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## Tranche 8: Exposure Draft Proposed Electricity System and Market (ESM) Amending Rules

Alinta Energy appreciates the opportunity to provide feedback on the Tranche 8 ESM Amending Rules Exposure Draft.

## **Key Recommendations**

- Delay the Reserve Capacity Cycle by two months to allow for the determination of an interim Electricity Storage Resource Duration Requirement (ESDR) based on a more realistic bottom-up analysis to apply until an enduring method that can be applied across all capability classes can be finalised.
- To avoid unnecessarily signaling shortfalls and increasing capacity costs, reduce the requirement for Network Access Quantity (NAQ) allocations to be based on the level of network access in 95% of scenarios (under 4.15.9) to 90%, aligning with the 10% probability of exceedance applied in the planning criterion.
- Pause the implementation of the flexibility capacity product, considering that it is no longer required, and the significant implementation effort would be wasted.
- Implement appropriate compensation for generators impacted by AEMO errors.

We make the following recommendations (summarised above) for EPWA's consideration.

- 1. Delay the Reserve Capacity Cycle by two months to allow for the determination of an interim Electricity Storage Resource Duration Requirement (ESDR) based on a more realistic¹ bottom-up analysis to apply until an enduring method that can be applied across all capability classes can be finalised. This recommendation is based on our views that:
  - There appears to be potential merit in increasing the ESRDR from four hours that

<sup>&</sup>lt;sup>1</sup> We note that the duration of the shortfall in EPWA's "bottom-up" assessment (8.5 hours) is likely over-stated because it ignores expected new entrants, including capacity committed under the Capacity Investment Scheme. We recommend that an interim ESRDR be determined based on bottom-up analysis that takes these into account

warrants further investigation.

- EPWA's initial "bottom-up" assessment indicates that there would be a shortfall unless longer duration storage enters.
- The duration requirements for other capability classes are much longer (although arbitrary).
- The planned withdrawal baseload coal facilities will likely increase the forecast duration of system stress periods.
- The existing ESRDR method that the proposed method would replace is not fit for purpose and would result in an excessive ESRDR.
- The proposed ESRDR method should not be implemented on an enduring basis because:
  - The ESRDR would be based on the shape of the operational demand curve and the current level of storage. This means the ESDR increases when additional storage connects, (or when the operational demand curve flattens with increased distributed storage) and a longer duration is not required to avoid shortfalls. Per capacity valuation theory and the taskforce's decision underpinning the four-hour requirement<sup>2</sup> it should be based on the expected duration of a system stress event.<sup>3</sup>
  - The proposed ESRDR method is inconsistent with the duration requirements for other technology types. Rather than entrench this inconsistency, to level the playing field, all duration requirements should be set based on a common principle, reflecting the expected duration of a system stress event.
  - The proposed ESRDR is subject to frequent (potentially annual) changes, which would deter investment in storage, potentially in conflict with the emissions component of the State Electricity Objective. Consistent with the Taskforce's view underpinning the four-hour requirement, we consider that a more standardised duration option is the most suitable for the SWIS.<sup>4</sup>
  - Being primarily driven by the level of storage on the system (and not the forecast length of a system stress period), the ESDR will likely become excessive with the entrance of the storage capacity mandated by the Capacity Investment Scheme, and the forecast increase of distributed storage (which will flatted the operational demand curve). This will substantially deter investment in storage, potentially in conflict with the emissions component of the State Electricity Objective.
  - In assessing the Availability Duration Gap, the proposed method assumes that all storage capacity will be dispatched simultaneously and does not allow

<sup>&</sup>lt;sup>2</sup> Energy Transformation Taskforce, June 2020, Storage participation in the Reserve Capacity Mechanism. The paper notes: "The higher a storage facility's nameplate capacity and the longer it can operate for at a given output, the more it can offer to reliability during a <u>peak event</u>" [emphasis added]. It also stated: "The benchmark duration will align to the typical length of a peak demand event."

<sup>&</sup>lt;sup>3</sup> A key principle of a capacity market is that capacity should be valued based on the contribution to reliability during a system stress event (i.e. its load carrying capability). Therefore, the duration requirement should be based on the expected duration of the system stress event.

<sup>&</sup>lt;sup>4</sup> Energy Transformation Taskforce, May 2021, Reserve Capacity Mechanism: Changes to support the implementation of constrained access and facilitate storage participation.

- for concatenation. This would overstate the gap, not recognising that an excess of ESR capacity over operational demand can be shifted.
- Further consideration is required as to whether continuing to oblige ESR to reserve capacity during fixed periods remains appropriate. We are concerned that maintaining this requirement as more ESR enters will distort the market by creating an excess of supply during the ESRDR and making ESR less able to respond to price signals outside the ESRDR (which risks price spikes).
- o The method is due to be reviewed in 2026 regardless.
- 2. Reduce the requirement for Network Access Quantity (NAQ) allocations to be based on the level of network access in 95% of scenarios (under 4.15.9) to 90%, aligning with the 10% probability of exceedance applied in the planning criterion.
  - Tranche 8 proposed changes to the NAQ prioritisation order where there is a shortfall. We consider that the current 95% requirement could signal a shortfall (and increase capacity costs) unnecessarily. That a constraint binds in 5% of dispatch scenarios indicates a very low likelihood that the constraint would actually bind and misaligns with the 10% probability of exceedance applied in the planning criterion.
  - We consider that Western Power is unlikely to prioritise rectifying a constraint that has such a low likelihood of binding.
  - Annual increases in peak demand forecast are likely to result in more Facilities
    having their NAQs reduced as generation levels across the dispatch scenarios
    necessarily increase to meet the target. The overly conservative 95% requirement
    will cause these constraints reduce NAQs prematurely.
- 3. Pause the implementation of the flexibility capacity product, considering that it is not required, and the significant implementation effort would be wasted.
  - We maintain our view that Flexible Capacity is not required within the foreseeable future as a result of:
    - o The recent influx of investment in battery storage capacity.
    - The strong likelihood of future investment due to the Capacity Investment Scheme.
    - The Coordinator's determination that the same reference technology will apply to both Peak and Flexible Reserve Capacity.
    - The ERA's determination that the same 2025 Benchmark Reserve Capacity
       Price will apply to both the Peak and Flexible Reserve Capacity.
  - AEMO have set the requirements to accredit all existing Semi Scheduled and Scheduled Facilities based on their view that additional investment in flexible capacity is not required. Although in or submission on AEMO's determination, we noted AEMO's approach lacked rigour (and raises concerns about their ability to operationalise the product in future) we consider that this indicates that AEMO does not perceive a need in the medium term and that there will not be a price signal for years to come.

- Increasing the ESRDR will further allay the need for flexible capacity mechanism as it will cover a significant portion of the flexible capacity duration.
- 4. Implement appropriate compensation for generators impacted by AEMO errors.
  - While outside the scope of the areas covered by Tranche 8, it was indicated in the TDOWG, that EPWA may consider proposals to ameliorate this issue.
  - Under the current rules, substantial under-compensation can result where:
    - A generator was dispatched or directed by AEMO due to an error in the dispatch process or AEMO's data. Where this occurs, the 7.11B.1B requires AEMO to determine a replacement Market Schedule based on the most recent Schedule. Typically, where a generator was dispatched due to this error, the schedule applied will reflect that the facility was not dispatched, and so the Facility will not be compensated despite having had no option but to follow AEMO's instructions.
    - A Facility was directed to dispatch due to a constraint, but the incorrect congestion rental value was applied, or the AEMO did not implement the correct constraint equation.
    - The Facility was dispatched, but the instance was not recognised as an Affected Dispatch Interval.
  - As a principle, we consider that where a Facility is dispatched, it should be compensated based on its efficient variable cost. This should be taken to be the Facility's offer price, unless atypical circumstances meant that the offers were not cost reflective (for example, where assumptions underpinning the offer price were substantially incorrect, or the Facility was directed to update offers to a minimum price to ensure that it was dispatched).

Thank you for considering our submission.

Yours sincerely,

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