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Australia

Robert Bicskei  
Australian Energy Market Operator  
Level 22, 530 Collins St.  
Melbourne, Victoria 3000

Via email: [Contact.connections@aemo.com.au](mailto:Contact.connections@aemo.com.au)

21 May 2024

**RE: Tesla submission for the SSIAG Amendment – Calculation of System Strength Quantity**

Dear Mr Bicskei,

Tesla Motors Australia, Pty Ltd (Tesla) welcomes the opportunity to provide the Australian Energy Market Operator (AEMO) with feedback on its SSIAG Amendment – Calculation of System Strength Quantity consultation.

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 BESS projects than any other provider, including the globally acclaimed Hornsdale Power Reserve (HPR) in South Australia, the Victorian Big Battery, and Lumea's Wallgrove Battery in NSW among others.

Tesla is aligned with the AEMO's objectives with the SSQ Final Rule amending clause 4.6.6 of the NER, which specifies the required content of the SSIAG, and the introduction of a stability coefficient to recognise systems limitations. The proposal put forward by AEMO is a good first step, however, Tesla encourages greater clarity for how the coefficient value was selected to be 1.2, and if this number is fixed or has the potential to change over time. Additionally, Tesla seeks further clarification on if this update could lead to negative SSQ, and exploration to alternatives for using rated active power Prated as the base for calculation.

Further work also needs to be done to understand how grid-forming-machines (GFM) and batteries will integrate with the proposal, such as in instances where the battery may be required to be derated, or when the voluntary specifications of grid-forming inverters (GFI) are considered instead of the Withstand SCR test. Furthermore, Tesla acknowledges that while voluntary specifications defines and captures the characteristics of today's GFI, this document may act as a limit for further technological development and so needs to be adaptable and flexible together with strong industry engagement.

As a leading battery OEM in Australia, Tesla is very open to engaging in data sharing with AEMO to provide insight into the behaviour and performance of GFM. We look forward to engaging with AEMO and the rest of the industry to consider the optimal pathway to enable the most efficient technologies to integrate into the market.

Tesla looks forward to continued engagement and actively participating in ongoing discussions to support the AEMO in the finalisation of the rule change, and future iterations of SSIAG reform.

Kind regards,

Tesla Energy Policy Team

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