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Mr Mark Feather
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Dear Mr Feather

Submission to AER's consultation paper on the value of customer reliability

Thank you for the opportunity to contribute to the consultation paper on the values different customers place on having a reliable electricity supply. The Tribunal has asked me to make this submission on its behalf. Our submission discusses IPART's role and interest in the value of customer reliability (VCR).

IPART's role [response to question 15]

In 2015-16 IPART reviewed and made recommendations on electricity transmission reliability standards for NSW. The terms of reference for that review required us to have regard to estimates of VCR published by AEMO. The resulting reliability standards came into force on 1 July 2018.

We applied an economic approach to determining the standards. We estimated both the cost of providing reliability and the cost to customers of experiencing outages.¹ We then identified the amount of expected unserved energy that would minimise the sum of these costs. Estimates of VCR are critical to this analysis. If those estimates do not reflect customers' actual preferences the resulting reliability standards will not meet customers' expectations.

In most cases we used the AEMO VCR values, as we considered they were the best estimates available. However, we agreed with stakeholders that these estimates have a number of shortcomings. For the Inner Sydney (CBD) area we did not use the AEMO VCRs in our analysis but instead adopted a higher VCR value estimated by HoustonKemp for TransGrid. We recognised that there was uncertainty around what would be an appropriate VCR value for Inner Sydney and received stakeholder comments that were critical of both estimates. On

¹ We developed a model that estimates the amount of unserved energy at each supply point under various reliability settings (different combinations of asset redundancy, load at risk and repair/restoration times) and calculates the costs associated with this by multiplying the expected unserved energy by the relevant VCR.

balance, we considered that where there is uncertainty around key inputs, we should be conservative in setting the allowances for expected unserved energy and noted that the use of the HoustonKemp estimates resulted in reliability that was closer to the current level and that the AEMO VCR values would result in a much higher value of expected unserved energy.

As part of this review, we made a recommendation to the NSW Minister for Energy that further research be undertaken by a suitable body to ensure that more accurate and relevant VCRs are available for future reviews of transmission reliability standards. We agree that a nationally consistent approach would be preferable.

Future use of VCRs [response to questions 16, 21, 22]

For any future review of transmission reliability standards we will need to estimate a VCR at each bulk supply point across NSW. For the AER's VCR review to be useful for this purpose, we would prefer the AER's review to consider what value residential, small business, and industrial customers place on reliable electricity. In addition, we would prefer that the review consider whether VCRs vary by industry - for example, for hospitals, airports, stock exchanges. It should also consider whether VCRs vary by location - such as the CBD or inner Sydney - and identify what factors drive geographical differences, for example, climate or the availability of alternative energy sources.

It would also be helpful to understand the impact that distributed generation and demand responses has on different customers value of reliability and whether households and businesses with solar panels and batteries place a different value on reliability than those that are fully reliant on grid supply.

IPART's officer for this review is Mike Smart, Chief Economist, contactable on 02 9113 7728.

Yours sincerely



Hugo Harmstorf
CEO