above HPO trajectory shall be trued 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.

13. Hydro power imported from outside India shall not be considered for meeting HPO.

14. Any shortfall remaining in achievement of 'Other RPO' category in a particular year can be met with either the excess energy consumed from WPPs, commissioned after 31<sup>st</sup> March 2022 beyond 'Wind RPO' for that year or with excess energy consumed from eligible LHPs (including PSPs), commissioned after 8<sup>th</sup> 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 consumed from Hydro Power Plants, which is in excess of 'HPO' for that year and vice versa.

15. The following percentage of total energy consumed shall be solar/wind energy along with/ through storage,

<b>F.Y.</b>	<b>Storage (on Energy basis)</b>
2023-24	1.0 %
2024-25	1.5 %
2025-26	2.0 %
2026-27	2.5 %
2027-28	3.0 %
2028-29	3.5 %
2029-30	4.0 %

16. The Energy Storage Obligation in para 15 above 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.

17. 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 para 5 above.

18. 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).

19. POSOCO will maintain a data related to compliance of RPO Obligations.

20. Further, the State Commissions may consider notifying RPO trajectory including HPO and Energy Storage Obligation trajectory for their respective States, over and above the RPO, HPO and Energy Storage Obligation trajectory given in para 5. Moreover, the Central Commission shall consider devising a suitable mechanism similar to Renewable Energy Certificate (REC) mechanism to facilitate fulfilment of HPO.

21. This issues with the approval of Hon'ble Minister of Power and New & Renewable Energy.



(Piyush Singh)

Joint Secretary to the Government of India  
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To

1. ACS/Principal Secretary/Secretary (Power/Energy), State Governments/UTs.
2. Secretary (CERC/FOR), New Delhi
3. Secretary, State Electricity Regulatory Commissions/Joint Electricity Regulatory Commissions

Copy to:

1. Secretary, MNRE, New Delhi
2. Chairperson, CEA, New Delhi

Copy also for information to:

1. PS to Hon'ble Minister for Power and NRE
2. Additional PS to Hon'ble Minister of State for Power
3. Sr. PPS to Secretary(P)/PPS to AS&FA, MoP/ PPS to AS(AT), MoP
4. PPS to All Joint Secretaries/ EA/ CE, MoP