सत्यमेव जयते

भारत सरकार/ Government of India
विद्युत मंत्रालय/ Ministry of Power
केन्द्रीय विद्युत प्राधिकरण/ Central Electricity Authority
आर. ए. प्रभाग / Regulatory Affairs Division

To,

सचिव (सी.ई.आर.सी.),
केंद्रीय विद्युत विनियामक आयोग,
6वीं, 7वीं और 8वीं मंजिल, टावर बी, वर्ल्ड ट्रेड सेंटर,
नौरोजी नगर, नई दिल्ली-110029

Subject: CERC Staff Paper on "Capacity Market for Electricity in India"- regarding.

Sir,

Reference is invited to CERC public notice dated 29.04.2026 vide which CERC has circulated a **Staff Paper on "Capacity Market for Electricity in India"** for inviting comments/suggestions/objections from stakeholders.

In this regard, comments of CEA on the **Staff Paper on "Capacity Market for Electricity in India"** is attached at **Annexure**.

This issues with the approval of Chairperson, CEA.

भवदीय/ Yours faithfully,

Digitally signed by
Sharad Chandra Bhupesh
Date: 16-06-2026
10:29:52

(शरद चंद्र भूपेश / Sharad Chandra Bhupesh)
उप निदेशक (आर.ए.)/ Deputy Director (RA)

Copy to:

1. मुख्य अभियंता **(R&R),** विद्युत मंत्रालय, श्रम शक्ति भवन, नई दिल्ली

Annexure

Comments/observations of CEA on CERC Staff Paper on "Capacity Market for Electricity in India"

The Staff Paper proposes the introduction of a market-based capacity procurement framework in India, under which distribution licensees would continue to bear Resource Adequacy (RA) obligations, but capacity would be contracted separately from energy through competitive auctions, with generators receiving capacity remuneration for ensuring availability during system stress periods while energy is dispatched and priced through the Day-Ahead and Real-Time Markets. The paper further proposes a Reserve Capacity Market for advance procurement of reserves and ancillary services during the transition to full resource adequacy compliance, and a Secondary Short-Term Capacity Market to enable trading of surplus and deficit contracted capacity.

It is submitted that many countries, particularly those with energy-only markets, have adopted capacity contracting or capacity market mechanisms to address the problem of missing money. However, with the growing integration of renewable sources into the grid, the primary objective of capacity markets has increasingly been to ensure resource adequacy, i.e. the availability of sufficient resources to reliably meet electricity demand at all times. Unlike conventional PPAs in India, where recovery of fixed charges is primarily linked to achievement of normative annual availability, capacity market obligations are generally more closely linked to performance and availability during identified system stress periods, with significant penalties for non-performance.

To address the issue of Resource Adequacy, the Minister of Power has notified the Resource Adequacy (RA) guidelines which entrust Central Electricity Authority to prepare Long Term-National Resource Adequacy Plan and NLDC to publish a one-year look-ahead Short-term National Resource Adequacy Plan (ST-NRAP). The RA guidelines aim to establish a Resource Adequacy framework for power procurement by distribution licensees, ensuring a reliable operation of the power system across all timeframes. The Resource Adequacy Plan lays down the quantum and type of resources required in the portfolio of a distribution licensee to meet the demand in an optimal (least cost and secure) manner. The plan also gives the year-on-year optimal generation (conventional plus Renewable) and storage capacities required to meet the system demand and the planning reserve margin securely and at least cost.

Once the Resource adequacy targets are allocated to DISCOMs, the next step is for the utilities to undertake capacity contracting. The contracting can be done either bilaterally or through a capacity market. At present, majority of the capacity contracting being done by DISCOMs is through bilateral long term PPAs wherein the DISCOMs invite bids using a two-part tariff structure for conventional generators: fixed cost, plus variable cost, and the bidder quoting the lowest total cost is awarded the contract to set up the generation project. The staff paper proposes a departure from the current practice of capacity contracting and gives three options for tying up capacities for meeting the RA obligation.

It is observed that unlike PJM, UK and several European jurisdictions, India is not a pure energy-only market. A significant proportion of conventional generating capacity is already contracted under long-term two-part PPAs, which provide recovery of fixed charges linked

to availability. Therefore, the extent of the "missing money problem" in India may not be comparable with jurisdictions where capacity markets were originally introduced.

A. Capacity Market for RA/Capacity Obligation

The staff paper proposes the following options:

Option 1 – Pure Capacity Market Model

Under this option, DISCOMs procure only capacity through a long-term capacity auction based on capacity charges. After contracting, actual energy is not supplied under the PPA. Instead, both generator and DISCOM participate in the Day-Ahead and Real-Time Markets and receive/pay the market clearing price (MCP). Capacity providers receive separate capacity remuneration and must ensure availability during stress hours. This model resembles PJM/UK-style capacity markets and represents the largest departure from the current Indian framework.

Observations:

In the year 2023, the report of the group on Development of Electricity Market in India headed by the then Secretary (Power) inter-alia contained discussions and recommendations about introduction of capacity markets in India. As per the report, the way forward for introduction of capacity market was based on the assumption that Market Based Economic Dispatch (MBED) shall be introduced first. In MBED, all capacity has to be mandatorily despatched through the market. As such, capacity auction can be based only on capacity charge as the energy rate will be discovered through the market. However, at present, introduction of MBED in Indian power sector is not foreseen in the near future. As such, a different approach needs to be considered for capacity markets in India.

In the absence of MBED, the staff paper proposes under Option-1 to separate capacity contracting and energy procurement, with both generators and procurers participating in the Day Ahead Market and Real Time Market for actual dispatch. The staff proposes a 15-year contract through this auction, however, does not indicate how much advance this auction needs to be conducted before the start of delivery period to ensure sufficient lead time for new capacity to come up. The proposed framework seeks to strengthen market-based dispatch and provide a clear separation between capacity procurement and energy procurement. However, the following implementation challenges may require further examination:

i. The first issue is to guarantee the delivery of power for DISCOMs which have their contracted capacities participating in DAM/RTM. This is due to the fact that when the MCP touches ceiling price i.e. Rs. 10/kWh in DAM/RTM, the supply is rationed between the buyers. As such, chances are that during such periods which are common during non-solar hours, a DISCOM may not be able to take power from the capacity contracted by it. The staff paper tries to address this issue by proposing to draw the demand curve of the contracting discoms for such contracted capacity slightly above the price cap. However, the proposal to draw the demand curve of contracting buyers above the market price cap to preserve access to contracted capacity may require detailed examination. Such an approach may potentially distort market price signals and could result in unintended impacts on market clearing

prices. This has also been acknowledged in the staff paper while addressing the free rider problem, however, this would also mean non level playing field for the buyers.

ii. In the current scenario, DISCOMs may not be willing to tie up long term capacity linked with exchange discovered prices especially when the MCP is hitting the price cap frequently. Though, it is logically expected that once the results of RA implementation get streamlined, within few years it will ensure enough capacity in the system and the periods of high prices may reduce substantially.

iii. Another issue is to ensure that the generators bid according to their marginal prices. While it is understood that the generators will bid in the capacity auction considering the revenues from both capacity charge and energy charges recovered from DAM/RTM, however, there may be a case when generators do not bid as per their marginal prices. As such, market monitoring and surveillance would also be a key concern.

To ensure that the capacity is available in the system during stress hours, the staff paper proposes that generators have to place zero prices bids during that period failing which there is a penalty of 1.5 times the capacity charge discovered. While ensuring availability during system stress periods is important, mandatory price-taker bidding may alter normal market behaviour and require careful assessment of commercial implications, fuel availability risks, operational constraints and interaction with existing market mechanisms. The methodology for identification of stress periods and corresponding obligations shall require further assessment.

iv. The impact of the proposed framework on bankability and financing of new generation projects may require detailed examination. Financial institutions presently rely substantially on long-term contracted cash flows for assessing project viability. The conventional generator and financier would be more comfortable with the current two-part tariff structure. As such, the extent to which capacity remuneration coupled with market-based energy revenues can provide similar revenue certainty in Indian conditions may require further assessment.

Option 2 – Capacity Contract with Market-Based Dispatch

This option retains the existing practice of procuring capacity based on total cost (fixed + variable charges), but changes the dispatch mechanism. DISCOMs continue to have scheduling rights up to DAM closure, but actual dispatch occurs through the market. After market clearing, bilateral financial settlement takes place between the contracted generator and the DISCOM based on the difference between MCP and contracted tariff. This is effectively a "contract-for-difference" type arrangement and is the closest to the current PPA regime.

Observations:

i. The Option-2 tries to alleviate the DISCOM apprehension of volatile energy prices in DAM/RTM through bilateral contract settlement outside the market. The proposed arrangement may facilitate gradual transition towards market-based dispatch while preserving contractual certainty for procurers. Moreover, this option also gives the scheduling rights to the DISCOM. However, the other issues including the issue of assured delivery of power from the contracted capacities as discussed above still persists. While Option-2 is relatively closer to the existing contracting framework, the proposed arrangement may introduce additional complexity in settlement,

accounting and reconciliation due to the coexistence of market settlements and bilateral contract settlements.

ii. While Option-2 proposes to retain scheduling rights with the contracting DISCOM up to DAM gate closure, actual dispatch is proposed to be determined through market clearing. In this regard, it is not entirely clear how situations would be handled where the schedule indicated by the DISCOM differs from the dispatch outcome determined through the market. The interaction between bilateral scheduling rights and centralized market-based dispatch, including implications for delivery assurance, deviation settlement and contract settlement, may require further clarification.

iii. There is also the issue of treatment of technologies such as renewable energy and storage resources, where the conventional distinction between capacity charge and energy charge may not be directly comparable with thermal generation. The implications of the proposed settlement mechanism for such resources may require further examination

iv. Moreover, as per the LPS rules, the generators have to mandatory participate in DAM/RTM if their beneficiary do not schedule their share of power from such generators which helps in bringing unscheduled power in the system. Efficiency in dispatch can be achieved through SCED which has not been widely used by the States. Accordingly, the incremental benefits arising from more efficient dispatch under the proposed arrangement may need to be weighed against the additional complexities relating to settlement, reconciliation and treatment of different resource types.

Option 3 – Residual RA Capacity Market

This option is intended only for DISCOMs that fail to meet their Resource Adequacy requirements. A central agency designated by the Ministry of Power conducts a centralized auction to procure the aggregate RA shortfall capacity. DISCOMs with deficits pay the discovered capacity charge, while generators participate in the energy market separately. The contracted buyers do not receive scheduling rights. This model functions as a corrective or backstop capacity market and is broadly aligned with the Resource Adequacy Guidelines that already envisage national-level procurement for identified capacity deficits.

Observations:

i. In compliance of the Resource adequacy plan, the Distribution Licensee shall submit the details of the contracted capacities for the ensuing year for meeting RAR of national peak to the respective STU / SLDC after approval of respective SERC/JERC by the month of January. The STUs / SLDCs shall aggregate the total contracted capacities at the state level and submit the information to the respective RLDC. Similarly, the RLDCs shall aggregate the capacities at the regional level and submit the information to the NLDC by the month of February. NLDC shall aggregate the capacities at the national level and check compliance with ST-NRAP and identify shortfall for the ensuing year, if any. The guidelines also provide that **in case of shortfall, NLDC shall either communicate the shortfall to the SERC/JERC for compliance or facilitate a national-level auction for the balance capacity with participation from distribution licensees with capacity shortfall.**

ii. The Option 3 is a residual capacity market which would facilitate the DISCOMs to tie up their balance capacities as per their RA plan which could not be tied up earlier.

As per the RA Guidelines, NLDC has to check for RA compliance at national level in March of a particular (X) year before the delivery period starts in April (X) to March (X+1) year. Since, the shortfall is identified very near to the start of delivery period, it may not be possible for all the DISCOMs to tie up the balance capacity in time. As such, the proposal for a centralized auction to meet residual Resource Adequacy shortfalls broadly aligns with the provisions of the Resource Adequacy Guidelines, which envisage identification of capacity shortfalls at the national level and facilitation of capacity procurement where required. Accordingly, such a mechanism may be considered as an initial step towards introduction of capacity market arrangements in India.

iii. The staff paper proposes a contract period of 10-15 years for the capacities cleared in this auction which means that new capacity is expected to come through this auction. However, as pointed above, in the current RA framework, the capacity shortfall is identified very near to the start of delivery period. As such, new capacities would not be able to come up in time and would not be able to the DISCOMs for meeting shortfall capacity in the upcoming delivery year. In the UK capacity market auction (T-4), different contracts duration of 1 year, 3 year and 15 years are offered for existing capacity, capacity requiring life extension works and new capacity respectively. However, this auction is run 4 years before the delivery period.

iv. Moreover, as pointed out in the earlier sections, if the contract duration is of 10-15 years, DISCOMs may not be willing to bear the capacity cost for such extended period without having exclusive scheduling rights for the pro rata capacity. There is also the issue of guaranteeing the delivery of power through power exchanges (DAM/RTM) in times of MCP hitting ceiling prices as highlighted earlier and DISCOMs reluctance to get exposed to volatile energy prices discovered in DAM/RTM. Further, the capacity requirements of different DISCOMs may vary significantly in terms of duration, seasonality and time-of-day requirements. As such, a centralized residual auction may not be able to fully address different types of capacity shortfalls across DISCOMs

v. In view of the timelines under the Resource Adequacy framework, the residual capacity auction may be more suitable for utilization of existing untied capacities, merchant capacities, capacities with expired PPAs, capacities which are suitable for R&M or capacities available due to changes in demand forecasts. The suitability of this mechanism for facilitating creation of entirely new generation capacity may require further examination.

B. Reserve Capacity Market

The staff paper proposes advance procurement of reserve to take care of the transition until adequate resources and reserve are available in the power system through the resource adequacy framework. It is expected that the framework of Reserve Capacity Market could open up opportunities for capacity creation as follows: (1) the capacity providers participating in the RA/capacity obligation market could have some open capacity for Reserve Capacity Market; (ii) the wind/solar generators could engage an aggregator to set up energy storage system (ESS) with capacity that not only balances their forecasting errors but also participates in the Reserve Capacity Market; (iii) the CTU/transmission licensee could set up ESS as a grid element and such ESS could cater to RE forecasting error and also participate in the Reserve Capacity Market.

Under the proposed framework, NLDC shall allocate reserves as per the requirement under the IEGC and States shall procure reserves and demonstrate compliance. NLDC shall identify the shortfall of reserves, State-wise, and initiate action for centralized procurement of reserves (equivalent to the sum of total shortfall). Capacity required to meet such shortfalls would be procured through annual auctions separately for Secondary and Tertiary Reserves, with eligible resources receiving capacity remuneration for maintaining reserve availability. The capacity provider will have three options for scheduling and dispatch – SRAS, TRAS, and Energy Market (DAM/RTM). The capacity provider to quote the compensation charge (in SRAS market)/price (in the TRAS market) /price in the energy market (DAM/RTM). Capacity Charge paid to the capacity providers is proposed to be recovered directly from the reserve-deficient States as per the IEGC. Energy/Compensation Charge and commitment/charge, incentives shall be paid from the DSM & AS pool, and any deficit shall be allocated in accordance with the DSM Regulations.

Observations:

i. As per RA guidelines, based on the share in national peak provided in LT-NRAP, each distribution licensee shall plan to contract the capacities (peak contribution * (1 + National level PRM)) prescribed by LT-NRAP or higher to be procured to meet their Resource Adequacy Requirement (RAR) at the time of national peak. The distribution licensees shall demonstrate to the SERC/JERC 100% tie-up for the first year and a minimum 90% tie-up for the second year to meet the requirement of their contribution towards meeting national peak.
   The staff paper proposes that NLDC shall allocate reserves as per the requirement under the IEGC and States shall procure reserves and demonstrate compliance. NLDC shall identify the shortfall of reserves and procure on behalf of the DISCOMs through a year ahead auction for a contract duration of one year.
ii. As the Resource Adequacy framework already requires procurement of capacity including Planning Reserve Margin and the Staff Paper separately proposes a residual capacity market to address any remaining capacity shortfall, it may be examined whether a separate year-ahead Reserve Capacity Market is required in addition to these mechanisms. Once adequate capacity is available in the system through implementation of the Resource Adequacy framework, reserve requirements may potentially be met through existing ancillary services and real-time market mechanisms, subject to suitable assessment of system requirements. A separate reserve procurement mechanism may lead to overlapping obligations and duplication of costs unless the specific purpose and scope of each mechanism is clearly delineated.
iii. Further, the staff paper proposes separate auctions for SRAS and TRAS and three options for scheduling and dispatch – SRAS, TRAS, and Energy Market (DAM/RTM). It may be noted that in the current TRAS framework, the participation in TRAS, particularly in the TRAS-UP is negligible compared to the requirement of NLDC which is primarily because of low commitment charges and generators preferring participation in energy segments. It may be examined how the proposed framework would address the underlying factors that presently limit participation in TRAS-UP, particularly where generators prefer participation in energy market segments.
iv. The staff paper envisages that Reserve Capacity Market could open up opportunities for capacity creation some types of capacity, however, as mentioned

in the staff paper itself this advance reserve market is only for the transition period. As such, revenue visibility for such capacities from this market segment shall be limited especially considering that the contract duration is for one year. Excess capacity may only come when they have good visibility of future cash flows from such auctions and when these auctions are conducted every year.

v. Since reserve requirements are dependent on system conditions, renewable generation variability and demand patterns, the appropriateness of a year-ahead reserve procurement framework and the methodology for periodic reassessment of reserve requirements may require further examination. Moreover, the shortage of reserves of states shall vary from state to state and for different durations. As such, DISCOMs may be not be comfortable with socialization of this cost through DSM pool account.

C. Secondary Short-Term Capacity Market (for existing capacities)

The Staff Paper proposes the introduction of a Secondary Short-Term Capacity Market to facilitate trading of surplus and deficit capacity on a short-term basis and thereby complement the existing energy-only markets. Under the proposed framework, capacity holders, including DISCOMs with surplus contracted capacity, generating companies and traders, may offer available capacity through market-based auctions for durations ranging from one month to three months. Such a mechanism is intended to address temporary mismatches in capacity requirements arising from demand forecast errors, maintenance outages, commissioning delays or regional imbalances, while improving utilisation of existing generation resources**.** Two options have been suggested in the Secondary Short-Term Capacity Market:

Under **Short-term Capacity Market (Option 1)**, the bidding is proposed to be called on the basis of capacity charges and the price discovery will be based on uniform step open auction. 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.

Under **Short-term Capacity Market (Option 2)**, the bidding is proposed to be called based on double-sided bidding for capacity, with two two-part bids for “capacity charge + energy charge”. Contracted buyers to have the first right of scheduling until the start of the day-ahead market, failing which the capacity providers can sell their energy into the energy market.

Observations:

i. The staff paper rightly identifies that in the short term particularly in the power exchanges, the products currently available are only energy only contracts which do not ensure capacity availability. Moreover, as the RA framework gets implemented in letter and spirit, there will be increased demand for such short-term capacity market. The Short-term capacity market will help the DISCOMs manage shortfall in capacity due to prolonged plant outage, delay in commissioning of projects and optimization of capacity charges.

ii. Considering the challenges mentioned in earlier sections with auctions based on capacity charges, it is felt that Short-term Capacity Market (Option 2) is a better option. However, the challenge in this option will be deciding the ratio between capacity charge and energy charge in which the bid has to be called. Moreover, different type of capacity resources will have different ability on delivery of firm power

particularly the RE resources. As such, participation of variable renewable energy resources may need to be linked with demonstrated firm capacity contribution, storage integration and appropriate capacity credit methodologies to ensure that resource adequacy objectives are effectively met.

iii. It is observed that the Staff Paper envisages the Secondary Capacity Market for addressing short-term capacity shortfalls of 1–3 years under Option-3, while the proposed market design contemplates auctions every three months for delivery over the subsequent three months. However, it may be noted that in compliance of RA framework, the DISCOMs have to tie up the capacity before the start of a delivery year starting from April. As such, the auctions need to be conducted before the start of a delivery year and the duration of contracts may not be limited to three months. Moreover, it may also be explored whether such auctions could be conducted similar to Any Day Sigle sided contracts in TAM given we are at a very nascent stage of this market segment.

iv. While capacity contracts generally require performance obligations to ensure availability of committed resources, the nature and quantum of penalties applicable to short-term capacity contracts may require careful calibration. Excessively stringent penalty provisions may discourage participation, particularly from existing surplus capacities, and could increase the cost of procurement. Moreover, the existing long-term procurement arrangements in India are not subject to the same type of explicit performance obligations and scarcity-period penalties envisaged under the proposed capacity market framework.

v. The participation in this market will depend on effective compliance of RA framework since, the capacity participating in this market will generally have higher fixed cost. The PUSHP portal provides a platform for trading of capacities based on both fixed and energy charges tied up with the DISCOMs, however, it is observed that DISCOMs have generally shown limited willingness to offtake such power with added fixed cost liability and lean on the energy markets for cheaper power. Moreover, the DISCOMs do not have sufficient incentives to offer their capacities in such market.

Conclusion:

i. Successful implementation of any capacity market would require robust institutional arrangements relating to determination of reliability standards, capacity accreditation, derating methodologies, monitoring of performance obligations, treatment of forced outages and settlement of penalties and incentives. These aspects would require detailed stakeholder consultation before introduction of long-term capacity market mechanisms.

ii. India does not presently suffer from the classical "missing money problem" that led to capacity markets in PJM or the UK, because a substantial portion of conventional generation is already supported through long-term two-part PPAs. Moreover, the issue of resource adequacy which is addressed by the capacity market auctions in some countries is already being addressed in India through the RA framework. Accordingly, the DISCOMs are tying up the required capacities through bilateral contracts. The question now is to decide whether to continue with the existing contracting mechanism or consider tying up the future capacities through capacity market auctions.

iii. As discussed earlier, the Secretary (Power) Committee envisaged introduction of capacity markets in a post-MBED framework. However, in the absence of MBED, the staff paper proposes alternate mechanisms which tries to imitate some of the features of MBED. However, such alterations may lead to distortions in the market and other issues as highlighted in the previous sections. Moreover, coexistence of multiple capacity procurement frameworks, wherein some distribution licensees continue with conventional long-term PPAs while others adopt capacity market-based procurement, may create operational, settlement and market design challenges that would require careful examination.

iv. The proposed RA Capacity Market mechanisms envisage that distribution licensees would procure capacity through centralized capacity auctions in place of, or in addition to, conventional long-term procurement arrangements. However, under the existing Resource Adequacy framework, distribution licensees are primarily obligated to ensure adequacy of contracted resources, while the choice of procurement mechanism remains largely within the domain of the concerned utility, subject to approval of the appropriate Commission. In this regard, it needs to be examined how participation in the proposed capacity market would be operationalized, including whether such participation would be voluntary or mandatory, and the legal, regulatory and institutional arrangements required for transition from the existing procurement framework. The interaction of the proposed mechanism with the Resource Adequacy Guidelines, existing bidding guidelines and procurement approval processes of SERCs/JERCs may also require further examination.

v. While conventional generators recover capacity charges under long-term PPAs, recovery of such charges is generally linked to annual availability requirements and may not necessarily ensure availability during identified system stress periods. Recognizing this, the CERC Tariff Regulations have introduced differentiated treatment for peak and off-peak availability for recovery of fixed charge. It may be examined whether similar provisions, or appropriate performance-linked incentives and disincentives, could be strengthened within the existing bilateral contracting framework before considering wider capacity market reforms.

vi. It is further submitted that the proposed capacity market mechanisms would require detailed examination from the perspectives of delivery assurance, investment facilitation and institutional design. In particular, mechanisms for ensuring reliable access to contracted capacity during periods of market scarcity, adequacy of revenue certainty and auction timelines for facilitating creation of new capacity, and the interaction of the proposed Reserve Capacity Market with the evolving Resource Adequacy framework and reserve procurement obligations under the IEGC.

vii. Among the options discussed in the Staff Paper, the Secondary Short-Term Capacity Market (Option-2) appears to be a practical and implementable mechanism for addressing temporary capacity surpluses and deficits while complementing the Resource Adequacy framework. The proposed mechanism may also facilitate efficient utilisation of existing generation resources and provide valuable operational experience in capacity trading before consideration of more comprehensive capacity market arrangements.

Among the long-term capacity market options, Option-3 appears to be most closely aligned with the existing Resource Adequacy framework and may be considered for addressing residual capacity shortfalls identified for the ensuing delivery period,

particularly through utilisation of existing untied or surplus capacities. In such a framework, the need for a separate year-ahead Reserve Capacity Market may require further examination, as reserve requirements may potentially be addressed through existing ancillary services and real-time market mechanisms, subject to system requirements.

viii. Any long-term capacity market design involving separation of capacity contracting and energy procurement may be considered after gaining sufficient operational experience from implementation of the Resource Adequacy framework and the proposed short-term capacity market mechanisms.

ix. Although Capacity market auctions are generally effective for ensuring long-term grid reliability by providing necessary revenue for power assets, yet they risk economic inefficiency through poor design, such as administrative over-procurement. It is expected that effective implementation of the Resource Adequacy framework would improve capacity availability and market liquidity, thereby providing a more conducive environment for evaluating advanced capacity market mechanisms in future. Thereafter, such option could be considered for capacity contracting.

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