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Value of Customer Reliability (VCR) – Consultation Update Paper

EnergyAustralia welcomes the opportunity to make this submission to the AER's consultation on the VCR.

EnergyAustralia is one of Australia's largest energy companies with around 2.6 million electricity and gas accounts in New South Wales, Victoria, Queensland, South Australia, and the Australian Capital Territory. We also own, operate and contract an energy generation portfolio across Australia, including coal, gas, battery storage, demand response, wind and solar assets, with control of over 4,500MW of generation capacity in the National Electricity Market (NEM).

Methodology

The AER has identified the use of stated preference (SP) methods to calculate the willingness to pay (WTP) as a suitable methodology. We understand this methodology is used widely in other sectors and Government departments to inform cost benefit analysis. However, widespread use of WTP in practice has been hampered by the need to undertake costly and intensive data collection surveys and is challenged by issues of timeliness as these may not fully reflect and keep updated with very quickly changing consumer preferences (even in other more stable sectors); this is exacerbated, as acknowledged by the AER, in a rapidly evolving energy market. We also note a cautious and pragmatic approach has been taken previously by other Australian Government agencies[1] in applying VCR in practice due to its potential impacts on investment certainty and stability.

We understand academic research[2] has suggested that the difference between the willingness to accept (WTA) and WTP reflects the substitutability of electricity as a commodity, and we encourage the AER to explore this further in the context of distributed energy resources being

[1] Australian Transport and Assessment Guidelines, https://www.atap.gov.au/parameter-values/road-transport/4-crash-costs.aspx and Austroads, https://austroads.com.au/latest-news/estimating-the-social-costs-of-road-crashes-in-australia

[2] Willingness to Pay and Willingness to Accept: How much can they differ? W. Michael Hanemann https://www.jstor.org/stable/2006525?seq=1#page_scan_tab_contents

more available to customers and how customers can rely on non-grid connected generation (predominantly solar PV, but diesel generation as well) when there is an outage.

The variability in WTP values expressed through stated preference methods, i.e. asking two people with exactly the same characteristics, might elicit completely different WTP answers due to psychological factors, "heterogeneity", has also been acknowledged as a general challenge of WTP surveys. It is our understanding that while sophisticated statistical and modelling methodology (such as choice modelling) has been developed this is still not completely controllable and tested methods have not been yet developed. We therefore encourage caution and flexibility in using VCR numbers. We also encourage the AER to further explore the use of revealed preference (RP) methods due to the benefits of the stability and "actuals" nature of the numbers, if not now, in the future; as more and more smart meters get rolled out this should be easier for the AER to collect and analyse a stable set of RP data.

While we support the AER differentiating between methodology for each customer segment, and broadly support the segmentation of customer groups suggested by the AER, we encourage the AER to investigate if combining the WTP obtained from different methods is valid and appropriate statistically. In terms of methodology, we understand the AER need to balance the cost and frequency of conducting WTP surveys in a rapidly evolving and changing market against a robust and representative survey data collection.

Potential impacts on the market

Uses of VCR
As highlighted in the AER's October 2018 consultation paper[3] the use of VCR can be categorised broadly into two ways within the NEM; needing to use it mechanistically in a calculation (e.g. in DNSPs' Service Target Performance Incentive Scheme), versus needing to 'have regard to' VCR (e.g. in the Reliability Panel's consideration of the reliability standard and settings or AEMO in using the Reliability and Emergency Reserve Trader (RERT)).

We note some examples where VCR could have a significant impact; a common usage of VCR in RIT-T's is to access the costing of High Impact Low Probability (HILP) events[4]; in addition, under the enhanced RERT rule change AEMO must also have regard to VCR when determining the upper price they can pay to RERT providers; VCR will also have a significant impact on end-user prices (for example, very high levels of VCR could result in significant additional transmission and/or distribution build and 'gold plating'), and a volatile VCR will also have impacts on investment certainty and stability, and associated risk premiums.

Given that there is potential for significant impacts and flexibility for the VCR to be used in transmission and wholesale planning, we suggest it might be worthwhile considering confidence bands or similar sensitivity methods on the stability of VCR estimates to guide proponents 'having regard to' VCR in their sensitivity analysis. Notwithstanding, we acknowledge this is prone to pitfalls, e.g. proponents 'cherry-picking' numbers within the bands. A potential way to address this would be to provide guidance on application in the AER's VCR guidelines, and for the AER to give itself flexibility in assessing the appropriateness of the value of VCR used.

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3 https://www.aer.gov.au/system/files/AER%20-%20Values%20of%20customer%20reliability%20review%20-%20Consultation%20Paper%20-%20October%202018_0.pdf

4 https://www.aer.gov.au/system/files/AER%20-%20Final%20RIT-T%20application%20guidelines%20-%2014%20December%202018_0.pdf)

Managing transitionary impacts

As a significantly differing VCR will also have impacts on investment certainty and stability we recommend robust stress testing and sensitivity analysis of the VCR figure determined on its own assumptions/methods to be taken into consideration, and that these considerations be published. We consider that the AER needs to balance objectives of accuracy and customer impact in determining a new VCR value. As acknowledged in the methodological discussion in the VCR consultation paper and our points above, the VCR figure is not precise and may not be repeatable with a high level of confidence.

If a large change occurs due to a new VCR value being determined (either through its current review, through periodic or annual adjustment method), we recommend that this be constrained or phased in over time, potentially in a process similar to the side constraints applied in distribution determinations. In terms of annual adjustment factors, we acknowledge that while the consumer price index (CPI) may not necessarily fully reflect changes in VCR, it may be the case that a pragmatic compromise by the AER is needed to maintain investment certainty and stability, and for cost effectiveness in the absence of other tested methodologies being suggested.

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Yours sincerely

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