AER SUBMISSION

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CONSULTATION PAPER – ASSESSING DER INTEGRATION EXPENDITURE

TEC is funded by ECA to work on the equitable decarbonisation of the NEM.

We congratulate the AER on a timely, comprehensive and balanced consultation paper. We understand that some other energy consumer groups, notably Renew and PIAC, intend to make comprehensive submissions. As a member of the relevant network committee, TEC has provided comments on the draft submission on this process from Ausgrid and supports the substance of its responses.

With limited resources, in this short submission TEC wishes to focus on one issue that appears to be missing from the paper: the potential role of DER in increasing energy system resilience.

This lacuna is not surprising, given that there is current no regulatory incentive for networks to invest in resilience beyond the value of customer reliability framework. However, there appears to be a substantial gap in the VCR framework that has been exposed by the current national bushfire crisis. That is, they only apply to outages of less than 12 hours duration. Many of the towns and communities recently impacted by bushfires have had outages lasting up to a week and in some cases even longer. There is no incentive for networks to invest in technologies and services that would reduce this timespan. Such outages are also not widespread enough to be covered by the category of high impact, low probability (HILP) events or widespread and long duration outages (WALDOs), which have a lower threshold of 1 GWh.

Nevertheless, distribution network investment is likely to playing important role in coming years and decades in strengthening the energy system against the risks associated with increasingly frequent, intense and prolonged severe weather events and cyberattacks. For instance, one of the strategies recommended in the 2018 National Disaster Risk Reduction Framework was to "Empower communities, individuals and small businesses to make informed and sustainable investments". (We interpret this strategy as including investments made by networks on behalf of local communities, where the latter have been involved in the decision-making process.)

Some of the network or private investments in DER which could (in theory, and noting the need for investment to be prudent and efficient) assist local energy system resilience, especially in isolated areas, include mandating or incentivising (in no particular order):

- PV systems with the ability to operate in island mode
- islandable home, business and community batteries
- greater visibility and self-healing technologies, especially on LV networks
- islandable or standalone microgrids
- a greater focus on the backup power needs of critical infrastructure
- stand-alone power systems (SAPS)
- undergrounding powerlines.

However, networks would have difficulty making these investments and including them in their revenue proposals under the current regulatory framework. TEC is intending to draw more attention to this issue in 2020, potentially leading to regulatory reform proposals, and would welcome the AER's input. Meanwhile, it behoves the AER to be forward thinking when giving advice to networks about long-term investments. We therefore consider that the AER should recognise the relevance of this issue to its DER integration expenditure guidelines.

We understand that the AER could consider resilience related network investment to be prudent and efficient even in the absence of a specific VCR metric, given that it pertains to the reliability element of the national electricity objective. We expect that this would not be easy task, given that there is currently no VCR for localised outages longer than 12 hours. However, for the foreseeable future we see no reason why the same VCR should not be applied to what might be called localised and long duration outages (LALDOs) as the AER intends to apply to HILP/WALDOs.

Please contact Mark Byrne, TEC's Energy market advocate, for more information.

Yours sincerely

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