Annexure-1:- Draft Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022

The Renewable Purchase Obligation (RPO) Provisions in the Electricity Act, 2003 are the most significant tools for development of renewable energy in the country. The REC mechanism is an important part of implementing RPO regulations.

Renewable Energy Certificate (REC) was introduced in India, in the month of January 2010, after the notification of Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010. The main objective of launching REC is to address the geographical disparity in the renewable resource. There was a need for an incentive mechanism, which would result in commercial benefits for the Renewable Energy (RE) generators on the one hand and to ensure that even those states which are deficient in RE potential are able to meet their individual Renewable Purchase Obligations (RPOs), thereby facilitating inter-state RE transactions. Since the REC mechanism has been notified for a long time now, the objectives are quite clear. Renewable Energy Certificate (REC) mechanism essentially seeks to address the mismatch between availability of RE sources and the requirement of the Obligated Entities to meet their renewable purchase obligation across States. The other objectives include the following;

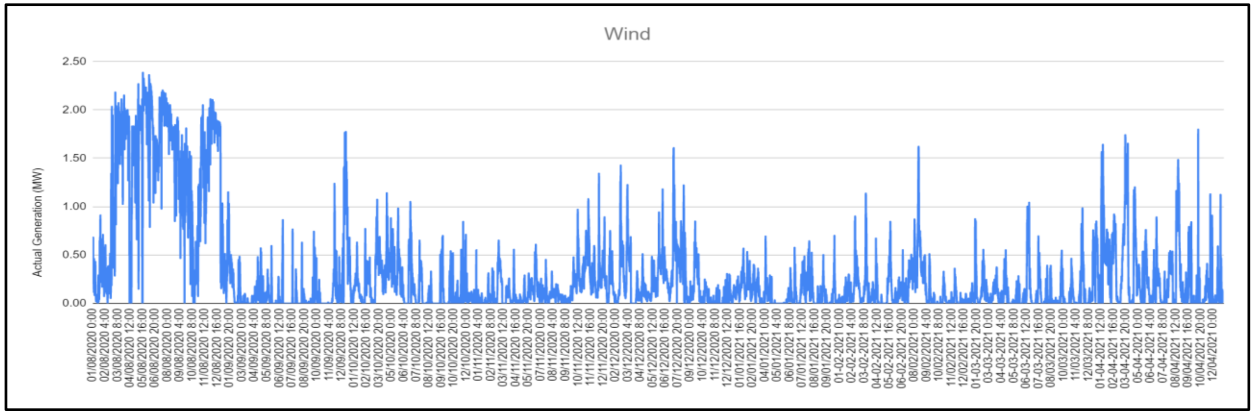
- Induce higher investment in the renewable sector
- Increase inter-state RE transactions
- Encourage higher participation of smaller players
- Increase financial feasibility of RE projects
- Effective implementation of RPO obligations across all states
- Reduce transaction cost on RE procurement

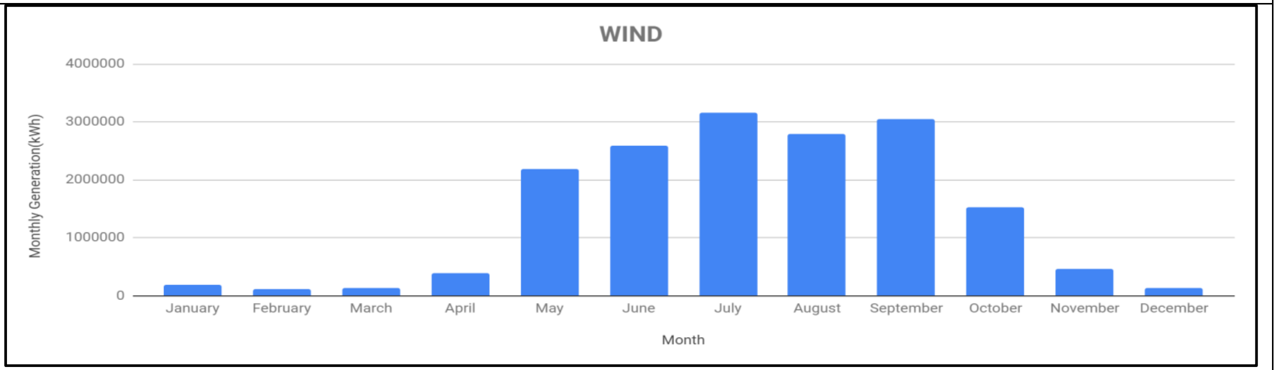
REC mechanism has been adopted internationally to promote generation and procurement of renewable energy. India has observed consistent growth in the REC trades over the years. However, even after ten (10) years of enactment of REC the situation is not changed at all in India. RE generators who has opted this mechanism are struggling to repay their loans. While the RECs are being primarily utilised by obligated entities, traction is yet to begin in the voluntary participation.

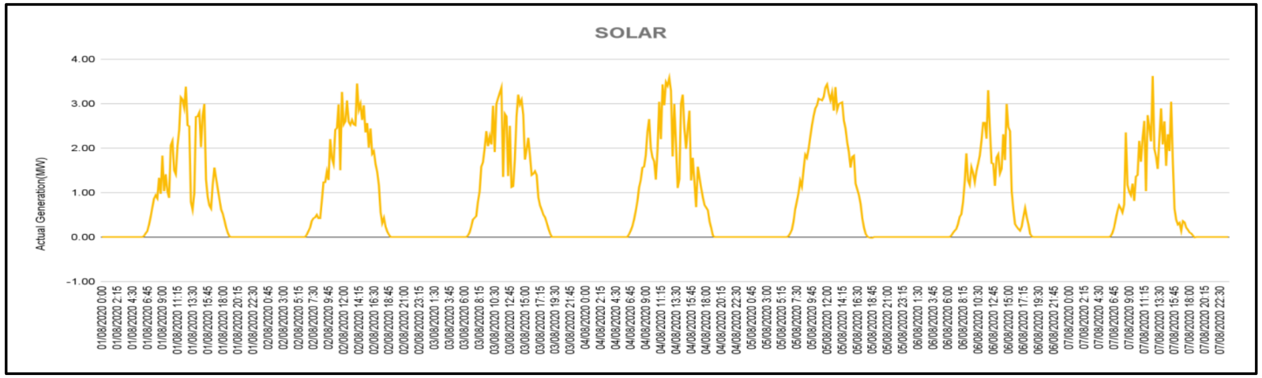
The overall trend of trading of REC however is worrying as the REC sale bids are much more than the buy bids in each and every trading and as a result there are large number of RECs which are remaining unsold. The primary reason of the large volume of unsold RECs is lack of enforcement of the renewable purchase obligations. Further, lack of participation from Distribution companies and large captive power plants is the main reason behind the price crash and accumulation of the RECs and that's why there is a need for revamping the REC mechanism. The generators of REC are feels cheated and defeated after almost a decade of its notification and more than eight and a half year of its operationalization.
As we look forward, India has set for itself a very ambitious renewable energy target. This cannot be achieved without a robust market which is primarily driven by the REC mechanism.

The plan to redesign the REC mechanism by CERC is very timely because over the last decade the nature of renewable energy projects in the country has changed dramatically. At the same time it is also very clear that the REC mechanism has not been functioning optimally, especially over the last few years.

Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
	Clause 4(2)(b)(iii) RE project is not eligible for RECs if it has availed *"facility of banking of electricity*	Eligibility of REC is limited to the renewable energy generation station that does not avail the facility of banking of electricity.	It should be noted that most RE projects have significant intra-day and seasonal variation in generation. For example, solar projects generate only for 8-10 hours a day, wind projects generate 60-80% of annual generation during the "high-wind" season that lasts 3-4 months, or small hydro projects in the Himalayan generate a significant portion of their electricity in the summer. (See data provided below for annual generation of wind and a week's generation for a solar plant) For these reasons, banking facilities are essential for RE projects to be viable. Without banking facilities, RE projects that will be set up will be much smaller in capacity, as their capacity will have to be matched with the consuming unit. Banking is not an incentive, it is an existential requirement of Renewable Energy Stations and imposition of this condition may amount to depriving renewable energy stations from availment of benefits provided by this Regulation. Earlier regulation had allowed REC eligibility if the project did not avail **preferential banking**. Banking facility does not provide any monitory benefit to generator, as the banking is allowed only

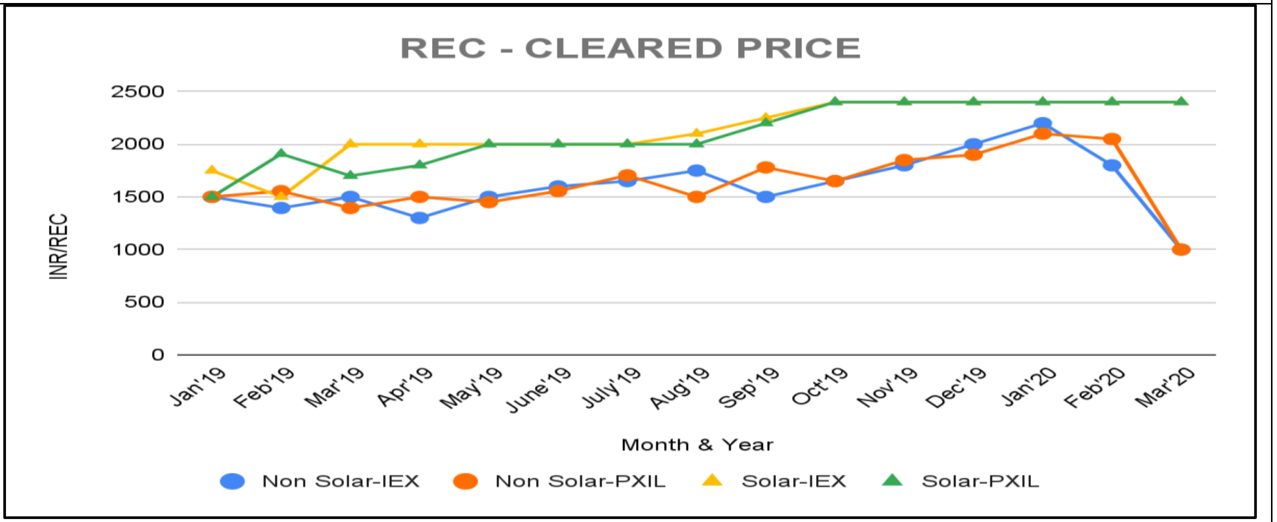
Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
			during certain hours & withdrawal of banked power is not permitted during certain hours as well as banking charges are also applicable, therefore the cost of banked energy is more than the cost of power under open access. In view of above, availing Banking facility should not be reason for dis-qualification under REC frame work as this will make most captive projects ineligible for REC. Wind(5.76 MW) - From 01/08/2020 to 30/04/2021  Wind(10.5 MW) –One Month Generation

<table>
<tr><th>Sr. No.</th><th>Clause No.</th><th>Proposed Discussion</th><th>Comments/ Suggestions</th></tr>
<tr><td></td><td></td><td></td><td>


Solar(5 MW) - 1 Week Generation


</td></tr>
<tr><td></td><td>Clause 4.3: Issuance of certificates to captive generating stations based on renewable</td><td>“Provided that the Certificates issued to such captive generating stations to the extent of self-consumption, shall not be eligible for</td><td>Inclusiveness of CGP in REC mechanism irrespective of date of commissioning is a welcome step to broaden the coverage of CGP. However, the proposed condition on eligibility based on self-consumption will require more clarity and detailed distinguishing guidelines to define the saleable RECs for CGPs.</td></tr>
</table>

Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
	energy sources	sale.”	
	Clause 4(4): Distribution licensee purchasing renewable energy in excess of the RPO are eligible for issuance of certificates for such excess electricity.		We welcome this step. However, to promote transparency in assessment of RPO, we request that the Commission make it mandatory for Discom’s seeking RECs to provide source wise details of RE procurement as a pre-condition for issuance of RECs. Such data should be certified by the SLDC, and should also be made publicly available.
	Clause 11: Exchange and redemption of Certificates	Draft regulation proposes to allow direct trading of RECs through electricity traders. Going forward, REC can be exchanged through power exchanges or through electricity traders. This will definitely enhance	Allowing direct trading will bring in two key advantages. i.e. it will give long-term visibility to the buyers of the REC and hence they can easily plan to fulfill the RPO. Therefore, it is important to carefully design the roles and responsibilities of traders. In addition to this, we propose that such transactions should also be allowed through the OTC marketplace, as defined in the Power Market Regulations. Trading should be allowed on all recognised marketplace. <u>Explanation on requirement of OTC Market place:</u> From the trade analysis from January 2019, we can see the REC price has been consistently trading over 60% of Floor prices in terms of Non Solar and 140% in case of Solar. Please refer the graph given below;

Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
		the role of traders in REC trading.	 From the above table, it is evident that the market players are willing to purchase RECs over the Floor prices for Non Solar and close to Forbearance price in case of Solar RECs. This shows that the RECs prices are well driven by the Market participants and market forces. We therefore suggest, further to ease the process of procuring RECs in a more cost effective and efficient manner, REC Trading should be allowed through OTC marketplace and more options should be provided to sellers/buyers to buy/sell RECs in the country. This will make the process more transparent, efficient and competitive thereby helping REC price mechanism to be more stable.
	Clause 12.2: Promotion of new and high cost	The multiplier for new RE Technology is a great initiative and will incentivize and	Projects which are commissioned prior to this regulation should also be taken under the ambit of REC multiplier. The Honorable Commission can also take into consideration the eligibility of the projects which opt for third party sale/ non-FIT power sale, irrespective of the date of commissioning. For example, SERC determined tariff for biomass projects in Maharashtra is Rs 5.55/kWh[1]. If these projects were to sell power

Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
	technologies in RE and the provision of multipliers for issuance of RECs. Certificate multiplier is introduced for the period of three years or as may be decided by the Commission.	pave the way for easy "market entry" of new and emerging RE technologies.	in the open market, or if the PPAs were to end, they would need the help of the "multiplier" to remain viable.
	Clause 13 & 14: Removal of Validity period of RECs; Floor & Forbearance Price	Limited validity of RECs served an important purpose in the design of RECs markets. It acted as a safeguard against hoarding or market manipulation, ensuring that RECs always traded at a	In light of the frequent extensions required in the past, it appears reasonable to remove a fixed validity of RECs altogether. However it needs to be done in conjunction with keeping another important safeguard in place - namely forbearance price - this will ensure that RECs always trade within reasonable bounds.

Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
		reasonable price, and that it did not become a speculative commodity. However, the regulators have been required to extend the validity of RECs several times. This has mainly been driven by the fact that RPO implementation has been a major concern	
Additional Comments			
1	**Undue benefit to RPO obligated CPPs:**		While discussing REC for CPPs, we would also like to bring to your notice that there has been a relaxation given to the CPPs in terms of incremental RPO year on year basis, which is implemented on the rest of the obligated entities. Earlier, the Ministry of Power(MoP) had published a clarification on its past orders of long-term RPO trajectory which stated that, *"RPO of the CPP may be pegged at the RPO level applicable in the year in which the CPP was commissioned. As and when the company adds to the capacity of the CPP, it will have to provide for additional RPO as obligated in the year in which new capacity is commissioned. There should not be an increase in RPO of CPP without any additional fossil fuel capacity being added"* Subsequent to the order from MoP, several states have amended their regulations to cap the RPO on CPPs. This position of MoP creates a few issues:

Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
			• According to section 86(i)(e) of Electricity Act 2003, RPO is to be determined on "percentage of the total consumption", and not on capacity, as this clarification proposes to do. • This order has the effect of reduction of demand of renewable energy, and consequently RECs as well The Supreme Court has made important observations on the applicability of RPO on captive generators. The SC said the RPO applicability on captive and open access consumers is well within the ambit of the Electricity Act 2003 and the cost of fulfilling the obligation cannot be held above the larger public interest. In our opinion, CPPs should also be treated equally as the other obligated entities. Hence, CPPs should follow the same RPO trajectory that is set for all other obligated entities. We request CERC or FOR to clarify the applicability of RPO on CPPs, and whether CPPs can be given preferential treatment by reducing or capping RPO for them.
2	**4.6**	Under the existing Regulations captive generating stations - except those which are commissioned between 29.09.2010 and 31.03.2016 and registered before 30-06-2016- are not eligible for REC. However, in the proposed REC Regulations, the	The commission restricted to off-set the RPO for the group of companies, however there may be possibility that a company (have RPO obligation), developed captive project through SPV model. In such circumstances, where RE Captive Generating Stations developed through SPV, the RECs generated from to the extent of self consumption shall be permitted to off-set the RPOs of its Group Companies and 100% subsidiaries of the Group companies.

Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
		Commission has decided to allow captive generating stations based on renewable energy sources to participate in the REC mechanism irrespective of its date of commissioning subject to the condition that the RECs issued up to self-consumption shall not be eligible for sale but **can be used only to offset RPO of such CGSs.**	
	Explanatory Memorandum - 6.4	The Commission dealt various petitions with regard to the processes involved in change in name or change in	The draft regulations has considered only CTU connected projects, i.e. inter-state transmission network however silent on projects connected with state grid, i.e. Intra-state Transmission network, therefore requested to kindly consider similar clause for Intra-state transmission connected projects with SLDC as nodal agency.

Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
		legal status of the entities. In order to bring clarity and simplify the process in this regard, **the Commission has proposed that upon the eligible entity connected to <u>Inter-state transmission system</u>** informing about its change in name or change in legal status with relevant documents from appropriate authorities (viz., Registrar of Companies or National Company Law Tribunal or any other Court), the RLDC shall update such change in	

Sr. No.	Clause No.	Proposed Discussion	Comments/ Suggestions
		records within 30 days.	
	Explanatory Memorandum - 2 (9)	**Categorisation of certificates as solar and non-solar has been dispensed with; instead the concept of Multiplier** has been introduced for new RE Projects based on the principle of tariff range for various RE technologies.	The draft proposes for removal of Categorization of Certificates (Non-Solar and Solar) with the concept of Multiplier, however the wind power projects are restricted to only windy state only and the reason behind to procure Non-solar REC to promote wind projects / non-solar projects in market. The Ministry of power has also issued trajectory on 29th Jan'21 for RPO with a bifurcation in solar, non-solar & Hydro, therefore REC should also be categorized in term of similar manner, i.e. solar, non-solar & hydro.