

19 November 2018

Mr Mark Feather  
General Manager - Policy and Performance  
Australian Energy Regulator

Send via email: [AERInquiry@aer.gov.au](mailto:AERInquiry@aer.gov.au)

Dear Mr Feather

## AER review of the Values of Customer Reliability

SA Power Networks welcomes the opportunity to comment on the AER's consultation paper on the Values of Customer Reliability (VCR). VCR is a key means of reflecting the energy supply expectations of our customers and is therefore a key factor in our investment and operational decision making. Given its importance, changes to VCR methodologies should not be taken lightly and we encourage the AER to ensure the review is appropriately staged, funded, and transparent.

Given the early stage of this review, we focus on raising some broad considerations. We look forward to engaging further with the AER, our customers and stakeholders on these issues as the review progresses.

### Developing fit-for-purpose measures

For distribution network service providers (**distributors**), VCR is a critical input to various regulatory processes.<sup>1</sup> It is imperative that:

- VCR estimates are fit-for-purpose given current and future potential uses. AEMO's current estimates need updating, and some specific rather than wholesale changes in approach should be considered to better reflect differences in customers' expectations, particularly by region and customer segment as discussed later in this submission. The need for change should be balanced against a desire to minimise the administrative costs of applying VCRs in practice; and
- the review is appropriately funded to enable application of robust research methods to statistically significant results. While recognising the AER's intent to balance robustness and practicality, we do not agree that research funding should constrain the development of fit-for-purpose VCRs.

### Potential additional uses of the VCR

The consultation paper queries if there are other potential uses of VCRs. Our views are set out below.

#### *Planned outages*

It is considered unnecessary and unhelpful to apply VCRs to the scheduling of planned distribution network outages, noting:

- our business already considers the characteristics of the specific customers who will be affected by a planned outage and tries to schedule work to minimise impact on these customers where feasible;
- flexibility is required as there may be operational reasons for scheduling work at particular times / days; and
- the first best approach is to inform customers with sufficient lead-in time of any planned outage so that these customers can make alternative arrangements, which we already do. Further, where a commercial

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<sup>1</sup> These include the setting of service performance targets, annual reporting, benchmarking, and cost / benefit evaluations on our network investments.

or industrial customer advises us that a planned outage would impose unreasonable restrictions on their operations, we would negotiate as to a rescheduled time or aim to shorten the length of the duration.

### *Apportioning recovery of investment costs*

Applying VCR to inform the recovery of network investment costs, risks conflation with the objectives and practicalities of distribution network pricing / tariffs noting that:

- The 'Distribution Pricing Rules' in the National Electricity Rules provide clear objectives to promote greater cost reflectivity in tariffs while balancing customer impact and jurisdictional considerations:<sup>2</sup>
  - these varied considerations contrast to the VCR's sole focus on the economic value of reliability;
  - the general premise in the pricing rules of reflecting / apportioning costs on the basis of customer's 'usage' as it drives network costs, may conflate with the VCR's focus on reliability value;
  - a significant current consideration is compliance with jurisdictional requirements to not vary price by location (i.e. 'postage stamping') which conflicts with the premise of using a VCR to apportion costs by the location in which a network investment is proposed to be made; and
- Tariff structures complying with the 'distribution pricing rules' are fixed for the same period of time that VCRs are proposed to be fixed for (5 years). However, the tariff charging parameters will over time (as metering permits) more flexibly reveal customers' 'willingness-to-pay' for their use of the network by time of day, week and month, as compared with a VCR fixed for 5 years.

VCR is also not required as a means of attributing costs where customers want higher than standard reliability such as via duplicate / backup-up supply arrangements. We currently identify customers' default network connection and supply arrangements with regard to the least cost technically acceptable solutions, but offer a cost reflective choice:

- For some customers with critical / significant loads (e.g. hospitals, sporting stadiums) we may identify that a duplicate supply arrangement is appropriate.
- However, these customers have the option to opt-out to lower reliability supply arrangements, and equally other customers have the option to opt-in to higher reliability supply arrangements by paying a commensurate direct charge.<sup>3</sup>

We consider, once again, that the actual customers are best placed to trade-off their value of reliability against a cost reflective pricing signal from the network as applicable to their circumstances.

### **Customer segmentation**

Our preliminary views on customer segmentation to consider in VCRs are set out below.

#### *Regions and outage duration / timing*

We have and expect to continue to need to vary VCRs by region within each jurisdiction. However, it is unclear if the most practical approach would be for the AER to specify VCRs for each region, noting:

- the significant number of regions to accommodate. Many, particularly smaller regions, may be susceptible to change given their sensitivity to, for example, the impact of the arrival or departure from the region of a major business;

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<sup>2</sup> This includes the: 'principles governing assignment or reassignment of retail customers to tariff classes and assessment and review of the basis of charging' in 6.18.4; 'network pricing objective' and the 'pricing principles' in 6.18.5.

<sup>3</sup> These have typically been recovered via 'Negotiated Distribution Services' but will for 2020-25 be classified as 'enhanced connection services' within Alternative Control Services (ACS). ACS costs are directly attributed to customers that request ACS and not to the general customer base.

- an alternative is to continue our current approach and allow distributors to estimate the proportional representation of customer classes within a region in which a particular investment is being considered.<sup>4</sup> This appears a more flexible approach that potentially negates the need for frequent VCR reviews; and
- the CBDs of each jurisdiction are exceptions for which we consider there is merit in the AER identifying a VCR estimate, given the significance of CBD loads and the more stable customer mix in a CBD.

Other required segmentations are likely to include the duration, times and seasons outages.

### *Customers with Distributed Energy Resources*

The prevalence of Distributed Energy Resources (DER) requires a re-think of the VCR's current focus on a one-way flow of energy to customers. This is particularly pressing in high DER jurisdictions such as South Australia and could be approached as follows:

1. Value of Customer Exports—a common approach to valuing National Electricity Market (NEM) benefits of DER:
  - Customers with DER are collectively likely to derive material value for the NEM.<sup>5</sup> This is in addition to any individual gains made by these customers (e.g. lower energy bills). Identifying NEM benefits is increasingly a key input to evaluating network investments which may release more exports compared with alternatives.<sup>6</sup>
  - Given the complexity of these assessments, it may be beneficial to achieve some commonality of approach via a suitable VCR equivalent for exports.
2. Valuing Customer Export Reliability (VCER)—valuing reliability as it pertains to customers' use of a network for energy export:
  - Issue (1) above only pertains to the NEM benefit that DER derives, an important input to network investment cost / benefit analyses.
  - However, just as the VCR captures tangible and intangible aspects of reliability expectations of customers with respect to energy consumption, so too may it need to reflect these expectations with the use of networks to export energy. This may also be a relevant input to cost / benefit analyses.

### **Research methods**

We do not yet have definitive views on the VCR research method to employ. The objective should be to use a method suitable to capturing both tangible (e.g. direct loss such as production or sales) and intangible aspects of electricity network use such as convenience, comfort, safety and amenity. To this end:

- It is likely that some combination of 'choice modelling' and 'contingent valuation surveys' would be ideal.
- The 'cost of substitutable products' method inadequately focuses only on asset costs being compared (e.g. a network asset vs the cost of a non-network option / stand-alone power system). The AER suggests that this method may help in, for example, evaluating the case for a stand-alone power system. In order to ensure that any decision to go off-grid only occurs where it is efficient, such assessments (pending regulatory reforms) should not only consider direct asset costs, but also consider (as discussed above):
  - any NEM value derived by customers with DER remaining connected to the network grid—in this way, assessments can ensure that any decision to go off-grid only occurs where it is truly efficient; and
  - the reliability expected via any stand-alone power system.

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<sup>4</sup> This is currently undertaken by using the customer classes used for distribution network tariffs. In future it may be necessary to apply other customer classifications particularly for business customers, to more accurately reflect the nature of their industry (e.g. agriculture, manufacturing etc).

<sup>5</sup> This may be via: reduced generation dispatch fuel costs; upstream generation / transmission investment; reduced energy losses; competition benefits; and other potential benefits

<sup>6</sup> For our upcoming regulatory proposal, we have been evaluating the NEM benefits of an investment that we propose to make which will allow us to manage our network in more dynamic ways for customers and thereby reduce the volume of exports that we may otherwise need to constrain and avoid significant network costs that would be involved in releasing all exports.

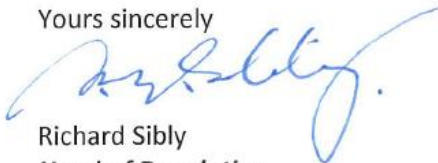
## Transitions and reviews

For the purposes of distribution regulation:

- there does not appear to be a need to stagger the transition to the AER's determined VCRs—these could feasibly apply as soon as the VCR review concludes;
- VCR estimates should only vary annually by movement in the CPI to ensure that VCRs remain commensurate with likely network investment costs; and
- more substantive reviews should only occur every five years, consistent with the length of the regulatory control periods. VCRs are unlikely to vary significantly on an annual basis, particularly if the approach to segmenting regions / customers is kept flexible as we discussed above. More frequent reviews will create regulatory uncertainty particularly for major projects with lengthy pre-planning.

We would be happy to discuss our submission further. If you have questions on any matter we have raised, please contact Bruno Coelho on 08 8404 5676.

Yours sincerely



Richard Sibly  
**Head of Regulation**