

Ms. Ulrika Lindholm Australian Energy Market Operator 530 Collins Street Melbourne VIC 3000

via email: NEMReform@aemo.com.au

25 October 2024

RE: Transitional Services Guideline Draft Report

Dear Ms. Ulrika Lindholm,

Tesla Motors Australia, Pty Ltd (Tesla) welcomes the opportunity to provide a response to the Transitional Services Guideline Draft Report.

Tesla's mission is to accelerate the transition to sustainable energy. A key aspect of this will be using smart, grid-forming inverters to support increased penetration of variable renewable energy (VRE) in the grid. We believe that battery energy storage system (BESS) assets, particularly Tesla Megapacks operating with our virtual machine mode (VMM) technology, will be integral to providing a scaled, cost-effective system strength solution in all Australian jurisdictions.

Tesla is actively engaged in the Engineering Roadmap and Transition Plan for System Security, and the associated AEMC led work on Improving Security Frameworks (ISF) and Essential System Services reforms, noting their criticality to connecting and operating grid-forming (GFM) BESS. Tesla commends the AEMO team for their engagement to date on the Transitional Services Guideline and supports the progression of the Draft Report.

Regarding Type 1 contracts, Tesla welcomes AEMO's incorporation of Tesla's feedback on the procurement process. Recent industry discussions with AEMO have suggested that the forthcoming Type 1 contracts may be used to address the Minimum Service Load (MSL) in Victoria and South Australia¹ to ensure minimum requirements and fleet unit configurations necessary for system strength and voltage management. Tesla acknowledges the Type 1 contracts aligning with this objective to provide power system security and looks forward to the opportunity to further engage with AEMO to discuss how the treatment of MSL risk could be managed under the Type 1 contracts, and in particular, appropriate tender and procurement strategies. A similar approach could be taken as in the WEM, where Non Co-Optimized Essential System Services (NCESS) contracts are designed to add load in periods of minimum demand with system security issues².

Regarding Type 2 contracts, Tesla is encouraged to see AEMO's initiative around trialing and funding new technologies, or a new application of existing technologies. To date, Tesla's GFM / VMM applications have been funded through ARENA or NSP trials, enabling early demonstration of performance and capability. Going forward, we look forward to the opportunity to engage with AEMO to understand a market wide approach to increasing the penetration of GFM as system services become more widely understood in a low thermal plant system. This can build on learnings for new applications, locations (e.g. microgrids) or use-cases (e.g. high renewable islanding applications) to ensure Type 2 contracts continue to drive innovation into power system services.

Tesla looks forward to continued engagement with AEMO on its Transitional Services Guidelines and actively participating in ongoing discussions.

Kind regards,

Tesla Energy Policy Team

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¹ https://reneweconomy.com.au/not-enough-demand-big-batteries-may-be-told-to-stand-by-on-empty-to-avoid-rooftop-solar-switch-off/ ² https://aemo.com.au/en/consultations/tenders/tenders-and-expressions-of-interest-for-ncess-minimum-demand-service-wa