

**Comments and suggestions on the
Draft Central Electricity Regulatory
Commission (Terms and Conditions for
Renewable Energy Certificates for
Renewable Energy Generation) Regulations,
2022**

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Submission to
Central Electricity Regulatory Commission
Government of India

Submitted by
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Dear Sir,

Greetings from the Council on Energy, Environment and Water (CEEW).

On February 15th, the Central Electricity Regulatory Commission circulated Draft Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022, and has sought comments on the same. In this document, we are submitting our comments and suggestions on the draft regulation.

Provision	Proposal in the draft regulation	CEEW proposed change in the draft regulation
2(o) – Definition of renewable energy sources	Renewable energy sources mean sources of renewable energy such as hydro, wind, solar including its integration with combined cycle, biomass, biofuel cogeneration, urban or municipal waste and such other sources as recognized or approved by the Central Government.	The definition misses out on hybrid systems and BESS with RE systems which can also be included under the REC mechanism.
4 – Eligibility for issuance of certificates.	In the proposed regulation, it is mentioned under 4(2)(b), that no REC will be issued to the renewable energy generating station which are beneficiary of (i) waiver or concessional transmission charges or (ii) waiver or concessional wheeling charges or (iii) facility of banking of electricity.	In CEEW-CEF report on Rebooting Renewable Energy Certificate for a Balanced Energy Transition in India, (here) we find that the supply side is a major challenge under the REC mechanism. For example, the aggregate shortfall in FY20 alone for the 27 RPO under compliant states, if met only through REC purchases, would have created a demand for 72.5 million RECs, while the actual number of RECs issued so far is merely 70.6 million. Out of date conditionalities imposed on the issuance of RECs result in low participation in the market which is evident from a mere 4.6 GW ¹ capacity registered under the REC mechanism as compared to the country’s

¹ Renewable Energy Certificate Registry of India. “Registered RE generators.” https://www.recregistryindia.nic.in/index.php/publics/registered_regens. Accessed 24 June, 2021

		<p>installed grid-interactive RE capacity of 94.4 GW².</p> <p>From the perspective of open access and captive RE generators, de-linking REC issuance from those availing concessional charges of waivers may be a good way to improve supply of RECs. Moreover, it may be that the sum total of waivers availed by open access and captive RE generators may be far less than the economic value of RECs forgone by them. RECs should be issued to the open access and captive RE generators availing promotional concessional and wheeling charges.</p> <p>Further, it may also be notable to point out that the waivers and concessions mentioned keeps changing across states and hence the process of finding out all the RE projects availing such charges in order to delink them from the REC issuance is a herculean task and adds to the administrative cost. It may also lead to a surge in legal disputes which will only add to the burden of SERCs.</p>
<p>8 - Grant of registration for certificates</p>	<p>In the proposed draft regulation 8(2), it is mentioned that the registration for certificates granted in terms of these regulations shall be valid for 15 years from the date of registration for Certificates</p>	<p>An additional period constraint on registration which then affects issuance of RECs may be avoided and RE generators may be issued RECs against all RE power injected into the grid by them until such time that green attributes have not been</p>

² MNRE.2021. "State-wise installed capacity of Grid Interactive Renewable Power as on 31.03.2021." <https://mnre.gov.in/the-ministry/physical-progress>. Accessed 24 June, 2021.

		passed on to the discom.
12 - Denomination of certificate	<p>Certificate multipliers are provided for renewable energy technologies such as On-shore wind and solar, hydro, municipal solid waste and non-fossil fuel-based cogeneration, biomass and biofuel.</p> <p>The certificate multiplier once assigned to a renewable energy generating station, shall remain valid for a period of fifteen years</p>	<p>Technology capacity multiplier can go a long way in integrating new RE technologies with the REC framework. The flexible nature of RECs makes it particularly well placed for incentivising newer technologies. The proposed concept of certificate multiplier is therefore welcome but it excludes the low-capacity solar (rooftop solar) and wind from participating in the REC mechanism as it requires the projects to fulfil the eligibility of 1 MWh to participate in the market. An enabling certificate multiplier can also be considered for BESS systems with REC, hybrid tech.</p> <p>The certificate multiplier can be made applicable till redemption of REC.</p>
13 – Pricing of certificates	<p>In the draft regulation 13, it is mentioned that:</p> <p>(1) The price of Certificate shall be as discovered in the Power Exchange(s) or as mutually agreed between eligible entities and the electricity traders: Provided that the Power Exchange(s) and the electricity traders shall report all transactions with details including but not limited to volume, price, buyers and sellers to the Central Agency on a monthly basis.</p>	<p>Bilateral trade of RECs may only result in conditions given in provision 13(2) of the draft regulation. Hence only market/exchange-based sale be considered. If bilateral trade be considered, at least the forbearance price of the certificates be determined by commission, in such case of RECs being mutually traded via traders rather than just waiting for some circumstances of 13(2) to happen. Non determination of forbearance prices may lead to increase in REC prices as the RPO targets for every state are</p>

	<p>(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:</p> <p>(a) Abnormal increase or decrease in prices of Certificates;</p> <p>(b) Sudden volatility in the prices of Certificates;</p> <p>(c) Sudden high or low transaction volumes of Certificates on a Power Exchange.</p>	<p>on an upward trend and the same may result in artificial scarcity of RECs in the market.</p>
Additional recommendations		
Proposal	Comments/Remarks	CEEW additional recommendations on the discussion paper on RECs.
<p>1. Creating demand for RECs beyond RPO</p>	<p>REC market is predominantly RPO driven and approximately, 99 per cent of the RECs sold so far have been to meet the RPO obligations.</p> <p>However, poor RPO compliance by the obligated entities has ailed the market to varying degrees.</p> <p>On the demand side, 5.1 million RECs (about 7 per cent) issued so far remain unsold. The demand side challenge may further increase as the trading resumes with the floor price removal and with the launch of competing products such as GTAM. It may therefore be needed to create a demand for RECs beyond RPO</p>	<p>CERC can expand the end-use of RECs by allowing them to be used as offsets for settling the DSM penalties of RE developers and discoms (given that RE generation is intermittent, which makes grid integration of RE challenging).</p>
<p>2. Regarding Hydrogen Purchase Obligation and REC</p>		<p>Government of India introduced Hydro Purchase</p>

		<p>Obligation (HPO) for promoting large hydro power plants which can be fulfilled by obligated entities by purchasing power from the large hydro commissioned on and after 08.03.2019 and up to 31.03.2030 of 70 per cent of the total generated capacity for a period of 12 years from the date of commissioning or by purchase of Hydro Purchase Certificate (HEC). Further, many state commissions have already made HPO mandatory for the state licensees. It is suggested if HEC can also be made part of the draft regulation or clarity if it shall be treated separately.</p>
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About CEEW

The [Council on Energy, Environment and Water \(CEEW\)](#) is one of Asia's leading not-for-profit policy research institutions. **The Council uses data, integrated analysis, and strategic outreach to explain — and change — the use, reuse, and misuse of resources.** The Council addresses pressing global challenges through an integrated and internationally focused approach. It prides itself on the independence of its high-quality research, develops partnerships with public and private institutions, and engages with the wider public.

The Council's illustrious Board comprises Mr Jamshyd Godrej (Chairperson), Mr Tarun Das, Dr Anil Kakodkar, Mr S. Ramadorai, Mr Montek Singh Ahluwalia, Dr Naushad Forbes, Ambassador Nengcha Lhouvum Mukhopadhaya, and Dr Janmejaya Sinha. The 100 plus executive team is led by [Dr Arunabha Ghosh](#). CEEW is certified as a **Great Place To Work**[®].

In 2021, CEEW once again featured extensively across ten categories in the *2020 Global Go To Think Tank Index Report*, including being ranked as **South Asia's top think tank (15th globally) in our category for the eighth year in a row**. CEEW has also been ranked as South Asia's top energy and resource policy think tank for the third year running. It has consistently featured among the world's best managed and independent think tanks, and twice among the world's 20 best climate think tanks.

In ten years of operations, The Council has engaged in 278 research projects, published 212 peer-reviewed books, policy reports and papers, created 100+ new databases or improved access to data, advised governments around the world nearly 700 times, promoted bilateral and multilateral initiatives on 80+ occasions, and organised 350+ seminars and conferences. In July 2019, Minister Dharmendra Pradhan and Dr Fatih Birol (IEA) launched the [CEEW Centre for Energy Finance](#). In August 2020, [Powering Livelihoods](#) — a CEEW and Villgro initiative for rural start-ups — was launched by Minister Mr Piyush Goyal, Dr Rajiv Kumar (NITI Aayog), and H.E. Ms Damilola Ogunbiyi (SEforAll).

The Council's major contributions include: The 584-page *National Water Resources Framework Study* for India's 12th Five Year Plan; the first independent evaluation of the National Solar Mission; India's first report on global governance, submitted to the National Security Adviser; irrigation reform for Bihar; the birth of the Clean Energy Access Network; work for the PMO on accelerated targets for renewables, power sector reforms, environmental clearances, *Swachh Bharat*; pathbreaking work for the Paris Agreement, the HFC deal, the aviation emissions agreement, and international climate technology cooperation; the concept and strategy for the International Solar Alliance (ISA); the Common Risk Mitigation Mechanism (CRMM); critical minerals for *Make in India*; modelling uncertainties across 200+ scenarios for India's low-carbon pathways; India's largest multidimensional energy access survey (ACCESS); climate geoengineering governance; circular economy of water and waste; and the flagship event, Energy Horizons. It recently published [Jobs, Growth and Sustainability: A New Social Contract for India's Recovery](#).

The Council's current initiatives include: A go-to-market programme for decentralised renewable energy-powered livelihood appliances; examining country-wide residential energy consumption patterns; raising consumer engagement on power issues; piloting business models for solar rooftop adoption; developing a renewable energy project performance dashboard; green hydrogen for industry decarbonisation; state-level modelling for energy and climate policy; reallocating water for faster economic growth; [creating a democratic demand for clean air](#); raising consumer awareness on

sustainable cooling; and supporting India's electric vehicle and battery ambitions. It also analyses the energy transition in emerging economies, including Indonesia, South Africa, Sri Lanka and Viet Nam.

The Council has a footprint in 21 Indian states, working extensively with state governments and grassroots NGOs. It is supporting power sector reforms in Uttar Pradesh and Tamil Nadu, scaling up solar-powered irrigation in Chhattisgarh, supporting climate action plans in Gujarat and Madhya Pradesh, evaluating community-based natural farming in Andhra Pradesh, examining crop residue burning in Punjab, and promoting solar rooftops in Delhi and Bihar.