

**CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**Date: 28<sup>th</sup> March 2016**

**Coram:       Shri Gireesh B. Pradhan, Chairperson**  
**Shri A.K. Singhal, Member**  
**Shri A.S. Bakshi, Member**  
**Dr. M.K. Iyer, Member**

**STATEMENT OF REASONS ORDER**

**The Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Fourth Amendment) Regulations, 2015.**

**1. Introduction**

- 1.1 The Central Commission, as a consequence of its roles for market development under section 66 of the Electricity Act, 2003 has created a market framework renewable energy certificates and notified the CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (hereinafter Principal REC Regulations) vide notification dated 14th January, 2010. As mentioned in the Statement of Reasons issued along with the regulations, the concept of renewable energy certificate aims to address the mismatch between availability of renewable energy sources and the requirements of obligated entities to meet their renewable purchase obligations. The Commission had further clarified that the REC mechanism has been aimed at promoting the additional investment in the renewable energy projects and to provide an alternative mode to the RE generators for recovery of their costs.
- 1.2 The Commission made amendment to the Regulation 5 of the Principal REC Regulations vide notification dated 29.09.2010 (hereinafter First Amendment Regulations).

Subsequently, the Commission made amendment to the Regulations 2, 5, 7, 8, 9 and 10 of the Principal REC Regulations vide notification dated 10.07.2013 (hereinafter Second Amendment Regulations). The Commission made amendment to the Regulations 5, 7 and 10 of the Principal REC Regulations vide notification dated 30.12.2014 (hereinafter Third Amendment Regulations). The principal objectives of the Amendment Regulations were to provide clarity on applicability of the regulations to eligible entities and bring in certain essential checks and balances in the REC related process.

- 1.3 The Commission in its endeavor to strengthen the REC framework and address some of the design issues and remove ambiguities which are affecting its implementation initiated the exercise of amendment to REC Regulations and issued, vide public notice No.L-1/94/CERC/2011 dated 26th June, 2015, the draft of Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Fourth Amendment) Regulations, 2015(hereinafter referred to as the draft Fourth Amendment REC Regulations) along with explanatory memorandum for inviting comments/ suggestions/ objections thereon. Last date of submission of comments / suggestions /objections was kept on date 15.07.2015. In response to the same, 63 stakeholders submitted their written comments /suggestions. A list of stakeholders who submitted written comments is enclosed as **Annexure-I**.
- 1.4 Subsequently, a public hearing was held on 05.08.2015 to get views of various stakeholders. The list of stakeholders who expressed their views/suggestions/comments in person is enclosed as **Annexure II**.
- 1.5 It is noted here that the Draft Amendment was issued as the Fifth Amendment, but as the proposed Fourth Amendment was revoked, this shall now be issued as the Fourth Amendment.

## **2. Consideration of the views of the stakeholders and analysis and findings of the Commission on important issues**

- 2.1 The following issues were proposed to be addressed through the present amendment:
  - i. Eligibility of issuance of Certificates to the renewable energy generators selling electricity component to third party through open access

- ii. Eligibility of issuance of Certificates to eligible RE based Captive Generating Plant (CGP)
- 2.2 Analysis of the views/comments/suggestions of the stakeholders and the Commission's decisions thereon are given in succeeding paragraphs.

### **3. Eligibility of issuance of Certificates to the renewable energy generators selling electricity component to third party through open access**

3.1 The Commission in its draft Fourth Amendment proposed that:

*The following provisos shall be added after the first proviso under sub-clause (c) of Clause (1) of Regulation 5 of the Principal Regulations:*

*Provided further that a renewable energy generator selling electricity component to third party through open access, shall be eligible for the entire energy generated from such plant for participating in the REC scheme subject to the condition that such generator has not availed or does not propose to avail any benefit in the form of concessional/promotional transmission or wheeling charges or banking facility benefit or concessional cross subsidy surcharge:*

*Provided also that if such a renewable energy generator forgoes on its own, the benefits of concessional/promotional transmission or wheeling charges or banking facility benefit or concessional cross subsidy surcharge, it shall become eligible for participating in the REC scheme only after the date of forgoing such benefits:*

*Provided also that if any dispute arises as to whether a renewable energy generator has availed such concessional/promotional benefits, the same shall be referred to the Appropriate Commission for decision.”*

#### **3.2 Comments received**

- 3.2.1 We welcome the proposed amendments as it will improve the Clearing Ratio and further attract RE generators to register projects under REC Mechanism. **(Power System Operation Corporation Limited)**
- 3.2.2 We submit that the proposed amendment is a welcome step in addressing difficulties towards holistic development of market in RECs. **(Power Exchange India Limited)**

3.2.3 Since long-term Open Access (OA) charges are determined on MW basis, wind and solar projects, having low capacity utilization compared to conventional projects this translates to nearly four times and five times higher OA charges per unit for wind and solar respectively. Moreover, except for a couple of states, even banking for intra-state transactions are either being withdrawn or being levied the UI charges, causing serious financial implications. As a result, the landed cost of solar PV generation in consumer premises in some states like Tamil Nadu is higher than the industrial and commercial tariff. Non-APPC models like OA third party or Group Captive are facing uncertainties in OA charges. The Commission is under the wrong presumption that there is a huge revenue realization from sale of such electricity as compared to sale to Discom at APPC. After paying all OA charges, net realization to RE generator is less than realization under APPC. Therefore, it is unfair to impose the proposed amendment. **(SunEdison Energy India Limited, National Solar Energy Federation of India, Kaizen Switchgear Products Limited, Baroda Moulds & Dies Limited, Electrical Controls & Systems Limited)**

3.2.4 By the 5<sup>th</sup> Amendment to REC Regulations, it appears that CERC has proposed changes only in order to meet a situation where under a large quantum of RECs remain unsold. It is submitted that the very logic and basis of proposing the amendments is wrong and illogical. It appears that CERC is effectively seeking to reduce RECs in order to manage the REC market and deal with the situation of oversupply. It has failed to note that the fundamental reason of oversupply is that there is no effective enforcement of Renewable Purchase Obligation (RPO) in any state. In our view, if it is effectively enforced on all obligated entities there would be more demand than supply. The proposal is therefore retrograde, in as much as, there is a direct action by CERC to discourage investment in NCES. This runs contrary to National Electricity Policy and Electricity Plan which are binding upon CERC. The CERC should therefore verify and take steps towards enforcement in order to ensure the sale of RECs rather than discourage the sector. **(DCW Limited)**

3.2.5 The proposed Amendments are one-sided as they are focused on curtailing the supply-side but silent about the demand-side triggers that are necessary for an equitable REC market, and has not proposed any measure to enforce stricter RPO compliance. Also, in

many states preferential tariffs are unviable; hence OA projects under REC mechanism availing concessional Cross Subsidy Surcharge (CSS) become viable. Such projects will be adversely affected by this Amendment. Moreover, CSS rates have been on the rise with growth in OA, which is counter to the objective of the Electricity Act of promoting OA. Hence before disallowing RE projects which avail concessional CSS from being eligible for REC, the Hon'ble Commission must make structural changes where CSS rate is delinked from OA growth, and CSS is progressively reduced/eliminated. The only option left for RE projects if the proposed Amendment is made will be to sell at preferential tariff or APPC rate to Discoms, making the projects vulnerable to the willingness of Discoms to buy, which will be a big blow to RE development given the limited enforcement of RPO. **(Abellon Clean Energy Limited)**

3.2.6 CERC has already withdrawn under REC mechanism benefits like Electricity duty exemption, wheeling charge exemption, etc. Further withdrawal of banking facility will add fuel to fire as Solar power generators would be able to supply only 21% of generation to OA third party, 69% to state Discom at 40% discounted tariff rate of Commission (APPC) putting already unviable solar projects under REC mechanism to NPA. There will be a 37.6% loss in revenue and it will discourage OA and RE investment. Hence, we humbly request to Delete the line "or banking facility or concessional cross-subsidy surcharge" from the proposed Amendment. **(Sai Saburi Urja Private Limited)**

3.2.7 1) If the change as per the proposed Amendment is applied retrospectively on projects that are operational and having been setup on the basis of the existing regulatory framework, then their viability will be seriously affected. The Hon'ble Commission must keep in mind the principle of Promissory Estoppel and thus cannot take away incentives that were the very basis of the conceptualization of these projects. Any change must be only applied prospectively for upcoming projects.

2) It must also address the enforcement of RPO which is the primary reason of accumulation of unsold RECs.

3) The Hon'ble Commission is right that projects existing before operationalizing the REC framework have not factored in the revenue from sale of REC and therefore may be debarred from participation in the REC market.

4) Firm and infirm nature of RE must be treated separately and infirm RE sources like Wind and Solar which cannot be traded in the open market without certain special dispensations must not be made in-eligible from participation in the REC market. **(Wind Independent Power Producers' Association)**

3.2.8 The income from our Solar projects (under REC mechanism with OA third-party selling) is not even enough for interest payments. The proposed Amendment if passed retrospectively will make the situation even worse and ultimately affect the government's robust solar power target in general. Hence, we suggest that: Floor and Forbearance prices should continue for OA till 2027. There should not be any differentiation between OA and APPC for RE power, REC should continue till 2027, and RPO compliance by obligated entities should be enforced strictly. **(Friends Salt Works and Allied Industries, Oswal Salt & Chemical Industries)**

3.2.9 I have installed a Solar plant in Madhya Pradesh as part of my proprietary company under the REC mechanism through OA third party selling option. Since the investment was made, the return has gone down due to many regulatory factors like imposition of an additional cess, disallowing of concessional charges by Discom, etc. The Commission in an attempt to improve the situation in the REC market is imposing further restrictions on the solar plant. As an NRI Investor, I am worried about the sanctity of the policies and mechanisms in the country. I submit that the Commission should work on studies, solutions, and release orders for the compliance of RPOs by obligated entities rather than imposing sanctions on RE generators. **(H. P. Sarda, proprietor of Flow Device Systems)**

3.2.10 The proposed Amendment will take away commercial viability of OA third-party model RE power plants including ours by depriving us from the benefits on the basis of which we had made the investments. Hence this Amendment is not possible under Section 115 of The Indian Evidence Act, 1872 on the basis of "Promissory Estoppel".

- Further, we would like to mention that the Hon'ble Commission itself exempted the applicability of CTU charges and losses for Solar power generators supplying Inter-State power under CERC (Sharing of Inter-State Transmission Charges & Losses) Regulations 2010 and many states like AP have already exempted these charges from being applicable on RE generators.

- Further, Banking of power is not a commercial benefit but an essential support for the settlement of Infirm Power Generation based RE Generator. We request the Hon'ble CERC to clarify that block-wise banking should not be the case for disqualification for REC mechanism.
- Further, the Central Ministry of Power has already proposed to eliminate CSS for RE generators as per the Electricity Act Amendment and the Draft National RE Act. Hence the proposed Amendment will cause serious implementation issues.
- Finally we request the Hon'ble Commission to classify REC mode projects into 3 periods, first, those commissioned prior to 14<sup>th</sup> Jan 2010 and later participated in REC, second, those commissioned under REC from 2010 upto notification of Proposed Amendment, and third, those that will be commissioned after Proposed Amendment. We suggest that the first case be excluded from REC, the second case should not be deprived from promised benefits and for the third, we suggest not putting any further conditions on third-party sale OA projects.

**(Continuum Wind Energy India Private Limited)**

3.2.11 Most Biomass projects under OA third-party sale route could not be viable solely under the feed-in-tariff model since price of fuel escalated; hence they depend on REC sale revenue to be viable. Even while availing the various State-level concessions, an OA biomass project is not viable unless it factors in REC revenue. Hence with the proposed Amendment, they will become completely unviable and become NPAs for the banks. Thus it is humbly submitted that the Amendment is not brought retrospectively on existing and operating plants. This will lead to lack of investment in RE sector due to regulatory uncertainty and the targets set by the government will not be achieved.

**(Indian Biomass Power Association)**

3.2.12 No changes should be done on conditions and applicability of the Solar RECs till the end of the control period up to March 2017 both for OA 3<sup>rd</sup>-party and CGPs. While making any new amendment to be enforced post the end of the control period, the same shall be done separately for solar and Non-Solar. To provide clarity period of 12 years of existence of the Solar REC mechanism for the better development and maturity of the solar energy sector under this mechanism which has still not crossed state of infancy. **(Indian Electrical and Electronics Manufacturers' Association).**

- 3.2.13 1) RPO non-enforcement is a major concern for poor performance of REC mechanism.
- 2) As per EA 2003, OA as well as Captive RE generation are to be promoted independently. Thus the concessional benefits that are accorded are inline with the objective of the Act.
- 3) The proposed Amendments are against the new initiatives and targets of the Central and State Governments.
- 4) The proposed Amendment to Electricity Act which is in Parliament presently waives off fully the CSS for OA consumers procuring RE, therefore the current proposed Amendment of REC Regulation by CERC goes against the Central Bill. Therefore this Amendment should not be passed by CERC at the moment.

The problem gets magnified since the EA Amendment Bill introduces the concept of RGO for all fossil fuel based generators (like NLC). But with OA becoming unattractive, evacuation through Discoms will be the only option. If they fulfill their RPO then they will be unwilling to buy further RE. Also RE generators are low on their payment priority. RGO also includes a heavy penalty cause and hence it may turn out that a generator is getting penalized due to restriction of viable sale avenues.

**(RSM GC Advisory Services Private Limited, Indian Wind Turbine Manufacturers Association, Mytrah Energy India Limited, Neyveli Lignite Corporation Ltd.)**

- 3.2.14 To avail REC benefit, RE generators are liable to pay OA charges at par with conventional generators, but actually turn out to be higher due to much lower capacity utilization by RE generators. Also key provisions for Banking have also been withdrawn from most of the states. Now taking away REC benefits from RE generators especially with infirm sources of generation will place the generators in a disadvantageous position against conventional generators, which is against the mandate of the Electricity Act. **(Indian Wind Power Association)**

- 3.2.15 In our opinion, the Commission's proposal to disqualify RE projects that sell power under OA and get the benefits of concessional wheeling, banking, or cross-subsidy surcharge is misplaced for several reasons:

- It will make RE projects under OA unviable, will also have significant impact on the viability of existing projects under long term OA contracts, and will be

detrimental to the development of OA and electricity markets in the country. Even when concessional cross-subsidy is factored in, in no case RE projects are viable under open access when compared to the CERC determined tariff for 2014-15. Keeping in mind that an OA projects taken on significant more risk (credit risk, regulatory risk, etc.), the returns under OA make the project even more unappealing.

- RE projects under open access in many states already pay higher wheeling charges and face stringent regulatory requirements. REC revenue is the only additional revenue available to them,
- It is contrary to the proposal of the central government in the Electricity Amendment Bill 2014 to remove cross-subsidy from RE projects entirely, and also of many state policies.

There is no economic argument for denying OA third-party sale RE projects the benefit of RECs. Our suggestion is that the Honorable Commission should consider continuing with the existing provisions in the REC regulations where RECs are allowed to all open access projects. (**REConnect Energy Solutions**)

3.2.16 We welcome the proposal for payment of normative charges for availing RECs for OA transactions but if concessions are extended by SERC or State Govt the same need not be considered as concessions and REC shall be eligible in such cases since without these RE projects will not be able to compete in the market. RE projects under OA is not viable without REC. If REC eligibility is not obtained upon getting concessional charges then that will discourage investment in RE sector.

OA projects take higher risk such as regulatory risk, buyer default risk, PPA termination risk by buyer, interest rate risk, etc. Hence we request the Commission not to equate realization of APPC mode with OA third-party mode since OA projects involve more risk. Cost per unit for wheeling is almost 5 times higher than conventional power due to low CUF. (**Orient Green Power Company Limited, EchandaUrja Private Limited, Beta Wind Farm Pvt. Ltd.**)

3.2.17 We have a 6MW solar plant in AP under third-party OA sale mode. It was built under AP Solar policy which promised concessionary wheeling, transmission, and cross-subsidy charges. However TSSPDCL was deducting all wheeling charges and CSS from

gross and we end up with Rs. 4.22/unit net tariff. This is not viable in the present situation. Hence availing REC benefits is a must. Many states are offering concessional wheeling, transmission, CSS charges and even with these benefits RE projects are unviable without REC benefits. Primarily due to high CSS, realizations go down to absurdly low levels if full charges are considered, for example, Rs. 0.69 in TN, Rs. 1.35 in AP, Rs. 2.87 in Gujarat, etc. In TN, the wheeling and transmission charges add up to Rs. 1.56/unit which is more than the revenue from non-Solar REC. Hence projects under OA mechanism will simply not be setup if paying concessional charge results in disqualification from REC because even with REC benefits projects paying non-concessional charges are still not viable. We humbly suggest that disqualification due to concessional CSS be removed. This EA Amendment Bill as introduced by Central Govt is also proposing abolishing CSS. **(Arhyama Solar Power Pvt. Ltd.)**

3.2.18 The 2nd Proviso of the proposed Amendment stipulates that a RE generator selling electricity component through OA shall be eligible for entire energy “generated” from such plant. It is submitted that this proviso defeats the other intent of the 5th Amendment that is, RE CGPs and RE generators having self-consumption are being excluded from the REC mechanism to the extent of self-consumption (this CGP and self-consumption exclusion we support). We therefore object to the 2nd Proviso to the extent that it refers to energy generated rather than energy sold. This creates an anomaly that, under the 2nd proviso, if a CGP sells some part of the energy through OA, then it becomes eligible for REC to the extent of entire energy “generated” (not “sold”), whereas clause IB prohibits a CGP to be eligible for REC altogether. This anomaly may be appropriately rectified by the Hon’ble Commission. **(Simran Wind Project Limited)**

3.2.19 1) Difference between CERC and State ERC Regulations for REC eligibility: All state commissions have specified their own eligibility criteria which are mostly at variance with the CERC criteria, such as Karnataka, AP, Rajasthan, Maharashtra, etc. So we request CERC to clarify on this.

2) Banking facility for RE power: This facility merely ensures generation and scheduling of RE power to the potential of the plant and does not reduce the cost of generation and transmission. Hence, it should not be looked at as a concessional benefit

providing economic benefits to the RE generator to be substituted with the REC benefit availed by the generator.

3) States promoting RE power while CERC reducing benefits to RE power: Different states are providing concessional benefits like duty waiver, reduced charges, etc. while on the other hand non-allowance of REC in lieu of the benefits by states amount to neutralization of those benefits.

RE Power has attained parity with commercial and industrial tariffs in many states, but cost of generation is still higher and hence RE needs promotion. Foregoing RE benefit in lieu of concessional benefits delays the case of cost parity of RE with conventional power. **(Greenko Energies Private Limited)**

3.2.20 It is understood from the explanatory memo that the amendments are proposed on the perception that RE generators selling power to 3rd parties are already eligible for concessions in wheeling charges, banking facility, and concessional cross-subsidy Surcharge as per the policies of various State Governments and the as per the Regulations of respective State Commissions. However, this is misplaced.

- Withdrawal of REC benefit on the ground of concession in CSS for RE sources, may not be appropriate as an irrational CSS can off-set the concession as in the case artificial hiking of price by sellers while offering attractive discounts.
- Concessional wheeling charges are allowed by the Appropriate Commissions in compliance of mandate for promotion of RE sources U/s 61 (g) and 86 (1) (e) and is only a token of encouragement and cannot be considered as a major incentive warranting withdrawal of REC benefit.
- RE sources, especially Wind and Solar are infirm in nature and 'Banking Facility' is a basic requirement for sale of power to persons other than the local Distribution Licensee. It cannot be considered as a concession. It is a "must" for promotion of RE. Withdrawal of REC benefit on the ground of availing 'Banking Facility' will be against the object of promotion on of RE sources under EA 2003.
- It is a misconception that market rates are much higher than preferential tariff and the generators selling power in the market do not require REC support. Paradoxically, the market prices have nosedived across the country including

Southern Region also in recent years. The average price of power transacted through Traders has fallen from Rs.7.29 in 2008-09 to Rs.4.29 in 2013-14, while that of PXs fell down from Rs.7.49 to Rs 2.90. (Source: CERC report on Short Term Power Market, 2013-14).

- This Hon'ble Commission may be pleased to drop the proposed amendments and explore other avenues for minimizing the imbalance between the Supply and off-take of RECs in the interest of promotion of RE envisaged under the Electricity Act, 2003.
- It is also suggested that, before attempting any major changes in the existing REC frame work, this Hon'ble Commission may please await the Renewable Energy Policy to be brought out by Central Government under the Electricity Amendment Bill, 2015, introduced in the Parliament. **(S Surya Prakasa Rao)**

3.2.21 The Electricity Act (Amendment) 2014 Bill stipulates that OA consumers procuring energy from RE sources need not pay cross subsidy surcharge for such period as prescribed by the central government. Selling RE through OA has involved considerable challenges and CERC's amendment will only discourage RE projects availing third party OA sale route. RE projects will not be viable without concessional charges as provided by states. Therefore GE strongly recommends that REC benefits be allowed in case that center/states provide concession wheeling, transmission charges, cross subsidy surcharge, banking, etc. **(GE India Industrial Pvt. Ltd)**

### **3.3 Analysis and Decision**

3.3.1 The Commission has analyzed the comments and observations submitted by the stakeholders.

3.3.2 It has been submitted by different stakeholders that several RE projects selling electricity component through open access route face higher risk related to regulatory changes, buyer's default, PPA termination by the buyer, interest rate fluctuations, etc. Apart from selling the RE to distribution utilities under FIT or APPC framework, the OA route is the only alternate option available for the developers to sell electricity in the market. Reversing the provisions for concessional charges available at the state level will impact the OA projects under REC framework and will limit the options of

RE developer for sale of electricity. CERC's amendment will only discourage RE projects availing third party OA sale route. It has also been commented that the OA model does not result in huge revenue realization and the same should not be equated to APPC model given the varying risk levels. It has also been pointed by select stakeholders that banking of power is not a commercial benefit and should not be considered as concession.

- 3.3.3 The Commission would like to reiterate that REC framework is a market based framework and emphasizes on encouraging competition without encouraging models benefitting from any concessional benefits, which have the potential to skew the market. The same approach was adopted while disallowing any form of concessional benefits for CGPs for participating in the REC framework.
- 3.3.4 A large number of stakeholders have requested that the proposed disqualification due to availing of concessional Cross Subsidy Surcharge (CSS) be removed. It has also been pointed out that the Ministry of Power, Government of India has already proposed to eliminate CSS for RE generators as per Electricity Act (Amendment) 2014 Bill, and also under the draft National RE Act. Hence, the proposed amendment to REC framework will cause serious implementation issues and are against the new initiatives of the Central and State Governments (including the exemption to solar power generators supplying Inter-State power provided by CERC).
- 3.3.5 The Commission has considered the feedback on Cross Subsidy Surcharge (CSS) in particular. Data shows that CSS varies a lot from state to state, and hence might put a subset of developers at a disadvantage based on the state they are operating in. Further, the proposed Electricity Act (Amendment) 2014 Bill has also proposed waiving CSS for RE based OA users. Respecting this as well as acknowledging the feedback from stakeholders, the Commission proposes to drop CSS from the amendment.
- 3.3.6 It has also been argued that the Commission must keep the principle of Promissory Estoppels in mind and hence should not take away the incentives that were very basis of the conceptualization of these projects. Any changes to the framework must only be applied prospectively.
- 3.3.7 A number of stakeholders have also indicated that it is important to differentiate between old and new RE projects. It has been pointed out that new RE based projects

have made investment decision after considering the REC revenue and the framework provided for open access players. The investment decision has been taken only after considering the REC Regulations issued by the Commission. Any initiative to debar these new RE projects to participate in REC market will make their projects unviable.

3.3.8 The Commission has considered the plea made above. However, it is felt that given the market clearing situation, it is unlikely that every project would have factored in REC revenue for investment or/and financing. Additionally, the Commission is of the view that these changes would not amount to Promissory Estoppels as it does not apply against legislative action. Commission is also aware that several states do not allow these concessional transmission/wheeling benefits to open access users already. Thus, allowing CSS benefit along with REC does not imply a marked change for most OA sellers based on RE.

3.3.9 It has been indicated by stakeholders that it is a misconception that market rates are much higher than preferential tariff and the generators selling power in the market do not require REC support. Further, the market prices have nosedived across the country including Southern Region also in recent years. The Commission notes that most renewable open-access sales are not on power exchanges. Many of them are able to compete with industrial and commercial tariffs in several states, due to which organic growth of OA RE sellers will continue to happen.

3.3.10 Simran Wind Project Limited has pointed that the proposed amendment creates an anomaly that under the 2nd proviso, if a CGP sells some part of the energy through OA, then it becomes eligible for REC to the extent of entire energy “generated” (not “sold”), whereas clause IB prohibits a CGP to be eligible for REC altogether, therefore object to the 2nd Proviso to the extent that it refers to energy generated rather than energy sold. The Commission would like to highlight that the draft amendment related to CGP has been modified under the final Regulation. Also, certificates for the energy generated from such plant (under CGP) shall not be issued to the extent of self-consumption.

3.3.11 A number of stakeholders have provided the following suggestions :

- i. Issue related to lack of RPO compliance and its impact on REC market.

- ii. Select stakeholders have provided suggestions to consider structural changes where CSS rate is delinked from OA growth, issues related to high OA charges in select States, impact due to low PLF of RE projects on OA charges and select SERCs having eligibility criteria at variance with the CERC criteria.
- iii. Select Stakeholders have indicated that most biomass projects could not be viable solely under the feed-in-tariff model since price of fuel escalated

These inputs are outside the scope of the present exercise to amend the REC Regulations. Hence these suggestions have not been considered by the Commission at this stage.

3.3.12 Considering the above, the Commission has decided to amend the proposed amendment in the final Regulations to the extent as under:

#### **Amendment to Regulation 5 of the Principal Regulations**

The following provisos shall be added at the end of sub-clause (c) of Clause (1) of Regulation 5 of the Principal Regulations:

*“Provided further that a renewable energy generator selling electricity component to third party through open access shall be eligible for the entire energy generated from such plant for participating in the REC scheme subject to the condition that such generator does not avail or does not propose to avail any benefit in the form of concessional/promotional transmission or wheeling charges or banking facility benefit:*

*Provided also that if such a renewable energy generator forgoes on its own, the benefits of concessional/promotional transmission or wheeling charges or banking facility benefit, it shall become eligible for participating in the REC scheme only after the date of forgoing such benefits:*

*Provided also that the above mentioned condition for renewable energy generator selling electricity component to third party through open access for participating in the REC*

*scheme shall not apply if the benefits given to such renewable energy generator in the form of concessional transmission or wheeling charges and/or banking facility benefit are withdrawn by the concerned State Electricity Regulatory Commission and/or the State Government:*

*Provided also that if any dispute arises as to whether a renewable energy generator has availed such concessional/promotional benefits, the same shall be referred to the Appropriate Commission for decision.*

*Explanation: For the purpose of this Regulation, the expression "banking facility benefit" shall mean only such banking facility whereby any renewable energy generator selling through open access gets the benefit of utilizing the banked energy at any time (including peak hours) even when it has injected into grid during off-peak hours."*

#### **4. Eligibility of RE Captive Generating Plants for RECs**

##### **4.1** The Commission in its draft Fourth Amendment proposed that:

*"Second, third, fourth, fifth and sixth proviso including the explanation under sub-clause (c) of Clause (1) of Regulation 5 of the Principal Regulations shall be deleted.*

*"A new clause shall be inserted after Clause (IA) as under:-*

*(IB) A Captive Generating Plant (CGP) based on renewable energy sources and a renewable energy generating plant not fulfilling the conditions of CGP as prescribed in Electricity Rules, 2005 but having self-consumption shall not be eligible for participating in the REC scheme for the energy generated from such plant to the extent of self-consumption."*

##### **4.2 Comments received**

4.2.1 1) Around 1,155 MW of non-solar RE CGPs that were commissioned prior to formulation of REC framework (in 2010) are registered under REC mechanism. This has resulted in piling up of huge non-solar REC inventory. Since these projects have not

factored in revenue from sale of REC in their model, the Hon'ble Commission should de-register them from REC. However, it is not the same for Solar REC. No Solar CGP that was established prior to 2010 formulation of REC is registered under REC mechanism. The reason for Solar REC inventory accumulation is due to primarily non-compliance of Solar RPO and lack of strict enforcement. It is strongly recommended that there is no need to discourage investment under CGP mode by making these projects ineligible.

2) Further, it is a myth that RE CGPs, particularly Solar PV, are making windfall profit. As per our analysis, the landed cost of Solar PV generation at consumer premises in Tamil Nadu is quite higher than the prevailing Industrial and Commercial tariffs. After paying all OA charges as applicable, it wouldn't be possible to earn a hefty profit.

3) It is also submitted that it is not clear whether the proposed Amendments shall be applicable prospectively or retrospectively. (**SunEdison Energy India Limited, National Solar Energy Federation of India, Kaizen Switchgear Products Limited, Baroda Moulds & Dies Limited, Electrical Controls & Systems Limited**)

4.2.2 All CGPs will be ineligible for REC benefits. This will affect both the CGPs that are operating Group Captive Schemes and which have been set up by obligated entities to meet their RPO. Thus an obligated entity which is looking to set up its own generation capacity would stand discouraged and left at the mercy of pure play generators. This is clearly arbitrary and strikes at the root of the Article 14 of the Constitution of India. This proposal has no connection to the objective sought and seeks to discriminate against a certain category without any legal or rational basis.

It also seeks to adversely affect entities that have already put up such plants and the CERC. While CERC is correct in its objective of removing imbalances seeks to address it incorrectly. Rather than impose restrictions on supply, it should ensure compliance of RPO by obligated entities. We reiterate that these amendments are incorrect. (**DCW Limited**)

4.2.3 The Amendments are drastically in contradiction to the main objective of the REC mechanism as a whole.

- Further, CGPs have incurred huge costs for installing equipment & metering which was necessary to be eligible for registration under REC mechanisms and

CGPs have helped Discoms to offset the Grid supply and enhance discipline. CGPs have also relinquished some concessional benefits like concessional transmission charges and banking for REC eligibility.

- Due to issues regarding RPO non-compliance, CGPs are suffering, which in turn is affecting market clearing miserably. More than half of the state utilities will refrain from purchasing RECs without facing penalty. Many states have not declared their RPO trajectory for this year. If all these issues are tackled, it will create a balance in the REC market. Further, the registration was granted to these projects for 5 years, and revocation before this period will affect the market and future generators will look up on such proposals with doubt. We therefore pray you to consider alternatives. **(JCT Limited)**

4.2.4 The proposed Amendments are one-sided as they are focused on curtailing the supply-side but silent about the demand-side triggers that are necessary for an equitable REC market, and has not proposed any measure to enforce stricter RPO compliance. The Hon'ble Commission should first discover the true demand of REC once the RPO compliances are being honored and then appropriately curtail or enhance the supply side. Also many CGPs have been set up under Group Captive mode where primary investment and risk is taken by an investor and tariffs are mutually negotiated and agreements are long-term. A sudden change will cause unreasonable loss and forestall investment in this mode of development, going against the principle of market development under the Electricity Act. We request that Group Captive projects be allowed to be eligible for REC regime. **(Abellon Clean Energy Limited)**

4.2.5 The proposed Amendment is contrary to Regulation 9 of the existing REC Regulation, that is, the Regulation governing Pricing of Certificates. The Hon'ble Commission's draft regulation is based on findings for large solar plants, cost of production for which is lower, due to economics of scale, foreign loans, etc. We pray that Solar CGPs be allowed under REC until the Commission determines the cost of production for smaller plants < 5MW. **(Porwal Auto Components Limited, Satna Cement Works Limited)**

4.2.6 The 2 arguments (in the Explanatory memorandum by the Hon'ble Commission) are only applicable to a specific subset of CGPs. There are other types of CGPs based on the purpose for which they were built, to which the arguments do not apply. For example, in

recent years, CGPs were setup by RPO obligated entities in RE resource-rich states to meet their RPO compliance in other states across the country. These investments will be made unviable. Another type of project is the Group Captive Plants which pay much higher transmission and wheeling charges (such as in Tamil Nadu, Karnataka, Gujarat) and also sells RE power at a lower rate to private consumers. These will also become unviable. Hence we suggest that the above 2 types of CGPs be allowed to continue within the REC mechanism. **(Gokak Power & Energy Limited)**

- 4.2.7 1) The obligated entities under the RPO regulations have failed to acquire the desired amount of electricity from renewable energy projects or RECs. We strongly feel that the regulators, at the Centre and in the States, should look at ways to make the obligated entities meet their RPO targets. We understand that Punjab State Power Corporation Limited had to buy approximately 6.50 lakh non-solar RECs during the FY2014-15, on the directions of the Punjab SERC. Similarly, all the state distribution companies should acquire RECs to meet their RPO targets. Even if the CGPs are removed from the REC mechanism, oversupply in the inventory would persist and even continue to increase in the absence of strict compliance by obligated entities.
- 2) Hon'ble CERC had adopted a five-year control period due to the requirement of long-term certainty of regulatory principles as RE technologies have not yet matured. We believe that the same principle applies here as well since the technology in question remains the same. The revocations of accreditation and registration during the period of validity can only be due to an event of default and will shake confidence of the generators who may refrain from making investments in the RE projects in the future.
- 3) Many CGPs (eligible entities) are also using the RECs so received for retention against the RPO of the wholly-owned subsidiary companies (obligated entities). Projects established under this provision will suffer a set back.
- 4) In the worst scenario i.e. if the Commission decides to implement this proposed amendment, it should be applicable on the forthcoming projects or at least the existing registered projects set up after the initialization of REC mechanism should be exempted. **(Satia Industries Limited, Indian Paper Manufacturers' Association)**

- 4.2.8 It is also submitted that it is not clear whether the proposed Amendments shall be applicable prospectively or retrospectively. Captive Generating Plants (CGP) operating

on infirm RE sources like wind fulfilling the statutory requirements should not be deprived of REC benefit, since especially since they are operating on old technologies and have very low CUF, as well as delay in OA permissions by State authorities leading to losses. There are also other advantages in certain states like non-bankability, and adjustment of wind energy in 15 minute time blocks. Also, CGPs who utilize RE generation through open access are not recognized by the MSEDCL as their consumers even though they are situated in their area of supply and don't change the contract demand. Despite these difficulties, CGPs on Wind are still operating and contributing to promotion of RE. Therefore, we request Hon'ble Commission not to omit CGP from the ambit of REC mechanism. Further, we request Hon'ble Commission to mention clear roadmap for trading backlog of unsold eligible REC in a definite targeted time within expiry of REC eligibility and stringent norms for RPO for obligatory entities. We also request Hon'ble Commission to implement a stringent mechanism for meeting RPO for obligatory entities and bring more attractive policies for RECs of CGPs to further produce conducive atmosphere for all CGPs **(Tata Motors Limited)**

4.2.9 Through the proposed Amendments, an obligated entity shall not be able to comply with its other units' RPOs **by setting up new CGP** project at one entity. We therefore propose that CGP based on RE sources and RE generation plant not fulfilling the conditions of CGP as prescribed in the ER 2005 but having self-consumption should be eligible for participating in the REC scheme for the energy generated from such plant to the extent of self-consumption only for fulfillment of RPOs of its units located across the country through self-retention of RECs.

Further we also propose the Commission to allow offset of RECs among Group Companies which will significantly incentivize RE projects, creation of long-term (10-12 years) RPO targets and REC price visibility, Strict enforcement of RPO compliance, Consideration of vintage multiplier cut-off date for Solar REC registered projects as project commissioning date instead of REC registration date, and usage of fossil-fuel based Cogeneration plant power for Fulfillment of Non-Solar RPO. **(Tata Power Trading Company Limited)**

4.2.10 The entire background paper is based on the renewable energy projects (CGP) but does not include the Solar based CGP projects. Hence, we understand that this proposal is not applicable to the Solar CGPs.

- CERC vide its 2nd Amendment notification dated 10th July 2013 (Clause 10) had accepted the Captive Solar Power consumption at one or more business units and also allowed offsetting the RPO of the host units. It was allowed to retain the equivalent RECs on the balance consumed power (under appropriate mechanism with REC Exchange) to offset the RPO for other business units spread across the country. We understand that the proposed 5th amendment does not apply to this provision already allowed by CERC.
- We would like to emphasize that the core issue of Solar RPO is to encourage obligated entities to maximize consumption of solar energy either via purchase of solar power or solar RECs generated by the solar power generators. This amendment in the present form is not consistent with this philosophy and proves to be a hindrance in large scale deployment of solar in meeting the RPO in the most cost-effective manner.

**(Aditya Birla Solar)**

4.2.11 The approach is detrimental for the RE industries at large as it will discourage larger projects at RE resource rich locations and promote smaller projects in different locations, making utilization of RE resources less efficient. It will make investments unviable as investments are made mainly to meet RPO, now the industrial units in other states will not be able to utilize it, and excess RE capacity will be created in another state. Thus we strongly oppose the proposed amendments. We suggest that RECs of CGP to be allowed to self-retain (as per Regulation) to meet RPO obligation of units of company to avoid huge financial impact in spite of having RE based CGP. We also suggest allowing RE based CGPs to participate in REC to encourage further investment in RE, even for its own consumption to minimize fossil fuel consumption. **(Aditya Birla Grasim Industries)**

4.2.12 The proposed Amendment will lead to sub-optimal utilization of resources for industrial companies with production units in different states as it will necessitate setting up of

different RE units of smaller capacity in each state where production unit is located which will result in higher capital expense and maintenance cost, and lower PLF.

The flexibility provided by the 2<sup>nd</sup> Amendment to REC regulations will be nullified by this proposed Amendment.

The rationale behind this Amendment is misplaced. Cost of Coal based CGP is much lower and they provide reliable power, not possible in RE CGP. Also the rationale in the explanatory memo seems to be referring to Non-Solar projects only but the cost dynamics of solar and non-solar projects are very different and well-recognized. Moreover, very few solar CGPs were set up before RPO was introduced.

Hence, we suggest that RE-based CGPs be allowed to continue to be eligible for REC scheme for entire energy generated by such plant. **(Aditya Birla UltraTech Cement)**

4.2.13 A multi-location company such as Hindalco may put up RE plant at one location to meet RPO of another unit in a different state. This is allowed as per 2<sup>nd</sup> Amendment to CERC REC Regulations. Hence we suggest that RE CGPs be eligible for participation the REC scheme for generation including self-consumption. **(Aditya Birla Hindalco)**

4.2.14 The Hon'ble Commission is in effect negating its own view as expressed during the 2<sup>nd</sup> Amendment to REC Regulations when REC eligibility was given to CGPs. The CGPs that avail REC benefit today are viable investment only because of the fact that they have factored in the revenue from REC framework in their economic model and have also made further investments based on this model. **(Indian Biomass Power Association)**

4.2.15 No changes should be done on conditions and applicability of the Solar RECs till the end of the control period up to March 2017 both for OA 3<sup>rd</sup>-party and CGPs. While making any new amendment to be enforced post the end of the control period, the same shall be done separately for Solar and Non-Solar. To provide clarity period of 12 years of existence of the Solar REC mechanism for the better development and maturity of the solar energy sector under this mechanism which has still not crossed state of infancy. **(Indian Electrical and Electronics Manufacturers' Association).**

4.2.16 Poor trading of RECs are mainly due to obligated entities not complying with RPO. This can only be made effective by strict enforcement through penalties for non-compliance, preferably through such a penalty clause in the Electricity Act. But instead of promoting

RPO compliance, the Hon'ble Commission is seeking to impose restrictions on sugar mills, which contribute 30% of all registered REC capacity, by making them ineligible for REC. This is like penalizing the generators for the failures of the obligated entities to buy RECs. There is actually a shortfall of RECs as compared to the total requirement of the obligated entities to comply with RPO. Hence we believe that the proposed Amendment, which is right in its intent, will actually be harmful for growth of RE industry. Therefore, it should not be carried out. **(Indian Sugar Mills' Association)**

4.2.17 We have a REC-based Biomass plant in Tamil Nadu. We had made enormous efforts and heavy investments in 2011-12 for modification of the prior conventional steam system foregoing operational flexibility for availing the benefit of REC for self-consumption. In addition to the above, we provided separate metering system for monitoring and verification of self-consumption from the RE-based power plant as per the procedures lay down by CERC. In view of the above, it is submitted that Hon'ble Commission may on the principles of legitimate expectation, consider continuing the benefit of REC for the self-consumption by RE CGPs. **(Tamil Nadu Newsprint & Papers Limited)**

4.2.18 As a CGP, we wish to state that the statement made in the Explanatory memorandum that CGPs are adequately compensated is factually wrong and is based on a study on very old Non-Solar RE plants like Wind or Biomass, installed before the introduction of REC mechanism. Financial details of our Solar CGP under REC mode are given and according to it, we are having difficulty to even repay interest. The proposed Amendment if made retrospectively during this control period (before 2017) will have very serious negative implications and will also be illegal. The National Tariff Policy and Electivity Act both promote CGPs but this Amendment will have a negative impact on these and discourage their growth. It is humbly submitted that the Commission work towards stricter enforcement of RPOs which will solve the problem of excess RECs. **(Shriji Polymers (India) Limited)**

4.2.19 We humbly submit that many developers have set up projects on the basis of existing REC Regulatory Framework that came in 2010 and any change done retrospectively will seriously affect their viability. The Hon'ble Commission must not take away incentives that were the very basis of these projects. We therefore strongly request you that the

proposed amendment must not be implemented retrospectively for all existing CGPs that are based on REC framework policy. We also request that the rules to shift of REC project to non REC project and vice versa in order to balance the viability should be brought in and the same should be left to the option of developers. (**Sembcorp Green Infra Limited**).

4.2.20 Most small RE CGPs commissioned before 2010 were Wind or Biomass or Mini-hydel where generation cost is lower than Solar so that even without REC benefits it can be viable. However, Solar CGPs like the one we operate will be rendered unviable if REC benefits are not given since generation cost is high as given in our data above. This will act as a disincentive to all Solar CGPs and will affect investment in this sector. Hence, to ensure profitable operation of such plants, we humbly request that the draft Amendment be kindly reviewed and REC benefits be granted on Solar CGPs, particularly those for domestic purpose like ours. (**Mahanadi Coalfields Limited**)

4.2.21 1) RPO non-enforcement is a major concern for poor performance of REC mechanism.  
2) Taking back a policy decision that was given earlier, that is REC eligibility to CGPs through 2<sup>nd</sup> Amendment of REC Regulations, will decrease investment in RE sector.  
3) It is unfair to remove REC benefits from CGP because many CGPs made additional investments in terms of technical upgrading of equipment and meters to meet the REC eligibility and the revenue from REC were factored into their model so that without REC these will be unviable.  
4) Further, there are many obligated entities that comply with their RPO by setting up RE CGPs in other locations and retain the RECs thus generated. Their investment will become unviable. (**RSM GC Advisory Services Private Limited**)

4.2.22 The scenario of demand-supply gap persists across India and capital investments incurred by CGPs or RE generators having self-consumption in setting up RE projects is still high and increasing.

- When CGPs sell to industrial and commercial customers the rates are lower than preferential tariff or tariff under APPC+REC in most states, hence there is not much additional recovery by CGPs, except for commercial customers in Maharashtra, Andhra Pradesh, Tamil Nadu.

- After the Commission introduced REC for CGP self-consumption in 2010, it has succeeded in maintaining the interest of prospective investors despite the adversities. Reversing that now will send a wrong signal about regulatory uncertainty and may result in a lack of RE investment in future.

4.2.23 Although the Commission has put forward many arguments (like CGPs replace grid retail tariff, carry no external risk, and some CGPs having been built before REC Regulations), to disallow CGPs from REC framework. However, the Commission must also consider the 3 cases of:

- 1) CGPs set up to meet RPO of obligated entities in various states across the country,
- 2) CGPs set up under Group Captive mechanism by a lead investor, and
- 3) The case of Rooftop Solar since it entails higher investment.

*Suggested Changes:*

- 1) When RE projects is set up as a CGP primarily for RPO compliance, RECs should be issued but only self-retention of the same should be permitted.
- 2) Disqualification should also not apply to Group captive RE projects
- 3) Alternatively, and without prejudice to the above suggestion, REC should be denied only when group captive project enjoys concessional wheeling charges and promotional banking benefits
- 4) RECs should continue to be provided to roof-top based solar projects. RECs generated from such projects should be allowed for self-retention by the obligated entity.

*Alternatively*, other methods may be applied for eligibility criteria to participate in REC, such as:

Allow all the RE projects to participate into REC mechanism provided they either meet minimum viability tariff (MVT) criteria or have RPO obligations or have taken voluntary targets to meet certain green energy targets. **(REConnect Energy Solutions)**

4.2.24 RE generator can retain the REC to meet its RPO on consumption units located in different states which the Commission has also mentioned in the Statement of Reasons of the second amendment. As result of which many companies have set up CGPs in one state and meet their obligation in other states through retention of RECs. We also request this Honorable Commission to kindly consider Commercial operation date (COD) as the eligible criteria for considering the electricity generated for issuance of

REC certificate on getting registration of the project under REC. Provided that the validity of Certificate shall be 1095 days from the date of issuance of Certificate.

**(Mytrah Energy India Limited)**

4.2.25 It is understood from the Explanatory Memo that the amendments are proposed on the perception that Captive Generating Plants (CGPs) are mostly established by Industrial/Commercial consumers of the Distribution Licensees who are already compensated by way of avoided high power purchase cost of energy from Utility, and are also enjoying exemption of Electricity Duty. However this is misplaced.

If REC benefit is withdrawn to CGPs on this ground by this Hon'ble Commission, it may be viewed as endorsement of irrational tariff fixation by State Commissions, against the provisions of EA 2003, and it will result in undoing the measures taken by Industrial Consumers in mitigating the risks arising out of such irrational tariffs, by migrating to Captive Consumption from RE sources.

This Hon'ble Commission may be pleased to drop the proposed amendments and explore other avenues for minimizing the imbalance between the Supply and off-take of RECs in the interest of promotion of RE envisaged under the Electricity Act, 2003.

It is also suggested that, before attempting any major changes in the existing REC framework, this Hon'ble Commission may please await the Renewable Energy Policy to be brought out by Central Government under the Electricity Amendment Bill, 2015, introduced in the Parliament. **(S Surya Prakasa Rao)**

4.2.26 As per the explanatory memo of CERC released as part of the draft amendment in August 2010, the Commission had mentioned the need for extending REC for self-consumption. When there is no change in the situation or circumstances, it is not appropriate to propose to remove the eligibility of REC for CGPs. Thus the projects that were setup after REC Regulations came into force, to avail the REC benefits specifically, should not be brought under the ambit of this proposed amendment under the promissory estoppel.

The proposed amendment will be relevant to old plants setup before REC regulations came into force and to co-located captive Cogen plants that are not incurring any costs for wheeling/transmission. **(Orient Green Power Company Limited, EchandaUrja Private Limited)**

- 4.2.27 The amendment is drastically in contradiction to the original objective of REC. With projects under preferential tariff mechanism offering higher fuel prices to farmers, the captive/cogen projects are coming under pressure to avail REC mechanism for survival. Now, if the benefit is revoked completely that will only lead to more distress. Moreover, the accreditation was granted for 5 years and can only be revoked in event of default. Many CGPs are also using REC to offset the RPO compliance of their own subsidiaries. They are also likely to suffer as a result of this amendment. **(Rana Sugars Limited)**
- 4.2.28 The proposed amendment will adversely affect our solar plant in Odisha, which is having lower irradiation than Rajasthan or Gujarat. Further, we have cement plants across various states. Revocation of REC eligibility will adversely affect our plans to meet RPO compliance using RECs generated from our CGP since REC provides a way to off-set RPO obligation of an unit in one state from RECs generated in an RE plant located in another state. **(OCL India Limited)**
- 4.2.29 There are justifications in the Explanatory Memo that are not correct:  
*“51% of projects under CGP were commissioned before notification of REC Regulation”*: This can't be the reason for not allowing new projects to come under REC mechanism. If old projects should not be receiving REC benefit, that should be made clear in the regulation. There is a strong case for making a distinction among existing and new RE projects.  
Focus on strengthening RPO: Except for very few instances, strict enforcement of RPO compliance is still lacking in many states. An RPO Compliance monitoring framework should be initiated by CERC through FOR. **(Indian Wind Energy Association)**
- 4.2.30 The amendment is contrary to RE development and promotional intent of the Electricity Act. The purpose of RBI to declare RE as a priority sector will be defeated. The CGP segment had taken off and it was starting to make economic sense to investors. Hence we submit that the proposed amendment should be modified in such a way that CGP revenue streams are not affected. They should be able to service their current loans. Also the amendment should make clear the applicability and existing projects should be allowed to function under the previous REC regulatory regime. **(Gujarat Flurochemicals Limited)**

4.2.31 The exclusion of RE CGPs from REC Mechanism is highly appreciable. The same exclusion should be extended to RE OA Generators. This is completely in line with Para 6.4 of the clarification on Tariff Policy 2006, as released by GoI on 19.04.2011. In MP, 94% of RE power is sold by REC registered solar RE generators through OA. In this way, they are taking away high paying customers from Discoms and deteriorating their financial condition. As per calculations based on discovered price for bidding of 300 MW solar power, it has been observed that levelized tariff for OA RE plants would be well above the fixed tariff which are being discovered through bidding process. Hence these RE projects are having financial viability without getting any REC benefit.

REC-registered OA generators in MP are not paying CSS and their revenue realization risk is minimized by allowing changing third-party customers once in a year. Hence their viability is more or less same as RE CGP. Hence we suggest all RE OA generators be excluded from REC mechanism. **(M.P. Power Management Company Limited)**

4.2.32 REC is today a “failed market” with over Rs. 2200 Cr. worth of RECs remaining unsold. This is due to non-enforcement of RPO by all but one State Commission. The main culprit is that RECs were given without any regard to date of commissioning or any cut-off date. CERC should award RECs only for projects set up after the notification of the principal REC regulations.

The overall impact of the amendment as it stands today is to make only APPC projects eligible for REC. This is not a desirable outcome since the growth and future of RE lies in open market and freedom to sell to any consumer across states. **(Er. Dinesh K. Patel)**

4.2.33 The Commission cannot only be guided by the accumulated unsold REC inventory in making its regulations. It also needs to take into account the promotion of RE which is envisaged under section 86(1)(e) of the EA 2003. Doubts may be created in the minds of those CGPs or Group Captive plant owners who have to fulfill RPO of one or more of its subsidiaries that whether now they will be ineligible for REC and therefore should they purchase additional REC or sell under APPC to get REC to fulfill their own RPO despite being RE generators themselves. This may not be the Commission’s intent and therefore should be specified more clearly. Further, it is submitted that a CGP might have some benefits (like no CSS for OA, or lesser electricity duty) and in case it does not meet the conditions of ER 2005 it will forfeit these benefits but it will be an

independent power plants, (referred herein as CIPP). It can then participate in REC, so logically CIPP which is an IPP should be eligible for REC. Further it is discriminatory not to consider supply of power by such CIPP to its own units (self-consumption) for earning REC. Hence Reg 5(IB) is discriminatory and needs to be deleted. Further, the amendment debars a consumer to meet RPO of its units by injecting RE power to grid and by that improving the green power mix. This is not proper. Hence, it is submitted that, RE injections must be verified and non-tradable RECs must be issued against it which can be retained to fulfill RPO for self-units. Also this non-tradable REC should be convertible to tradable REC if RE power (without “green” part) is sold to Discoms or third party and this conversion should be in respect of the Discom or third party to whom the power is sold. This will not lead to accumulation of REC as it is matching with sale/RPO. **(Shri Shanti Prasad)**

4.2.34 We are the first solar plant in India commissioned under REC mechanism. The assumption that a major portion of the REC inventory is contributed by CGPs is false. As of 31<sup>st</sup> March 2015, only 15.91% (90MW) of solar projects registered under the REC mechanism are on CGP mode. Further it has been assumed that companies investing in CGPs are saving money by not having to procure power. This is also incorrect as data provided shows that they are not able to pay even the interest on the capital employed to build the CGP. The study done for the Explanatory Memo under para 2.8 is for non-Solar REC only and no study has been done for Solar. The first solar project under REC mechanism was commissioned only in 2012 after formulation of REC Regulations and it is impossible to conceive the project without REC and withdrawing this benefit will be hugely disadvantageous. **(Ujaas Energy Limited)**

4.2.35 For CGPs that use the RECs to fulfill RPOs of its units in other states, they will be greatly affected. As for NLC in particular, under the mandate of the proposed RGO of the EA Amendment bill, NLC can set up CGPs for consumption by mines and townships. Without REC benefit such option will be unviable. One argument for revoking REC from CGPs is that CGPs being either commercial or industrial consumers, the applicable tariff for that category being high, therefore CGPs are adequately compensated by savings made in not having to procure power externally. However this argument is not applicable to NLC. Under this circumstances, if NLC as a

generating company invests in RE power for captive use, we submit that it should not be treated at par with other CGPs and should be eligible for RECs. **(Neyveli Lignite Corporation Limited)**

4.2.36 Only a fractional portion of solar RECs are contributed by CGPs. The lack of enforcement of Solar RPO regulations is the primary reason for high build-up of solar REC inventory today. None of the developers under Solar REC mechanism in AP, MH, MP, etc. are making any profit. In para 2.2, the Commission has referred to the submission made by Karnataka ERC. However, there is no solar CGP in Karnataka under REC mechanism and the observation is based on Non-Solar. The first solar plant under REC was established after notification of REC Regulations. Any change to regulations in the control period will have very serious negative implication. The Commission should provide clarity on REC applicability for 12 years. **(Green Energy Association)**

4.2.37 1) Viability of investment made for our captive solar project (1MW) in Maharashtra was based on revenue realization from captive consumption and REC sale. But in Maharashtra we are facing strict regulations and risks such as No banking facility, Highest OA charges and losses, reduction in contract demand to the extent of PLF, and 15-min block adjustment similar to conventional power trading despite solar being in-firm RE source. Hence given our net realization, the disallowing of REC will have severe adverse effect on project viability and may become an NPA.

2) We want to highlight that APPC rate and Industrial rate is different from rate mentioned in Explanatory Memo Point 28.

3) We would like to submit that we do not avail any concessional benefit and we suggest that the Commission should modify the clause pertaining to CGP by appending the following: “RE generators commissioned post launch of REC and who are not availing any concessional benefits in form of Wheeling/Transmission charges and losses, Banking, Power adjustment TOD zone wise or 15 min block shall be allowed to avail REC benefit in the state.”

4) We also suggest that CERC should make RPO compliance mandatory and impose penalty for non-compliance which will enhance REC trade. **(Gaurav Agro Pipes Pvt.**

**Ltd., Klassic Wheels Pvt. Ltd., Bothara Agro Equipments Pvt. Ltd., Paras PVC Pipes & Fittings Pvt. Ltd.)**

- 4.2.38 1) The Commission has not considered the underlying cause for high REC inventory accumulation. It is incorrectly premised that the cause of inventory build-up is due to RE CGPs rather than low enforcement of RPO by State ERCs. The Commission has also not undertaken any study to ascertain the sub-categories of generators within particular RE types which contribute to RECs. Therefore it is without any proper study that the Commission has considered CGPs to be the main cause of REC over-supply.
- 2) It is stated in the Explanatory Memo that CGPs bear less risk. However there is no rationale/data provided to support this. For a CGP, the risk is linked to the financial health of the parent organization and in the sugar industry owing to unfavorable market conditions and statutory payment obligations towards farmers, it is increasingly difficult to recover the cost of power. Other risks like mandatory sugarcane purchase obligation, customer termination of PPA (sale of surplus power), etc.
- 3) ATE has directed State Commissions to take steps for effective RPO enforcement, which may improve the REC off-take in near future. This has not been considered by the Hon'ble Commission.
- 4) Commission notes that majority of RE CGPs were setup prior to REC regulations. However all RE CGPs, existing and new contribute to equal measure in protecting the environment and hence should be eligible to promotional benefits under EA 2003.
- 5) The proposed amendment would fall foul of Article 14 of Constitution of India because it fails to conform to the test of "intelligible differentia".
- 6) The Commission has also not taken note of the potential fallout of the exclusion of CGPs from REC. It will discourage RE developers. Hence we pray that the Commission should not proceed with this proposed Amendment. **(U. P. Sugar Mills Cogen Association)**

- 4.2.39 The Amendment rightly considers self-consumption as the ground to determine eligibility of RE generators under REC. This avoids the case where a generator is not having CGP but is having self-consumption. Further as per the National Electricity Policy, the CGPs are given a favourable treatment with respect to tariff for supply of power. Thus CGPs cannot be granted additional benefit for the trade of environmental

component in form of REC. We therefore support the proposed amendments by the Hon'ble Commission to exclude CGPs and RE generators having self-consumption from the REC mechanism.

**(Simran Wind Project Limited)**

4.2.40 We submit that the proposed amendment is a welcome step in addressing difficulties towards holistic development of market in RECs. **(Power Exchange India Limited)**

4.2.41 We welcome the proposed amendments as it will improve the Clearing Ratio and further attract RE generators to register projects under REC Mechanism. **(Power System Operation Corporation Limited).**

4.2.42 We welcome the proposed Amendment to revoke the REC eligibility for Captive Generation Plants which are mostly old cogeneration plants and issuing the maximum share of RECs in an already surplus supply. **(Continuum Wind Energy India Private Limited).**

### **4.3 Analysis and Decision**

4.3.1 The Commission has analyzed the comments and observations submitted by the stakeholders.

4.3.2 Several stakeholders have indicated that a large number of CGPs were set up by RPO obligated entities in RE resource-rich states to meet their RPO compliance in other states across the country. These stakeholders have recommended that CGP based on RE sources and RE generation plant not fulfilling the conditions of CGP as prescribed in the Electricity Rules 2005 but having self-consumption should be eligible for participating in the REC scheme for the energy generated from such plant to the extent of self-consumption only for fulfillment of RPOs of its units located across the country through self-retention of RECs. The argument made is that these CGPs have made investments primarily for the purpose of meeting RPO compliance and any variation in the existing framework shall result in their project becoming unviable.

4.3.3 The Commission appreciates the inputs of stakeholders on aspects related to self-retention of the RECs. It must be noted that the main objective of introduction of REC framework is to facilitate RPO compliance by obligated entities and overcome issues

related to inter-state RE trading also. Nonetheless, CGPs have no credit risk on the customer, no risk of early termination of PPA by the customer etc as the electricity generated is for self-consumption purpose. Captive consumption from a CGP is already adequately compensated in terms of saving on the tariff because of less procurement of power from the distribution companies. Generally, the CGPs are either commercial or industrial consumers and as such, save equivalent to the applicable tariff for such consumer categories.

- 4.3.4 The Commission has carefully considered comments received in the context of eligibility of CGPs to participate in the REC framework. A number of stakeholders have indicated that it is important to differentiate between old and new CGPs based on the timelines of REC regulation. It has been pointed out that new RE based CGPs have made investment decision after considering the REC revenue. That the investment decision had been taken only after considering the REC Regulations issued by the Commission. Any initiative to debar these new CGPs to participate in REC market will make their projects unviable.
- 4.3.5 Some stakeholders have also argued that the market has witnessed very high issuance of RECs to the CGPs which has dampened climate for new investments in the REC market while CGPs are adequately compensated for substitution of conventional power. Such stakeholders have indicated that the proposed Amendment is a positive step to safeguard the interests of REC market.
- 4.3.6 It has also been pointed by stakeholders that the entire background paper is based on the renewable energy projects (CGP) but does not include the Solar based CGP projects in the analysis. Solar based CGPs need to be analyzed separately. It is submitted that no Solar CGP, that was established prior to 2010 formulation of REC, is registered under REC mechanism. It has been submitted that no changes should be done on conditions and applicability of the Solar RECs till the end of the control period up to March 2017.
- 4.3.7 The Commission would like to clarify that the eligibility conditions for CGP are technology neutral (irrespective of solar or non-solar projects). The concerns related to pricing are separately addressed under solar & non-solar REC pricing framework.
- 4.3.8 The Commission has noted the comments and recognizes the concerns in terms of the likely impact on RE based CGPs commissioned post enactment of the REC regulations.

4.3.9 Considering the above and with due regard to safeguard investments made consequent upon the REC framework, the Commission has decided to retain provisions of participation for trading under REC framework, for only those CGPs who have made the investment decision after considering the REC regulations. The Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (First Amendment) Regulations, 2010 issued on 29th September, 2010 provided the framework to allow CGPs to participate in REC framework. This date of, 29th September 2010, shall be considered as the cut-off date as it was only after the issuance of the First Amendment, the CGPs were made eligible for participation in REC framework. Additionally, if by 31st March 2016, some projects are commissioned that were contemplating registration under REC, the Commission is allowing 3 months for them to register with the Central Agency. Thus, to summarize:

- a) The CGPs having date of commissioning on or after 29<sup>th</sup> September 2010 and already registered with Central Agency under REC framework before 30<sup>th</sup> June 2016 shall be eligible for REC issuance and dealing in any of the power exchanges.
- b) The CGPs meeting any of the following conditions, i.e. having date of commissioning prior to 29<sup>th</sup> September 2010 or after 31<sup>st</sup> March 2016 ii) not registered with Central Agency before 30<sup>th</sup> June 2016, shall not be eligible to participate in the REC framework. The Commission is of the view that withdrawing the benefit of REC scheme to these CGPs would not amount to any reversal of policy or regulation as investments by these CGPs were made prior to the issuance of REC regulations or after this amendment, as applicable.

4.3.10 Thus, the Commission has decided not to extend REC benefit to the RE based CGPs commissioned after 31.3.2016. In other words, RE based CGPs set up after 31<sup>st</sup> March, 2016 shall not be eligible for issuance and dealing in RECs.

4.3.11 On the issue of self-retention, the Commission is of the view that such facility shall be available only in respect of the CGPs commissioned during the period from 29<sup>th</sup> September, 2010 to 31<sup>st</sup> March, 2016. In view of the fact that the Commission has decided not to allow REC eligibility to the RE based CGPs set up after 31.3.2016, it

follows that the self-retention facility cannot be extended in respect of such projects (commissioned post 31.03.2016). It is clarified that the RE based CGPs set up after 31<sup>st</sup> March, 2016 can participate under REC mechanism like any other renewable generators, if they otherwise meet the eligibility criteria for REC. These RECs may be separately sold at the power exchanges, and the parent company can purchase the requisite number of RECs from the exchange for RPO compliance. For CGPs that are not eligible as above, self-retention of RECs shall not be permitted either. To that effect, Clause (3) of Regulation 8 has been modified appropriately.

4.3.12 A number of stakeholders have indicated that several CGPs have been set up under Group Captive mode where primary investment and risk is taken by an investor and tariffs are mutually negotiated and agreements are long-term. A sudden change will cause unreasonable loss and impact future investments under this mode which would go against the objective of market development. On the issue of Group Captive, the Commission would like to reiterate that as long as such generators meet the eligibility criteria as specified in the Principal Regulations and amendment Regulations they would be eligible for the REC mechanism. However, they have to participate under REC mechanism as independent generators and would not be allowed to off-set RECs between group companies.

4.3.13 A number of stakeholders have provided suggestions on the following :

- i. Issue related to lack of RPO compliance.
- ii. Propose the Commission to allow offset of RECs among Group Companies which will significantly incentivize RE projects.

These inputs are outside scope of the present exercise to amend the REC Regulations. Hence these suggestions have not been considered by the Commission at this stage.

4.3.14 The Commission has decided to incorporate such conditions in the final Regulations as under:

**Amendment to Regulation 5 of the Principal Regulations:**

Second, third, fourth, fifth and sixth proviso including the explanation under sub-clause (c) of Clause (1) of Regulation 5 of the Principal Regulations shall be deleted.

A new Clause shall be inserted after Clause (1A) as under:

*“(1B) A Captive Generating Plant (CGP) based on renewable energy sources and a renewable energy generating plant not fulfilling the conditions of CGP as prescribed in Electricity Rules, 2005 but having self-consumption shall not be eligible for participating in the RE scheme for the energy generated from such plant to the extent of self-consumption, if such a plant:*

- a) Has been commissioned prior to 29<sup>th</sup> September 2010 or after 31<sup>st</sup> March 2016*
- b) Is not registered with Central Agency under REC scheme on or before 30th June 2016*

*Provided that a CGP 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 fulfilling both the following conditions:*

- a) having date of commissioning between 29<sup>th</sup> September 2010 and 31<sup>st</sup> March 2016; and*
- b) registered with Central Agency under REC scheme on or before 30<sup>th</sup> June 2016 shall be eligible for the entire energy generated from such plant for self consumption for participating in the REC scheme subject to the condition that such plant does not avail or does not propose to avail any benefit in the form of concessional/promotional transmission or wheeling charges and/or banking facility benefit:*

*Provided further that if such plant meeting the eligibility criteria for REC, forgoes on its own, the benefits of concessional transmission or wheeling charges and/or banking facility benefit, it shall become eligible for participating in the REC scheme only after a period of three years has elapsed from the date of forgoing such benefits:*

*Provided also that the above mentioned condition for participating in the REC scheme shall not apply if the benefits given to such plant in the form of concessional transmission or wheeling charges and or banking facility benefit are withdrawn by the concerned State Electricity Regulatory Commission and/or the State Government:*

*Provided also that if any dispute arises as to whether a CGP or any other renewable energy generator has availed such concessional/promotional benefits, the same shall be referred to the Appropriate Commission for decision.*

***Explanation:-*** *For the purpose of this regulation, the expression ‘banking facility benefit’ shall mean only such banking facility whereby the CGP or any other renewable energy generator gets the benefit of utilizing the banked energy at any time (including peak hours) even when it has injected into grid during off-peak hours.”*

***Amendment to Regulation 8 of the Principal Regulations:***

*Clause (3) of Regulation 8 of the Principal Regulations shall be substituted as under:  
“An eligible renewable energy generator including an eligible captive generating plant shall be permitted to retain the certificates for offsetting its renewable purchase obligation as a consumer subject to certification and verification by the concerned State Agency.”*

Sd/-

**(M.K.Iyer)  
Member**

Sd/-

**(A.S. Bakshi)  
Member**

Sd/-

**(A. K. Singhal)  
Member**

Sd/-

**(Gireesh B. Pradhan)  
Chairperson**

New Delhi

Date: 28<sup>th</sup> March 2016

## **Annexure I**

Names of stakeholders who submitted written comments:

<b>S.No.</b>	<b>Name of Stakeholder</b>
1	Abellon Clean Energy Limited
2	Aditya Birla Grasim Industries
3	Aditya Birla Hindalco
4	Aditya Birla Solar
5	Aditya Birla UltraTech Cement
6	Baroda Moulds & Dies Limited
7	Continuum Wind Energy India Private Limited
8	DCW Limited
9	EchandaUrja Private Limited
10	Electrical Controls & Systems Limited
11	Friends Salt Works & Allied Industries
12	Gokak Power & Energy Limited
13	Greenko Energies Private Limited
14	H. P. Sarda, Proprieter of Flow Device Systems
15	Indian Biomass Power Association
16	Indian Electrical and Electronics Manufacturers' Association
17	Indian Paper Manufacturers' Association
18	Indian Sugar Mills' Association
19	Indian Wind Power Association
20	Indian Wind Turbine Manufacturers Association
21	JCT Limited
22	Kaizen Switchgear Products Limited
23	Mahanadi Coalfields Limited
24	Mytrah Energy India Limited
25	National Solar Energy Federation of India
26	Orient Green Power Company Limited
27	Oswal Salt & Chemical Industries
28	Porwal Auto Components Limited
29	Power Exchange India Limited
30	Power System Operation Corporation Limited
31	REConnect Energy Solutions
32	RSM GC Advisory Services Private Limited
33	S. Surya Prakasa Rao
34	Sai Saburi Urja Private Limited
35	Satia Industries Limited
36	Satna Cement Works Limited
37	Sembcorp Green Infra Limited

<b>S.No.</b>	<b>Name of Stakeholder</b>
38	Shriji Polymers (India) Limited
39	SunEdison Energy India Limited
40	Tamil Nadu Newsprint & Papers Limited
41	Tata Motors Limited
42	Tata Power Trading Company Limited
43	Wind Independent Power Producers' Association
44	Green Energy Association
45	Ujaas Energy Limited
46	Klassic Wheels Pvt. Ltd.
47	Gaurav Agro Pipes
48	Paras PVC Pipes & Fittings Pvt. Ltd.
49	Bothara Agro Equipments Pvt. Ltd.
50	Gujarat Flourochemicals Limited
51	Arhyama Solar Power Pvt. Ltd.
52	Indian Wind Energy Association
53	OCL India Limited
54	Rana Sugars Limited
56	Simran Wind Project Limited
57	Neyveli lignite corporation limited
58	M.P. Power Management Company limited
59	Beta Wind Farm Private Limited
60	U.P. Sugar Mills Cogen Association
61	Er. Dinesh K. Patel
62	Shri Shanti Prasad
63	GE India Industrial Pvt. Ltd.

## Annexure 2

Names of stakeholders who made oral submissions at the hearing:

<b>S.No.</b>	<b>Name of Stakeholder</b>
<b>1</b>	Satna Cement Works
<b>2</b>	Porwal Auto Components Ltd.
<b>3</b>	Green Energy Association
<b>4</b>	Simran Wind Project Limited
<b>5</b>	IWPA
<b>6</b>	UP Sugarcane Association
<b>7</b>	INWEA
<b>8</b>	Ujaas Energy Ltd.
<b>9</b>	HINDALCO Ind Ltd.
<b>10</b>	Satia Industry
<b>11</b>	REConnect Energy
<b>12</b>	Beta Windfarm Private Ltd.
<b>13</b>	IEEMA
<b>14</b>	NLC
<b>15</b>	TATA Power Trading
<b>16</b>	Shri Vishnu Rao