

19 August 2022

Energy Security Board

Emailed to [info@esb.org.au](mailto:info@esb.org.au)

Dear Sir/Madam

**RE Electric Vehicle Smart Charging Issues Paper**

TasNetworks appreciates the opportunity to make a submission to the Energy Security Board (**ESB**) in response to the Electric Vehicle Smart Charging Issues Paper.

TasNetworks, as the Transmission Network Service Provider (**TNSP**), Distribution Network Service Provider (**DNSP**) and the proponent for Marinus Link, is focussed on delivering safe, secure and reliable electricity network services to its customers at the lowest sustainable prices. As such, TasNetworks is supportive of reforms that ensure the uptake of electric vehicles (**EV**) is managed to ensure no customers of electricity are disproportionately impacted.

TasNetworks supports Energy Networks Australia's (**ENA**) submission and has the following additional comments from a Tasmanian perspective.

Effective integration of EVs into the National Electricity Market (**NEM**) will require consideration of a wide range of issues. TasNetworks notes that the scope of the Issues Paper has been targeted at the implementation of EV smart charging.

The Issues Paper highlights the potential benefits from mandating default charging configurations for EVs. This requires aligning the charging configurations with network tariffs to provide customers with incentives to encourage charging at more beneficial times. There are a range of challenges to networks across Australia with various drivers for network congestion leading to different approaches to the development of network tariffs. Finding the balance between ease of installation, charging and setting of default configurations will become increasingly important as charging becomes an essential service. This is especially true for those in remote areas that may not have alternative transport options if the EV's battery is flat. It is TasNetworks' preference to have the ability to design network tariffs to meet specific jurisdictional conditions and have the charging configurations match those

rather than having a national standard for charging configurations driving network tariffs. It is also important to note that network tariff design will be driven by a desire to help customers access the benefits from the flexibility in their demand arising from all types of Consumer Energy Resources (CER) not just EVs.

The Issues Paper proposes that a “degree of transitional cross-subsidisation of network costs in respect of EV charging” be considered. TasNetworks is opposed to the concept of a “specific tariff for EV charge points” due to the distortionary impact this can have on markets and the complexity of determining who would qualify for such a tariff and how compliance would be enforced. Network tariffs should not be linked to specific appliances or uses, but rather be designed around the timing and volume of electricity consumption which is the key driver for network augmentation.

In the unlikely situation that a level of cross-subsidisation is proved to be necessary to bring long term benefits to customers through the development of a new industry, there must be a commitment to remove this cross-subsidy once the new market is mature and sustainable. TasNetworks encourages the ESB to provide such a commitment providing clarity as to when and how any subsidisation will be removed to prevent long term distortion to markets.

TasNetworks is supportive of further investigation into options for remote coordination capabilities for smart EV charging. The Australian Energy Market Operator’s (AEMO’s) 2022 Integrated System Plan (ISP) predicts, for the Step Change scenario, an increase in Tasmania, due to growing numbers of EVs, of around 330 GWh in energy consumption in the next decade. The importance of ensuring this additional load does not increase peak demand thereby driving network augmentation is critical. As is ensuring those that cause additional network investment pay for it which will result in a more equitable outcome for non-EV customers.

While TasNetworks acknowledges the potential benefits from competitive pressures to put downward pressure on prices for customers, there is a risk that this policy results in a presumption that excluding distribution businesses is required to ensure competition. It is TasNetworks’ experience that in Tasmania, and especially away from the larger urban centres, for many services there is often a lack of providers. This could well be the situation for EV charging stations. By excluding distribution businesses, some communities may find no one is willing to install EV charging stations. Sometimes this may be due to the small number of EVs in the community or just the physical isolation making maintenance and fault repair expensive. The energy sector is undergoing large scale changes and previously distinct roles are becoming blurred. It is a concern that the ESB has a default position (as expressed on page 25 of the Issues paper) that distribution network business will be excluded from the role of CPO. When designing new markets it is important not to be biased by the perceived issues in the past and allow network businesses to operate outside their traditional areas to ensure the best outcome for all customers especially those in areas where markets can be slow to develop.

It is also important to acknowledge the diversity in customer preferences when determining the role of CPOs. As indicated in the Issue Paper there is a risk that mandating one specific way for CPOs to operate could see some customers bypass mandatory requirements by plugging directly into their own wall plugs. Customers will have a range of drivers influencing their behaviour and it is important that a range of incentives are provided to encourage the desired customer behaviour. For example, and as indicated above, allowing distribution

businesses to participate as CPOs may allow customers in more remote locations to maximise the benefits of their EV, and CER more generally.

If distribution businesses are limited to purchasing some services from CPOs then there needs to be restrictions on CPOs exercising their own monopoly powers. There is also a risk that distribution businesses are required to use these non-network options to manage network issues but they are not available when required. In this situation it is the distribution business that faces the risk of non-compliance with network standards or has to find more expensive alternatives at the last minute. There needs to be an ability to ensure CPOs bear the risks of not providing services and that customers can get redress for any losses incurred.

In response to question 17, TasNetworks has identified a further area where EVs could have a large negative impact on network security. This is the potential for mass disconnection of EV chargers during grid disturbances. In a scenario with high uptake of EVs, a voltage disturbance caused by a network fault could result in the mass disconnection of many EV chargers from the grid thereby creating new challenges for the management of network frequency.

TasNetworks is unaware of any Standard required in Australia that governs the technical performance of EV charging and requires that they remain in uninterrupted operation following a network voltage disturbance. TasNetworks therefore suggests that the ESB consider this requirement as it sets in place requirements for EVs to charge in Australia.

TasNetworks would appreciate the opportunity to discuss the issues raised in this submission in more detail. To take up this offer or if there are any further questions, please contact Tim Astley, Network Reform and Regulatory Compliance Team Leader on [tim.astley@tasnetworks.com.au](mailto:tim.astley@tasnetworks.com.au) or by 0428 032 751.

Yours faithfully



Chantal Hopwood

Regulation Leader