



25 July 2022

Ms Anna Collyer
Chair
Energy Security Board
GPO Box 787
Canberra ACT 2601

Email: info@esb.org.au

Anna
Dear Ms Collyer

Response to capacity mechanism project high-level design paper

Thank you for the opportunity to respond to the Board's Capacity mechanism project high-level design paper (the Paper).

As you know, EDL is a leading global producer of sustainable distributed energy. We own and operate more than ninety power stations and renewable gas facilities across Australia, North America and Europe. The power stations are both grid connected and remote and fuelled by wind, solar, gas, liquid fuels and storage. We have a thirty-year reputation for developing innovative, tailored clean and green energy solutions.

Consistent with our previous submissions, EDL's view is that the NEM capacity mechanism should be based on the UK capacity market design with some modifications. The UK design exhibits many of the features sought in the design principles set by the Energy Ministers including:

- an independent assessment of reliability needs coupled with a centralised approach to procurement
- technology neutrality and the eligibility of both new and existing resources
- providing confidence in supply with long term contracts (up to 15 years) available to underpin new capacity projects
- greater competition via mechanisms designed to remove the market power of incumbents and
- penalties for failing to provide contracted capacity during system stress events when directed.

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EDL also recommends that resources supported by capacity contracts reflect the attributes of the future power system in which they operate. Longer term contracts that will support resources operating in 2050 should be consistent with achieving net zero emissions while shorter term contracts should manage reliability within the context of resources currently in operation. This approach should provide the right mix of reliability, affordability and sustainability as the energy system transitions to the future.

Further detail regarding EDL's view on a preferred design appears in our responses to a number of the Board's specific questions contained in the Attachment to this letter.

We look forward to participating in the detailed design of the capacity mechanism in the coming months. Please do not hesitate to contact Anthony Englund, Head of Regulatory Affairs at anthony.englund@edlenergy.com or on (0412) 039 860 should you wish to discuss any aspect of this submission.

Kind regards

A handwritten signature in black ink, appearing to read "J Harman", is positioned above the printed name and title.

James Harman
Chief Executive Officer



ATTACHMENT

Forecasting

Q2. *Do you agree that the capacity mechanism should provide for multiple zones being the existing NEM regions?*

A2. Yes.

Q3. *Is there sufficient evidence to say that the at-risk periods can be defined on a time-based definition?*

A3. EDL supports adopting the UK approach where the at-risk periods are modelled and contracted resources are required to be available after a suitable, short period once notice is given by AEMO.

EDL submits that the main focus of the at-risk periods should be on major demand peaks where system stress is most likely to occur. However, as the Paper notes, the changing supply and demand dynamics mean this may not be only daily or seasonal demand peaks with capacity gaps potentially arising at other points. It is therefore important that the potential for gaps to change or emerge is regularly reviewed.

Q4. *If there is a risk of the emergence of more than one at-risk period in the NEM, how should that be addressed?*

A3/4. See answer A3 above.

Q5. *The de-rating factors produced by different at-risk period definitions and modelling methodologies can show large ranges particularly for non-traditional technologies. How should this and potential year to year variability in de-rating factors be addressed?*

Q6. *What approaches should be used to de-rate different technologies? Should different approaches apply to different technologies?*

Q7. *What is the right balance between transparency/simplicity and accuracy?*

Q8. *Should de-rating factors be determined at a technology class/region level or at a station level?*

A5-8. EDL agrees there needs to be a pragmatic balance between transparency/ simplicity and accuracy. To achieve this, de-rating should be based on historical information where that information is statistically robust, and modelling otherwise. De-rating should be at the station level where there is statistically robust historical information or by local technology clusters (for example, wind farms in physical proximity) otherwise. There should also be a well-defined process to revise de-ratings where there have been suitably material changes in circumstances.

Q9. *Do you agree with the approach to setting the forecast capacity requirement and the target capacity in a region?*

A9. Yes.

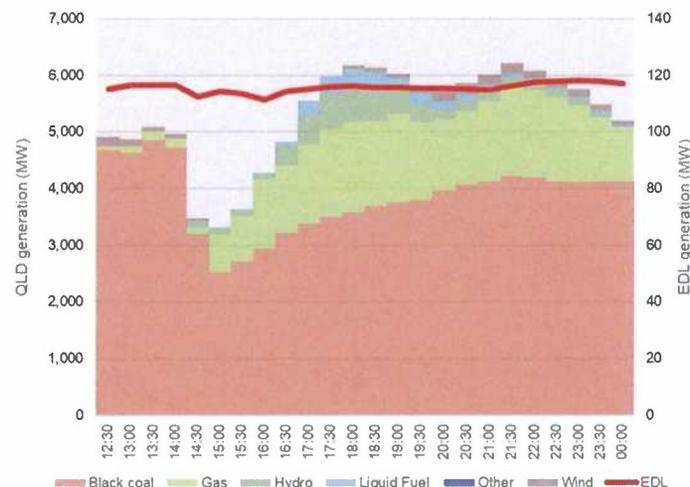
Additional matters

Centralised forecasting and procurement

EDL restates its previously submitted position that, to manage the risk of over-procurement, the centralised forecasting and procurement should be undertaken either by different bodies or with independent oversight. If the latter, the forecasting (likely undertaken by AEMO) should be independently reviewed by another body (such as the Reliability Panel).

Non-scheduled generation should be eligible

EDL supports the Board's position that, broadly, all existing and new generators should be eligible to participate in the mechanism. This should include non-scheduled generation and is the case in other jurisdictions where EDL generates. Non-scheduled generators can make a contribution. By way of example, EDL's own waste gas-fueled non-scheduled generation kept supplying Queensland during the 25 May 2021 Callide C outage as the graph below shows.



Procurement and auction design

Q11. *Should retailers have a role in a centralised capacity mechanism?*

Q12. *If you support retailer involvement in procurement, what are your views on how this could operate?*

A11/12. EDL supports a centralised procurement model. Retailers should not have a role. Doing so would reduce transparency and confidence in the mechanism while adding complexity and cost (including regulatory and additional counterparty risk costs). A centralised approach also provides an opportunity for increased generation competition as it takes away the reliance on underpinning initial investment PPAs from the large vertically integrated Retailers.

Q13. *Do you agree with holding two auctions for each delivery year and is this timing appropriate? If no, what auction frequency and timing is appropriate and why?*

Q14. *How should the timing of the auctions align with the notice of closure obligation?*

A13/14. EDL considers that there should be more auctions in the short term to address the rapid change in the power system that we are seeing. We suggest auctions at T-4, T-3, T-2, T-1 and T-0.5. This larger number of more frequent auctions should be able to address the potential impact of generator closure notices.

Q15. *What are your views on how existing and new capacity should be treated in the auction process?*

A15. EDL agrees that there should be shorter (one year) capacity contracts for existing capacity and longer (out to 10-15 year depending on the technology) contracts for new capacity.

Q16. *Are there other considerations the Board should take into account in the detailed design?*

A16. There is an opportunity to ensure that the resources supported by longer term capacity agreements reflect the attributes of the future energy system in which they will operate. Thus, longer term contracts that support resources that will be operating in 2050 should be consistent with achieving net zero emissions by that date. Shorter term capacity agreements should manage reliability within the context of the resources currently in operation. We believe this pathway involving shorter and longer term contracts, with the latter supporting net zero emissions, provides the right balance of reliability, affordability and sustainability as the power system transitions.

Q19. *Internationally, capacity mechanisms rely on some multiple of the net cost of new entry (net-CONE) to determine the capacity mechanism market price cap. Is this appropriate or should an alternative approach be used?*

A19. EDL supports the use of bidding caps based on the net CONEs for new (1.5x) and existing (0.5x) technologies as per the UK and Irish markets. These levels help to mitigate the potential market power of incumbent generation (as to which see further A22-23 below) with the new technology cap acting as a market cap. The multipliers are set at levels which take into account the uncertainty involved in assessing the CONEs.

Q20. *How should the price settings interact with the energy market price? Over time, when settings are regularly reviewed, should the price settings in the capacity auction and the energy market be jointly determined?*

A20. There should be a reduction in the energy Market Price Cap to account for the potential to earn capacity mechanism revenues. Regular reviews should jointly address both market settings.

Q21. *Are there considerations the Board should take into account when determining demand curves in the detailed design?*

A21. The value of the flexibility provided by demand curves depends on the accuracy of the CONE assessments. We would recommend that the Board reviews how effective curves in overseas capacity markets have been before incorporating one into the local mechanism.

Q22. *While the RRO requires mandatory participation for the largest three participants in a region, the Board considers a methodology for determining market power should be applied to account for changing market concentration over time. Are there specific market concentration thresholds of concern?*

Q23. *Should market power mitigation measures be applied to capacity providers with large market shares in supply-side regardless of their market share in retail?*

A22-23. It is important that the design drives efficient outcomes. Centralised procurement will help address the risk of market power leading to inefficient outcomes. However, the NEM is highly concentrated and tests for market power and measures to mitigate it should be included in the design. As previously submitted, these could include offer caps for participants, or combinations of participants, above certain volume thresholds. It is a matter of analysis for the Board as to what those thresholds should be.

The Board expresses a view in the Paper that the changing dynamics of the market (new technologies brought by new entrants) will likely mean a lessening of market concentration. Experience suggests otherwise, noting the recent failure of small retailers in the NEM and overseas as well as the fact that other infrastructure markets with higher technology rates of change are typically highly concentrated (for example, telecommunications and computers).

Additional matter

The Reliability and Emergency Reserve Trader (RERT)

The Board should explore whether changes should be made to the RERT mechanism to account for the introduction of the capacity mechanism.

Obligations

Q1. *Do you have preliminary views on compliance obligations for capacity providers?*

Q2. *Do you have views on compliance obligations for new entrant capacity in advance of the delivery year?*

Q3. *Do you support the Board's proposed performance model for consultation? If not, what other proposed model would be better and why?*

A1-3. EDL does not support the Board's model. Rather, it strongly prefers the UK model of making of capacity payments through the year coupled with penalties where the provider fails to dispatch capacity during system stress events when directed by the market operator. The fundamental point of the mechanism is to ensure that capacity is used to address those stresses. To be meaningful, penalties greater than total annual payments should be imposed. Otherwise, not making capacity available could be treated as a valid option.

The Board's preference for the capacity simply being available rather than being dispatched is based on its concern that there may be valid reasons why dispatch could not occur without any fault on the part of the provider. This is possible. For example, a network constraint may provide a valid reason for not being penalised.

However, as with any other failure to dispatch when directed, the question should be made the subject of an ex-post review (and, in the case of the network constraint, should signal consideration of options to relieve the constraint).

Consistent with overseas designs, there should be penalties for failing to deliver new capacity in a timely way with appropriate milestones included in the contracts.

Q25. *Are there any issues with using LOR2 and LOR3 as the trigger for capacity payments? If yes, please explain the issues and any alternative triggers.*

A25. EDL does not support the use of Lack of Reserve Notices as the trigger. Consistent with A3, the main focus should be on system stress events arising from major demand peaks. LORs may arise for other reasons as was recently seen in the NEM when generators acted in ways that contributed to higher prices. Setting LORs as the trigger would likely encourage more such actions.

Q27. *Do you support the Board considering capacity payments based on availability throughout the year and during periods of system stress?*

A27. See A1-3 immediately above.

Q28. *If you support payments based on two factors, what is the preferred distribution of the first and second payment? Should more or less weight be given to responding to events?*

A27/28. See A1-3 immediately above. There would be no second payments under EDL's preferred model.

Q37. *Do you think the Market Price Cap should be reduced if a capacity mechanism is introduced and, if so, by how much? What key issues should the Board take into account when considering this issue?*

A37. See A19-20 above.

Cost allocation

Q38. *Do you agree that costs should be passed on via retailers, rather than network service providers?*

Q39. *What do you consider to be the most appropriate mechanism to allocate costs to retailers?*

A38/39. Costs should be passed on to retailers as this is simpler than passing them via networks (and then retailers) and, as the Paper notes, would provide more of an incentive on retailers to consider greater support for demand side solutions. Costs should be allocated on retailers shares of peak demand.

Transmission capacity

Q40. *Do you think that Option 1 (recognise inter-regional transfers in the capacity requirement) or Option 2 (explicit procurement of inter-regional resources) better meets the assessment criteria?*

A40. EDL supports Option 2 in principle subject to addressing the associated practical issues raised in the Paper (such as ensuring the resource is only procured once across the two regions).

Q44. *Do you think that proposed new market interconnectors should be able to participate in the capacity mechanism?*

A44. Yes. Not regulated interconnectors which are already effectively remunerated for their capacity.