



(Renewable Purchase Obligation and RE Certificate Framework Implementation) Regulations, 2024

DERC notified a draft (Renewable Purchase Obligation and RE Certificate Framework Implementation) Regulations, 2024 on 10th June, 2024

Objective: The Draft Regulation for implementing RPO and REC frameworks in the National Capital Territory of Delhi. It mandates that dicoms, captive & open access consumers meet specific RPO obligations, with targets varying yearly for different RE sources, including wind and hydro power. The draft define key terms, set compliance mechanisms and outline penalties for non – compliance. The framework aim to ensure that a portion of electricity consumption in Delhi is met through RE sources, promoting sustainability and energy diversification in the region

Definitions:

1. “Accredited Entities” means entities engaged in generation of electricity from Renewable Energy Sources registered under Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022, as amended from time to time, for issuance of Renewable Energy Certificates;
2. “Obligated Entity” means the Distribution Licensee, Captive user, Open Access Consumer or any other entity in the National Capital Territory of Delhi, which is mandated to fulfil Renewable Purchase Obligation as may be notified by the Commission from time to time subject to fulfilment of conditions in Regulation 4;

The document can be accessed [here](#).

CER Opinion

1. **Capacity Constraints for Increased Consumer Load: Clause No. 5. 2. 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.” (emphasis added)

The proposed clause does not account for potential capacity constraints of the supporting infrastructure. A consumer who intends to consume higher than the Sanction load, the feeder or the distribution transformer may have a capacity limitation to handle this additional energy procured. A proviso may be added to subject the same to the limit due to system constraints, particularly those at the distribution network level.

While the above clause specifies no capacity limit for installation of RE power plants for own consumption, clarity with respect to plants with shared capacity by consumers within the area of a distribution licensee or multiple distribution licensees in the state. A consumer may have multiple locations across different license areas in the state of Delhi, and thus should have flexibility of setting up a shared generation capacity or enter into a PPA for the same.

The above clause should also permit setting up of a generating unit owned by a group of consumers within or across different distribution licensees within the state.

2. **Green Energy Supply to Consumers: Clause No. 5. 2. c (i)** – “Any consumer may elect to purchase green energy either up to 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 and the consumer shall have the flexibility to give separate requisition for solar and non-solar;” (emphasis added)

The percentage of green energy desired by a consumer should be beyond the RPO target for the distribution licensees. Any premium payable, if any, for such green energy supplied to the consumers should be applicable only on the energy supplied over and above the RPO equivalent energy consumed by the consumer.

How would the licensee provide proof of incremental green energy procurement to meet this requirement by consumers? The licenses may, without any additional green energy procurement, may deem the green energy to be supplied to the consumer from its obligated green energy procurement. Such a mechanism would lack accountability and would make consumer pay a premium for green energy procurement beyond the RPO of the state.

The non-solar and solar classifications are no longer applicable in the context of RPO. Either the RE energy supply can be irrespective of the RE source or it should be mapped to the applicable RPO categorization (Wind, Others, DER etc.).

- 3. Consumers’ Right to Green Attributes for Voluntary/Excess Green Energy Purchase: Clause No. 5.2 c (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.”*

The voluntary purchase of green energy by a consumer gives right to that consumer to the green attributes associated with such excess green energy consumed. The consumer bears the cost of this additional green attributes by payment of a premium. The consumer may need this right to demonstrate greenness of its production process (for example for export purposes). **The property rights associated with such additional green energy purchase should lie with the consumers paying for it. This should thus not be accounted towards the RPO of the distribution licensee.**

- 4. Green Energy Rating for Consumers: Clause No. 7. Vii –** *“the Distribution Licensee shall categorize consumers on different rating, based on the percent of green energy purchased by such consumers.”*

The categorization should be based on the proportion of green energy in the consumer's overall **green energy mix (including both that on account of RPO and voluntary purchase of green energy)**, rather than the voluntary purchase of green energy purchased. Such a standardised approach across the country would provide a uniform index to classify consumers based on overall share of green energy procured. **Any premium applicable would be applicable for the voluntary green energy purchase beyond the RPO.**

The above suggested approach would ensure that all consumers would be rated for the green energy purchase on account of RPO compliance, with each consumer having a minimum green rating. This would also enhance transparency for RPO compliance for the distribution utilities.

- 5. RPO Compliance Rating for Obligated Entities:**

A rating/grading mechanism to highlight the degree of compliance with of RPO by the obligated entities should be introduced. This rating would account for degree of compliance vis a vis the RPO target for the respective year as suggested below,

Rating	Level of RPO compliance
A+	More than 98 %
A –	95-98 %
B+	90-95%
B –	85-90 %
C+	80-85%
C –	75-80%
D+	70-75%
D -	65-70%
	Below 65%

The obligated entities should be required to furnish RPO compliance data on a quarterly basis to the Commission along with a plan to achieve the target and address any shortfall from previous quarters. Following data format is suggested for the same.

S No.	Obligated Entity	Total energy consumption	Total RPO target	RE Power (PPA)	PXs (GTAM, GDAM)	REC	DER/ Rooftop/ off-grid	Target Achieved (%)	Shortfall/ Surplus (%)	Shortfall/ surplus (MUs)
Q1										
Q2										

- 6. RPO compliance portal:** To facilitate collection of information for RPO compliance, we recommend creation of a login-based portal where all obligated entities can report RPO achievements on a monthly/quarterly basis. Supporting data/document can also be uploaded on the portal. The data reported by the SLDC and the Distribution licensee for the other obligated entities can be used for cross verification purpose.

Post verification, the portal should publicly share the quarterly RPO compliance as well as the assigned compliance rating (suggested above) on the portal for public information and dissemination.

- 7. SNA Charges: Clause No. 8 iv -** *The Commission may fix the remuneration and charges payable to the State Nodal Agency for discharge of its functions and the same shall be recovered from the accredited entities and the Obligated Entities other than Distribution Licensees.*

Applicability of these regulations are in the context of RPO and RE framework. The above clause can this be modified as

*“The Commission may fix the remuneration and charges payable to the State Nodal Agency for discharge of its functions **specified herein** and the same shall be recovered from the accredited entities and the Obligated Entities other than Distribution Licensees.” (emphasis added)*

- 8. Handover Process and Data Transfer for New State Nodal Agency: Clause No. 8.iv –** *“If the Commission is satisfied that the State Nodal Agency is not able to discharge its functions satisfactorily, it may by an Order, and after recording reasons in writing, designate another agency to function as State Nodal Agency, as it considers appropriate.”*

If there is any case where the Commission designates a new agency to function as the State Nodal Agency due to the unsatisfactory performance of the previous agency, the process of handing should be clearly laid out. This should include transferring all relevant data and documents to the new agency to ensure a smooth transition.



- 9. REC-Based Penalty for RPO Shortfall: Clause No. 13** – *“Provided that Distribution Licensee shall be subjected to reduction in Annual Revenue Requirement at a rate of Rs 0.10 per kWh for cumulative shortfall in total RE procurement target for each year; Provided further that other Obligated Entities shall be subjected to penalty of Rs. 0.10 per kWh for cumulative shortfall in total RE procurement target for each year.”*

To ensure that appropriate economic signals are passed on to the obligated entities, penalty for RPO shortfall should be linked to price of Renewable Energy Certificate (REC). This would ensure that the obligated entities are incentivized to purchase RECs. The penalty rate should be set little higher than the prevailing REC prices to effectively encourage RPO compliance with.

- 10. Guarantee of origin for Energy used in Green Hydrogen and Ammonia production: Clause 5. 2. F** – *“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.”*

Ensure the authenticity of the energy source used for the green hydrogen or green ammonia, a mechanism to verify guarantee of origin must be established. Such credit should be for utilization of green hydrogen or green ammonia rather than its purchase. The mechanism should also verify the production, purchase and utilization of green hydrogen or green ammonia by obligated entities for them to be eligible for RPO compliance. The current REC mechanism¹ could be utilized to certify these processes. Relevant procedures, protocols, and an accounting framework need to be outlined for the same under the appropriate Central Electricity Regulatory Commission (CERC) regulations.

¹ Anoop Singh (2009), “A market for renewable energy credits in the Indian power sector”, *Renewable and Sustainable Energy Reviews* 13 (3), 643-652. <https://www.researchgate.net/profile/AnoopSingh-28>
Anoop Singh (2011), “Directions for Effective Regulation for Renewable Energy: An Analysis of Renewable Energy Certificates”, *India Energy Security Summit: Energy Security for a sustainable future*, IPPAI. <http://dx.doi.org/10.2139/ssrn.3440341>
Anoop Singh (2010), “Economics, Regulation, and Implementation Strategy for Renewable Energy Certificates in India”, *India Infrastructure Report 2010*, Oxford Univ. Press. <https://ssrn.com/abstract=3440253>