

Mr Otis Boyle  
Electricity Authority  
Level 7, Harbour Tower  
2 Hunter Street  
Wellington

14<sup>th</sup> April 2026

Dear Otis,

## **RE: Tesla's Response to the Connected Asset Commissioning, Testing and Information Standard (CACTIS) Decision paper**

Tesla welcomes the opportunity to provide feedback to the Electricity Authority (the Authority)'s CACTIS decision paper. Tesla's mission is to accelerate the transition to sustainable energy. In New Zealand, Tesla is proud to have recently commissioned its first utility-scale project, the 100MW/200MWh Glenbrook BESS with Contact Energy, and looks forward to continuing to grow our footprint.

The recommended modelling requirements within CACTIS are intended to do enable the System Operator to maintain system stability, reliability, and efficient planning. Tesla is generally supportive of this intention and makes specific Code amendment proposals to support IP concerns while maintaining this objective. In particular, Tesla raises concern for the IP risks surrounding unencrypted model sharing, and, as a general recommendation, suggests improving the efficiency of the Code by noting that the OEM can directly share several of these modelling requirements (4.8, 4.9) with system operator, rather than that responsibility being on the asset owner.

Tesla is not supportive of OEMs sharing unencrypted models with asset owners, to then share with the system operator. While in conversation with the Authority, it was proposed that it is possible for OEMs to share the unencrypted model model directly with the System Operator (which is Tesla's preferred approach), this could be further clarified within 4.6 and 4.7., such as follows:

- "4.6 All m1 models and m2 models must be provided to the system operator **by the OEM or the asset owner**".
- "4.7 If an asset owner **or OEM** provides an unencrypted model to the system operator..."

As a non-negotiable policy, Tesla is unable to share unencrypted models with the asset owners. Furthermore, we would encourage further confidentiality protections for model sharing within Transpower as well, as was suggested in point 3.30. in the Decision Paper, to restrict access to limited authorised personnel within the system operator part of the organisation, and not the grid owner or network service provider components. Finally, we are supportive of requiring OEMs to only share an unencrypted model in one platform, with RMS (e.g. PowerFactory considered sufficient).

For encrypted model sharing, Tesla acknowledges the inefficiencies in the existing process of conducting FRT studies, in which the system operator must sign an NDA with OEMs each time. We are supportive of moving from individual NDAs to intellectual property protections being embedded within the Code to prohibit further use or sharing beyond the intended purpose for FRT studies. Given potential concerns with the system operator releasing the system-wide network models publicly, Tesla strongly supports the inclusion of allowing standardised WECC models under clause 4.9.

Finally, regarding modelling and connection study requirements, Tesla makes the following suggestions.

<b>4.12(e)</b>	Remove state of charge from the clause, as this is not modelled in PowerFactory model, and rather assumed to have full discharge/charge capability. This has a non-material impact on plant performance.
<b>4.17(a)</b>	Tesla does not support this clause. While it is possible to provide models for upcoming projects once the system operator announces updating software version, it will be the responsibility of the system operator for updating historical packages. For models required for FRT studies, the system operator will be able to source compatible versions from WECC if the software is updated.
<b>5.14(a)</b>	Confirming that Power System Stabiliser (PSS) or Power Oscillation Damper (POD) are not applicable to IBR. Suggestion to include purpose built damping controller for BESS.
<b>5.14(b)</b>	Confirming that over and under excitation limiter only apply to synchronous generation, therefore add 'as applicable' similar to (a), or to change the 'and' to an 'or' between item (b) and (c).

Tesla looks forward to continued engagement with the Authority and welcomes any further discussion on the points raised in this consultation.

Kind regards,

Kaavya Jha  
Senior Energy Policy Advisor