

## ORIENT GREEN POWER COMPANY LIMITED

25-03-2022

The Secretary,
Central Electricity Regulatory Commission
36, Janpath
New Delhi – 110 001.

Dear Sir,

Sub: Submission of comments/ suggestions/ objections on the Draft Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022

Ref: No. RA-14026(11)/1/2022-CERC Dated: 15th Feb, 2022

We, the Orient Green Power Company Limited, engaged in the business of generation of green energy through wind and registered under REC mechanism, thank the Hon'ble Central Electricity Regulatory Commission for the opportunity provided to offer our comments on the Draft Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022 on its own behalf as well as Associate Companies.

Before offering our specific comments on the various elements of the Draft Regulations, we wish to bring the following important points for your kind consideration, so that the RE projects registered under REC are not adversely affected and the proposed changes provide long term visibility to the investor and encourage setting up of new RE projects in future.

- The new Regulations should not place any of the existing REC registered project in a disadvantageous position such that it stands to lose eligibility for claiming RECs or have the risk of realizing lower revenues from sale of RECs
- Further, for the sake of policy clarity and to avoid any ambiguity, we request Hon'ble CERC to clearly specify that the Draft Regulations of REC mechanism would be made applicable prospective for projects commissioned after the date of notification of the new Regulations and would not affect the entitlement to avail and trade in RECs in respect of projects registered already, under the 2010 Regulations.
- Several RE projects have been set up for supply of power to captive consumers under group
  captive mode or for sale to third party consumers under REC route. Such projects pay normative
  charges and have foregone the concessions and that the additional cost being paid by those
  projects are recovered only from the sale of RECs. Such RE generators who are supplying the
  power to other OA consumers, which are distinct and different legal entities, should not be
  affected by the outcome of the present Regulations and they should continue to be eligible to
  claim and trade REC.
- The proposal that the price of Certificate shall be as discovered in the Power Exchange(s) or as
  mutually agreed between eligible entities and the electricity traders would adversely impact the
  RE generators, particularly those which have been established already, as there won't be any
  visibility of revenues. The cumulative supply of RECs has been in excess of the demand and the

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- price discovery is demand driven. Under these circumstances, if the floor and forbearance prices are removed and sale of RECs is allowed through traders, prices will decline sharply.
- All the State Commissions while determining the RPO percentage have mentioned the RPO
  percentage for solar and non-solar. Under these circumstance if the proposal to do away with
  solar and non-solar classification is implemented then it might lead to inconsistent provision with
  the State Electricity Regulatory Commissions that have notified the RPO percentage separately
  for solar and non-solar.

With the above background, the following detailed submissions are made with a request to consider them while finalizing the Regulations.

Draft Description	Our Comments/Suggestions
1.Short title and commencement	
These Regulations may be  Regulations, 2022.	No Comments
2. These Regulations shall come	No Comments
2. Definition	
(1) In these Regulations, unless the context otherwise requires, a) 'Act' means the Electricity Act, 2003 (36 of 2003); b) 'Central Agency' means the agency as referred to in Regulation 3 of these regulations;	No Comments
(2) Words and expressionsissued by the Commission.	No Comments
3. Central Agency and its Functions	
(1) The National Load under these regulations.	No comments
(2) The functions of the Central Agency shall be to: (i) undertake registration of eligible entities, (ii) undertake issuance of Certificates, (iii) maintain and settle accounts in respect of Certificates, (iv) act as repository of transactions in Certificates,	We submit that the following to be added in the functions of Central Agency:  • Viii Maintain and make public the details (Name, date, mode of purchase, No of RECs purchased etc.) of RECs purchasing entities.  This will bring more transparency in the REC certificate accounting and settlement and also help in identifying the states/obligated entities not fulfilling the RPO.
v) maintain Registry of Certificates,	

- (vi) perform such other functions incidental to sub-clauses (i) to (v) of this clause, and
- (vii) undertake any other function that may be assigned by the Commission.

## 4. Eligibility for Issuance of Certificates

 Following entities shall be eligible for issuance of Certificates: General comments

Many projects have been set up based on the eligibility criteria in the 2010 Regulations and any change to the eligibility would adversely impact the REC revenues of such projects. This will have a cascading impact on the viability and the ability to service the loans and the project could have the risk of turning into NPA. Hence we submit that the RE projects registered under REC Regulations 2010 shall continue to be eligible based on the eligibility criteria of 2010 Regulations notwithstanding any change in the eligibility criteria in the new Regulations. Any change in eligibility criteria for projects established already under the 2010 Regulations is also not legally tenable as the investments have been made on the basis of REC revenues. Without prejudice to the above, we would like to give our detailed submissions as below:

(a) Renewable energy generating station,

No comments.

(b) Captive generating station based on renewable energy sources,

All Captive generating stations registered under the existing 2010 Regulations should be made eligible under the new Regulations to avail RECs so long as the eligibility criteria of 2010 Regulations are complied with by such projects.

It is submitted that under group captive mode, some consumers are purchasing RE power from RE Generator. Both the RE generator and consumers are different legal entities. The project has been registered by the RE generator in the name of generating entity. In such cases, the RE generators supplying power to consumers should continue to be entitled to avail and trade in RECs, as available under the extant Regulations, subject to the fulfillment of conditions. It is also pertinent to mention here that they have set up projects under REC route by paying normative charges (without availing concessions) and are therefore incurring higher cost per unit of power wheeled. REC revenue is an integral part of revenue for such projects and hence their (RE generators supplying power under group captive mode to consumers of different legal entities) entitlement to REC or sale of REC shall not be, restricted or made ineligible.

In other words, all captive based RE projects or RE Generators who have already established the plants and have already Registered under REC successfully, should be eligible to avail and trade in RECs under the proposed Regulations as any change in the criteria rendering them ineligible to avail or trade in REC would severely affect the viability of the project. Hence the Regulations be modified as below

Captive generating station based on renewable energy sources registered under REC Regulations 2010 and established after the date of notification of this Regulation

(c) Distribution licensee, and

In respect of DISCOM availing REC for purchase of RE Power in excess of their RPO, we agree to the proposal subject to the condition that the DISCOMS shall become eligible for availing REC only if

- The RPO has been fulfilled by all DISCOMs, in the State if there is more than one DISCOM in that State, up to that year (Including for the past years)
- ii) such purchase of green power is made without availing any concessions including ISTS waiver. In other words, REC cannot be availed by DISCOMs in respect of power purchased under SECI bidding /GTAM /GDAM with waiver of ISTS charges. This is in consonance with the cardinal principle of not availing any concessions to be eligible to claim RECs.

Justification for the above submission:

In some states, wind is concentrated in very few places coming under one DISCOM, while the rest of the places do not have wind potential where some other DISCOMs provide services. It is possible that the DISCOM operating in the wind zone fulfils its RPO in excess of its own obligation and shall be eligible to claim REC for such excess while the other DISCOMs operating in other parts of the State, may not have fulfilled their RPO obligation. Under such circumstances, it will lead to issuance of RECs even when the RPO is not fulfilled at the State level leading to oversupply. It is pertinent to mention here that in the absence of strict enforcement of RPO, allowing a DISCOM in a State to claim REC without ensuring that other DISCOMs operating in the State have fulfilled their RPO will defeat the very objective of the scheme and will also result in excess supply.

In respect of DISCOMs purchasing RE Power under SECI Bidding or GDAM etc., ISTS charges are waived and hence it amounts to availing concession. Hence for the purposes of calculating purchase of RE Power in excess of the RPO for claiming RECs or for the purpose of compliance of RPO the power purchased under the SECI Bidding shall not be considered.

It is evident from the first ten years of the REC mechanism that even though it is a compliance-based market, there has been rampant noncompliance by the obligated entities and the REC market is still a demand-driven market.

As observed by CERC in its Explanatory Memorandum, there has been a sharp decline in REC based projects, and this is primarily due to the deliberate non-compliance of their RPO targets by the respective obligated entities and poor implementation of the RPO and REC framework.

If all obligated entities were made eligible for RE Certificates against the purchase of RE Power beyond their RPO compliance, it would result in:

A sudden surge of RECs in the market that will adversely affect the trading of RECs.

Decreased realization would deter investment in REC-based RE projects.

There is no mechanism which prioritizes the sale of REC from projects specifically setup under the REC mechanism because REC revenue is essential for such projects. However, if all entities are allowed to avail RECs, it would be an unjustified additional revenue source for Open access or captive consumers.

(d) Open access consumer

The proposal to allow OA consumers to avail RECs in respect of RE power sourced in excess of RPO while seeking to remove floor price etc. would further affect the existing RE generating stations who are registered already. This may pave way for claiming RECs by a OA consumer in respect of power sourced from a RE generating station which is not eligible to claim RECs. The commission has not spelt out conditions to be satisfied by OA consumer to claim RECs and even if specified it is very difficult to enforce or verify them. If OA consumer sources RE power under GTAM/GDAM availing concessions, such power is not eligible to claim RECs as they avail concessions. Further, this also requires a mechanism to verify if RECs have been availed by

the generator to avoid duplicity. It is submitted that the eligibility to claim RECs be made only to the RE generator and not to OA consumer.

Without prejudice to the above, we submit that the proposal to make the OA consumer eligible shall not in any way affect the REC trading eligibility of Group Captive and other RE generators who have already registered and are availing RECs and supplying power to other captive OA consumers, which are different legal entities. The power consumption from such group captive WEGs cannot be called as selfconsumption and the RE generators who are already registered under REC mechanism should continue to be eligible to avail and trade in RECs.

- (2) A renewable energy generating station shall be eligible for issuance of Certificates, if it meets the following conditions:
- (a) the tariff of such renewable energy generating station | APPC+REC Eligibility: has not been either determined or adopted under section 62 or section 63 of the Act, or the electricity generated is not sold either through an electricity trader or in the Power Exchange, for RPO compliance by an obligated entity;

The eligibility as per REC Regulations 2010 for the entities which sells the electricity generated to the distribution licensee of the area in which the eligible entity is located at the pooled power purchase cost of such distribution licensee as determined by the appropriate commission is completely not mentioned here.

The Hon'ble Commission has removed the APPC + REC as a concept where the APPC is a reflection of the conventional energy costs whereas the REC represents the cost of green attributes.

Even as per the explanatory memorandum on this draft regulation issued by the Hon'ble Commission, around 332 projects totaling 1,775MW are registered under REC Mechanism through APPC + REC route.

Under the proposed draft, the Commission has entirely removed the concept of APPC. This will have a disastrous impact on the existing REC projects registered under the APPC + REC route.

The projects commissioned based on the overall premise of APPC+REC as a long term viable proposition, are adversely affected already because of the interruptions in the REC trading, the cash flows having been affected heavily causing distress in the continuation of operations.

If the Central Commission also removes the eligibility of such projects entirely, all the existing projects registered under APPC+REC route, will soon face difficulties in continuing their operations. It may also be noted that these projects were commissioned at much larger capital costs than the one prevailing today.

The significant change in policy by the Commission through this regulation could lead to a severe financial distress on such projects operating under APPC+REC route.

Our submission to the Hon'ble commission is that the concept of APPC+REC should be retained for financial viability of the existing projects.

We wish to submit our comments on the Banking facility as follows:

#### Banking facility benefit:

Hon'ble CERC introduced eligibility for Captive power plants through its first Amendment in Sep 2010. The relevant portion is reproduced below:

 Amendment of Regulation 5 of Principal regulations: The following provisos shall be added at the end of sub clause (c) of clause (1) of Regulations 5 of the principal regulations, namely:

"Provided that such a generating company ........

Provided further that a Captive power producer (CPP) based on renewable energy sources shall be eligible for the entire energy generated from such plant including self-consumption for participating in the REC scheme subject to the condition that such CPP has not availed or does not propose to avail any benefit in the form of concessional/promotional transmission or wheeling charges, banking facility and waiver of electricity duty.

Provided also that if such a CPP foregoes on its own, the benefits .......

(b) such renewable energy generating station has not availed any (i) waiver or

concessional transmission charges or

(ii) waiver or concessional wheeling charges or

(iii) facility of banking of electricity.

Provided also that the abovementioned condition for CPPS for participating in the REC scheme ........

Explanation: - For the purpose of this Regulation, the expression "Banking facility benefit" shall mean only such banking facility whereby the CPP 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.

It can be observed from the above that a specific explanation was given as to what constitutes concessional banking in the very first amendment, when the CPP was made eligible to claim RECs. The Commission has clarified the expression 'banking' in all the amendments (right from the time when captive wind projects were made eligible to claim RECs) to include only such banking facility whereby the 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. In other words, the banking facility wherein the CPP is entitled to draw power from the utility based on and corresponding to the time period (peak or off-peak period) of injection of power by such CPP, shall not be considered as concessional / promotional benefit for the purpose of this regulation.

It was made very clear that availing banking per se is not to be considered as concessional and only when the banked energy generated during the off peak hour is allowed to be adjusted even during the peak hour is considered as concessional. This means that so long as the lower slot to higher slot (non-peak hour to peak hour) of banked energy is not adjusted, banking is not considered to be concessional and such projects are eligible to avail RECs.

It is on the basis of this eligibility condition read with explanation that many RE projects have been set up considering the revenue from sale of RECs.

The explanation defining what is concessional banking has been continued by CERC in all its subsequent Amendments as listed below:

CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Second Amendment) Regulations, 2013 dated 10th July 2013

CERC (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) (Fourth Amendment) Regulations, 2016 dated 23rd March 2016. We also like to submit that many projects under captive have been set up based on the eligibility conditions stipulated by CERC in Sep 2010 and any change to the eligibility conditions now would adversely impact the financial viability of the already set up projects leading to cash flow stress and force becoming NPAs.

But in the proposed draft, webhosted seeking comments, the explanation is not specifically mentioned as to what constitutes concessional banking. In the absence of such explanation, the very eligibility of RE Projects that avail banking can be questioned by the Accreditation Agency. We do hope that the intent of this Amendment is not to bring in this ambiguity or to make any change relating to the Banking of wind energy and we believe that this explanation has not been specifically provided by oversight in the draft.

It is a well-known fact that the nature of RE sources, especially wind and solar, is infirm in nature. It is a fact that neither the generator nor the consumer has any control over the availability, quantum, direction, etc. of RE resources and are in absolutely no position to accurately estimate, exercise control, or direct the energy generation from such sources. Hence, banking of wind energy is crucial and investments have been made on the basis of availability of banking and eligibility of REC even when banking is availed subject to fulfillment of conditions.

APTEL has held in various Orders that banking is an integral part of Wind power in view of its infirm nature and hence it is impossible to consume the wind power generated by the Open Access consumers without the facility of banking.

We reproduce below the relevant part of the Hon'ble APTEL order in Appeal No 53, 94 and 95 in its order dated 21.9.2011.........

### 27. Summary of Our Findings

(d) The concept of "banking" was evolved by the State Commission which is in line with the provisions of the Act, 2003, National Electricity Policy and the National Tariff Policy. Therefore, the impugned order promotes the object of the Act/Rules and the purpose it serves. It would be impossible to set-up the Wind Energy Units without the banking facilities due to the very characteristics of wind power generation. It was only because of the promises made by the Government and the Appellant in respect of Wind Power Generation which included the concept of banking, the wind generators set-up their facilities by incurring heavy expenditure. Therefore, the Appellant is estopped from making claims contrary thereto

If the explanation is not explicitly provided, it may result in misinterpretation on the very eligibility for claiming RECs for Wind energy generators. The eligibility of projects already established under the REC Scheme cannot be changed now as it will affect the viability of the project. All the projects have been set up based on the eligibility criteria that prevailed at the time of establishing the project, assuming that the project would be eligible for REC for the life time. Any change in the eligibility now would adversely impact the financial viability of the project and would result in default of servicing the loans leading to NPAs. Further changing the eligibility criteria is not legally tenable.

We therefore humbly submit that the explanation on concessional Banking may please be inserted to the Regulation as an Explanatory note and we request that point (iii) shall be modified as below:

## (iii) facility of promotional banking of electricity.

Explanation: For the purpose of this Regulation, the expression "banking facility benefit" shall mean only such banking facility whereby any 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."

(3) Captive generating stations based on renewable energy sources and meeting the conditions as specified under clause (2) of this Regulation in respect of renewable energy generating stations shall be eligible for issuance of Certificates:

Provided that the Certificates issued to such captive generating stations to the extent of self-consumption, shall not be eligible for sale. In the draft Regulations it has been proposed to make sale of RECs to the extent of self-consumption. We already have submitted in the preamble and other clauses that the projects which have been registered under 2010 Regulations be made eligible to claim and trade in RECs under the New Regulations. Any change in eligibility criteria be made applicable to projects set up after the notification of new Regulations, without prejudice to the above, we submit our comments as under:

The words self-consumption needs to be defined in the Regulations.

This draft will create room for misinterpretation of the eligibility, issuance or sale of RECs, because the self-consumption can be misconstrued even when the group captive consumers consume the power.

It is pertinent to mention that self-consumption has been referred to in 12 (1) of the draft Regulations wherein it is mentioned as follows

(1) Each Certificate issued under these regulations shall represent one Megawatt hour of electricity generated from renewable energy sources and injected or deemed to be injected (in case of self-consumption by eligible captive generating station based on renewable energy sources) into the grid:

It is clear from the reading of the above that the self-consumption refers only to the injection of RE power in collocated points which are not metered or integrated with the grid. Although the inference is that the power consumed by consumers under group captive / captive under open access will not fall within the meaning of self-consumption in order not to have interpretational issues to arise in future, we submit that the term Self consumption may please be clarified and defined in the Regulations so that the trading of RECs by group captive plants is not affected. Otherwise, only the group captive generating entity, would be affected.

It is also pertinent to mention here that in the second amendment to the REC Regulations, the issue relating to Self-consumption has been discussed. The self-consumption has been referred to the consumption by the bagasse based cogeneration plant that are co-located to the sugar mill. Self-consumption therefore means only the consumption by a co-located RE based cogeneration plant who do not avail any open access.

We also would like to submit that a similar amendment to restrict self-consumption was proposed in 2016 to restrict the issuance of RECs for self-consumption when all the stakeholders had submitted their comments. CERC after considering the comments restricted the eligibility of RECs for captive based on the commissioning date of the projects.

In this connection, we reproduce below the relevant paras of Statement of reasons given along with the Fourth amendment .....

### 4.3 Analysis and Decision

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.

- 4.3.4 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.
- 4.3.8 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 29th September 2010 and already registered with Central Agency under REC framework before 30th 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 29th September 2010 or after 31st March 2016 ii) not registered with Central Agency before 30th 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 31st March,

2016 shall not be eligible for issuance and dealing in RECs.

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 criterio 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.

4.3.14 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 29th September 2010 or after 31st 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 29th September 2010 and 31st March 2016; and

b) registered with Central Agency under REC scheme on or before 30th 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."

It can be observed from the above that the restriction to claim REC for captive power plants was made based on the date of commissioning after considering the comments of the stakeholders that many captive projects were setup based on the REC revenue paying normative charges (foregoing concessions). The present draft proposes the same amendment as was proposed in the fourth amendment draft, which was eventually modified to restrict the REC eligibility for captive power plants that were commissioned between 29.9.2010 and 31.3.2016. This was because the projects that were setup under REC scheme after the date of notification considering the income from sale of RECs (foregoing the concessions) as a revenue stream for the viability of the

project should not be affected. This was fair and balanced the interest of all stakeholders.

Open Access consumer can source power from

- a) 100% owned captive power plant Here both the generators and the consumer are one and the same. Both the generating station and the consumer are the same legal entity. Such consumers will be able to avail RECs in respect of surplus RPO as a OA consumer as per the proposed draft as both generating entity and consuming entity are one and the same.
- b) Group captive power plant Some of the RE projects have been set up under group captive and registered under REC. The generating entity and the consuming entities are different legal entities. Project has been set up by the generating entity with REC revenues by paying normative charges and foregoing the concessions. Project viability is established only with REC revenues. In this case as the consumers and generating entities are different, the consumption by consumers would not fall within the meaning and scope of self-consumption.

When the generating plant is set by the CGP, the REC Registration is made in the name of the Group Captive Generating Plant and the consumers are not registered and are not eligible to register under the REC because they do not own the Captive generating plant in their own legal entity. Open Access is availed for wheeling power from generating station to consuming location for which normative charges are paid, foregoing the concessions, only based on the REC revenues. Such consumption would not fall within the scope of self-consumption.

# Justification

Many captive generators have set up the captive power plant under the REC route by paying full transmission and wheeling charges even though their own RPO would be much less. The generation from the captive power plants could be much higher than the RPO requirement and they had all set up with the REC revenue stream as one of the main revenue streams for the project. Any sudden change in the eligibility to trade RECs by an entity which has invested in the RE project and has not availed any concessions and paid full charges would adversely impact the financial viability of the project and therefore the existing methodology of allowing Captive generating

plants to avail RECs and retain to the extent of their RPO and trade the surplus should be continued. Otherwise even though an entity is paying all the charges without availing any concessions, rendering them ineligible to trade RECs would create imbalance and inequality in the system. While one set of consumers may be eligible to avail RECs, when they avail power under Open access, another set of consumers who are generating power on their own and are not able to consume after paying full normative charges would not be eligible to trade RECs merely because they are consuming for their own purposes. This will create imbalance in the system. While an open access consumer who is buying power from the third party is allowed to claim RECs when they buy RE power in excess of their RPO, a captive generator who is actually paying the normative charges and has invested in the project taking the risk is not allowed to trade in RECs, thus creating inequality between a generator and a OA consumer. If trading of RECs is not permitted, the CPPs will end up paying higher normative charges instead of concessional charges, without earning any corresponding revenue from sale of RECs. The option to pay higher charges was exercised only based on the expected revenue from sale of RECs.

In the draft Regulations, it has been proposed to allow the open access consumers to claim and trade RECs if they have fulfilled their RPO in excess of their obligation. The investment in the generating plant is made by the generating entity and not by the OA consumers. It is submitted that the proposed draft gives rise to inequality by placing the genuine investor at risk (by proposing to restrict the sale of RECs to the extent of self-consumption, removal of floor and forbearance price) while the OA consumer who has not made any investment will be rewarded.

Hence we submit that self-consumption be defined in the Regulations to mean only co located plants consuming within the premises where generation is taking place (behind the meter) and allow all captive projects that avail open access paying normative charges to claim and trade in RECs as is being done under the existing Regulations

Eligibility to avail RECs based on date of commissioning of the generating station:

The amendment made in 2016 i.e. on 23rd March 2016 vide Amendment to Regulation 5 of the Principal Regulations, new Clause (1B) specified clearly the eligibility norms for availing RECs is based on the date of Commissioning. All Captive plants that were commissioned between 29th Sep 2010 and 31st Mar 2016 were eligible to claim RECs

and plants that were commissioned prior to 29th Sep 2010 and after 31st Mar 2016 were not eligible for claiming RECs.

In the draft Amendment that is proposed the restriction to claim REC based on the date of commissioning is sought to be removed. The commission introduced the restriction with a well-reasoned explanation by safe guarding the interest of the generating stations set up after the notification of REC regulations and rendered other plants ineligible. In the proposed draft while the commission seeks to restrict the trading of RECs to the extent of self-consumption, is proposing to make eligible all CPPs to claim RECs, that were commissioned prior to or after the notified dates of commissioning of the existing Regulations, even though those plants were set up without considering REC revenues. This is against Commission's own analysis and reasoning provided in the Fourth Amendment when the eligibility to claim RECs was restricted based on the date of commissioning of the generating station.

We submit that the eligibility for the CPPs to claim and trade in REC be continued based on date of commissioning as per the present Regulations.

(4) An obligated entity being a distribution licensee or an open access consumer, which purchases electricity from renewable energy sources in excess of the renewable purchase obligation determined by the State Commission shall be eligible for issuance of Certificates to the extent of purchase of such excess electricity from renewable energy sources.

The CERC vide Third Amendment to the Regulations dated 30<sup>th</sup> Dec 2014 has clearly given the eligibility for Distribution Licensee as follows:

[(1A) A distribution licensee shall be eligible to apply for registration with the Central Agency

for issuance of and dealing in Certificates if it fulfils the following conditions:

(a) It has procured renewable energy, in the previous financial year, at a tariff determined under Section 62 or adopted under Section 63 of the Act, in excess of the renewable purchase obligation as may be specified by the Appropriate Commission or in the National Action Plan on Climate Change or in the Tariff Policy, whichever is higher:

Provided that the renewable purchase obligation as may be specified for a year, by the Appropriate Commission should not be lower than that for the previous financial year.

Provided further that any shortfall in procurement against the nonsolar or solar power procurement obligation set by the Appropriate Commission in the previous three years, including the shortfall waived or carried forward by the said Commission, shall be adjusted first and only the remaining additional procurement beyond the threshold renewable purchase obligation - being that specified by the Appropriate Commission or in the National Action Plan Climate Change or in the Tariff Policy, whichever is higher - shall be considered for issuance of RECs to the distribution licensees.

 b) It has obtained a certification from the Appropriate Commission, towards procurement of renewable energy as provided in sub - clause
 (a) of this regulation.]

The same principle should be followed in the new Regulations also.

In respect of DISCOM availing REC for purchase of RE Power in excess of their RPO, we agree to the proposal subject to the condition that the DISCOMS shall become eligible for availing REC only if

- The RPO has been fulfilled by all DISCOMs, in the State if there is more than one DISCOM in that State, up to that year (Including for the past years)
- ii) such purchase of green power is made without availing any concessions including ISTS waiver. In other words, REC cannot be availed by DISCOMs in respect of power purchased under SECI bidding etc. with waiver of ISTS charges. This is in consonance with the cardinal principle of not availing any concessions to be eligible to claim RECs.

#### Comments on OA consumer

In the draft Regulations, it has been proposed to allow the open access consumers to claim and trade RECs if they have fulfilled their RPO in excess of their obligation. The investment in the generating plant is made by the generating entity and not by the OA consumers. It is submitted that the proposal gives rise to inequality by placing the genuine investor at risk (by proposing to restrict the sale of RECs to the extent of self-consumption, removal of floor and forbearance price) while the OA consumer who has not made any investment will be rewarded. Further, we submit that this could lead to claiming RECs by generating stations /CPPs which are not eligible to claim REC if the date of commissioning is prior to or after the dates notified under the present Regulations as such plants could sell the power under OA to OA consumers who would become entitled to avail RECs as per this draft. This would be contrary to Commission's own approach followed earlier in restricting the eligibility to claim REC based on date of commissioning of the generating station. Our submission is that the eligible generating stations claim RECs as a generator and hence the proposal to allow OA consumers to claim REC be removed as this will lead to more complexities, open window for energy generated by plants which are otherwise not eligible to claim RECs to become

eligible, leading to oversupply of RECs affecting the projects that were genuinely setup on the basis of REC revenues.

In view of what is stated above, the proposal to allow OA consumers to avail REC may please be considered to be dropped.

#### 5. The Processes

The process involves (i) accreditation and registration for Certificates and (ii) issuance, exchange and redemption of Certificates, as specified in these regulations.

The process involving (i) accreditation and registration for Certificates and (ii) issuance, exchange and redemption of Certificates, is agreeable but should not be as specified in these regulations.

#### 6. Grant of Accreditation for Certificates

(1) Accreditation for Certificates to the eligible entities connected to intra-State transmission system shall be granted by the State Agency:

Provided that the entities granted accreditation for Certificates under the REC Regulations, 2010 shall be deemed to have been granted accreditation for Certificates under these regulations till validity of their accreditation under the REC Regulations, 2010.

RE projects registered under REC Regulations 2010 shall continue to be eligible based on the eligibility criteria of 2010 Regulations and the validity of accreditation shall be for the period as stipulated under the new Regulations from the date of the notification of the new Regulations.

This will bring in uniformity in the accreditation period for all the projects.

In view of the above, it is requested to the Hon'ble CERC that the validity period of the entities deemed to have been granted accreditation under the proposed regulations shall be for the same period (irrespective of the validity of the accreditation period under 2010 Regulations) from the effective date of the new Regulations, as proposed under the new Regulations

In other words, projects registered already should be granted deemed accreditation for a period of 15 years from the effective date of this Regulations.

This is also in consonance with the clause provided in 8 ( 2) below where the registration of projected registered already under the 2010 Regulations are deemed to have been registered under the new Regulations and would be valid for 15 years.

(3) Eligible entities that have been granted accreditation for Certificates, referred to in clause (2) of this Regulation, which have undergone a change in name or change in legal status after the grant of accreditation for Certificates, shall inform, along with relevant

No Comments

In case the REC registered project is transferred as a going concern from one legal entity to another legal entity with a different name, we submit that the project shall continue to be eligible to avail REC. The date of commissioning shall be the sole criterion for determination of eligibility for captive power plants and not the date of transfer of the plant to the new legal entity in case of a slump sale.

documents from the appropriate authority such as Registrar of Companies or National Company Law Tribunal or any other Court, to the concerned RLDC which shall, upon verification of documents, update such change in its records within 30 days from the date of such information and inform the same to the Central Agency.  7. Revocation of Accreditation	
The concerned RLDC, after to	No Comments
render it liable to revocation.	
8. Grant of Registration for Certificate	es
(1) An eligible entity whichCertificates under these regulations.	No Comments
(2) The registration for Certificates granted in terms of these regulations shall be valid for 15 years from the date of registration for Certificates: Provided that the registration for Certificates granted under the REC Regulations, 2010 and deemed to have been granted registration for Certificates under these regulations shall be valid for a period of 15 years from the date of deemed registration for such Certificate.	The deemed accreditation should also be for the same period a proposed in this clause to maintain uniformity in the validity period Kindly refer to our comments 6 (1) in this regard.
(3) The entities having beendate of such application.	PI see our comments in 6(3)
9. Revocation of Registration	
The Central Agency, after to to render it liable to revocation.	No Comments
10. Issuance of Certificates	No Comments
(1) An eligible entity which has Detailed Procedure.	No Comments
(2) Application for issuance of from corresponding generation.	No Comments
(3) The Central Agency shall, to the concerned entity.	No Comments
(4) The Certificates shall be	No Comments

(5) The entities granted ...... for Certificates.

No Comments

## 11. Exchange and Redemption of Certificates

 The Central Agency shall maintain a Registry of Certificates. No Comments

(2) The Certificates shall be exchanged through power exchanges or through electricity traders in such periodicity as may be stipulated by the Central Agency in the Detailed Procedure.

The proposal to allow the trading of RECs through Traders in addition to the trading in the power Exchanges would not augur well for the trading of the REC and the investors. It is because the supply is already in excess of the demand and the generators are unable to liquidate RECs, due to poor demand caused by lack of enforcement of RPO. Under these circumstances if open trade through traders is permitted, it will lead to crash in the prices obviously because the market is not balanced with supply being in excess of demand. With poor enforcement of RPO, the obligated entities may take advantage of this situation and try to bargain the prices through traders for reducing the REC prices. Hence if the floor prices are removed, the revenues for the genuine investors would be affected leaving a cascading impact on the banking system as they would not be able to service the debt due to lower realisation from sale of RECs. In the present circumstances where the supply is more than the demand, Removal of Floor and forbearance price and allowing trading through a trader will definitely lead to a significant reduction in the prices and will make the whole mechanism fail miserably.

The present system of exchanging the certificates through Power exchanges is working well without any gaming or price volatility and balances the interest of stakeholders. Under these circumstances, introduction of Power Traders is not necessary as it may lead to huge imbalance in the system by the Traders, who can tempt the eligible entities and subsequently manipulate high fluctuations in prices in the absence of Floor and Forbearance prices and further flooding of RECs due to opening the door for eligible cogeneration plants also.

There should not be any role for Trader, the market being seasonal and occasionally volatile. In such a situation, introduction of Traders can lead to hoarding and gaming that could result in distress sale by RE generators impacting their revenues.

It is submitted that the present mechanism of trading through the exchange between the RE generator and the obligated entities can continue where there is no scope for intermediaries and gaming in prices.

(3) The Power Exchange(s) shall ......
the Power Exchange(s).

No Comments

- (4) Exchange of Certificates through electricity traders shall be subject to the following:
- (a) The eligible entities shall inform, in advance, to the Central Agency about the number of Certificates intended to be sold through electricity traders;
- (b) The Central Agency shall block the Certificates in the Registry as informed by eligible entity in terms of sub-clause (a) of this clause;
- (c) The Certificates blocked under sub-clause (b) of this clause shall not be allowed to be exchanged through Power Exchange(s);
- (d) The electricity trader shall intimate to the Central Agency consequent upon sale of the Certificates blocked under subclause (b) of this clause;
- (e) The trading margin to electricity traders for trade of Certificates shall be governed by the Trading License Regulations, 2020, treating one Certificate representing one Megawatt hour of electricity.
- (5) The Certificates once ...... stand redeemed.
- (6) Upon redemption, the ........ Registry and update its records.
- (7) The Certificates issued to captive generating stations based on renewable energy sources to the extent of self-consumption shall stand redeemed on compliance of RPO:

Provided that the State Agency shall inform the Central Agency about

Pl refer our comments to 11(2) above. We submit that Exchange of Certificates through Traders should not be permitted.

The present system of trading through power exchanges demands only Rs.20/- per REC transacted while the proposal that the Trading margin to traders for transacting RECs as per the CERC Trading License Regulations 2020 No. L-1/253/2019/CERC Dated: 2<sup>nd</sup> January, 2020, will make the commitment on the Sellers to the tune of Rs.70/- per REC (Max), thus increasing the burden by reduced revenue realized.

No Comments

No Comments

We submit that as stated is previous paras self-consumption should be defined to mean only co located plants where generation and consumption take place within the same premises. Where OA is availed for captive consumption, including group captive generating plants, by paying normative charges the consumption by captive users would not fall within the meaning of self-consumption and hence this clause be clarified accordingly, further this clause be made applicable prospectively for plants commissioned after the new Regulations are notified. Eligibility to avail and trade in RECs by captive/group captive shall not be affected.

In such cases the Power generator should be made eligible for issuance of certificates and also for trading the issued Certificates. This is as per the present Regulations 2010.

such redemption of Certificates, upon which the Central Agency shall extinguish such Certificates and update its records.

### 12. Denomination of Certificate

(1) Each Certificate issued under these regulations shall represent one Megawatt hour of electricity generated from renewable energy sources and injected or deemed to be injected (in case of self-consumption by eligible captive generating station based on renewable energy sources) into the grid:

Provided that Certificate Multiplier may be determined by the Commission as per clause (2) of this Regulation:

Provided further that Certificates shall be issued in multiple of the assigned Certificate

Multiplier as per clause (2) of this Regulation for one Megawatt hour of electricity generated and injected or deemed to be injected into the grid.

(2) The Certificate Multiplier for the period of three years from the date of effect of these

regulations or such other period as may be decided by the Commission, as determined in **Appendix-1** shall be as under:

Renewable Energy Technologies	Certificate Multiplier
On shore Wind and Solar	1
Hydro.	1.5
Municipal Solid Waste (MSW) and non-fossil fuel-pased cogeneration	5
Biomass and Dicfuel	2.5

Provided that the Certificate Multiplier for other renewable energy technologies, not covered in the above table, shall be notified by the Commission on a case-to-case We presume the term self-consumption mentioned as "Deemed to be injected" means the power generated and consumed (behind the meter) from RE sources within the premises without availing OA. This may please be clarified.

While we fully agree with the proposal to introduce multipliers to new RE projects prospectively, we submit that the same principle is equally applicable to projects commissioned already and hence should be applied to the existing registered projects, where the floor prices are reduced progressively since the commissioning.

We appreciate the fact that the policy should be evolved with time. However, the project commissioned based on the certain regulations should also be considered as per the prevalent market realities. In this regard we would like to highlight the following points for your consideration in support of our request to provide multipliers to existing projects as well

A. Lower Capacity Utilization Factor: The wind projects set up during FY 12 to 17 under the REC mechanism have lower capacity utilisation factor around 19%. The same has been corroborated by the Power System Operation Corporation Limited (POSOCO) i.e. the Central

basis based on the principles stipulated in Appendix-1:

Provided further that the Commission may, from time to time, based on review of the maturity level and cost of various renewable energy technologies, revise the Certificate Multiplier.

Agency in its report "Renewable Energy Certificate Mechanism in India Key learnings, Data analysis and Way forward" published in 2018. The relevant part of the report is reproduced below:

# "6.12 Summary of CUF of Wind, Solar and SHP plants

Energy Source	So ar			Wind			Small Hydro		
Year	No. of Projects	Total Capacity (MW)	Average CUF	No. of Projects	Total Capacity (MW)	Average CUF	No. of Projects	Total Capacity (MW)	Averag CUF
2012		34	40	127	719	22.3	8	92	39.8
2013	9	20	17.5	360	1641	19.3	14	115	40.6
2014	122	278	19	258	1529	17.B	14	150	47.2
2015	214	461	17.9	286	1637	15.7	17	119	48.4
2016	252	518	18.2	270	1584	20.1	15	106	40.4
2017	239	505	17.8	215	1546	20.5	15	99	42.4
Total Ave	erage				19.3				

From above, it is clear that the average CUF of wind projects registered under the REC mechanism is around 19%. However, in the recent past, due to technology advancements, higher hub heights, large capacity turbines etc., the CUF of wind power projects has been improved and resulted in higher generation per MW, but the capital cost of wind power projects has not dropped much as compared to solar. The projects set up under the REC mechanism have lower generation and need timely realization of revenue so as to meet their project expenses (interest on term loan, insurance, O & M and other expenses) and remain financially viable. The poor state of REC-based RE generators will remain the same until there is timely realization of REC revenue and uniform implementation of Average Power Procurement Cost (i.e., APPC tariff) as per the definition provided by CERC. Given the foregoing, a multiplier relief is essential for such projects to remain financially viable and meet their project expenses.

B. Poor implementation of REC mechanism: REC is a national mechanism notified by CERC with the objective of promoting RE and helping non-RE states align their RPO targets with national RPO targets. Effective implementation of RPO Regulations and determination of APPC as per the definition specified by CERC are critical for the success of the REC mechanism. Electricity is a concurrent issue, therefore the responsibility for determination of APPC and effective implementation of RPO Regulations is with the respective SERCs. Unfortunately, SERCs have come up with their own definitions for the determination of APPC, which results in lower APPC, leading to lower revenue realization for the REC project investors. The above-mentioned fact can be confirmed by comparing the state-wise APPC determined by CERC by various orders issued from time to time with the actual APPC tariff

which is being paid to REC based RE Generators. For example, the Tamil Nadu State Electricity Regulatory Commission and the Karnataka State Electricity Regulatory Commission have capped the APPC tariff at 75% of the SERC approved RE technology tariff. In our opinion, the APPC will fall in the future as low-cost RE generation contributes significantly more to the grid. The reduced APPC will ultimately reduce the revenue realization of REC projects with lower CUF and higher capital costs.

In addition to the above, RE generators are deprived of timely revenue realization from the sale of REC due to poor compliance with RPO. The lenient approach of SERCs toward non-compliant obligated entities has resulted in the accumulation of RECs in the market. As of today, the total inventory of REC is approximately 30 lakhs. Also, there is no compensation mechanism like LPS for delay in revenue realisation as provided in the PPA executed under sections 62 and 63 of the E Act, 2003.

On account of the absence of uniform APPC and 100% RPO Compliance, the only way to compensate the existing REC investors is to provide them with a vintage multiplier so that their projects will remain viable.

C. Poor revenue realisation: The revenue from REC projects came from two sources: the sale of energy (at variable APPC or mutually agreed tariff) and the sale of green attributes, i.e., REC (at or between floor and forbearance price). Unfortunately, since the beginning of the REC mechanism, RE generators have not been able to get the APPC as defined under the REC Mechanism notified by the CERC and realise timely revenue from the sale of REC. States are also not willing to purchase power from REC-based RE projects due to current low RE tariffs, which are discovered through competitive bids to be lower than the state's APPC as well as the Indian average of APPC. Also, the open access charges have been significantly increased by the states. This has resulted in low revenue realisation under third-party bilateral transactions. Moreover, in collective transactions, the price discovered in energy exchanges is less than the APPC of the States.

Besides the above, REC projects bear the risks of PPA, project financing, off taker ratings, payment security mechanisms, economies of scale, dependence on STOA, and relief for change in law. It is therefore essential that the multiplier be provided to old projects so that renewable energy investors can manage their project expenses and come forward for further investments in the future.

- D. Reduction of Floor and forbearance Price: The floor and forbearance prices have been reduced by CERC from time to time, relying on the current lower capital costs and tariff for wind and solar projects. The floor price is a critical component for projects established under the REC mechanism because it ensures the minimum revenue from the sale of REC to generator. Non Determination of floor price would affect the viability of the project. Eliminating the floor price would make generators more vulnerable to market risk and jeopardise the project's viability. comparing REC based RE projects with the projects under the competitive bidding route may not be appropriate on the following counts:
- (I) the majority of REC projects are small-scale MW projects with higher capital costs; (II) no waivers are granted because ISTS charges are a major component of the tariff; (III) projects registered under REC have lower CUF; and (IV) REC projects have shorter-term visibility than competitive projects.
- E. Reduction in wind power installation: The government of India has set an ambitious target of 175 GW by 2022 and 450 GW by 2030. Despite such ambitious targets, a reduction in wind power installations has been seen in the recent past. The reasons being the poor financial condition of wind manufacturers, land execution issues, RoW issues, and surrender of wind projects under competitive bidding, regulatory uncertainty etc. The wind power installation is tabulated below:

FY	Wind Installation (MW)
2016-17	5502
2017-18	1865
2018-19	1481
2019-20	2118
2020-21	1503

It is evident that wind installation contributes a major portion of the total renewable energy installation in India. Earlier, wind contributed to the majority of RE installations in the country. However, there has been a drastic decrease in wind installations since 2017 onwards. The wind capacity share in total RE installation is still significant, viz. 42% of total installed capacity, amounting to 39 GW. Moreover, wind investment is still dominating the entire REC installation in the country (which is more than 70% of total REC project capacity, amounting to 2693 MW). In view of the above facts, we opine that the multiplier is necessary for vintage projects but should also be provided to the new wind projects registered under the REC mechanism to promote wind energy installation in the country. This will not only encourage existing

investors to invest, but it will also attract new investments in renewable energy technologies. This stride would also assist in achieving our Honorable Prime Minister's vision of the installation of 175 GW capacity of renewable energy projects by 2022 and 450 GW capacity of renewable energy projects by 2030.

In fact, existing projects stand on a better footing to be eligible for multiplier than the new projects for the existing projects were set up when the floor price was Rs. 1500/- while the new projects that come up after the notification of the proposed regulations are set up, based on the new regulations knowing the uncertainty in the revenues unlike the existing projects. Hence it is only just and fair to provide the multiplier to existing projects

Considering the afore-mentioned issues, we request the Hon'ble Commission to provide a multiplier of 2X for RECs generated through wind energy for existing projects as well.

(3) Applicable Certificate multiplier as per clause (2) of this Regulation shall be assigned to the renewable energy generating stations and captive generating stations based on renewable energy sources, commissioned after the date of effect of these regulations. As mentioned in point (2) above the multiplier shall be given to existing projects as well.

(4) The Certificate Multiplier once assigned to a renewable energy generating station, shall remain valid for a period of fifteen years from the date of commissioning of such renewable energy generating station or captive generating station based on renewable energy sources. This is in contradiction to Clause (2) of this Regulations where it is mentioned that

The Certificate Multiplier shall be for the period of three years from the date of effect of these regulations.

## 13. Pricing of Certificates

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

Provided that the Power Exchange(s) and the electricity traders shall report all transactions with details

It is noted in the explanatory memorandum that CERC relied upon the fact that the RE market has adequately matured and prices of renewable technologies, especially wind and solar, have reduced drastically and we feel this assumption is not correct. The APTEL, in its order dated 9-11-2021, noted that CERC had wrongly relied upon the declining tariff trend in competitive bidding, assuming that such phenomena could only be due to a reduction in generation costs. The relevant extract from the order is mentioned below:

including but not limited to volume, price, buyers and sellers to the Central Agency on a monthly basis.

- (2) The Commission, on being satisfied that any of the following circumstances exist or is likely to occur, may by an order give such directions as may be considered necessary:
- (a) Abnormal increase or decrease in prices of Certificates;
- (b) Sudden volatility in the prices of Certificates;
- (c) Sudden high or low transaction volumes of Certificates on a Power Exchange.

"91. There is not sufficient data shown to support the contention that there would be no loss to the REC project developer even when the Floor Price is set at ZERO. Reliance on statistics of bid-discovered tariff, treated as the cost of power, without comparing the same with the tariff actually received by the RE generators under the REC mechanism seems misleading. The RE generators under the REC Mechanism are obliged to sell their brown component at par with the conventional sources of energy without any concessional or promotional benefits and cannot be compared with the RE generators under the Preferential mechanism or under the competitive bidding mode which receive various concessions or promotional benefits."

For the following reasons, IWPA opines that the removal of the floor price is not the right step at this juncture.

We submit that since its inception, REC has been effectively traded for only 5 years out of 10 years. A tabulation of month wise clearing ratios from March 2011 onwards is enclosed as **Annexure A**. The enclosed tabulation establishes that over the past 10 years, there has been a very poor demand for RECs. This is primarily due to deliberate noncompliance of RPO targets by obligated entities (i.e., captive users, DISCOMs, and open access users) and stay granted during some court proceedings. This has adversely affected the cash flows of the REC based RE generators and it is extremely critical to provide them with regulatory and policy support in the form of a floor price.

The generators who have set up these projects have done so with certain assumptions and risks in mind. However, they were assured that there would be a minimum price at which they could sell RECs issued to them. As pointed out earlier, there were very few effective REC trade sessions during the first ten years of the REC mechanism. Due to poor implementation of the RPO framework and deliberate non-compliance by obligated entities, REC-based RE generators could not meet their cash flow requirements. Therefore, it is critical to provide a minimum assured return to REC based RE generators in the form of a floor price.

In our opinion, GTAM and GDAM will also reduce the demand and price for REC in the market as obligated entities can source physical power instead of purchasing REC's as per their RPO requirement without entering into long-term contracts. This is likely to affect demand for RECs in the coming years.

The absence of a floor price will incentivize the defaulting obligated entities who have been manipulating the REC market by deliberately not fulfilling and delaying their respective annual RPO compliance to push RE generators to sell RECs at the lowest rate possible with the expectation that the REC floor price will further go down on account of the low sales of RECs. Indeed, in its most recent order on REC pricing, dated 17.06.2020, CERC reduced the REC price band, relying on the

manipulated market reality that poor REC sales are caused by the higher price band of REC, i.e., Rs. 1000 per REC to Rs. 3000 per REC. The REC mechanism has been developed and introduced to enable non-RE states to comply with their RPO targets and therefore immensely contribute to the national RPO targets provided by the MoP. Therefore, RE generators who have invested in the REC mechanism play a vital role in the national RPO framework and the development of the RE-based electricity market. As a result, it is the responsibility of policymakers and regulators to ensure that REC-based RE Generators receive the bare minimum of revenue on time. This will ensure the compliance of RPO targets and would also attract more investment under the REC mechanism and contribute towards achieving the ambitious target of 450 GW by 2030 set by the Central Government under the leadership of PM Shri Narendra Modi.

We submit that Floor price is needed to provide revenue certainty and to keep the projects viable through its life time.

In view of poor enforcement of RPO compliance and the fact that the RPO compliance is required to be met only on an annual basis, normally the demand kicks in only during the last quarter of the financial year. Hence due to poor demand during the intervening period, there is a likelihood of trading happening at a very low price, if floor prices are removed, which will affect the small and medium investors who do not have the wherewithal to hold RECs until the price improves. MSMEs cannot afford to carry the inventory till the demand picks up to get better realization. They will be forced to make a distress sale to realize whatever money they can get out of trading their RECs.

Prices would crash if distress sale happens which will affect the project viability.

There is no compensation mechanism (interest/LPS) for delay in REC revenue realisation like for projects having PPA with DISCOMs. It is the responsibility of the Policy makers and the Regulators to ensure that the REC based RE Generators should get minimum revenue on time.

Elimination of floor price would make generators more vulnerable to the market risk and put the project viability under tremendous risk.

Reducing the floor price of REC or seeking to remove the floor prices of REC based on subsequent developments such as lower tariff discovered in competitive bidding is not logical or relevant for the project investments made much earlier to the introduction of the competitive bidding, as the capital cost was much higher when these

projects were set up and the subsequent developments cannot in anyway reduce the CAPEX or OPEX. Hence the cost of generation would remain the same and for such projects, if the floor prices are reduced, the revenues will go down affecting the viability of the project and it might even result in bankruptcy.

If the REC prices are not fixed for the life of the project, there won't be visibility on the realization resulting in revenue uncertainty. This would discourage the lenders from financing such projects as there is no revenue certainty. Already due to poor clearance of RECs in the past and the downward revision in REC prices, lenders are wary of funding REC based projects.

The last amendment made by CERC while removing the floor prices of REC was made on the basis of unrealistic APPC rates (which rates are not being paid to RE generators as most states have fixed a cap on APPC for RE projects) and the same was pointed out by us to the Hon'ble CERC before the order was passed. The calculations made on the basis of this wrong assumption of higher APPC rates has led to the conclusion that Removal of Floor price and bringing down the Forbearance price will not affect the already registered projects. The order of the CERC has been already set aside by the Hon'ble APTEL.

Most of the SERCs have provided for payment of penalty in the case of defaulting RPO at Forbearance rates. The purpose of Forbearance is not just to fix a price band. It is also to make it as a deterrent, for defaulting on RPO compliance. Hence Forbearance price should continue.

In line with our above submissions, we submit that the forbearance price shall also be determined to ensure that there is no undue increase in the prices of RECs.

The proposal to provide multiplier would be well served only if the floor price is maintained. Otherwise if there is a sudden crash in price, even with multiplier, the revenue realization could be lower. What is needed to the investor is the revenue certainty and to achieve this floor price is very essential.

To summarize, we submit that the floor and forbearance price should continue to be in place for RECs for the life of the project and in the event of any reduction in floor price, a multiplier in respect of projects commissioned prior to the date of the reduction in floor prices came into effect, representing the difference in floor price prevailed on the date of commissioning and the revised floor prices prevailing from time

to time be determined and RECs issued accordingly. This will help strike the right balance keeping the interests of all the stakeholders and will ensure viability of the projects and achieve financial closure.

In the absence of visibility of REC prices over the life of the project, the investor may shun from making the investments, not being sure of the revenue realization. If there is no revenue certainty, bankers would also resist from extending loans.

In the preamble to the explanatory Memorandum it is mentioned that the supply has been more than the demand based on the last ten-year data. Therefore, it is obvious that the market is not balanced with supply continuing to be higher than the demand. It is also an admitted fact there has not been any enforcement of RPO by most of the DISCOMs in the last ten years. In the absence of a proper enforcement of RPO, the compliance of RPO would still remain to be uncertain and the trading of RECs and the price at which the trading happens would continue to remain uncertain. Under these circumstances, the following are submitted.

The need to continue with the floor and forbearance price is established clearly by the fact that the supply is in excess of demand and it is also very clear over the last two years of trading when the supply was 90,71,597 number of RECs against which only 75,24,759 number of RECs got traded. This depicts the very recent data about the REC clearing percentage.

Similarly, the proposal to remove the segregation of Solar and non-solar RECs would also create further uncertainty in the trading of RECs and hence we submit that the original proposal for the existing classification of the solar and non-solar as also the RPO determinants for the solar and non-solar by the State Electricity Commissions be continued. We submit that solar and non-solar have different economics and costs and are not comparable. It won't be proper to equate both and hence we submit that the existing solar non solar segregation be continued.

### 14. Validity of Certificates

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

Provided that where an eligible entity has obtained accreditation or registration on the basis of false information or by suppressing material information and the We appreciate the proposal of the validity of REC until they are redeemed.

The perpetual validity of REC would aid in the reduction of regulatory processes, as the issuance of orders to extend the validity of REC would no longer be required.

It will give confidence among RE generators that they will not lose the revenue associated with the unsold RECs accumulated due to  $\,$ 

accreditation for Certificates or deliberate non-compliance of RPO Regulations by the Obligated registration for Certificates of such Entities. entity is revoked at a later date, the However, it is critical that the state regulators ensure that the Certificates already issued to perpetual validity of REC is not used as a tool or reason for rollover of such entity, but not redeemed, shall the shortfall in the compliance of Renewable Purchase Obligation stand extinguished from the date of (RPO) in the event of non-availability of physical renewable energy issue of such Certificates and in during a financial year. respect of Certificates already redeemed, such entity shall deposit to the Central Agency, the amount realized from sale of such Certificates along with the interest at the rate of two hundred (200) basis points above the State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) of one year tenor. 15. Fees and Charges The Commission may, based on No Comments .....matters connected therewith. 16. Detailed Procedure (1) The Central Agency shall ..... No Comments information to the Commission. (2) The Detailed Procedure shall No Comments ...... incidental matters. 17. Power to give directions The Commission may, from time No Comments ..... these regulations. 18. Power to Relax The Commission may by general No Comments ...... interested person(s). 19. Repeal and Savings (1) Save as otherwise provided in A clause may be added in this to provide protection to the projects regulations, registered already to remain eligible for availing and trading in REC as Regulations, 2010 and all subsequent per the provisions of 2010 Regulations and the eligibility of those amendments and Procedures projects shall not be affected by the new Regulations. This clause may thereof shall stand repealed from the specifically provide for this exception. date of effect of these regulations. (2) Notwithstanding such repeal: (a) anything done or any action taken Please refer our comments to 19(1) above and accordingly an or purported to have been done or exception to the existing projects ,even if there are any inconsistency taken or any accreditation or in the provisions between 2010 Regulations and the proposed registration or permission granted or Regulations be specifically made to enable existing projects to claim

any document or instrument

executed or any direction given under the repealed regulations shall, in so far as it is not inconsistent with the provisions of these regulations, be deemed to have been done or taken under the corresponding provisions of these regulations.

(b) any order or direction issued or approval granted, or any appointment made in pursuance of the repealed regulations shall, if in force at the commencement of these regulations, continue to be in force, and shall have effect as if made, directed or issued under or in pursuance of these regulations, unless otherwise specifically required under these regulations.

REC so long as they satisfy the eligibility conditions of the 2010 Regulations.

## Appendix-1

## Principles for Determination of Certificate Multiplier

Certificate Multiplier has been determined based on the tariff range of various renewable energy sources, by taking into account the:

 Tariffs of renewable energy projects discovered through bidding process under Section 63 of the Act; Comparing REC based RE projects with the projects under the competitive bidding route may not be appropriate on following counts:

- (a) majority of the REC projects are small scale MW projects with higher capital cost;
- (b) not getting any waiver as ISTS charges form a major component of tariff;
- (c) projects registered under REC having lower CUF;
- (d) short term visibility to REC projects as compared to competitive projects

Removing the floor price of REC based on subsequent developments such as lower tariff discovered in competitive bidding is not logical or relevant for the project investments made much earlier to the introduction of the competitive bidding, as the capital cost was much higher when these projects were set up and the subsequent developments cannot in anyway reduce the CAPEX or OPEX. Hence the cost of generation would remain the same and for such projects, if the floor prices are removed, the revenues may go down affecting the viability of the project.

Any reduction in the prices assumed in the viability workings through change in the floor prices or removal of floor prices of the green attribute viz REC will adversely affect the cash flows and the very viability of the project and it might even result in bankruptcy

The reduction in REC floor prices have led to uncertainty in the revenue stream of projects opting for REC revenues and that uncertainty has deterred investors from investing in RE projects as is evident from the fact that there has been a decline in capacity additions since the first reduction in REC floor prices was made by Hon'ble CERC in March 2017 and there has been no major capacity addition under the REC mechanism after the introduction of competitive bidding

- Tariff Orders issued by the Commission for projects based on various Renewable Energy Sources;
- Tariff Orders issued by State Electricity Regulatory Commissions for Renewable Energy Projects;
- Renewable Energy Project Specific Tariffs determined by the Appropriate Commission, if any.

B) Based on the above principles, the levelized tariff for renewable energy technologies estimated and Certificate Multiplier assigned to renewable energy technologies are as follows:

Renewable Energy Technologies based on	Tariff Range in Rs/kWh	Certificate Multiplier
On-shore Wind and Solar	<=4	1
Hydro	4-6	1.5
Municipal Solid Waste (MSW) and non-fossi fue-based degeneration	6.8	2
Biomass and Biofuel	8-10	2.5

The cap fixed by some State Electricity Regulatory Commissions on the applicable APPC rate affects the revenue for the electricity component of projects supplying REC power to DISCOMs under PPA. Hence this should also be considered so that at least Floor price of REC will protect the estimated revenue through the Green attributes component of such already registered REC projects.

While we fully agree with the proposal to introduce multipliers to new RE projects prospectively, we submit that the same principle is equally applicable to projects commissioned already and hence should be applied to the existing registered projects, where the floor prices are reduced progressively since the commissioning.

We submit that the Regulations webhosted for comments only will pave way for Flooding of RECs in to the market as the gates have been opened to Cogeneration projects also.

The removal of Floor price will result in bringing down the REC revenue to the minimum as a result of tough competition to sell the available RECs in hand, causing the already registered projects to have strain in cash flow and force them become NPAs.

The validity of some of the already Accredited projects will be under question.

Allowing traders to exchange and redeem Certificates is not desirable as the present system of redemption through exchanges is working well.

In order to maintain Regulatory certainty for effective development of RE sector, we request the Hon'ble Commission not to notify the Regulations in the present form and we request the Hon'ble Central Electricity Regulatory Commission to kindly consider our above comments/suggestions before finalizing the changes in the REC Regulations.

We also submit that all these proposals, if implemented as proposed, shall take prospective effect for projects to be established in future and not for the projects already commissioned and registered under REC.

OGPL also seeks liberty to make further submissions during the Public Hearing.

Thanking you,

Your faithfully

For ORIENT GREEN POWER COMPANY LIMITED

Authorised Signatory.

# Annexure A

SNO	Month, Year	Opening Balance	RECs Issued	RECs Redeemed through Power Exchanges	RECs retained by RE Generators	RECs revoked/D eleted	Closing Balance	clearing ratio
		Į,		N	on Solar			
1	March,2011	0	532	424			108	79.70%
2	April,2011	108	4,503	260			4,351	5.64%
3	May,2011	4,351	28,270	18,502			14,119	56.72%
4	June,2011	14,119	27,090	16,385			24,824	39.76%
5	July,2011	24,824	30,224	18,568			36,480	33.73%
6	August,2011	36,480	31,813	25,096			43,197	36.75%
7	September,2011	43,197	74,612	46,362			71,447	39.35%
8	October,2011	71,447	126,544	95,504			102,487	48.24%
9	November,2011	102,487	135,697	105,527			132,657	44.30%
10	December,2011	132,657	88,055	111,621			109,091	50.57%
11	January,2012	109,091	102,348	171,524			39,915	81.12%
12	February,2012	39,915	200,736	206,188			34,463	85.68%
13	March,2012	34,463	203,819	199,737			38,545	83.82%
14	April,2012	38,545	122,369	71,226			89,688	44.26%
15	May,2012	89,688	230,448	168,675			151,461	52.69%
16	June,2012	151,461	258,801	2,36,485			173,777	57.64%
17	July,2012	173,777	382,384	1,58,220			397,941	28.45%
18	August,2012	397,941	474,594	2,73,893			598,642	31.39%
19	September,2012	598,642	568,124	2,64,446			902,320	22.66%
20	October,2012	902,320	614,478	2,22,700			1,294,098	14.68%
21	November,2012	1,294,098	392,485	1,32,352			1,554,231	7.85%
22	December,2012	1,554,231	382,391	2,73,644			1,662,978	14.13%
23	January,2013	1,662,978	304,238	1,93,337			1,773,879	9.83%
24	February,2013	1,773,879	314,917	1,52,952			1,935,844	7.32%
25	March,2013	1,935,844	268,323	4,27,871			1,776,296	19.41%
26	April,2013	1,776,296	259,299	44,459			1,991,136	2.18%
27	May,2013	1,991,136	249,221	52,968			2,187,389	2.36%
28	June,2013	2,187,389	292,928	72,486			2,407,831	2.92%
29	July,2013	2,407,831	462,962	1,61,402			2,709,391	5.62%
30	August, 2013	2,709,391	488,824	40,889			3,157,326	1.28%
31	September, 2013	3,157,326	611,572	49,831			3,719,067	1.32%
32	October,2013	3,719,067	490,425	1,50,640			4,058,852	3.58%
33	November,2013	4,058,852	401,095	3,08,928			4,151,020	6.93%
34	December,2013	4,151,020	409,340	4,03,862			4,156,498	8.86%
35	January, 2014	4,156,498	572,505	3,58,997			4,370,006	7.59%
36	February,2014	4,370,006	319,027	3,78,825			4,310,208	8.08%
37	March,2014	4,310,208	1,864,158	6,58,727			5,515,639	10.67%
38	April,2014	5,515,639	1,070,344	79,354			6,506,529	1.20%
39	May,2014	6,506,629	482,240	29,255			6,959,614	0.42%
40	June,2014	6,959,614	398,552	1,39,454			7,218,712	1.90%
41	July,2014	7,218,712	1,338,162	31,809			8,525,065	0.37%

42	August,2014	8,525,065	559,850	50,681		9,034,234	0.56%
43	September, 2014	9,034,234	761,455	22,650	25,000	9,748,039	0.23%
44	October,2014	9,748,039	840,238	74,002	20,000	10,494,275	0.70%
45	November,2014	10,494,275	552,552	1,96,013	25,457	10,825,357	1.77%
46	December,2014	10,825,357	932,679	3,35,723	60,400	11,361,913	2.86%
47	January,2015	11,361,913	411,590	5,37,009	46,085	11,190,409	4.56%
48	February,2015	11,190,409	522,079	7,47,487	57,747	10,907,254	6.38%
49	March,2015	10,907,254	338,899	6,54,985	13,543	10,577,625	5.82%
50	April,2015	10,577,625	578,001	55,612	8,329	11,091,685	0.50%
51	May,2015	11,091,685	537,160	2,56,579	2,879	11,369,387	2.21%
52	June,2015	11,369,387	1,169,826	1,61,845	45,627	12,331,741	1.29%
53	July,2015	12,331,741	648,016	1,55,271	1,776	12,822,710	1.20%
54	August,2015	12,822,710	624,056	1,07,281	11,903	13,327,582	0.80%
55	September,2015	13,327,582	712,372	1,83,599	27,129	13,829,226	1.31%
56	October,2015	13,829,226	399,981	2,11,442	36,150	13,981,615	1.49%
57	November,2015	13,981,615	517,140	2,31,545	25,432	14,241,778	1.60%
58	December,2015	14,241,778	392,095	8,98,439	36,156	13,699,278	6.14%
59	January,2016	13,699,278	551,202	3,44,519	36,707	13,869,254	2.42%
60	February,2016	13,869,254	410,156	5,86,501	42,330	13,650,579	4.11%
61	March, 2016	13,650,579	818,392	11,14,319	73,546	13,281,006	7.70%
62	April,2016	13,281,006	232,881	2,90,457	46,380	13,177,050	2.15%
63	May,2016	13,177,050	561,372	1,61,858	30,094	13,546,470	1.18%
64	June,2016	13,546,470	451,138	4,17,426	1,497	13,578,685	2.98%
65	July,2016	13,578,685	135,406	2,35,007	10,303	13,468,781	1.71%
66	August,2016	13,468,781	60,055	2,58,891	3,979	13,265,966	1.91%
67	September,2016	13,265,966	497,148	1,75,525	6,569	13,581,020	1.28%
58	October,2016	13,581,020	239,114	2,55,321	1,376	13,563,437	1.85%
69	November,2016	13,563,437	1,002,846	2,61,057	28,074	14,277,152	1.79%
70	December,2016	14,277,152	526,235	4,21,952	63,151	14,318,284	2,85%
71	January,2017	14,318,284	485,652	15,20,293	46,407	13,237,236	10.27
72	February,2017	13,237,236	1,128,011	10,44,235	169,649	13,151,363	7.27%
73	March,2017	13,151,363	690,614	8,88,703	26,971	12,926,303	6.42%
74	April,2017	12,926,303	457,679	5,38,371	30,875	12,814,736	4.02%
75	May,2017	12,814,736	244,797	0	53,037	13,006,496	0.00%
76	June,2017	13,006,496	344,287	0	8,797	13,341,986	0.00%
77	July,2017	13,341,986	330,501	495,295	2,600	13,174,592	3.62%
78	August,2017	13,174,592	296,229	289,505	6,159	13,175,157	2.15%
79	September,2017	13,175,157	392,467	382,007	27,493	13,158,124	2.82%
80	October,2017	13,158,124	474,773	487,105	42,471	13,103,321	3.57%
81	November,2017	13,103,321	512,604	2,207,622	50,849	11,357,454	16.21
82	December,2017	11,357,454	728,303	5,217,189	103,874	6,754,694	43.17
83	January,2018	6,764,694	575,494	1,230,826	55,394	6,053,968	16.77
84	February,2018	6,053,968	249,219	2,358,396	23,155	3,921,636	37.42
85	March,2018	3,921,636	386,538	2,769,433	44,557	1,494,184	64.28
86	April,2018	1,494,184	273,002	1,87,543	27,837	1,551,806	10.615
87	May,2018	1,551,806	427,123	4,01,609	25,629	1,551,691	20,295
88	June,2018	1,551,691	479,691	3,03,828	61,331	1,666,223	14.965

89	July,2018	1,666,223	270,316	2,35,437	50,988		1,650,114	12.16%
90	August,2018	1,650,114	433,227	3,33,479	3,713		1,746,149	16.01%
91	September,2018	1,745,149	489,435	3,45,576	6,335		1,883,673	15.46%
92	October,2018	1,883,673	598,776	4,27,305	11,273		2,043,871	17.21%
93	November,2018	2,043,871	584,004	4,46,861	28,917		2,152,097	17.00%
94	December,2018	2,152,097	301,283	3,82,400	77,680		1,993,300	15.59%
95	January,2019	1,993,300	536,509	6,86,792	98,199		1,744,818	27.15%
96	February,2019	1,744,818	1,553,662	8,32,085	15,599		2,450,796	25.23%
97	March,2019	2,450,796	272,230	8,31,378	18,822		1,872,826	30.53%
98	April,2019	1,872,826	314,348	2,85,924	299		1,900,951	13.07%
99	May,2019	1,900,951	426,295	5,63,613	9,782		1,753,851	24.22%
100	June,2019	1,753,851	598,685	5,74,530	0		1,778,006	24.42%
101	July,2019	1,778,006	446,167	5,00,572	40,832		1,682,769	22.51%
102	August,2019	1,682,769	346,383	3,61,666	8,548		1,658,938	17.82%
103	September, 2019	1,658,938	558,484	7,18,032	6,173		1,493,217	32.38%
104	October,2019	1,493,217	620,657	5,87,859	23,706		1,502,309	27.81%
105	November,2019	1,502,309	325,239	505,673	19,216		1,357,112	27.67%
106	December,2019	1,357,112	477,020	442737	125,803		1,265,592	24.14%
107	January,2020	1,265,592	541,222	494484	1,126		1,311,204	27.37%
108	February,2020	1,311,204	5,444,408	842673	24,577		5,888,362	12.47%
109	March,2020	5,888,362	509,354	789766	19,735		5,588,215	12.34%
110	April,2020	5,588,215	153,163	217093			5,524,285	3.78%
111	May,2020	5,524,285	441,471	292301	3,916		5,669,539	4.90%
112	June,2020	5,669,539	288,043	259558	3,415		5,694,609	4.36%
113	July,2020	5,694,609	441,041	0	98,084		6,037,566	0.00%
114	August,2020	6,037,566	172,485	0	4,744	3,613,894	2,591,413	0.00%
115	September,2020	2,591,413	495,986	0	207		3,087,192	0.00%
116	October,2020	3,087,192	659,652	0	1,086		3,745,758	0.00%
117	November,2020	3,745,758	370,236	0	7,833		4,108,151	0.00%
118	December,2020	4,108,161	448,961	0	3,171		4,553,951	0.00%
119	January,2021	4,553,951	223,045	0	2,612		4,774,384	0.00%
120	February,2021	4,774,384	284,021	0	109,394		4,949,011	0.00%
121	March,2021	4,949,011	289,559	0	108,957		5,129,613	0.00%
122	April,2021	5,129,613	280,516	0	66,899		5,343,230	0.00%
123	May,2021	5,343,230	276,825	0	1,206		5,618,849	0.00%
124	June,2021	5,618,849	131,308	0	63,044		5,687,113	0.00%
125	July,2021	5,687,113	220,458	0	1,935		5,905,636	0.00%
126	August,2021	5,905,636	587,343	0			6,492,979	0.00%
127	September,2021	6,492,979	563,270	0	61,777		6,994,472	0.00%
128	October,2021	6,994,472	473,959	0	1,409		7,467,022	0.00%
129	November,2021	7,467,022	427,611	3201020	15,586	8	4,678,027	40.55%
130	December,2021	4,678,027	889,546	1716925	54,406		3,796,242	30.84%
131	January,2022	3,796,242	505,494	1232865	6,039		3,062,832	28.66%
132	February,2022	3,062,832	447,504	604997	777		2,904,662	17.23%