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Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

By electronic lodgement

Discussion Paper - Coordination of generation and transmission investment

Origin Energy Limited (Origin) welcomes the opportunity to comment on the AEMC's Discussion Paper.

Origin considers that to ensure the regulatory framework supports the efficient coordination of generation and transmission investment, the AEMC should focus on: streamlining the approach for the connection of renewable energy zones (REZ); and the treatment of storage technologies.

In the case of congestion management, the current framework remains effective, precluding the need for some of the suggested policy options such as optional firm access (OFA) or deep connection charges.

Congestion

As highlighted in the Discussion Paper, congestion in the NEM is minimal and primarily occurs on an inter-regional basis. Notwithstanding this, we agree that ensuring congestion remains at an efficient level should be a priority. This can be achieved by routine monitoring. We note the AEMC's contemplation of new options for congestion management, the need for which seems largely based on the expected entry of increasing amounts of new renewable generation in the market. The AEMC states that with over 45, 000MW of proposed new generation expressing an interest in entering the market, there is the potential for significant amounts of congestion in the future. While there is always some possibility of increased congestion, this reasoning does not provide sufficient rationale for the introduction of the new congestion management approaches.

It is our understanding that electricity consumption in the NEM is projected to remain relatively flat over AEMO's 20-year forecasting horizon. Given this, it would not be economically feasible for all the proposed new generation cited by the AEMC to enter the market. Even where there is significant new entry this will be balanced by plant retirement over time, which would lessen the strain on the transmission network, minimising the prospects of the occurrence of congestion beyond an efficient level. We agree the location of new renewable generation is likely to be different from traditional thermal plant, which in theory could have implications for the network. However, there has been no evidence to suggest a reduction in the effectiveness of the NEM's existing locational signals (e.g. MLFs; prospect of being constrained-off if locating in a congested area). The most significant implication for future congestion is the potential connection of REZ, which should be the ongoing focus of this work stream.

In terms of the suitability of policy measures such as a generator transmission access standard, Origin's view is that this is not needed (and we are wary of how it could be efficiently incorporated) given that transmission build is already guided (and appropriately so) by the reliability standard. Similarly, the case for adopting the OFA model has not improved compared to when the AEMC delivered its final determination under the transmission frameworks review. OFA is not required as the problem it is intended to fix does not exist. Additionally, any expected net benefits have not been demonstrated;

and the model's complexity (particularly at time when there are so many significant market changes) all combine to rule out its adoption.

Treatment of storage facilities

While noting that storage generating units are both generation and load, our view is that their treatment under the transmission framework should be consistent with that of generators. In the NEM, load pay TUOS, reflecting that the transmission network is augmented to ensure the meeting of the reliability standard. Of particular importance is that the network needs to be built to a level to accommodate peak demand. The economics of storage units is such that they are most likely to be a generator at periods of high demand and load at times of lower pool prices when electricity demand is lower. On this basis, we consider it appropriate that storage units are not subject to TUOS charges.

Renewable Energy Zones (REZ)

Origin agrees that it is not immediately clear what a REZ is, and that going forward it is important to have a suitable definition in place. While it is obvious a key prerequisite is the existence of a renewable energy resource in a particular area, it's not known what size the zone would need to be, for it to be classified as a REZ. Our views on the various potential types of REZ are set out below.

Options 1 and 2: These options largely reflect the status quo given the existence of the SENE framework, and AEMO's development of its integrated system plan. There is an outstanding question whether this is sufficient to overcome some of the inherent difficulties that are likely to be encountered in connecting remote renewable zones where multiple parties are involved. The clustering approach discussed in the paper could provide an improvement on the current framework, and Origin supports the further development of this concept. The length of the season over which the TNSP would accept but not process applications will be critical, given that it would need to be long enough to get sufficient applicants, but not delay market participants that may prefer a speedier connection. Perhaps there could be scope for connecting parties of a certain size (e.g. greater than 50% of the renewable resource) to bypass the cluster if a more expeditious connection is required.

Option 3: We assume that TNSPs can already engage in speculative investment described under Option 3, but the extent to which they are willing to take on this level of risk is uncertain.

Option 4: Contemplation of this option will require the resolution of several issues. Firstly, if a REZ is to be constructed as a prescribed service this suggests there is some broader market benefit, which would need to be tested. Determining the magnitude of any benefits will also be important if the expected benefits from one REZ is impacted by the development of another. The discussion notes that the AER is currently considering the alignment between the integrated system plan and the RIT-T, which will help inform the extent to which the current test is an appropriate means of quantifying the benefits of a REZ.

If you wish to discuss any aspect of this submission further, please contact Steve Reid at steve.reid@originenergy.com.au or on 02 9503 5111.

Yours Sincerely

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