

POSOCO (Detailed Procedure for REC Mechanism in compliance of CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022) [Draft]

POSOCO has notified draft on “Detailed Procedure for REC Mechanism in compliance of CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022, on 8th July, 2022. Key highlights of the draft are mentioned below:

❖ Introduction:

The POSOCO notified draft detailed procedure for Implementation of REC Mechanism, in compliance with the CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022 on 08.07.2022. The draft defines the roles, responsibilities and functions of the different entities involved in the process of issuance of the certificates along with the complete process of issuance, validity of the certificate, denomination of the certificate, etc.

The procedure is made defining the step-wise process for accounting of generation in respect of eligible entities, accreditation of REGS including CGP under REC Mechanism, their accreditation & registration of eligible entities, issuance and redemption of the certificate.

❖ Functions of Agencies:

NLDC will be responsible for registration of projects of eligible entities, issuance of certificates, maintain accounts of registry along with other functions as mentioned in the regulations.

State Agency is the agency designated by the concerned State Commission for accreditation of eligible entities connected to the intra-state transmission system for the grant of RECs.

RLDC shall undertake accreditation to the eligible entities connected to the inter-State transmission system and issuance of Energy Injection Report (EIR)

SLDC shall take up issuance of EIR on the basis of electricity generated and injected to the grid

❖ Process for implementation of REC Mechanism

Accreditation of the eligible entities → Registration of the eligible entities → Issuance of Renewable Energy Certificates (RECs) → Exchange and redemption of REC(s).

❖ Eligibility for issuance of Certificates

Following entities shall be eligible for issuance of Certificates.

- (a) Renewable energy generating stations (REGS) – Tariff not determined by section 62 or 63 of EA, 2003 or electricity sold to fulfil the RPO of obligated entity.
- (b) Captive generating stations (CGP) based on renewable energy sources,
- (c) Distribution licensees whose RPO have been already met and
- (d) Open access consumers

❖ **Denomination of the Certificate**

- Each certificate represent 1MWh of electricity injected or deemed to be injected in to the grid.
- Certificate to be issued in multiple of Certificate multiplier. Multiplier will be reviewed 3 years.

<u>Renewable Energy Technologies</u>	<u>Certificate Multiplier</u>
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

Certificate Multiplier for different RE technologies

The Certificate multiplier once assigned to the REGS/CGS shall remain valid up-to 15 years from date of commissioning beyond which, the multiplier shall be 1.

❖ **Fees and charges**

The applicable fees and charges payable by the eligible entities is as below:

- Accreditation of Eligible Entities (connected to the inter-state network) by RLDCs:
 - (a) Application Processing Fee
 - (b) One-time Accreditation fee
 - (c) Annual Accreditation fee
- Registration under REC Mechanism:
 - (a) Application Processing Fee
 - (b) One-time Registration fee
 - (c) Annual Registration fee
- Issuance of RECs
 - (a) Transaction fee and charges for issue of certificate

SERC may notify separate Fees and Charges for Accreditation of Eligible Entities (connected to interstate).

In case separate Fees and Charges for accreditation are not notified by the respective SERC, then the Fee and Charges notified by CERC will be applicable.

Further, the Commission, based on the proposal from the Central Agency, may revise the fees and charges payable by the eligible entities for accreditation, registration, issuance of Certificates, and other connected matters.

- ❖ Monitoring of purchase of RECs will be done by CERC and SERCs through REC web application.

The Document can be found [here](#).

CER Opinion

- 1. REC as a guarantee of origin (Clause No.7.4):** As per the clause, “*An obligated entity being a distribution licensee or an open access consumer, which purchases electricity from renewable energy sources in excess of the renewable purchase obligation as determined by the concerned State Commission will be eligible for issuance of Certificates to the extent of purchase of such excess electricity from renewable energy sources.*” It is suggested that all RE generator in the country be issued REC, which can be issued as guarantee of origin and can be used as proof of compliance with the respective SERCs. To implement this, the eligibility for issue of REC should be extended to all the RE projects, which should now be registered with REC registry. This draft document, is a partial implementation of recommendation which has been given earlier^{1,2,3,4,5}. It is recommended that this philosophy be further extended as per the suggestion given herein.
- 2. Eligibility for plants participating in non-green products of Power Exchanges:** The condition for eligibility of the entities to participate in REC mechanism is as stated “*.....not having entered into any power purchase agreement for full or part capacity related to such generation to sell electricity, with the obligated entity for the purpose of meeting its renewable purchase obligation, at a tariff determined under section 62 or adopted under section 63 of the Act by the Appropriate Commission for which participation in REC scheme is sought as per the REC Regulations...*”. The current design of REC mechanism provides for sale of non-green product at APPC. To encourage significant RE capacity addition under REC Mechanism, such projects may also be allow to sell the grey electricity into non-green segments of power exchanges (e.g. DAM, RTM etc).

¹ Comments by Dr. Anoop Singh, Statement of Object and Reasons, “CERC (Terms and conditions for recognition and issuance of Renewable Energy Certificate for renewable energy generation) Regulations, 2010.” - https://cercind.gov.in/Regulations/Statement-of-Reasons_SOR_for-CERC_REC_regualtions_2010.pdf

² Singh, A. 2010. “Economics, Regulation and Implementation Strategy for Renewable Energy Certificates in India” in India Infrastructure Report 2010, Oxford Univ. Press. - https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3440253

³ Comments by Dr. Anoop Singh, Statement of Reasons, “CERC (Terms and conditions for recognition and issuance of Renewable Energy Certificate for renewable energy generation) (Second Amendment) Regulations, 2013” - <https://cercind.gov.in/2013/regulation/sor15.pdf>

⁴ Comments by Dr. Anoop Singh on “WBERC (Co-generation and Generation of Electricity from Renewable Sources of Energy) (First Amendment), Regulations, 2020.” - <https://wberec.gov.in/sites/default/files/SOR71.pdf>

⁵ CER comments on “Discussion paper on Redesigning of Renewable Energy Certificate (REC) Mechanism on 7th June, 2021” by Ministry of Power - https://cer.iitk.ac.in/blog/new_blog/?id=ODQ1ue

3. **REC Multiplier (Clause No. 8.2):** The certificate multiplier set as per the procedure is as follows in clause 8.2: “...*The Certificate Multiplier for the period of three years from the date of effect of REC Regulations is as under... the Commission may, from time to time, based on the review of the maturity level and cost of various renewable energy technologies, revise the Certificate Multiplier.*” A relatively medium-term projection of multiplier (as a sunset clause) would provide a trajectory for cost reduction for the investors as well as technology⁴.
4. **REC Multiplier for Hydro (Clause No. 8.2):** As per MNRE notification, hydro power plants of capacity greater than 25 MW, commissioned after the 8th March 2019 would be considered as renewable energy projects, and hence will also now be eligible for registration under the REC mechanism and issue of RECs thereof. A clarification to this regard may be added. Also if the same multiplier would be applicable for all types of hydro projects. Larger hydro project would have are likely to have cost advantage over small ones and would gain accordingly.
5. **Denomination of Certificate (Clause No. 8.4):** As per clause 8.4, “*The Certificate Multiplier once assigned to a REGS/CGP will remain valid for a period of fifteen years from the date of commissioning. Beyond this period the REGS/ CGP shall be issued one Certificate for one MWh of electricity generated and injected or deemed to be injected into the grid.*” The issuance of the ‘Certificate Multiplier’ should be reduced gradually keeping in view the philosophy of the Sunset Clause², as illustrated.

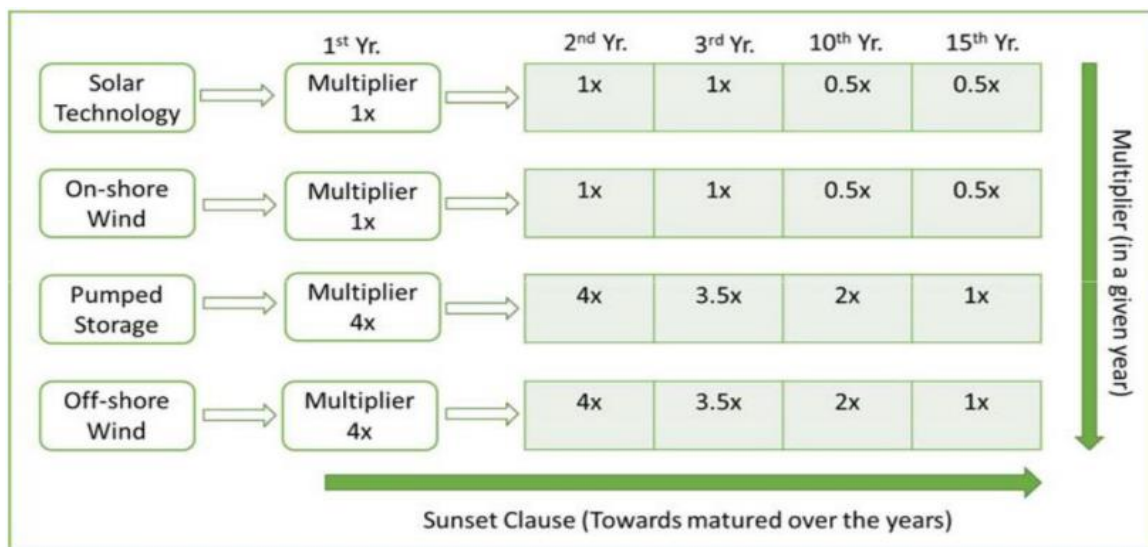


Figure: Sunset Clause

6. **Validity of Certificates (Clause No. 9.2):** *In case an eligible entity has obtained accreditation or registration on the basis of false information or by suppressing material information and the accreditation or registration of such entity is revoked at a later date, the Certificates already issued to such entity, but not redeemed, shall stand extinguished from the date of issue of such Certificates and in respect of Certificates already redeemed, such entity shall deposit in the*

Central Agency, the amount realized from sale of such Certificates along with the interest at the rate of two hundred (200) basis points above the State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) of one year tenor..”

Words “*shall deposit*” may be replaced with “shall pay the penalty” as the connotation of deposit carries a meaning that it can be claimed later.

- 7. Procedure for Accounting of Generation in respect of eligible entities (Clause 1.0):** “*REGS based on Hybrid technology i.e. renewable energy generation based on combination of two or more source of technology shall require separate energy accounting for capacity linked to each source of technology*”.

In case a hybrid RE plant generates electricity from multiple RE technologies, the RECs to be issues with respect to each technology need to be based on apportioned electricity generated from the respective technology. The approach for such apportionment needs to be specified. The following alternate methodologies may be adopted⁶:

- a. Gross metered generation method** – In case, separate metering arrangements are available for the respective technology, the same may be used
 - b. Normative CUF based energy injection** – In the absence of separate metering, normative CUF (for the location) can be used to apportion the respective technology-specific RECs. The REC registration process and the issue of RECs should thus allow for multiple technologies with differential multipliers.
In case of hybrid technologies with battery energy storage system, similar approach be used and applied for the energy to be supplied from the battery.
- 8. Cross-border trading of RECs:** The process should include the cross border trade and the mechanism and functions should be specified for cross border as well as international trading of RECs. RECs can thus be exported through international trading mechanism. Provision for the same needs to be incorporated in the Regulation as well.
- 9. Energy accounting and issue of RECs for in-firm power:** It should be clarified whether the energy injected on account of infirm power of the eligible REGS/CGP registered under REC Mechanism will be considered for issuance of RECs or not.

⁶ CER opinion on National Wind-Solar Hybrid Policy of MNRE announced on May 14, 2018, published in its newsletter Issue-03 of Volume 01. https://cer.iitk.ac.in/newsletters/regulatory_insights/Volume01_Issue03.pdf