No.23/06/2021-R&R (Part-1)
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi, 14th March, 2022

To
The Secretary
Central Electricity Regulatory Commission
Chanderlok Building, 36 Janpath, New Delhi-110001

Sub: Suggestions on draft CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022.

Sir,

I am directed to refer the **draft CERC (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022.** It is appreciated that in the draft Regulations, CERC has covered almost all the important suggestions proposed by MoP vide letter dtd. 30-9-2021(Copy enclosed). However, there are few points, as given below, which are in variance or not completely covered in the draft Regulations, may also be considered:

a. In the MOP letter dated 30.09.2021, it was mentioned that there should be a monitoring and surveillance mechanism by CERC to avoid hoarding. After making the RECs perpetual, there may be a possibility of hoarding the RECs. Though provisions for maintenance of requisite details by Central Agency, revocation of registration & accreditation as well as payment of REC value along with interest to central agency in case of revocation, are made in the draft Regulations, a more effective mechanism for monitoring & surveillance by CERC to prevent hoarding may be made.

b. MoP had suggested eligibility for the period of PPA and for existing RE projects eligibility of 25 years, but as per the draft, the validity of Registration being 15 years, an eligible entity would be eligible for issuance of Certificates for 15 years. A larger period for eligibility may be considered in order to ensure enhanced regulatory certainty.

c. It was suggested that DISCOMS and OA customers should be made eligible for RECs for purchase of power from RE in excess of RPO as notified by Central Government, but in the draft the RPO as determined by the State Commission is mentioned. To ensure uniformity throughout the country, the eligibility with reference to RPO trajectory notified by Central Government may be considered.

2. Above mentioned suggestions may, suitably, be incorporated in the final regulations.

3. This issues with the approval of competent authority.

Yours faithfully,

Encl:- As above

DRC

(Debranjan Chattopadhyay)
Deputy Secretary to Government of India
Ph: 011-23715250

<u>**Copy to:**</u>

Sr. PPS Secretary(Power), Sr. PPS to JS(RR & OM) Ministry of Power.

File No. 23/06/20201-R&R (Part-1)
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg
New Delhi, 30th September, 2021

To

Secretary, CERC, New Delhi.

Subject: Note on Redesigning the Renewable Energy Certificate (REC) Mechanism_-Reg

To address mismatch between availability of RE sources and the requirement of the obligated entities to meet their renewable purchase obligation (RPO), Pan-India market-based Renewable Energy Certificate (REC) Mechanism was introduced in the year 2010.

2. Due to the changed circumstances of power sector and to promote new renewable technologies, a need of revisiting the present REC mechanism was felt. Accordingly, a discussion paper proposing the changes in the extant REC Mechanism has been finalized by a Joint Committee of MNRE and MoP along with CEA, CERC and POSOCO.

3. Subsequently, a **Discussion paper on Redesigning the Renewable Energy Certificate (REC) Mechanism** was circulated on 4th June, 2021 for stakeholders consultations. Extensive stakeholder consultations were held on the matter and about 80 stakeholders comments were received.

4. Based on the comments received and further deliberations held through various meetings, a **Note on redesigning the Renewable Energy Certificate (REC) mechanism** has been finalised. The proposals will provide some flexibility to the players, additional avenues, rationalization and also addressing the RECs validity period uncertainty issues. Primarily, the following has been proposed in the revised REC Mechanism.

a. Validity of REC would be perpetual i.e., till it is sold.

b. Floor and forbearance prices are not required to be specified.

c. CERC to have monitoring and the surveillance mechanism to ensure that there is no hoarding of RECs.

d. The RE generator who are eligible for REC, will be eligible for issuance of RECs for the period of PPA as per the prevailing guidelines. The existing RE projects that are eligible for REC would continue to get RECs for 25 years.

e. A technology multiplier can be introduced for promotion of new and high priced RE technologies, which can be allocated in various baskets specific to technologies depending on maturity.

f. RECs can be issued to obligated entities (including DISCOMs and open access consumers) which purchase RE Power beyond their RPO compliance notified by the Central Government.

g. No REC to be issued to the beneficiary of subsidies/concessions or waiver of any other charges. The FOR to define concessional charges uniformly for denying the RECs.

h. Allow traders and bilateral transactions in REC.

5. Accordingly, as stated above, the **Note on redesigning the Renewable Energy Certificate (REC) mechanism** is being forwarded for consideration, for implementing the same suitably at the earliest.

6. This issues with the approval of Hon'ble Minister for Power, New & Renewable Energy.

Yours faithfully,

Encl:- As above

(Debranjan Chattopadhyay)
Deputy Secretary to the Government of India
Ph: 011-23715250

<u>Copy to</u>:-

1. Secretary, MNRE, New Delhi
2. The Chairperson, Central Electricity Authority, New Delhi
3. PS to Minister for Power and NRE, APS to MoSP, Sr. PPS to Secy.(P), Sr. PPS to JS(RR &OM), Ministry of Power

Note on Redesigning the Renewable Energy Certificate (REC) Mechanism

1. The energy mix in India is rapidly changing from fossil fuel dominance to increasing non-fossil fuel share. At the time of inception of REC Mechanism, Renewable Energy (RE) technologies viz. solar, wind, etc. faced limitations namely, high cost, absence of National Level Renewable Energy market, absence of expertise in the forecasting and scheduling, and issues related to large scale grid integration of Renewable. With an impetus on promoting RE, Pan-India market-based REC Mechanism was introduced to enable the buyers to meet their Renewable purchase obligations (RPO).

2. The scenario has changed over the years. The cost of solar power has reduced to around Rs 2 per unit, wind power is around Rs 3.50 per unit. The prices are even less than the variable charge of most of the coal based stations. Further, declining trend of the prices of solar and wind energy is to continue. Renewable Energy Management centres (REMCs) have been commissioned for better forecasting and scheduling. Power exchanges are in place for an alternate mechanism to sell and buy RE power through various products viz Day Ahead Market (DAM), Term Ahead Market (TAM), Green Term Ahead Market (GTAM), Real Time Market (RTM) etc., in addition to REC mechanism. The GDAM is also being developed. A number of new technologies are also emerging in the Renewable Space. These are Off-shore wind, Pumped Hydro power stations, Hydrogen etc, whose initial cost of generation is going to be high. Accordingly, a discussion paper on the requirement of redesigning the REC Mechanism has been prepared in order to align it with the emerging changed power scenario and to promote new renewable technology.

3. **Key objectives:**

(i) Contribution towards the green planet: Increasing the non-fossil fuel share in the electricity energy basket in order to meet the international commitment. There is a commitment to integrate more renewable energy in the electricity grid. Target: 175 GW by 2022 and 450 GW by 2030.

(ii) Be a leader in new technology to maintain future energy security. Hence promote new technologies like offshore wind, Hydrogen, Pumped Storage hydro Plant (PSP) etc.

4. **RE Sector: Evolution from promotion stage to growth stage**

During the inception stage of promoting RE, the impetus was to compensate for the high cost of RE Technologies. However, in the present context, the thrust is to support the growth of the RE Generation. Further, it was mentioned that promotion of RE Power is pivotal for India to achieve its Intended Nationally Determined Contributions (INDCs). In present scenario, evolution of technologies like solar PV etc., due to technology advancement, economies of scale and market competitiveness has been witnessed. On the other hand, to increase the penetration of the less mature and high cost RE technologies like Off-shore wind, Pumped Storage Hydro power Station, Hydrogen, etc., it may require larger support depending upon their relative maturity, development cost and associated risk. It is also observed that cost of power from conventional sources is on the rise due to increasing cost of fuel and the railway freight etc., whereas the cost of power from RE sources like Solar PV etc., is witnessing down trend.

5. Based on the above scenario, the following aspects for redesigning of REC Mechanism are to be considered:

5.1 **<u>Validity period of RECs; Floor & Forbearance Price</u>**

At present the validity period of RECs is of 1095 days (approx. 3 years) from the date of issuance though depending on situation, the validity period, from time to time, has been extended by CERC to avoid expiry of any REC(s).

CERC determines the floor and forbearance price for control period(s) specifying the effective period which, till date, has been revised 4 to 5 times for non-solar and solar RECs respectively. It is pertinent to mention that, on the request, of the RE Generators, longer time period for the floor and forbearance price was provided in the second control period (1st April 2012 to 31st March 2017). However, due to drastic downward trend in tariff of solar power, the solar REC(s) prices were revised as they were becoming a deterrent for their off-take. Revised solar RECs, notified by CERC, were effective from 1st January 2015 to 31st March 2017 and a vintage multiplier of 2.66 was provided to solar projects which were registered under REC Mechanism prior to the former date.

Following is recommended and changes may be incorporated by CERC accordingly:

(i) The REC validity period may be removed. Thus, the validity of REC would be perpetual ie till it is sold.

(ii) As RECs are perpetually valid then the floor and forbearance prices are not required to be specified as RECs holders would have the complete freedom to decide the timings to sell.

(iii) CERC to have monitoring and the surveillance mechanism to ensure that there is no hording of the RECs and creation of artificial price rise in the REC market. CERC may intervene if such case of malpractices is observed in the REC trading.

5.2 **<u>Period for which the RECs are to be issued to RE generators:</u>**

The RE generators who are eligible for REC, will be eligible for issuance of RECs for the period of PPA as per the prevailing guidelines. The existing RE project that are eligible for REC would continue to get RECs for 25 years.

5.3 **<u>Promotion of new and high cost technologies in RE and the provision of multiplier for issuance of RECs</u>**

(i) The concept of multiplier can be introduced, under which new/less mature RE technologies can be promoted over other matured renewable technologies.

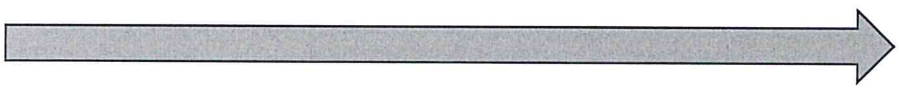
(ii) The concept of negative list and sunset clause may also be considered for various technologies depending upon their maturity level.

(iii) Any RE technologies which need to be promoted may be identified say 2 years in advance. For such RE projects at least 15 years policy visibility would be provided to attract investments and promotion of such technologies in the renewable energy.

(iv) <u>Multiplier</u>

A technology multiplier can be introduced for promotion of new and high priced RE technologies, which can be allocated in various baskets specific to technologies depending on maturity. The multiplier would also take care of vintage depending on the date of commissioning of the project. Depending on the type of technology to be encouraged or technology whichhave already achieved maturity, the number of RECs to be given in the manner as indicated below:

Technology-A	Technology-B	Technology-C
Multiplier-3X*	Multiplier-2X	Multiplier-1X



Less mature Technologies to Mature technologies

*X denotes one MWh

For example, Technology-A which is at a nascent stage can be issued 3 RECs for every 1 MWh energy sale, which is subjecting to 3X multiplier. (Considering the prevalent costs). As the adoption of the technology progresses along the maturity path, the same can gradually be reduced. Also, subject to the policy thrust to be given to specific RE technology, the multiplier can also be varied for specific RE Technology.

Further, the existing RE technologies which are reaching maturity stage can be given a relative evaluation of a multiplier or can be included in the negative list or be provided with sunset clause. However, these conditions would be applicable only to the new RE projects. The RE projects which have already been commissioned shall not be subjected to these conditions. Also, once a multiplier is given to a project, same would continue for 15 years for that project.

5.4 **Incentivising Obligated Entities for procurement of RE Power beyond RPO**

RECs can be issued to the obligated entities which purchase RE Power beyond their RPO notified by the Central Government. This will incentivise the Obligated Entities to not only achieve RPO but also go beyond the RPO level. This would facilitate and promote REC market as well.

5.5 **No REC to be issued to the beneficiary of the subsidies/concessional charges or waiver of any other charges**

As a general principle, One who gets any subsidies or concession i.e. waiver of transmission charges or preferential banking charges etc should not be given the REC.

Any waiver or any preferential or concessional charges, if it is being availed by the seller, then REC should not be given. The FOR may define concessional chargesuniformly for denying the RECs.

5.6 **The role of trader can be enhanced in the REC trading** which will bring in two key advantages i.e. it will give long-term visibility to the buyers of the REC and they can easily fulfil theRPO. Further, the small buyers can bank on the traders for buying REC as an ease of purchase. This will facilitate even the small buyers who face difficulty in trading in REC market to fulfil their RPO.This would also enable the introduction of products/offeringsin REC with longer time horizon, which could even be transacted via an OTC mechanism. CERC will have oversight over traders to prevent any abuse of market power.

6. **Summary:**

The following changes are to be incorporated in the REC mechanismby CERC:

a) Validity of REC would be perpetual ie till it is sold

b) Floor and forbearance prices are not required to be specified
c) CERC to have monitoring and the surveillance mechanism to ensure that there is no hoarding of RECs
d) The RE generator who are eligible for REC, will be eligible for issuance of RECs for the period of PPA as per the prevailing guidelines. The existing RE projects that are eligible for REC would continue to get RECs for 25 years.
e) A technology multiplier can be introduced for promotion of new and high priced RE technologies, which can be allocated in various baskets specific to technologies depending on maturity
f) RECs can be issued to obligated entities (including DISCOMs and open access consumers) which purchase RE Power beyond their RPO compliance notified by the Central government.
g) No REC to be issued to the beneficiary of concessional charges or waiver of any other charges. The FOR to define concessional charges uniformly for denying the RECs.
h) Allow traders and bilateral transactions in REC trading.

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