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Subject 2025 Benchmark Capacity Providers Review

Date 18 September 2025

Good Afternoon

Thank you for the opportunity to comment on the recent Consultation Paper on the 2025 Benchmark Capacity Providers Review. Perth Energy supports the two proposals which are put forward in this Paper namely:

- Choice of a 200MW/1200MWh Lithium Battery Electric Storage System (BESS) connected at 330kV as the reference technology for the Peak and Flexibility BRCPs.
- Retention of the gross Cost Of New Entry approach to the BRCP determination.

The Review has highlighted several matters, some of which are noted in section 2.7.1, which, while present in the past, have become more significant due to changes currently occurring in the energy industry. In particular, the recently legislated State Electricity Objective (SEO) which seeks to balance reliability, affordability and sustainability, needs to be adequately considered. While these changes do not challenge the outcomes provided within this Review, they are matters that warrant attention within the ongoing monitoring of the performance of the Wholesale Electricity Market (WEM).

Future plant mix

There has been some concern expressed that the WEM is potentially becoming over reliant on BESS systems and that setting these as the Benchmark Capacity Providers, for both Peak and Flexibility, will accentuate this. Limb B of the reliability criterion, which limits expected energy shortfalls to 0.0002% of annual energy consumption, addresses this in part but not necessarily in full compliance with the SEO.

If no new generation capacity is brought on line, existing plant must run harder to meet increasing demand and increasing BESS losses. This will significantly lift the output required from older, less efficient generating plant raising overall system operating costs and greenhouse gas emissions. New, higher efficiency plant, with lower operating costs and emissions levels, may be a better overall investment for the system.

Long plant lead times

Lead times for some of the plant considered in the Review are currently well beyond the period from plant certification to required operation. Because the BRCP Procedure only considers construction time this is not an issue for the Review, but it does highlight the mismatch between the reserve capacity process and much utility sized non-intermittent generation. Developers of such facilities must make substantial binding financial commitments well before certification and assignment of capacity credits.

These facilities are effectively ruled out as potential benchmark capacity providers in the future. Further, bringing such plant into the market to maintain an optimum plant mix which meets the SEO, presents major challenges.

Fuel supply for firming capacity

Much of the firming capacity now in service on the WEM is certified on diesel fuel. This is a reliable and relatively low-cost approach to meeting the fuel security requirements within the Electricity System and



Market Rules. The Review notes that expected potential limits on carbon emissions intensity effectively exclude the use of diesel in the future requiring gas fired plant to certify only on gas. As set out in section 2.3.2, to secure certification, a gas fired facility will incur the fixed charges associated with firm full haul gas transport as well as purchase of sufficient firm gas supply to service a 14-hour run time, potentially offset with storage.

This approach ensures virtually absolute certainty of secure plant availability but gives no consideration to cost. Perth Energy suggests that a probability-based approach, as is used to set the maximum demand forecast or the capacity contribution of intermittent generation, may better comply with the SEO.

Perth Energy is happy to discuss any matters raised in more detail. Should you have any questions please do not hesitate to contact me at <u>p.peake@perthenergy.com.au</u> or on 0437 209 972. This submission may be made public.

Kind regards

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I am based in the Perth Office and work Tuesday, Wednesday and Thursday