Australian Energy Market Operator (AEMO)

Submitted via email: contact.connections@aemo.com.au

23 May 2023

Dear AEMO team

AEMO review of technical requirements for connection – addendum to draft report

Tesla Motors Australia, Pty Ltd (Tesla) welcomes the opportunity to provide the Australian Energy Market Operator (AEMO) with feedback on the Addendum to the Draft Report making recommendations for amendments to Schedules 5.3 of the National Electricity Rules (NER). Our comments below are limited to definitional points to ensure that there is absolute clarity on the requirements for loads. Our responses below also mirror the feedback we provided to AEMO in respect of Power System Modelling Guidelines (PSMG) Consultation Paper where we suggested the threshold for loads is set at 30MW (see Tesla response here https://aemo.com.au/-/media/files/stakeholder_consultation/consultations/nem-consultations/2022/psmg-review-consultation/submissions/tesla.pdf?la=en). While we have no concerns with maintaining the 5MW threshold for bidirectional assets such as battery energy storage systems (BESS) we want to ensure that there are no challenges to deploying electric vehicle (EV) charging infrastructure at a point where deployment is critical.

For further discussion or clarification on any of the points included in the response below, please contact Emma Fagan (efagan@tesla.com).

Rule	Issue	AEMO recommendation	Tesla feedback
New definitions	Single facility load	A load that forms part of a single installation (as distinct from, say, the connection between a transmission and distribution network). It may have one or more physical connection points, which are in electrical proximity to each other, and the plant within the facility can be described as one geographical location, so that most power system disturbances affect the facility as a whole. A single facility load may have different types of load technologies. For the purposes of the technical requirements of Schedule 5.3, a single facility load is 5 MW or greater.	As per our feedback to the PSMG Consultation Paper, our view is that for any load that is not a bidirectional unit such as a BESS the threshold should be 30MW. If AEMO chooses to maintain the 5MW threshold, we would suggest that the definition needs further refinement. The threshold for plant should be 5MW behind a separate connection point, and AEMO should remove the geographical proximity inclusions. This may have a number

Tesla Motors Australia, Pty. Ltd.
Level 14, 15 Blue Street
North Sydney 2060 NSW
Australia

			of inadvertent consequences. For instance, if an EV charging site or other large load wanted to add solar PV plus a BESS to manage their own grid impacts, this would push the site outside of the threshold as the BESS would also be captured as a load – even though the inclusion of onsite generation would manage the grid impacts of the load. It may also result in loads far lower than 5MW being captured if they're located next to an existing load – such as EV charging infrastructure located at/ or near to a shopping centre.
New definition	Large single facility IBL	A "single facility load", or portion of a "single facility load", that contains [30 MW] or more IBL with discretion for the NSP to use a threshold down to 5 MW, depending on circumstances in the network. In applying this discretion, the NSP must consult with AEMO and have regard to its views. Amend NER 5.3.3 (Response to connection enquiry) to require the NSP to advise whether a proposed connecting IBL would be treated as a large single facility IBL, should the proposed connection proceed. Where the load comprises IBL and other types of load, Schedule 5.3 large single facility IBL access standard requirements apply to the IBL component of the load. Unless inconsistent, large single facility load requirements will also apply to the balance of the load, where relevant, if the balance of load size exceeds the threshold for that definition.	As above, Tesla believes this definition should be made much clearer and remove any element that includes NSP discretion. Our view is that a simple definition would be: • Bidirectional inverter based loads such as BESS assets should have a 5MW threshold attached (note that this could be linked to the bidirectional unit definition in the NER for clarity). • All other inverter based loads have a 30MW threshold.