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Declan Kelly
Australian Energy Market Commission
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29 April 2020

Dear Declan

ERC0247: Wholesale Demand Response Mechanism – Draft Determination

Tesla Motors Australia, Pty Ltd (Tesla) welcomes the opportunity to provide the Australian Energy Market Commission (AEMC) with feedback on the Wholesale Demand Response Mechanism (WDRM) Rule Change.

Tesla is supportive of the approach that the AEMC has taken, and the establishment of a new Demand Response Service Provider (DRSP) market classification.

It presents a major step towards recognising that the future of the NEM needs to be managed by both flexible generation and flexible load. There are some important elements in this second Draft Determination that will help inform the two-sided market approach work program currently being managed by the ESB.

Change from first Draft Determination

Tesla acknowledges the efforts made by the AEMC to progress from the first to the second Draft Determination. There are a number of positive changes that Tesla supports including:

- Bringing the start date forward to October 2021. This earlier start date is critical to continuing the momentum of distributed energy resources (DER) actively engaging in all markets. Consultation Papers, such as the Energy Security Board “Moving to a Two-sided market”¹, note that the rate of technological advancement for DER currently outpaces the rate of DER market development. The earlier start date helps to bridge this gap.
- Removing FCAS causer pays liability. We believe this is also an important step.
- Explicit inclusion of generation and enabling exports as well as demand reduction (for example where a wholesale demand response unit) can reduce demand to OMW and then export solar.

Concern with current draft

The major concern that we have with the second draft determination is the proposed approach regarding upper limits for the amount of demand response that can operate within a jurisdiction.

Specifically we're concerned that this approach will result in inequity for future wholesale demand response units (WDRUs) entering the market. It appears as though this requirement is driven less by the

¹ <https://prod-energy council.energy.slicedtech.com.au/sites/prod.energy council/files/Two-sided%20markets%20-%20ESB%20COAG%20Paper-%20Consultation.pdf>

ability of AEMO to handle the level of WDR and more by the level of WDR that AEMO would feel comfortable with before imposing more stringent metering requirements.

Tesla would suggest an alternative approach where AEMO starts with a light touch metering approach and has designated review points on the efficacy of the metering (given ex-post compliance approach). Earlier WDRU metering requirements can be grandfathered.

Small scale customers

Tesla has supported the inclusion of small scale customers under the WDRM from the beginning of the AEMC consultation on this work. However we agree with the AEMCs position that this model would be challenging to deploy across aggregated residential and small scale customers.

Noting the point above regarding the rate of technological change versus the rate of market development, we would suggest that the progress of the WDRM be closely linked to the ongoing two-sided market development work. Tesla provided an overview of some immediate priorities that should be considered in respect of fast-tracking two-sided market development work in response to the AEMC 2020 Retail Energy Competition Review Electric Vehicles Issues Paper².

There are a number of elements of the proposed WDRM that support the broader transition to two-sided markets. Specifically we think these are:

- **Single connection point** - Enabling customer participation behind a single connection point. The current Small Generator Aggregator (SGA) framework is not fit for purpose for small scale distributed energy resources (DER) participating in the energy markets at scale. Allowing market participation without requiring the establishment of a second connection point is an important step.
- **Co-optimisation across energy and FCAS markets** – this is important as it will be inefficient for market participants to have to register under multiple participant IDs to provide both energy and other market services.
- **Inclusion of export** – ultimately DER utilisation will be most valuable if it includes both demand side reduction and exports.

There are several other elements of the WDRM that could also be developed in a way that benefits the two sided market development work. This includes both metering requirements and the approach used for scheduling wholesale demand response units.

Metering requirements:

The WDRM can influence work done on developing two-sided markets in respect of the metering requirements of the National Measurement Institute and the *National Measurement Act*.

Under the Act, all meters used for trade must be of a basic standard, which is the National Measurement Institute's pattern approval. Pattern approval is mandatory for measuring instruments used for trade in Australia and the National Measurement Institute is responsible for evaluating measuring instruments to ensure they meet Australian standards.

While it is critically important that meters used for any kind of customer trade are fit for purpose in respect of accuracy of measurement, the relevant data-points for new energy market services are increasingly capable of being delivered by asset level devices (such as the Tesla Powerwall Gateway). Considering whether the *National Measurement Act* should be reviewed to better enable assets to directly provide this data will be an important enabling factor in the development of two-way markets.

² https://www.aemc.gov.au/sites/default/files/documents/tesla - retail_competition_review_2020 - tesla_final.pdf

The current process for gaining pattern approval for new meters is cumbersome and time-consuming, and the process should be reviewed to focus more on outcomes and meeting all requirements of the National Electricity Rules chapter 7. The process for obtaining pattern approval should be reviewed and streamlined to encourage more suppliers to go through the process, and create more customer choice.

Scheduling

As a new asset class, there is good opportunity for AEMO to explore alternative approaches for scheduling and receiving signals, than that used for scheduled generation. This could also build on the work being undertaken through the AEMO Virtual Power Plants (VPP) Demonstrations Trial and could consider using APIs or other alternatives. Note that this also feeds into the metering considerations noted above.

Kind regards



Emma Fagan

Head of Energy Policy and Regulation