



17 May 2018

Ms Therese Grace
Australian Energy Market Commission
Level 6, 201 Elizabeth Street
Sydney NSW 2000

Dear Ms Grace

Coordination of generation and transmission investment

Thank you for the opportunity to provide a submission on the Australian Energy Market Commission's (AEMC) Coordination of generation and transmission investment discussion paper.

We support the AEMC's consideration of Renewable Energy Zones (REZ) to coordinate generator connections and lower overall network costs. In Victoria, we expect renewable generation to continue increasing rapidly driven by the Victorian Government's target of 40% renewable energy by 2025. To accommodate the expected increase in network demands and congestion it is important to review current regulatory arrangements.

The REZ concept should be expanded to include distribution networks

In areas of high renewable resource Powercor's network is already congested, and is facing the same connection issues as transmission networks.¹ Given this, we encourage the AEMC to expand its consideration of the REZ concept and associated mechanisms to distribution networks. The concept of a REZ should not be limited to new areas of development without existing network, but should also include areas where network augmentations are needed to accommodate additional generation. In fact many of the proposed REZ locations in the Australian Energy Market Operator's Integrated System Plan consultation document cover areas of existing network with potential for far greater renewable generation than is present or planned today.

There is currently a 'gold rush' of wind and solar generation enquiries seeking to use any remaining capacity on Powercor's network, both at the 22kV and 66kV levels. However, we are also seeing an increasing number of enquiries that will require large scale augmentation in order to be connected at their full capacity. This either imposes additional charges on individual projects (without any guaranteed firm capacity or the right to export) or requires generators to 'runback' and instantaneously reduce their output under specific circumstances. These are the only ways we can ensure a connection will not overload the network given that we do not control dispatch. Both approaches limit the amount of renewable resource that can be utilised and leads to the 'last in worst dressed' scenario where those who connect prior to (or after) a necessary augmentation pay a lower connection charge by virtue of the timing of their project. A more coordinated approach is likely to improve upon these arrangements.

¹ We publish a map of sub transmission generation capacity on our website at: <https://www.powercor.com.au/our-services/electricity-connections/solar-and-other-generation/connecting-larger-embedded-generator-systems/>.

Risk sharing

A key question in this review is which party should bear the risk of network investments undertaken to develop REZs. We do not have firm views on this question, however, we note:

- in our experience generators have generally been unwilling to coordinate over shared asset development because, throughout the coordination process, they may need to concede competitive advantages they hold over other generators
- whether networks are willing to undertake speculative investment will depend on their risk appetite. Differing risk appetites among network providers may lead to distortions and inconsistency; REZ's may not be built in the best locations based on available renewable resources, and
- both generators and customers benefit from a REZ through more wholesale competition and lower connection costs. A risk sharing approach between these parties may be appropriate.

We welcome the opportunity to discuss this letter with the AEMC. Please contact Frans Jungerth on 03 9683 2022 or fjungerth@powercor.com.au if you have any questions.

Yours sincerely



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