26 Reddacliff Street, Newstead QLD 4006
GPO Box 1461, Brisbane QLD 4001

ergon.com.au

25 July 2022

Ms Anna Collyer
Chair
Energy Security Board
John Gorton Building
King Edward Terrace
PARKES ACT 2600

Dear Ms Collyer

Capacity Mechanism – High-Level Design Paper

Ergon Energy Queensland Pty Ltd (Ergon Energy Retail) welcomes the opportunity to provide comment to the Energy Security Board (ESB) in response to its *Capacity Mechanism – High-Level Design Paper* (Paper).

Please find Ergon Energy Retail's detailed responses to the issues raised in the Paper in the attached submission.

Should the ESB require additional information or wish to discuss any aspect of this submission, please contact Andrea Wold, Manager Policy Compliance and Assurance, on 0428 384 448 or myself on 0438 021 254.

Yours sincerely

C. L. Martin

Charmain Martin
Acting Manager Regulation

Telephone: 0438 021 254
Email: charmain.martin@energyq.com.au

Encl: *Ergon Energy Queensland comments to the Paper.*

Submission

ENERGY SECURITY BOARD CAPACITY MECHANISM HIGH-LEVEL DESIGN PAPER

25 JULY 2022

ERGON. ENERGY RETAIL

Part of Energy Queensland

Introduction

Ergon Energy Queensland Pty Ltd (Ergon Energy Retail) welcomes the opportunity to provide comment to the Energy Security Board (ESB) in response to the Capacity Mechanism High-level Design Paper (the Paper).

Ergon Energy Retail acknowledges that as the generation mix evolves, the market must adapt to maintain system security. In the context of achieving this objective, we support in principle the implementation of a strategically designed capacity mechanism. However, we are concerned that certain elements considered in the Paper, whilst intended to support least cost outcomes, risk developing a capacity mechanism that is overly complex and costly.

Approach

Ergon Energy Retail supports the ESB's proposal to adopt a centralised capacity model where the Australian Energy Market Operator (AEMO) forecasts demand and the capacity requirement so as to reduce complexity, risk and transactional costs for market participants. Further, we agree that the reliability outlook contained in the National Electricity Market (NEM) Electricity Statement of Opportunities (ESOO) is an appropriate source of information to signal an impending reliability gap to market participants and governments.

While we do not support adopting a hybrid approach to capacity procurement (e.g. retailers acquiring capacity alongside AEMO in auctions), Ergon Energy Retail welcomes an auction process which establishes a common clearing price received by all successful bidders for the delivery year (similar to the current spot market) which is then passed to market customers via AEMO's wholesale market settlements process. This would enable the emergence of a secondary capacity market that operates in conjunction with the centralised process for capacity providers. Outside of the centralised process, a retailer and capacity provider could manage their exposure against future capacity market prices through the use of derivative contracts.

Capacity definition

Ergon Energy Retail agrees with the ESB that the capacity mechanism should ensure there is sufficient capacity within each region to meet the reliability standard and that each capacity region should mirror existing NEM regions.

Ergon Energy Retail acknowledges the need to de-rate a resource's nameplate capacity to the level of expected output during at-risk periods as this will allow each megawatt of capacity to be considered interchangeably. While we acknowledge that there is merit in aligning compliance periods with the definition of at-risk periods, the extra level of complexity required to predict system stress events in future years may not actually result in significantly different de-rating factors.

Our preference therefore is for a simple approach to defining at-risk periods for the purpose of determining de-rating factors. An approach that is transparent and allows each technology provider to understand their rating and the value of their technology is preferred, especially during the infancy of the capacity mechanism as participants grapple with how the capacity mechanism works in practice. However, it is important to consider how geographical differences such as ambient temperature can influence performance levels. Ergon Energy Retail recognises that climatic differences within jurisdictions (States) needs to be accounted for in establishing de-rating factors. For example, a solar generator operating in North Queensland will have a different de-rating factor than a solar generator operating in Toowoomba, despite the fact they are located in the same jurisdiction. Consequently, it is our view that one approach will not be suitable for all events.

Ergon Energy Retail is also of the view that there should be multiple at-risk periods throughout a delivery year, and that over time, the at-risk period definition should evolve as system peak demand changes in line with the evolving generation mix.

Procuring capacity and auction design

Ergon Energy Retail notes that international markets which have sought procurement of new capacity four years ahead of the auction saw the emergence of a diverse and dynamic portfolio of technology and fuel types to meet the demands of consumers. However, despite this benefit, it was noticed T-4 auctions resulted in under-procurement due to a lack of 'qualified' units.[1] Given this, we support multiple auctions whereby an initial auction is held several years ahead of the delivery year to procure less than the forecast capacity requirement, with the remaining capacity procured in one or more supplementary auctions closer to the delivery year. While the timing and number of capacity auctions held should form part of the ESB's detailed design, we suggest that a trigger be included in the high-level design for a regular review of the timing and frequency of auctions to ensure they remain appropriate as the market matures.

To manage the risk that auction criteria results in under-procurement, the framework should not place undue burden on new capacity providers. We suggest that T-4 auction criteria should be flexible, must consider the impact assessment criteria has on procurement, and whether the proposed technical assessments to be performed by AEMO are valuable and do not add unnecessary administrative costs on market participants.

Nevertheless, there is a need to balance these risks with the cost to consumers should capacity providers fail to deliver the required reliability. In our view, while capacity certificates could be awarded to proposed future capacity to provide revenue certainty for new capacity needing to secure finance, capacity payments should only be made when the new capacity

[1] Single Electricity Market Committee, *Capacity Remuneration Mechanism 2025/26 T-4 Capacity Auction Parameters & Annual Run Hour Limited Plants* (Decision Paper, 1 October 2021) 9.

is made physically available (e.g. when the new build is operational). This risk to new capacity providers could be offset by more favourable contract terms which further encourage new investment.

Auction demand curve

Ergon Energy Retail understands the auction demand curve is intended to define the benefit provided by the given amount of awarded capacity. Rather than operate a capacity auction which seeks to procure a fixed requirement, we support the proposal to consider a demand curve which would seek to vary the quantity of capacity procured based on price.

The ESB defines the design of the curve as reflecting the trade-off between appropriate investment required to ensure reliability and cost. In this context, we suggest the curve be set by an independent price regulator at a level which reflects new entrant costs to incentivise investment. We also recommend a periodic public review of the demand curve shape and anchor points to ensure the curve remains effective in supporting the objective of the capacity mechanism.

Obligations on capacity providers

Ergon Energy Retail supports the proposed obligations for capacity providers to be available throughout the year with additional obligations imposed for bid availability during periods of system stress. We also support the ESB's suggestion that these obligations be incentivised rather than the imposition of a further onerous penalty regime on market participants.

Ergon Energy Retail supports the differentiation between bid availability during periods of forecast system stress and bid availability during unplanned events. Certain technologies may be unavailable (e.g. a battery may be fully discharged) during an unplanned outage which should not be considered non-performance. However, a battery that is not bid available during a forecasted system stress event (assuming there is no planned maintenance) should be considered a non-performance. Where bid unavailability results in additional market intervention (e.g. the activation of the Reliability and Emergency Reserve Trader), we consider it appropriate for the non-performing capacity provider to be liable for market intervention costs. This would in our view further incentivise capacity providers to 'turn up' instead of simply foregoing capacity payments.

Capacity payment

Ergon Energy Retail supports a two-part payment which seeks to appropriately reward providers for availability and performance at times of system stress. However, each component of the payment should reflect the value it provides. We recognise the greater the portion of the first payment, the more revenue certainty it gives to capacity providers. Alternatively, the greater the portion of the second payment, the less likely consumers are to pay for capacity which does not contribute to reliability. It is therefore our view that further

analysis is required to determine the appropriate proportion of each payment to balance risks and costs in the initial years of the capacity mechanism. This proportion should then be reviewed on a regular basis in advance of the delivery year to tailor the mechanism to the evolving needs of the NEM over the coming decade/s.

A model that supports capacity providers receiving the second payment, even when no events occur, would incentivise new projects and achieve the capacity mechanism objective. However, where there are repeatedly no events over multiple delivery years, then the two-part payment mechanism must be reviewed to assess its on-going relevance. Nonetheless, it is important that total AEMO payments to capacity providers for a delivery year do not exceed budget as market customers require cost certainty, especially for the purpose of setting annual retail tariffs.

In situations where there is systemic non-performance and unavailability during the delivery year by a capacity provider, that capacity provider should be required to repay payments associated with year-round availability. Customers should not be required to pay for a proponent's failure to provide capacity.

Market price cap (MPC)

Ergon Energy Retail notes the required market price cap to meet the reliability standard was determined in the absence of a capacity mechanism. However, the objective of a capacity mechanism is to incentivise generation required to ensure reliability. As such, we are of the view that the price settings for the energy market and the capacity mechanism should be jointly determined given they serve a similar purpose.

Further, we consider assessing the scope for reductions in the market price cap (MPC) is a sensible approach to ensuring customers do not pay more for reliability than is necessary. We note that the ESB expressed a clear intent to reflect on issues linked to the MPC in the Paper[2] and we support the proposed approach to considering relevant issues when carrying out a detailed assessment, including quantitative analysis.

Defining periods of reliability or system stress

An approach which encourages capacity providers to make outage and operational decisions to maximise availability during periods of expected system stress will encourage capacity providers to be available when capacity is most needed. Ergon Energy Retail therefore supports the proposal for periods of reliability or system stress to include all instances of actual lack of reserve (LOR) 2 and LOR 3 reliability events, regardless of whether they were forecast in advance.

[2] Energy Security Board, *Capacity mechanism High-level Design Paper* (Consultation Paper, 20 June 2022) p56

Allocation of costs

Ergon Energy Retail supports the proposal for AEMO to recover the costs of procuring capacity via retailers which in our view can be accommodated within the existing NEM settlement process to reduce administration costs. We also support the settlement of certificates by using a simple megawatt hour approach to ensure costs are allocated in a simple and timely way.

As part of the detailed design, the ESB has expressed its intent to consider incentives which encourage retailers to minimise customer demand in real-time.[3] The proposed formula by which costs are allocated to retailers assumes all retailers are best placed to predict and incorporate these costs into their tariff prices. However, this is true where a retailer is able to set their own tariff prices. It should be noted that regional Queensland is still subject to regulated pricing determined annually by the Queensland Competition Authority (QCA), meaning regulated retailers such as Ergon Energy Retail do not have the capacity to incentivise customers to reduce demand in real time unless the QCA is able to better reflect this flexibility into sharper tariff structures and/or prices. We also point to the Queensland Government's flat default tariffs which also restrict our ability to minimise customer demand.

Similarly, the costs associated with the capacity mechanism would need to be captured by the Australian Energy Regulator in its Default Market Offer (DMO) prices. As the DMO prices are the maximum price retailers should charge residential and small business customers on standing offers, the application of regulated pricing and the DMO are issues that require the ESB's consideration when determining how a capacity mechanism will appropriately encourage retailers to minimise demand.

Inter-regional procurement

A well-designed capacity mechanism intended to support the NEM should reflect existing market design. As the NEM was designed using a regional model, it is our view that capacity zones aligned to the NEM regions is preferable.

On this basis, we support a model where the region's capacity requirements must be met by capacity located in that region. We note the ESB's preference for inter-regional procurement subject to identifying a workable and cost-effective way of incorporating these resources. However, Ergon Energy Retail does not support this option as the uncertainty resulting from one jurisdiction opting out of the capacity mechanism could in turn impact the capacity mechanism in another jurisdiction, making inter-regional procurement exceedingly complex and impracticable.

[3] Energy Security Board, *Capacity mechanism High-level Design Paper* (Consultation Paper, 20 June 2022) 57.

Should the ESB adopt inter-regional procurement, we recommend the ESB make public the results of its cost-benefit analysis which clearly identifies the benefits and customer savings of what will be a complex settlement process.

Retailer Reliability Obligation (RRO)

Ergon Energy Retail recognises that the role of the RRO was to provide stronger incentives for market participants to invest in the right technologies in regions where it is needed to support reliability in the NEM. Ergon Energy Retail suggests that the capacity mechanism will be a more effective means of ensuring reliability of electricity supply and agrees with the proposal to replace the RRO with a capacity mechanism.

Future State

Ergon Energy Retail recognises the scale of investment necessary to maintain reliability over the coming decades, and the role of the capacity mechanism to encourage new investment of the right mix. This will become even more necessary as the electrification of transport and the hydrogen economy emerge, increasing demand for supply reliability. However, we note that many international schemes have defined capacity mechanisms as temporary measures intended to ensure reliability.[4] Consequently, we seek to understand the longevity of the proposed capacity mechanism, particularly once the required investment in generation capacity has been acquired.

Implementation timeframes

Ergon Energy Retail raises concern with the proposed timeframe between the release of the draft design paper (December 2022) and the final design paper due to Energy Ministers in February 2023. This timeframe does not provide stakeholders with sufficient opportunity to review and provide feedback on the draft design prior to the ESB preparing the final design for the Energy Ministers. Given the costs and risks which we expect to emanate from the capacity mechanism, Ergon Energy Retail suggests this mechanism must not be hastily designed and stakeholders must be afforded sufficient opportunity to consider the detailed design of the capacity mechanism to ensure costs and risks can be addressed.

[4] 'Capacity mechanisms', *European Union Agency for the Cooperation of Energy Regulators (ACER)* (Web Page) <https://www.acer.europa.eu/electricity/security-of-supply/capacity-mechanisms>.