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U.O.I NO. 841 (C)

Through E-mail

Dated: 11/06/2026

To,
Shri Harpreet Singh Pruthi,
The Secretary,
Central Electricity Regulatory Commission,
06th, 07th and 08th Floor, Tower B,
World Trade Centre, Nauroji Nagar,
New Delhi - 110029.

Sub: Views/ Suggestions of GRIDCO Ltd. on the Staff Paper on "Capacity Market for Electricity in India"

Sir,

Please find enclosed the views/ suggestions of GRIDCO Ltd. (annexed as **Annexure I**) on the aforementioned Staff Paper for your kind consideration and further necessary action.

Encl: As above

Yours faithfully,

11.06.26
Chief General Manager (PP), I/c

Chief General Manager (PP)
Gridco Ltd., Bhubaneswar

CC to:

i) MD, GRIDCO for kind information.
ii) Director (T&BD)/Director (Commercial)/ Director (F&CA) for kind information.

ANNEXURE I

Views of GRIDCO on CERC Staff Paper on "Capacity Market for Electricity in India"

The Staff Paper has discussed possible capacity market mechanisms for three distinct purposes, namely:

a. Capacity Market for Resource Adequacy / Capacity Obligation;
b. Reserve Capacity Market; and
c. Secondary / Short-term Capacity Market.

The broad objective appears to ensure adequate capacity availability, improve reserve adequacy, and make surplus capacity visible for short-term use through market-based mechanisms.

The existing Indian power procurement framework already has capacity-contract features through long-term PPAs, wherein fixed/capacity charges are paid to generators and scheduling rights are available to procurers. Accordingly, any new capacity market framework needs to be aligned with existing PPAs, SERC-approved procurement framework, Resource Adequacy framework, scheduling mechanisms and consumer cost implications.

I. Capacity Market for Resource Adequacy / Capacity Obligation

- Preference for Option 2 over other options w.r.t. Settlement of Contracts

  Among the options proposed for RA-linked capacity procurement, Option 2 appears more appropriate from the procurer's perspective. It provides for total cost discovery and bilateral settlement of the difference between MCP and contracted price.

  Option 1 and Option 3 are based on capacity charge-only bidding & settlement is being done through market. Under these options, the capacity provider may receive capacity remuneration as well as MCP from the market, while the DISCOM may bear both capacity charge and market energy price. This creates possibility of double payment and higher cost exposure for procurers and consumers. However, under Option 2, the contracted price acts as a financial benchmark and reduces open-ended MCP exposure.

- Centralised auction for the residual RA capacity

  The Buyers may first undertake capacity procurement through their own auctions based on the features of Option 2. Any residual RA shortfall remaining thereafter may be aggregated and procured through a centralised auction by a designated central agency, retaining the overall design framework and operational approach of Option 2. Accordingly, guidelines may be issued incorporating the necessary timelines.

- Bid Evaluation Methodology

  Bid evaluation may not be effective, if it is based only on simple quoted total cost. The evaluation should consider the purpose and expected despatch profile of the contracted capacity.

For illustration, suppose two generators quote as follows:

Generator	Capacity Charge	Variable Charge	Quoted Total Cost
Generator A	₹2.00/unit	₹3.00/unit	₹5.00/unit
Generator B	₹1.50/unit	₹3.60/unit	₹5.10/unit

If the capacity is expected to be used frequently, Generator A may be more economical due to lower variable charge. However, if the capacity is intended mainly for low-utilisation peak/stress support, Generator B may be preferable because its capacity charge is lower and the higher variable charge would apply only for limited despatch hours.

Therefore, it may be examined whether bid evaluation should be based on evaluated cost considering factors such as annualised capacity charge, expected despatch hours, variable charge, peak/stress hour availability, etc. instead of simple L1 ranking on quoted total cost. Further, capping of capacity charge w.r.t. the total cost may also be explored to prevent the bidders to quote high-capacity charge and low variable charge to keep their total cost competitive, leading to excess recovery of capacity charges.

- Operational Flexibility & Surrenderability of Capacity

  Necessary safeguards may be put in place to avoid limitation of operational flexibility after capacity is contracted and cleared through the market. DISCOMs operate in a dynamic environment where demand, renewable generation, hydro availability, outages and market conditions may change after day-ahead scheduling.

  If market-based long-term capacity becomes effectively unsurrenderable, DISCOMs may remain vulnerable to real-time uncertainties despite paying capacity charges. Therefore, if capacity market becomes a principal or mandatory route for long-term procurement in future, surrender, revision, resale or re-optimisation of contracted capacity after day-ahead scheduling and before real-time gate closure may be clearly provided.

- Allocation of power to buyers

  The proposal to place buyer bids slightly above the price cap for ensuring receipt of equivalent energy may require further examination, as it may affect market price discovery and distort the MCP. Instead, a clear mechanism for allocation of contracted capacity to the concerned buyer may be explored through capacity tagging, priority matching, bilateral financial settlement or contract-for-difference mechanism.

II. Reserve Capacity Market/ Ancillary Requirement

- Harmonisation with Resource Adequacy Framework

  The Reserve Capacity Market may be clearly harmonised with the Resource Adequacy framework. Since RA planning normally considers planning reserve margin, separate

advance procurement of reserves may result in duplication of capacity procurement or double payment for the same system margin.

Clarity may be provided on whether "resource capacity" considered under the RA framework and "reserve capacity" proposed under the Reserve Capacity Market are distinct products, or whether the same capacity can be counted for both purposes. If planning reserve margin has already been considered in the RA requirement of a State/DISCOM, the same may be duly recognised while computing reserve shortfall. Centralised reserve procurement may be triggered only for the net shortfall after considering RA-compliant and technically eligible resources.

- Granular Assessment of Reserve Shortfall

  The Staff Paper proposes annual auction and one-year contract duration for Reserve Capacity Market. However, reserve requirement and reserve shortfall may not remain uniform throughout the year. A State may be reserve-deficient during certain months or time blocks, such as summer peak periods, but may not be deficient during other seasons or hours. Therefore, reserve shortfall may be assessed on seasonal, monthly and diurnal basis, including peak, off-peak, solar and non-solar hours.

  Such assessment shall help in designing the appropriate capacity mix for meeting reserve shortfall, even for a short duration, thereby optimising overall system cost. Capacity charge recovery may also be linked to the period and quantum of actual shortfall, rather than a uniform annual shortfall.

- Others

  - The Staff Paper proposes MCP / pay-as-clear type price discovery for reserve capacity. The cost effectiveness of such mechanism may be examined with reference to reverse auction or pay-as-bid procurement, particularly since the cost is proposed to be recovered from reserve-deficient States and ultimately from consumers.

  - Further, where the capacity is not requisitioned by NLDC and the capacity provider is allowed to participate in the energy market, clarity may be provided on treatment of margins earned from such market sale. Since the capacity provider is already receiving capacity charge for reserve availability, sharing or adjustment of margin earned over and above marginal cost may be considered to reduce the cost burden on reserve-deficient entities and consumers.

III. Secondary/ Short Term Capacity Market

- Preference for Option 2

  Option 1 is based on capacity charge-only bidding, with scheduling and dispatch through the market. Under this option, the buyer may pay capacity charge and still remain exposed to MCP for energy procurement.

  Option 2 provides for two-part bidding comprising capacity charge and energy charge, along with first scheduling right to the contracted buyer until the start of Day-Ahead Market. This makes Option 2 more aligned with the existing procurement framework and provides better

commercial clarity to the buyer. Thus, among the two options proposed for Secondary / Short-term Capacity Market, Option 2 appears more appropriate than Option 1.

While Option 2 appears more appropriate, the detailed settlement procedure under this option has not been clearly specified in the Staff Paper. Clarity may be provided whether settlement of difference between contracted price and MCP shall be carried out outside the market, similar to the settlement mechanism proposed under Option 2 of RA-linked capacity procurement.

The Staff Paper proposes uniform price step auction for Short-term Capacity Market. The suitability of such mechanism vis-à-vis reverse auction or pay-as-bid procurement may also be examined, particularly where the buyer's requirement is specific and cost is to be recovered through regulated tariff.

- Surrender of power on real time basis

Clarity is also required regarding treatment of cases where the buyer schedules power on day-ahead basis under Option 2 but subsequently seeks to surrender or revise such schedule closer to real time.

DISCOM demand may change after day-ahead scheduling due to variation in load, renewable generation, outage conditions or other operational factors. Therefore, the framework may clearly specify whether the buyer can surrender or revise the scheduled capacity after DAM and before real-time gate closure. If surrender or revision is permitted, the treatment of released capacity, financial liability, market gains/losses, etc. may also require clarification.

IV. Additional Submissions

- The proposed capacity market framework may be introduced as a complementary mechanism to the existing PPA-based procurement framework, in a phased manner, and not as an abrupt replacement thereof.

- Further, where an intra-State generator is selected through an auction, under Resource Adequacy/ Short term capacity market, for meeting the requirement of the same State/DISCOM, the concerned State/DISCOM may be given the option to schedule and avail such power through the intra-State network under SLDC coordination, subject to applicable State regulatory, metering, accounting and open access requirements.