CONTINUUM

CONTINUUM GREEN ENERGY LIMITED

(formerly known as Continuum Green Energy Private Limited and Continuum Green Energy (India) Private Limited)

To,
Shri. Harpreet Singh Pruthi,
Secretary, CERC, 6th, 7th & 8th Floors,
Tower B, World Trade Centre,
Nauroji Nagar, New Delhi- 110029.

Date:- 15.06.2026

Subject: Suggestions and Comments on the Staff Paper on "Capacity Market for Electricity in India."

Respected Sir,

We are thankful to the Hon'ble Commission for providing an opportunity for us to share suggestions and comments on the Staff Paper on "Capacity Market for Electricity in India."

In this regard, please find our comments provided in Annexure A, enclosed along with this letter.

We request Hon'ble Commission to kindly consider our submissions, as may be considered appropriate by them.

Yours Sincerely,

For Continuum Green Energy Limited.

CONTINUUM GREEN ENERGY LIMITED

Authorized Signatory

Annexure: - A

Comments on the Staff Paper issued by the Hon'ble CERC on Capacity Market for Electricity in India			
Sr. No.	**Para / Clause No.**	**Relevant Provision in Staff Paper**	**Comments and Suggestions**
1	**Para 27 (Option 1)**	RA Obligation Capacity Market (Option 1): • The discom may invite bids based solely on the capacity charge. • The discom may draw the demand curve on a Net-CONE basis. The bidders' quotes for capacity remuneration may be arranged in ascending order, and the intersection of the demand and supply curves would yield the market-clearing price for capacity. …….. • Ensuring adequate capacity in the market is likely to keep the MCP under control. At the same time, drawing the demand curve of the contracting buyer at a price slightly above the price cap will ensure the buyer receives an equivalent quantity of energy. This approach addresses the free-rider problem and concerns about double payment while ensuring efficient dispatch of generation resources.	In this regard we would like to submit as follows, a) The term *"contracting buyer"* be clearly defined. In the proceedings (sub-para of para 27), it has been explicitly stated that the DISCOM shall issue bids for capacity. However, in the preceding portions of para 27, the term *"contracting buyer"* has been used without clarification. This creates ambiguity regarding whether the term includes not only DISCOMs but also Open Access (OA) consumers and Captive consumers. If these categories are intended to be included, the following aspects require explicit clarification: • Whether OA and Captive consumers will also be mandated to invite bids for capacity charges. • The authority responsible for approving capacity procured by such consumers (e.g., the Commission, NLDC, or any other designated entity). A clear definition and delineation of roles is essential to avoid regulatory uncertainty. b) Approval of Capacity and Role of Authorities In the first sub-para of para 27, it is stated that the DISCOM may invite bids based solely on capacity charge. In this context, clarification is required on the following: • Whether the quantum of capacity to be auctioned will require prior approval of the Commission, or • Whether it will be determined based on directions issued by NLDC or any other central authority.

			A transparent approval mechanism is critical to ensure regulatory consistency and investor confidence. c) Treatment of Existing Long-Term PPAs If a capacity market framework is introduced, it is essential to clarify the treatment of existing long-term Power Purchase Agreements (PPAs) executed by Distribution Licensees (DLs). To ensure effective implementation of a capacity market, the transition framework must address: • Legal sanctity of existing PPAs • Commercial implications, including fixed cost recovery and contractual obligations Without addressing these issues in a comprehensive legal and commercial manner, the capacity market may not achieve the desired economic outcomes, as observed in mature international markets. d) Impact on Open Access and Captive Consumers In the event that *contracting buyer* includes OA and Captive consumers, the following critical issues must be addressed: A significant and growing share of renewable energy (RE) deployment in India is driven by Commercial & Industrial (C&I) consumers through Open Access arrangements. These consumers enter into long-term PPAs with RE developers (IPPs). Under the proposed framework—particularly Option 1 and Option 3—the removal of scheduling rights for buyers and routing of all dispatch through the spot market may therefore it need to be explicitly clarify that the said capacity markets will not affect the scheduling and dispatch right provided under energy market to ensure that status and enforceability of existing PPAs

			executed by OA and Captive consumers will be maintained.
2	**Para 27 (Options 1 & 3) Para 37**	RA Obligation Capacity Market (Option 1): Residual RA Obligation Capacity Market (Option 3): and 37. Reserve Capacity Auction Design The discom may draw the demand curve on a Net-CONE basis. The bidders' quotes for capacity remuneration may be arranged in ascending order, and the intersection of the demand and supply curves would yield the market-clearing price for capacity. …… …….. To guarantee the discoms' right over the contracted capacity, the demand curve of the contracting discoms for such contracted capacity could be drawn slightly above the price cap. It is reiterated that this may not be the optimal approach and could also raise concerns about inflating the Market Clearing Price (MCP). This is being recommended to address the free-rider concern until all discoms fulfill the RA requirements. Further, it is felt that the requirement that capacity holders bid as price takers during peak/stress hours (as stipulated in subsequent paragraphs) might counterbalance the likely adverse effect of the demand curve above the price cap. The demand curve is to be drawn on a Net-CONE basis, i.e., Cost of New Entry adjusted by likely revenue from the energy market. The Net-CONE is also to be used for the Reserve Capacity Market.	In this regard we would like to submit that the Net-CONE (Cost of New Entry) principle is conceptually sound, its effective operationalisation requires technology-specific calibration. A uniform or blended Net-CONE benchmark is not appropriate given the significant variation in cost structures across different generation and storage technologies. In particular, separate reference benchmarks should be developed for the following categories: • Gas/thermal peaking plants (conventional CONE reference). • Standalone utility-scale Battery Energy Storage Systems (BESS). • Renewable Energy coupled with storage (RE+ESS), including wind-solar hybrid configurations with co-located storage. Adopting a single, blended Net-CONE, especially one calibrated primarily based on thermal new entrants, is likely to result in price caps that are materially lower than the true cost of RE+ESS capacity. This misalignment will render participation by RE developers commercially unviable and may deter investments in emerging flexible capacity solutions. In view of the above, the following measures are submitted for consideration of the Hon'ble Commission, • The CERC should commission a dedicated and independent study to determine technology-specific CONE values, particularly for RE+ESS configurations, prior to the notification of final capacity market regulations. • The demand curve design for each capacity auction should reflect the marginal technology expected to

			provide incremental capacity. Given the evolving generation mix, this marginal resource in many states is increasingly likely to be RE+ESS rather than conventional thermal capacity. Further, it is submitted that the NLDC's Net-CONE study for the Reserve Capacity Market (as referenced in Para 37) must also: • Explicitly incorporate cost data and performance characteristics of RE+ESS technologies, and • Avoid being restricted to conventional ancillary service providers, such as thermal or gas-based resources A comprehensive and forward-looking approach is necessary to ensure that the market design remains technology-neutral in principle, yet cost-reflective in practice, thereby enabling efficient price discovery and encouraging investments in modern, flexible capacity solutions.
3	**Para 27 (Option 1 bullet 5) Para 39 (Option 1 bullet 7)**	RA Obligation Capacity Market (Option 1): Residual RA Obligation Capacity Market (Option 3): and 37. Reserve Capacity Auction Design The discom may draw the demand curve on a Net-CONE basis. The bidders' quotes for capacity remuneration may be arranged in ascending order, and the intersection of the demand and supply curves would yield the market-clearing price for capacity. …… …….. To guarantee the discoms' right over the contracted capacity, the demand curve of the contracting discoms for	In this regard we would like to submit that the proposal to draw the demand curve above the price cap is economically unsound and raises significant concerns, particularly in light of its direct impact on end-consumers, including those of Distribution Licensees (DLs) as well as Open Access (OA) and Captive consumers under Option 3. It is noteworthy that the discussion paper itself acknowledges that this approach "may not be optimal and could raise concerns about inflating the Market Clearing Price (MCP). Despite this explicit recognition, the same approach has been recommended as a design feature. In view of this, we respectfully urge the Commission to reconsider its adoption. While the free-rider problem is indeed a legitimate concern in capacity market design, the proposed solution of artificially

		such contracted capacity could be drawn slightly above the price cap. It is reiterated that this may not be the optimal approach and could also raise concerns about inflating the Market Clearing Price (MCP). This is being recommended to address the free-rider concern until all discoms fulfill the RA requirements. Further, it is felt that the requirement that capacity holders bid as price takers during peak/stress hours (as stipulated in subsequent paragraphs) might counterbalance the likely adverse effect of the demand curve above the price cap.	inflating the MCP presents several unintended and adverse consequences: • Increased Cost Burden on Consumers: An elevated MCP will directly translate into higher capacity procurement costs for all buyers, including DISCOMs and C&I consumers operating under OA and Captive arrangements. • Perverse Incentives for Non-Compliance: Artificially inflated prices may allow non-compliant DISCOMs (those not meeting Resource Adequacy obligations) to benefit from higher price signals without adhering to procurement discipline. • Failure to Address Structural Issues: This mechanism does not fundamentally resolve the free-rider problem. Instead, it introduces a distortion that may necessitate continued regulatory intervention and correction. To address the free-rider issue in a more targeted and economically efficient manner, the following alternatives are suggested: • Non-Compliance Charges: Introduce a clearly defined penalty or non-compliance charge for DISCOMs that fail to meet Resource • Incentivising Compliance: Provide priority access to capacity in secondary markets for DISCOMs that comply with RA obligations, creating a market-based incentive for discipline.

			• Phased Implementation of RA Obligations: Gradually phase in mandatory RA compliance, supported by interim backstop arrangements, rather than embedding an artificial price premium within the demand curve structure. Therefore, in view of the above we submit that while addressing the free-rider problem is essential, however the current proposal risks cost inflation, distorted price signals, and inequitable burden-sharing across consumers. A more targeted, transparent, and structurally sound approach—centered on compliance enforcement rather than price manipulation—will better support the long-term efficiency and credibility of the capacity market.
4	**Para 32** **Para 33** **Para 37**	It is expected that the Reserve Capacity Market will open opportunities for: (i) capacity providers in RA market with open capacity; (ii) wind/solar generators with aggregator-backed ESS for RE forecasting errors and reserve participation; (iii) CTU/transmission licensee with ESS as a grid element. Auction design specifies eligibility as per CERC Ancillary Services Regulations.	In this regard we submit that the Reserve Capacity Market design shall need to be explicitly considered Renewable Energy plus Energy Storage Systems (RE+ESS) also to participate as direct, independent capacity providers. This would ensure a level playing field and unlock the full value of hybrid resources in delivering firm, reliable capacity.
5	**Para 38** **Para 39** **(Options 1 & 2)**	(C) 38. Secondary Short-Term Capacity Market (for existing capacities) At present, closer to the time of delivery, the markets, viz., the Day-Ahead and Real-Time Markets, are energy-only markets. Even in the Term Ahead Markets, the contracts are energy-only. These markets do not guarantee capacity availability. As a result, there are times when demand far outstrips supply and prices reach the ceiling. At such times, paradoxically, there could be some 21 capacities	We would like to submit that the proposed secondary short-term capacity market, while well-intentioned, must be designed in a manner that does not disrupt existing bilateral renewable energy power purchase agreements (PPAs) with commercial and industrial (C&I) consumers. In particular: • Renewable Energy Independent Power Producers (RE IPPs) supplying power to C&I consumers under existing open access PPAs

		available in the system but not visible in the market because of silo based contracting and scheduling. At other times as well (i.e., in periods other than high-demand periods), there may be surplus and deficit capacity zones in the country. Therefore, there is a need to introduce short-term capacity markets for trading existing contracts to supplement the energy market. The idea is to create a market platform that enables capacity holders to exchange capacity rather than energy alone. Scheduling and Dispatch: Such capacities shall be scheduled and dispatched on day ahead basis. Both the buyers and the sellers shall go through the day ahead market for the capacity contracted. • To guarantee the discoms' right over the contracted capacity, the demand curve of the contracting discoms for such contracted capacity could be drawn slightly above the price cap.	shall need to be allowed—but not obligated—to offer any surplus capacity in the short-term market. Mandating participation could interfere with their contractual commitments to PPA counterparties. • The design of the short-term capacity market shall need to clearly define its interface with Open Access Regulations and ensure that the scheduling and dispatch rights of C&I consumers under existing PPAs are fully preserved and are not adversely impacted by market-clearing outcomes.
6	**Para 25-27 Section III (General)**	The paper does not address the interaction between the proposed capacity market and the existing Renewable Purchase Obligation (RPO) framework, Renewable Energy Certificates (RECs), or the Green Energy Open Access Rules, 2022.	We request that the Central Electricity Regulatory Commission (CERC) explicitly clarify the following aspects in the final capacity market regulations: • Whether energy generated by Renewable Energy (RE) resources that clear in the capacity market and are dispatched through the Day Ahead Market remains eligible for Renewable Energy Certificate (REC) issuance—particularly in cases where such energy cannot be directly attributed to the consumption of a specific C&I offtaker. • Whether capacity payments received by RE generators under the capacity market would be construed as "subsidies" or "incentives," and consequently, whether such

			payments have any implications for REC eligibility under the prevailing REC Regulations. • The interaction between the capacity market framework and Green Energy Open Access provisions—specifically, whether C&I consumers procuring RE capacity through the capacity market mechanism would be deemed compliant with their Renewable Purchase Obligation (RPO) requirements. • Whether the proposed capacity market introduces any additional eligibility criteria, additionality requirements, or exclusions for RE generators already contracted under existing competitively bid PPAs (for example, projects awarded through SECI, NTPC, or state agency tenders with fixed tariffs). Clarity on these issues is essential to enable RE IPPs and C&I consumers to accurately assess the commercial viability and regulatory implications of participating in the capacity market.
7	**Para 27 (Option 1)**	The contract duration is proposed as 15 years for Options 1 and 3. Under Option 3, for short-term shortfall (1-3 years), capacity may be procured through the secondary market.	We note the staff paper's recognition is consistent with international experience that contract durations should differ for existing and new capacities, with shorter tenures (1–3 years) for existing resources and longer tenures (10–15 years) for new investments. While we broadly support this approach, the following refinements are necessary to ensure practicality and investment viability: • For RE+ESS projects, the contract tenure should reflect the technical and economic characteristics of the Energy Storage System (particularly BESS), which typically has a useful life of 10–12 years, subject to degradation. Accordingly, capacity contracts

			should be aligned with the ESS replacement cycle—typically around 10 years—rather than imposing a uniform 15-year term, which may adversely impact bankability of the storage component. • Capacity contracts should incorporate a mid-term review mechanism (e.g., at year 5 or year 7) to allow for recalibration of capacity charges in line with evolving market conditions, technology costs, and performance realities, without disturbing the underlying capacity obligation. • For C&I consumers, the framework should enable access to shorter-duration capacity contracts (less than 5 years) through the short-term capacity market (as envisaged in Section C), thereby aligning procurement structures with commercial planning cycles and risk preferences. Rigid, long-tenure contracts without built-in review mechanisms risk discouraging new RE+ESS investments and limiting participation from innovative and flexible capacity providers.
8	**Para 27 Option 3**	Residual RA Obligation Capacity Market (Option 3): All buying entities are mandated to ensure their resource adequacy as per the approval of SERC. • A central agency designated by the Ministry of Power may carry out a centralized auction for 'Residual RA Obligation Capacity Market' where the discoms having RA shortfall may participate for procurement of the shortfall RA capacity.	In this regard, we submit that Option 3 appears to be both tenable and legally sound, as it appropriately clarifies the role of the Hon'ble State Electricity Regulatory Commissions (SERCs). However, ambiguity remains as to whether participation in the bidding process is restricted solely to Distribution Companies (DISCOMs) or whether all eligible buying entities are permitted to participate. We respectfully request that the framework explicitly clarify this aspect.

			Further, in the event that participation is extended to all buying entities—based on their capacity shortfall as determined under resource adequacy plans approved by the respective SERCs—such an approach would be beneficial. It would enable these entities to address their capacity deficits through the market mechanism without adversely affecting their existing contractual arrangements. A robust and well-calibrated design is essential for auction and bidding mechanisms under the proposed capacity market framework under this option. Past experience with centralised procurement of renewable energy (RE) power under Section 63 has revealed several implementation challenges, including non-execution of Power Purchase Agreements (PPAs), non-signing of Power Sale Agreements (PSAs) by distribution licensees (Discoms), and delays or rejections in PSA approvals by State Electricity Regulatory Commissions (SERCs). In this context, the proposed capacity market design-particularly where it involves a centralised procurement approach—must be carefully structured to address these risks upfront. While the RE procurement mechanism relates to the energy market, and the current proposal pertains to a capacity market, there are notable similarities in the underlying auction and contracting framework. Accordingly, it is imperative that the capacity market design incorporates appropriate safeguards, stronger contractual enforceability, risk allocation mechanisms, and alignment of stakeholder incentives, drawing lessons from the challenges encountered in centralised RE power procurement. This will be critical to ensuring effective participation, timely contract execution, and overall market credibility.
9	**Para 37 (Reserve**	"Demand Curve: Net CONE (Cost of New Entry adjusted by the likely	While the concept of indexing the demand curve to Net CONE is well-supported, the

	Capacity Auction Design)	revenue from the AS market and the Energy Market) plus 10% to set the bid cap and downward sloping demand curve."	Staff Paper does not provide the explicit empirical, financial, or statistical basis for selecting the specific **"plus 10%"** premium to determine the bid cap. It is respectfully requested that CERC provide detailed clarity or a working methodology behind the calculation of this 10% buffer. Clarification is needed on whether this figure accounts for specific parameters such as regional capital expenditure (CAPEX) variances, fuel/market revenue volatility, or a targeted internal rate of return (IRR) required to incentivize new storage and fast-ramping capacity additions.