

Ref: PXIL/S&R/24032022/1 Date: 24th March 2022

To

The Secretary Central Electricity Regulatory Commission

3rd and 4th floor, Chanderlok Building 36 Janpath New Delhi - 110001

Sub: Public notice issued by CERC on "Draft Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2021 – Observations, comments and suggestions from Power Exchange India Limited.

Ref: Public Notice No. RA-14026(11)/1/2022/CERC dated 15th February 2022

Dear Sir,

The Renewable Energy Certificate (REC) mechanism has played an instrumental role in promoting investments in Renewable energy generation and meeting the Renewable Purchase Obligation (RPO). The REC mechanism has certain distinct advantages over physical purchase of Renewable energy as highlighted below:

- Promotes competition within the Renewable Energy technologies
- Reduces the Transaction Costs
- Offer flexibility in procurement both in terms of timing and quantity

The draft REC regulation will result in deepening and strengthening of REC mechanism by enabling perpetual validity to Certificates till they are redeemed, abolishing the concept of Floor and Forbearance price for transacting in RECs instead allowing demand-supply dynamics to determine the price of transaction, fungibility of RECs across different technologies, providing multipliers in issuance of RECs to promote adoption of newer technologies, and by permitting Eligible entities to sell Certificates to Trading licensees mutually, etc. These new measures will help RE developers to optimise their portfolio by offering capacities under REC mechanism.

We request the Hon'ble Commission to kindly take our suggestions on record and grant us an opportunity to present them to the Commission and its staff.

Thanking You,

Yours faithfully,
For **Power Exchange India Limited**

Authorised Signatory



PXIL suggestions and observation on Draft CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022

The "draft CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022" (**REC regulation**) is a welcome initiative with significant focus on enlarging and increasing the depth of REC market.

The REC regulation aims to aid the country in meeting its climate targets and provide a market-based approach for migration from usage of conventional power to Renewable power. This will help in meeting the target of 500 GW RE capacity by 2030 and the related development of Green economy in the country.

Sustainable energy economy and Renewable targets

India aims a massive transition towards Green energy, especially with the Government's goal to increase RE installed capacities to 175 GW by 2022 and around 500 GW by 2030. To meet these ambitious renewable energy targets as committed during the COP26 Climate Conference, a market-based approach that allows flexible, transparent, and competitive procurement will usher a new and sustainable energy order.

The RECs, which includes all renewable and environmental attributes, allows obligated entities – Discoms, Open access consumers, Captive units as well as voluntary consumers to procure RE without investing capital and is hence positioned as a key market instrument. With climate change emerging as a key risk confronting India and other major economies across the globe, the transition to a sustainable energy economy becomes inevitable in the future.

Evolution of REC market

PXIL submits that since introduction of REC Contract from March 2011, the purchase of RECs by Obligated entities such as Discoms, Open access consumers and Captive power plants from different part of the country has enabled such entities to meet their Renewable Purchase Obligation (RPO) in the most efficient and competitive manner. The Exchange platform has greatly helped in accelerating Renewable energy penetration in the country's energy mix.

The REC market has enabled nearly 4,970 MW capacity to adopt this mechanism and has positioned it-self as a market-based instrument playing a vital role in accelerating the growth of renewables in the country, permitting obligated and voluntary entities to buy renewable energy in the form of RECs through a market based mechanism to fulfill their RPO requirement.

The concept of RPO as a driver for renewable penetration has been accepted by all the State Electricity Regulatory Commissions (SERCs) and Joint Electricity Regulatory Commission (Jt.



ERC) over the past 11 years. The country's ambitious green target is anchored in RPO and this has helped in directing and achieving exponential growth in investments over the past few years.

Fungibility in RECs issued across varied technologies resulting in Integrated RPO

The provision for integrating the RECs of Wind, Solar, Hydro, Municipal Solid Waste (MSW) and non-fossil fuel-based cogeneration, Biomass and Biofuel or any other technology category into one category of REC is welcome first step that results in integrated RPO.

An integrated RPO, which is technology agnostic, will diversify the supply mix bringing more elasticity on the supply side rather than relying on a single technology. In the long run, integrated RPOs will incentivize cost-effective investments, induce competition amongst various technologies and increase the compliance while reducing the costs.

RECs and Green Contracts complement each other

PXIL has introduced the GTAM Contracts from 24.03.2021 and the IDAM Contract from 20.12.2021 that enables procurement of RE to fulfill RPO targets, however, there remains a gap between notified RPO targets and achievements fulfilled by Obligated entities.

The SERCs and Jt. ERC have mandated purchase of RECs on Exchange platform to fulfill prescribed RPO targets as provided under Section 62 of the Electricity Act 2003. In case of Discoms, the expenditure made in REC purchase is a 'pass-through', hence the need and necessity to mandate transparent and efficient process for purchase of RECs plays a crucial role in accepting REC purchase for RPO fulfillment.

Discoms with surplus RE generation have additional avenue of trading surplus RE or convert the same into REC. Thus, the Green Contracts and RECs complement each other and serve the requirements of the constituents in their own unique and efficient ways. For an Obligated entity, Green Contract is appropriate, and the REC is suitable when it requires RPO fulfillment on standalone basis.

The proposed REC regulation revamps the REC mechanism by aligning it with the emerging changes in the power scenario and promotes different Renewable energy sources.

PXIL submits the following clause wise comments / suggestions on the draft regulations.

1. Regulation 4 Eligibility for Issuance of Certificates

"Regulation 4 Eligibility for Issuance of Certificates



- (2) A renewable energy generating station shall be eligible for issuance of Certificates, if it meets the following conditions:
 - (a) the tariff of such renewable energy generating station has not been either determined or adopted under section 62 or section 63 of the Act, or the electricity generated is not sold either through an electricity trader or in the Power Exchange, for RPO compliance by an obligated entity;
 - (b) such renewable energy generating station has not availed any (i) waiver or concessional transmission charges or (ii) waiver or concessional wheeling charges or (iii) facility of banking of electricity.
- (3) Captive generating stations based on renewable energy sources and meeting the conditions as specified under clause (2) of this Regulation in respect of renewable energy generating stations shall be eligible for issuance of Certificates: Provided that the Certificates issued to such captive generating stations to the extent of self-consumption, shall not be eligible for sale."

Suggestions:

PXIL submits that waiver of transmission charges or any other waivers of similar nature, are concessions granted to the Renewable energy sector to give them greater access to the market-place. Such concessions have limited time of applicability and have been cautiously considered by investors while committing capital to a project.

Under the REC framework, various types of entities are eligible for issuance of Certificates i.e. RE plants, Captive generating station based on renewable energy sources, Distribution licensees and Open access consumer. PXIL submits that equitable treatment is made applicable to such entities that participate in the REC framework on matters related to waiver/concessions/banking., equitable treatment will promote competition in market-based transaction in Certificates.

2. Regulation 11 Exchange and Redemption of Certificates

- "(1) The Central Agency shall maintain a Registry of Certificates.
- (2) The Certificates shall be exchanged through power exchanges or through electricity traders in such periodicity as may be stipulated by the Central Agency in the Detailed Procedure.
- (3) The Power Exchange(s) shall seek approval of the Commission, if required under the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 to the respective Bylaws and Rules for exchange of Certificates in the Power Exchange(s).
- (4) Exchange of Certificates through electricity traders shall be subject to the following:



- (a) The eligible entities shall inform, in advance, to the Central Agency about the number of Certificates intended to be sold through electricity traders;
- (b) The Central Agency shall block the Certificates in the Registry as informed by eligible entity in terms of sub-clause (a) of this clause;
- (c) The Certificates blocked under sub-clause (b) of this clause shall not be allowed to be exchanged through Power Exchange(s);
- (d) The electricity trader shall intimate to the Central Agency consequent upon sale of the Certificates blocked under sub-clause (b) of this clause;
- (e) The trading margin to electricity traders for trade of Certificates shall be governed by the Trading Licence Regulations, 2020, treating one Certificate representing one Megawatt hour of electricity.
- (5) The Certificates once exchanged through Power Exchange(s) or through electricity traders and used for compliance of RPO by the obligated entities, shall stand redeemed."

Suggestions:

PXIL welcomes the provision related to sale of RECs by eligible entities to Trading licensees, the same would provide an added avenue of cash flow and avoid piling up of inventory at Seller's end. PXIL submits that check and balances need to be in place for implementation of the above provisions to avoid un-due piling of inventory / hoarding of RECs by Traders.

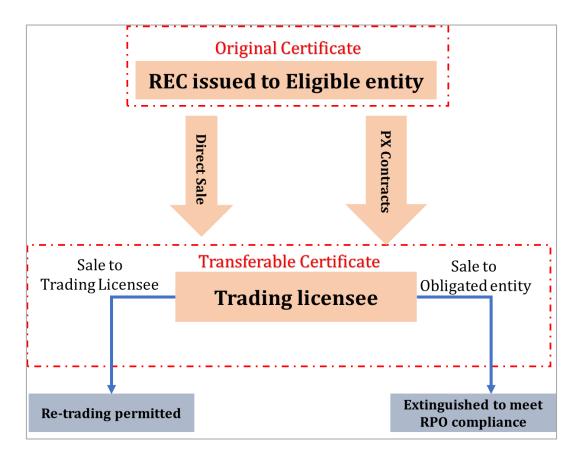
Role of Trading licensees

The Regulation 11(2) provides for RECs to be traded by Trading licensees on bilateral basis at such periodicity to be prescribed by Central Agency. Based on guidelines / procedures prescribed by Central Agency, the Trading licensees may intend to purchase RECs to utilise the same for two purposes:

- a. Voluntary usage to promote sustainable consumption
- b. Sale to other Obligated entities that purchase to fulfill RPO targets

In addition to voluntary purchase, which in itself may be a smaller portion of overall transactions, the RECs purchased by Trading licensees is expected to mostly be with an intent to resale the same to an Obligated entity at a future period, hence, such RECs need to be identified as 'Transferable Certificate' and are to be distinguished from 'Original Certificate (RECs)' issued to eligible entities.





Such 'Transferable Certificate' should be purchasable by any Trading licensee, with transfer of title/ownership in the name of Trading licensee, either through direct purchase or even on specially notified Contracts introduced on Power Exchanges. Such specially notified contracts would be different from the Extinguishment Auctions.

Extinguishment Auctions would be auctions run on monthly basis, or on a periodicity to be notified in advance, by the Power Exchanges for the purpose of transacting RECs for their extinguishment to meet RPO compliance. Once the REC is transacted through the Extinguishment Auction, the REC would be extinguished from the records of the Seller and credited to the Buyer for meeting RPO.

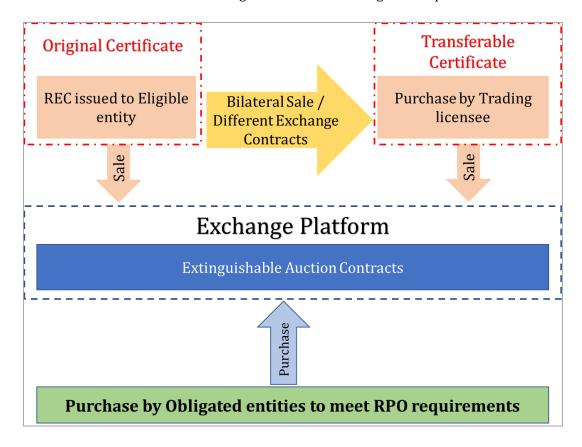
The distinction between two types of Certificates shall be as under

Particulars	Original Certificate	Transferable Certificate
Ownership	Eligible entities	Trading licensee
Re-trading	No	Yes
	(Obligated entity is not	(Re-trading upto eventual
	permitted to undertake Sale	purchase by Obligated entity
	and may utilise it to meet RPO	to meet RPO requirement)
	requirement)	



Particulars	Original Certificate	Transferable Certificate
Change in Ownership	No	Yes
	(Details of Eligible entity	(Reflects new ownership
	remains for perpetuity)	details after every
		transaction)
Validity	Perpetuity	Valid for 1-year from the date
	(Extinguishes when	of transfer of ownership
	transacted on Exchange	
	platform through	
	Extinguishment Auctions)	

PXIL submits that Obligated entities shall purchase Original Certificate from Eligible entity or "**Transferable Certificate**' from Trading licensees for fulfilling RPO requirements.



The Power exchange shall provide multiple avenues to Obligated entities for transacting in RECs:

- a. Existing Uniform Price auction as approved in Order dated 17.09.2010 in Petition no 215/2010
- b. Proposed new REC Contracts to be introduced separately by Power exchanges



PXIL submits that the above provisions may please be incorporated as under in Regulation 11:

- "(1) The Central Agency shall maintain a Registry of Certificates.
- (2) The Certificates shall be exchanged through power exchanges or through electricity traders in such periodicity as may be stipulated by the Central Agency in the Detailed Procedure.
- (2A) The Certificates exchanged through electricity traders shall be recognised as 'Transferable Certificates' that shall be permitted for re-trading with other electricity traders. Provided further that the Registry maintained by Central Agency under provision of Regulation 3 (2) shall trace the 'Transferable Certificate' to the 'Original Certificate' till they get transacted in Extinguishable Auction Contracts that operate under Clause (3)

Provided that the 'Transferable Certificates' shall be

- Valid for re-trading with any other electricity trader within a period of 1-year from the 'date of transfer', or
- ii. Valid for purchase by Obligated entity, through Extinguishable Auction Contracts operated by Power exchanges, to meet RPO requirement
- (3) The Power Exchange(s) shall seek approval of the Commission, if required under the Central Electricity Regulatory Commission (Power Market) Regulations, 2021 to the respective Bylaws and Rules for exchange of Certificates in the Power Exchange(s).
- (4) Exchange of Certificates through electricity traders shall be subject to the following:
- (a) The eligible entities shall inform, in advance, to the Central Agency about the number of Certificates intended to be sold through electricity traders as 'Transferable Certificates';
- (b) The Central Agency shall block the Certificates in the Registry as informed by eligible entity in terms of sub-clause (a) of this clause **and designate such blocked certificates as** 'Transferable Certificates';
- (c) The Certificates blocked under sub-clause (b) of this clause shall not be allowed to be exchanged through Power Exchange(s);
- (c) The electricity trader shall intimate to the Central Agency consequent upon sale of the Certificates blocked under sub-clause (b) of this clause;
- (d) The Trader shall exchange the 'Transferable Certificates' mutually with other Trader or to **Obligated entity through Power Exchange(s)**;



- (e) The trading margin to electricity traders for trade of Certificates shall be governed by the Trading Licence Regulations, 2020, treating one Certificate representing one Megawatt hour of electricity.
- (5) The Certificates once exchanged through Power Exchange(s) or through electricity traders and used for compliance of RPO by the obligated entities, shall stand redeemed."

3. Regulation 13 Pricing of Certificates

"(1) The price of Certificate shall be as discovered in the Power Exchange(s) or as mutually agreed between eligible entities and the electricity traders:

Provided that the Power Exchange(s) and the electricity traders shall report all transactions with details including but not limited to volume, price, buyers and sellers to the Central Agency on a monthly basis.

Suggestions:

PXIL submits that Regulation 13 (1) prescribes provisions related to Pricing of Certificates applicable for transactions undertaken by market participants

- a. **Price discovery on Power exchange**: The participants on REC Contract on Exchange platform are Obligated entities that are keen to purchase RECs to fulfill their RPO targets on the counterpart side are Eligible entities or Trading licensee. The transaction has been accepted by market participants as Exchange platform ensures fair, neutral, efficient, and robust price discovery as prescribed under Regulation 8(2) of CERC (Power Market) Regulations, 2021.
- b. **Mutual arrangement and consideration between Eligible entity and Trading licensee**: The participants in envisaged arrangement are Eligible entity and Trading licensee, the transactions are based on negotiations between the two entities. The terms and condition and consideration of such transaction differ and is solely dependent on nature of businesses undertaken by negotiating parties.

Further, since such 'Transferable Certificate' may undergo re-trade between different Trading licensees prior to its purchase by Obligated entities on Exchange platform to fulfill RPO requirement.

PXIL submits that to recognise such modes of transaction, Regulation 13 may please be modified as under:



(1) The price of Certificate discovered in Power Exchange(s) shall comply to provisions provided in Regulation 8(2) of CERC (Power Market) Regulations, 2021

Provided that price of Certificate may be mutually agreed between eligible entities and electricity traders or between two electricity traders:

Provided that the Power Exchange(s) and the electricity traders shall report all transactions with details including but not limited to volume, price, buyers and sellers to the Central Agency on a monthly basis."

4. Regulation 14 Validity of Certificates

"(1) The Certificates issued shall remain valid until they are redeemed:

Provided that where an eligible entity has obtained accreditation or registration on the basis of false information or by suppressing material information and the accreditation for Certificates or registration for Certificates 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 to 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

Suggestions:

PXIL welcomes the provision wherein the Certificates issued to Eligible entity shall remain valid till perpetuity. The provision enables Eligible entities to transact RECs based on demand-supply dynamics and obviates from pressures related to desperate sale when RECs are near-to- expiry.

PXIL further submits that Regulation 11 enables Trading licensees to purchase REC and sell them to Obligated entities based on their requirement to fulfill their Obligation. The hoarding of RECs by Trading licensees may distort transaction in REC market resulting in sudden volatility in discovered price.

PXIL submits that to avoid inadvertent inventory built-up / hoarding by a Trading licensee, resulting in price volatility due to such distortions in REC market, the validity of Certificates needs to be segregated based on their ownership i.e. validity of Certificates issued to Eligible entity and to Trading licensee shall be different. Further, the Certificates issued to Eligible entities shall remain valid till redeemed and the 'Transferable Certificate' possessed by Trading licensee shall remain valid for a period of one (1) year from the date of transfer.



PXIL submits that Regulation 14 may be modified as:

- "(1) The Certificates issued to Eligible entity shall remain valid until they are redeemed:
- (2) The 'Transferable Certificate' transferred to Trading licensee shall have shelf life of one (1) year from the date of transfer:"

5. Regulation 16 Detailed Procedure

- "(2) The Detailed procedure shall contain procedures including, but not limited to
- (d) Periodicity for exchange of Certificate through Power exchange or through electricity traders as referred to in clause (2) of Regulation 11 of these regulations."

Suggestion:

PXIL submits that it has proposed distinction between 'Transferable Certificate' and 'Certificate' issued to Eligible entities. The transaction in two Certificates differ due to the nature of such Certificates. PXIL submits that Regulation 6 (2) (d) may be modified to reflect the transaction under such Certificates:

- "(2) The Detailed procedure shall contain procedures including, but not limited to
- (d) Periodicity for exchange of Certificates issued to Eligible entities for transaction in Power exchange
- (e) Periodicity for reporting exchange of 'Transferable Certificates' by electricity traders as referred to in clause (2) of Regulation 11 of these regulations."

6. Regulation 16 Detailed Procedure

"(2) The Detailed procedure shall contain procedures including, but not limited to

Suggestion:

Issuance of 'Certificate of Purchase of REC(s)' by Power Exchange to a Buyer

PXIL submits that based on directives issued in Order dated 17.09.2010 in Petition no 215 / 2010, the 'Certificate of Purchase of REC(s)' to each Obligated entity whose trades are cleared in a trading session. Each Certificate issued to an Obligated entity contains host of transaction information as Certificate number, quantum of Solar and Non-Solar REC(s) purchased, trading date, trading session, etc., this information is then submitted to Central Agency for maintaining a repository of 'Certificate of Purchase of REC(s)' issued to Buyers. The information maintained at



repository is later accessed by State Agency to verify details regarding purchase of REC(s) made by a Buyer.

"Para 14.

As per detailed procedure issued by NLDC (Central Agency) for REC Mechanism, Power Exchange(s) are required to issue a certificate of purchase of REC to the buyers. The Exchange is directed to issue to a buyer an electronically printable certificate along with REC account statement pertaining to such certificate. To have consistency in the market, a standard certificate which a power exchange is required to issue to a buyer of Renewable Energy Certificates is annexed with the order. The Trade information shall be sent to the Central Agency as per the agreed data interchange formats which shall also include the Certificate number of the certificate which is being issued by the Power Exchange to a buyer. The State Agency may verify the details regarding purchase of RECs by a buyer from REC Registry Website. Accordingly, the applicant shall modify and incorporate the provisions for interchange of data information and issuance of such certificates in its Business Rules. It is further directed that in order to bring consistency in the market, the certificates shall be issued to buyers within five days from the date of trading of such certificates. The existing provisions shall be modified by the Petitioner accordingly."

PXIL humbly requests the Hon'ble Commission to include the above directive at Regulation 16 (2) as under:

"(f) Procedure for issuance of standard certificate by Power exchange to buyer of REC(s)."

Other Suggestions:

- 7. **Different sessions offered to enable Obligated entities to fulfill RPO requirement**PXIL submits that the Exchange offers different sessions to enable Obligated entities to transact in RECs based on directives issued by Hon'ble Commission from time to time:
 - i. Separate Solar and Non-Solar session: Based on directives issued in Order dated 17.09.2010 in Petition no 215/2010, PXIL offers separate auction windows for transacting in Solar and Non-Solar segments. The RE specific contract session enable Obligated entities meet their RPO requirements of such type
 - ii. Separate Vintage Non-Solar session for RECs issued prior to 01.04.2017



Based on directives issued in Order dated 30.03.2017 in Petition no 2/SM/2017, PXIL offers separate auction window for transacting in Non-Solar RECs issued prior to 01.04.2017

The Hon'ble Commission is requested to clarify on the status of certificates already issued to Eligible Entities and whether such certificate would retain their separate Solar / Non-Solar / Vintage tags and whether separate trading sessions are to be operated by Power exchanges to enable participants to transact in them.

We submit that converting even the older certificates through appropriate multipliers would enable the possibility of running a common trading session for all technologies in the Exchange Platform. A common trading session would give fillip to the supply side, thereby reducing the price volatility in RECs, ease costs of compliance and improve the overall efficiency of the market. This fungibility in purchase of RECs would prevent any loss in liquidity for any category and help in easing the cash flow situation of plants as RECs get sold in shortest possible time.