

**CENTRAL ELECTRICITY REGULATORY COMMISSION**  
**NEW DELHI**

**Draft Central Electricity Regulatory Commission (Terms and Conditions for  
Renewable Energy Certificates for Renewable Energy Generation) (First  
Amendment) Regulations, 2025.**

**Explanatory Memorandum**

**1. Background:**

1.1 In exercise of powers conferred under sub-section (1) of Section 178 and Section 66 read with clause (y) of sub-section (2) of Section 178 of the Electricity Act, 2003 and all other powers enabling it in this behalf, and after previous publication, the Central Electricity Regulatory Commission (hereafter referred to as “the Commission”) notified the Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022 (hereinafter referred to as the (“Principal Regulations” or “REC Regulations, 2022”) vide No. RA-14026(11)/1/2022-CERC with effect from 05.12.2022.

1.2 After the notification of the Principal Regulations, the Commission received representations by the distribution Companies (DISCOMs) highlighting that the three-month timeline for submission of Renewable Purchase Obligation (RPO) related data after due certification from the concerned State Regulatory Commission is not adequate in view of the existing energy accounting practice followed in the States. Some stakeholders also requested clarity on the treatment of self-consumption by renewable generating stations that do not meet the captive criteria. Furthermore, the Principal Regulations have specified Certificate Multipliers for different renewable energy sources, which were applicable for a period of three years, and need review. Additionally, the Ministry of Power (MoP), vide communication dated 3<sup>rd</sup> March 2025, requested the Commission to devise a suitable regulatory framework for Virtual Power Purchase Agreements (VPPAs). Pursuant to this, the Commission has issued draft guidelines for VPPA to facilitate compliance with the Renewable Consumption Obligation (RCO) by consumers and designated consumers. This requires enabling provision in the REC Regulations, 2022, to facilitate the deemed transfer of green attributes from eligible RE stations to designated consumers under VPPAs. These

developments, along with the stakeholders' representations, have necessitated certain amendments to the Principal Regulations.

1.3 The following section details the amendment proposed in the REC Regulations, 2022.

## **2. Eligibility of RE Plants with Self-Consumption**

2.1 Some stakeholders requested to bring clarity regarding the provision of self-consumption by a renewable energy station which is not fulfilling the criteria of a captive generation plant. This will avoid any ambiguity regarding the treatment of self-consumption for eligible renewable energy generators not categorized as captive generating stations, but with self-consumption. The Commission notes that the objective of the REC Regulations is to facilitate compliance with the Renewable Energy Obligation (RPO) and now the Renewable Consumption Obligation (RCO). Hence, it has been decided to amend the provisions to bring clarity on self-consumption.

2.2 An amendment to Regulation 4 of the Principal Regulation is proposed as follows:

*“A captive generating station based on renewable energy sources, **including renewable energy generating plant not fulfilling the conditions of CGP as prescribed in the Electricity Rules, 2005, but having self-consumption**, and meeting the conditions as specified under clause (2) of this Regulation in respect of a renewable energy generating station shall be eligible for issuance of Certificates:”*

## **3. Issuance of Certificate to Distribution Companies (DISCOMs)**

3.1 The Commission notes that the REC Regulations, 2022 require the eligible distribution company to apply for issuance of certificates within three months from the end of a financial year to submit the details of excess procurement of renewable energy above the Renewable Purchase Obligation (RPO).

3.2 The Commission has received representations highlighting difficulties in achieving the three-month timeline for data submission due to the existing energy accounting practice followed in the States. Many DISCOMs have filed petitions requesting relaxation of timelines, and the Commission has given relaxation in these matters. Hence, it is proposed that the provision may be amended to provide relief to the DISCOMs. The proposed amendment is as follows:

*“Regulation 10 (3): Application for issuance of Certificates shall be made by an eligible entity, being a distribution licensee or an open access consumer, within three months from the date of certification by the concerned State Commission about the purchase of electricity from renewable energy sources in excess of the renewable purchase obligations as determined by the concerned State Commission.*

*Provided that no Certificate shall be issued in case the application is made beyond the period of three months from the date of certification by the concerned State Commission.”*

#### **4. Review of the Principles of Certificate Multiplier**

4.1 The REC Regulations, 2022, introduced the concept of a multiplier by assigning a **Certificate Multiplier** for new RE Projects based on the tariff range of various RE technologies as follows:

<b>Renewable Energy Technologies</b>	<b>Certificate Multiplier</b>
On-shore Wind and Solar	1
Hydro	1.5
Municipal Solid Waste (MSW) and non-fossil fuel-based cogeneration	2
Biomass and Biofuel	2.5

4.2 Certificate Multiplier has been determined based on the tariff range of various renewable energy sources, by taking into account the Tariffs of renewable energy projects discovered through bidding process under Section 63 of the Act, Tariff Orders issued by the Commission for projects based on various Renewable Energy Sources, Tariff Orders issued by State Electricity Regulatory Commissions for Renewable Energy Projects, Renewable Energy Project Specific Tariffs determined by the Appropriate Commission, if any.

4.3 The said Certificate Multiplier was specified for the period of three years from the date of effect REC Regulations, 2022. The REC Regulations, 2022, were notified on December 5, 2022; hence, the Commission needs to review the Certificate multiplier.

4.4 Further, the Commission also felt the need for a review of the principles of the certificate multiplier to include new and innovative technologies. Some stakeholders have also advocated for considering factors other than tariff for the determination of Certificate Multiplier, to encourage new and innovative technologies. Therefore, based on a detailed review, the Commission proposes amendments to the principles for determining the Certificate Multiplier as follows.

4.5 Following are the proposed Amendments to Clause (2), (3), and (4) of Regulation 12 of the REC Regulations, 2022:

*“(2) The Certificate Multiplier for different renewable energy sources shall be governed by the following provisions:*

*(a) The eligible generating stations or captive generating stations, commissioned after 05.12.2022 and before the date of effect of the Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) (First Amendment) Regulations, 2025, shall be entitled to the Certificate Multiplier as indicated in the following table:*

<b><i>Renewable Energy Sources</i></b>	<b><i>Certificate Multiplier</i></b>
<i>On-shore Wind and Solar</i>	<i>1</i>
<i>Hydro</i>	<i>1.5</i>
<i>Municipal Solid Waste (MSW) and non-fossil fuel-based cogeneration</i>	<i>2</i>
<i>Biomass and Biofuel</i>	<i>2.5</i>

*(b) The eligible generating stations or captive generating stations, commissioned after the date of effect of the Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) (First Amendment) Regulations, 2025, shall be entitled to the Certificate Multiplier as indicated in Appendix-1.”*

*“(3) The Certificate Multiplier for other renewable energy sources, not covered under sub-clause (b) of clause (2) of this Regulation, shall be determined by the Commission, on a case-by-case basis through a separate order based on the principles stipulated in Appendix-1.”*

*“(4) The Certificate Multiplier, once assigned to an eligible generating station or a captive generating station, shall remain valid for a period of fifteen years from the date of commissioning of such generating station or captive generating station:*

*Provided that for the period of validity of their Registration beyond fifteen years from the date of commissioning of such eligible generating station or captive generating station, one Certificate shall be issued for one Megawatt hour of electricity generated and injected or deemed to be injected into the grid.”*

4.6 The principles of the Certificate multiplier have been revised to incorporate the additional factors. The Certificate Multiplier for renewable energy plants, including Captive RE generating stations, which will be commissioned after the date of effect of the REC (1st Amendment) Regulations, 2025, will be based on the tariff range, the maturity of the RE Technology, as well as the level of Capacity Credit/ Peak Support of RE sources. In addition, scores are assigned to each of these factors based on different sub-categories, with specific weightage allocated to each factor, as outlined below:

*“ Principles for Determination of Certificate Multiplier*

*A) Certificate Multiplier has been determined based on the Tariff Range, Technology Maturity, and level of Capacity Credit/ Peak Support of various renewable energy sources, by taking into account the following:*

*(i) **Tariff Range: Tariff range based on***

- a. Tariffs of renewable energy projects discovered through the bidding process under Section 63 of the Act;*
- b. Tariff Orders issued by the Commission for projects based on various Renewable Energy Sources;*
- c. Tariff Orders issued by State Electricity Regulatory Commissions for Renewable Energy Projects;*

- d. Renewable Energy Project Specific Tariffs determined by the Appropriate Commission, if any.
- e. Scores have been assigned for the Tariff Factor in the following manner:

<b>Tariff Range</b>	<b>Score</b>
<=4	0
4-6	20
6-8	40
8-10	60
10-12	80
Above 12	100

**(ii) Technology Maturity:**

- a. Technology maturity is categorized from fully commercialized (with or without support) to those with limited or site-specific commercialization, as well as technologies at the nascent or R&D stage.
- b. Scores have been assigned for Technology Maturity in the following manner:

<b>Technology Maturity</b>	<b>Score</b>
Fully commercialised without any promotional measures	0
Fully commercialised but potential still to be harnessed	20
Limited commercialisation in India	40
Site Specific Potential Exists	60
Nascent stage, but potential exists	80
R & D Stage	100

**(iii) Capacity Credit/ Peak Support:**

- The level of Capacity Credit/ Peak Support has been considered, with levels ranging from “Nil” to “Very High”, depending on the capability of the technology to respond to grid requirements.
- Scores have been assigned for Capacity Credit / Peak Support in the following manner:

<b>Capacity Credit/ Peak Support</b>	<b>Score</b>
<i>Nil</i>	<b>0</b>
<i>Very Low</i>	<b>20</b>
<i>Low</i>	<b>40</b>
<i>Medium</i>	<b>60</b>
<i>High</i>	<b>80</b>
<i>Very High</i>	<b>100</b>

B) Further, weightage has been assigned against the aforesaid three factors as under:

<b>Tariff Range</b>	<b>Technology Maturity</b>	<b>Capacity Credit/ Peak Support</b>
<b>40%</b>	<b>30%</b>	<b>30%</b>

Based on the principles specified under clauses (A) and (B) of this Appendix, the Certificate Multiplier assigned to various renewable energy sources is as follows:

<b>Technology</b>	<b>Tariff Factor</b>	<b>Technology Maturity</b>	<b>Capacity Credit/ Peak Support</b>	<b>SUM</b>	<b>REC Multiplier (Normalised based on Minimum tech. score and rounded off)</b>
<b>Weightage --- - &gt;&gt;</b>	<b>40%</b>	<b>30%</b>	<b>30%</b>		
<i>Solar</i>	<i>0</i>	<i>40</i>	<i>20</i>	<i>26</i>	<i>1.0</i>
<i>Wind</i>	<i>0</i>	<i>20</i>	<i>40</i>	<i>26</i>	<i>1.0</i>
<i>Biomass /Biofuel</i>	<i>80</i>	<i>40</i>	<i>40</i>	<i>66</i>	<i>2.5</i>

<i>SHP</i>	40	40	40	50	2.0
<i>Pumped Hydro</i>	60	40	80	75	3.0
<i>Cogen</i>	80	40	40	66	2.5
<i>Large Hydro</i>	40	60	60	67	2.5
<i>Offshore Wind</i>	100	60	60	91	3.5
<i>MSW</i>	80	40	40	66	2.5
<i>BESS (4 hours)</i>	40	60	80	76	3.0
<i>Hybrid RE</i>	20	40	40	42	1.5

## **5. Regulation for Treatment of Certificates issued under Virtual Power Purchase Agreement (VPPA):**

5.1 In the exercise of the powers conferred under Regulation 54(3) of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021, the Commission has issued draft guidelines for VPPA for public consultation.

5.2 As specified in the said draft guidelines, a Consumer or a Designated Consumer may enter into a long-term bilateral Virtual Power Purchase Agreement (VPPA) with a Renewable Energy (RE) generator at a mutually agreed price (VPPA price), for facilitating RCO compliance by the regulated entities.

5.3 Under this arrangement, if the RE generator sells electricity component through power exchanges or any other mode authorized under the Electricity Act 2003, the Renewable Energy Certificates (RECs) received thereby shall be transferred to the Consumer or Designated Consumer who can use such RECs for RCO compliance or for claiming green attributes. Such RECs shall not be allowed to be traded.

5.4 In view of the above, the Commission has proposed amendments to the REC Regulations, 2022, to provide for transactions of RECs under VPPA.

### *“14A. Treatment of Certificates issued under the Virtual Power Purchase Agreement*

*Notwithstanding anything contained in these regulations, the Certificates issued to an eligible generating station that has entered into a virtual power purchase agreement shall be governed by the following provisions:*

- (a) *The Certificates issued to the renewable energy generating station shall stand transferred to the consumer or the designated consumer with whom such generating station has entered into a virtual power purchase agreement.*
- (b) *The consumer or the designated consumer under the virtual power purchase agreement shall be eligible to meet its renewable purchase obligation or renewable consumption obligation, as the case may be, by way of such Certificates.*
- (c) *The Certificates, once transferred to the consumer or the designated consumer, shall stand extinguished:*  
*Provided that the certificates to the credit of the consumer or the designated consumer over and above the RPO or RCO can be carried forward for compliance in future years, but shall not be available for sale in the power exchanges or through traders.*
- (d) *An eligible generating station shall inform the Central Agency about the Project that has entered into a virtual power purchase agreement.*
- (e) *The Central Agency shall extinguish such Certificates after they are used for compliance with the Renewable Purchase Obligation or Renewable Consumption Obligation by the consumers or the designated consumers, and update its record.*

## **6. Inclusion of Definitions under Regulation 2 of the Principal Regulations**

6.1 The Commission notes that that the inclusion of definitions for *Designated Consumers*, *Renewable Consumption Obligation* and *Virtual Power Purchase Agreement* are consequential to above amendments in the Regulations which are as follows:

*“(g-1) ‘**Designated Consumer**’ shall have the same meaning as assigned to it under the Energy Conservation Act, 2001, as amended from time to time or any reenactment thereof;”*

*“(o-1) ‘**Renewable Consumption Obligation**’ or ‘**RCO**’ means the requirement specified by the Central Government under clauses (n) and (x) of Section 14 of the Energy Conservation Act, 2001, as amended from time to time or any reenactment thereof, for the minimum share of consumption of non-fossil sources (renewable energy);”*

*“(u-1) ‘**Virtual Power Purchase Agreement**’ or ‘**VPPA**’ shall have the same meaning as assigned to it under the Central Electricity Regulatory Commission (Power Market) Regulations, 2021, as amended from time to time or any reenactment thereof;”*

7. In view of the above, the Commission seeks comments from the stakeholders by 23<sup>rd</sup> October, 2025.

\*\*\*\*\*