

Department of Energy, Mines, Industry Regulation and Safety
Level 1, 66 St Georges Terrace,
Perth WA 6000
Via email to: energymarkets@dmirs.wa.gov.au

20 June 2024

RE: WEM Amending Rules Miscellaneous Amendments No. 3 Exposure Draft

Dear Noel,

Tesla Motors Australia, Pty Ltd (Tesla) welcomes the opportunity to provide Energy Policy WA (EPWA) with a response to the WEM Amending Rules Miscellaneous Amendments No. 3 Exposure Draft consultation (the draft rules).

Tesla's global mission is to accelerate the world's transition to sustainable energy. Tesla has the largest energy storage team in Australia (over 150 employees) and an unrivalled track record in successful deployments of large-scale batteries. Tesla has delivered and connected more Australian utility scale battery energy storage systems (BESS) projects than any other provider, including the globally acclaimed Hornsdale Power Reserve (HPR) in South Australia, the Victorian Big Battery, and Neoen's Collie Battery currently under development in WA, among others.

Tesla commends EPWA and AEMO for recognising that an energy sector under transition requires a regulatory and rule framework that can adapt as conditions and learnings evolve. In particular, the WEM is still at the nascent stages of integrating private, market-facing utility scale storage assets – through both supporting rule changes as well as the NCESS mechanism, which is providing valuable near-term investor certainty and targeted services. As the WEM supply and demand balance changes, so too will the requirements of, and need for storage. We note AEMO's analysis in the latest ES00 provides the indicative ESR Duration Requirement based on current methodology outlined in the WEM rules:

- *"Figure 36 illustrates the ADG value for each of the 12 ADGLS, as well as the final ADG value, which is eight Trading Intervals. This has resulted in an indicative ESR Duration requirement for 2026-27 of 16 Trading Intervals (8 hours), which is the sum of the ESR Duration Requirements from the 2023 Reserve Capacity Cycle (eight Trading Intervals) and the final ADG value.¹*

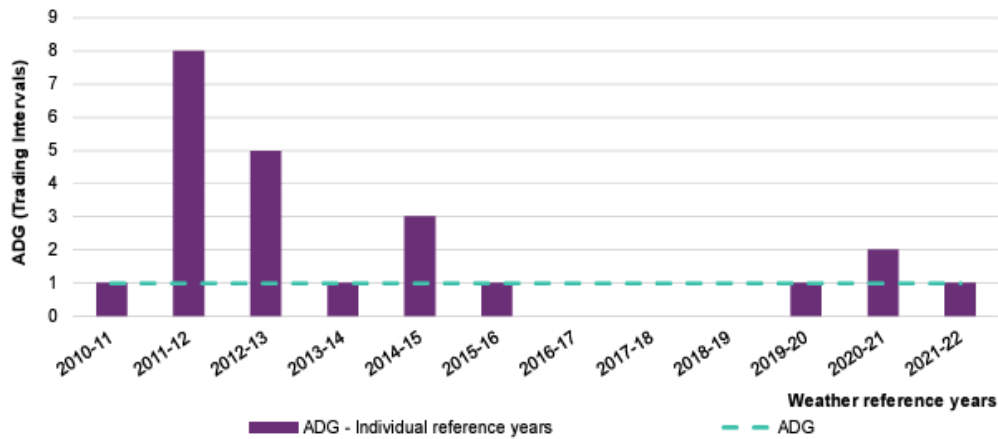
This result is deeply concerning for storage proponents – contradicting the current pipeline of 4-hour battery storage projects (as supported by NCESS) and suggesting investors may have future Reserve Capacity Payments de-rated by 50 per cent – introducing risk to existing projects that cannot be hedged. Coupled with the ongoing uncertainty in the FCESS market (volume and prices) and lower energy price arbitrage opportunities relative to the NEM, such a change would significantly hamper the development opportunities for future battery storage in WA, or see a high reliance on out of market revenue support (e.g. via future NCESS or under the Capacity Investment Scheme) – adding cost to consumers and taxpayers alike.

¹ Pg 83, https://aemo.com.au/-/media/files/electricity/wem/planning_and_forecasting/esoo/2024/2024-wem-electricity-statement-of-opportunities.pdf?la=en

However, we are encouraged by AEMO’s further analysis as detailed in the ESSO Appendices – which provides an alternative methodology that more accurately reflects the requirements for storage to meet peak demand using a ‘flexible ESROI’ methodology and recognising that peak demand assessment should be based on the 90th percentile, to discount flatter, lower demand days across the year:

- “To address this, AEMO suggests that in the development of ADGLS, ESRs should be dispatched evenly over a set of contiguous Trading Intervals with a duration equivalent to the ESR Duration Requirement from the previous Reserve Capacity Cycle, which minimises the peak demand of each Trading Day. This approach aligns with AEMO’s operational flexibility to adjust ESR dispatch prior to each Scheduling Day, optimising the use of ESRs in the SWIS as per Clause 6.3.1 of the WEM Rules.²
- Figure 31 shows ADG values for historical weather reference years, incorporating the proposed changes for the 2026-27 determination. The results lead to a final ADG value of one Trading Interval, and consequently ESR duration requirement of nine Trading Intervals.”

Figure 31 ADG values and ADG value for historical weather reference years, incorporating the proposed changes



In summary, Tesla supports the proposed changes as shown in Figure 31 of Appendix A2 of the 2024 ESSO and outlined in the draft rules. This would provide a more accurate representation and forecast of the system needs for storage duration, avoid outlier days (flat, lower peak demand days) skewing results, mitigate huge risk and uncertainty for existing and future storage projects, and ultimately minimise costs to consumers. We commend EPWA and AEMO for identifying these issues and being pragmatic about methodology and rule changes to address them proactively and look forward to continuing to support WA’s energy transition going forward.

Kind regards,

Dev Tayal

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² Pg 49, https://aemo.com.au/-/media/files/electricity/wem/planning_and_forecasting/esso/2024/appendices-for-the-2024-wem-electricity-statement-of-opportunities.pdf?la=en