

Australian Energy Regulator

Email: AERInquiry@aer.gov.au

AER Reference: PRJ1003080

17 December 2018

The Energy Users Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing and materials processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and are desperate to see all parts of the energy supply chain making their contribution to the National Electricity Objective.

Our members are highly exposed to movements in both gas and electricity prices and have been under increasing stress due to escalating energy costs. These increased costs are either absorbed by the business, making it more difficult to maintain existing levels of employment or passed through to consumers in the form of increases in the prices paid for many everyday items.

This supplementary submission addresses a number of issues raised during the Public Forums.

General Comments

Should AER determine a High Impact Low Probability (HILP) VCR?

In our original submission we said that we do not support the development of a VCR for long outages associated with High Impact Low Probability events. To expand on why we have this view:

- There is no clear definition of a HILP event – would a blackout across a CBD be classed as a HILP event or does it need to be something like the South Australian event in 2016? Is it only limited to reliability events or also include security events?
- The difficulty of measuring the VCR for an event that most consumers may not have experienced.
- The use of any values to support a level of network investment that may not be in the long-term interests of consumers – resolving large events – not always dealt with by network solutions – could be new generation which could make for a complex approach to addressing HILP events.
- The AER comment at the Forum that it has limited funding and a tight timetable to complete the VCR work; we think that seeking to develop HILP VCR would detract from the AER's ability to complete analysis of the "conventional" VCR values.

Should the AER develop VCR values for customers with DER?

Yes, we support the AER developing these measures. As we noted in our initial submission, the values will need to reflect the fact that many consumers have invested in DER to protect themselves against supply interruptions.

These consumers are not interested in paying additional network charges to provide increased reliability that they have decided to source through their own internal expenditure. This consumer led response should be encouraged.

Should the AER develop VCR values for momentary outages?

Given the recent change of definition of monetary interruptions to <3 minutes, we support developing VCR values for momentary outages. However, the AER needs to ensure that the VCR analysis is well targeting to cover those commercial and industrial customers that actually benefit from a quick restoration. There may be some customers who have their own internal measures to assist in riding through momentary interruptions and do not wish to pay twice.

Business and industry segmentation

We commented on this issue in our earlier submission.

Response to Specific Questions

Current application to regulation within the NEM

VCR is a key input to the AER assessment of network expenditure, particularly for those projects covered by RiT-T and RiT-D as well as the various incentive schemes.

We support the continuation of the current approach whereby the VCR acts as a cross-check on the reliability settings rather than there being a direct link between VCR and MPC. The market risks to consumers from an MPC linked to some measure of VCR would be significant and potentially result in a significant increase in wholesale prices with unclear benefits to consumers.

Potential uses for VCR

We look forward to reviewing submissions on these matters. Our preliminary view is not to support the use of VCR in the areas proposed. We would need to understand more detail around the costs and benefits to consumers of doing so.

Methodologies for Deriving VCRs

The EUAA sees a core principal of VCR measurement as a “willingness to pay” (WTP) to avoid the interruption. As the Consultation Paper notes (p.10):

“VCR is typically estimated by conducting surveys on a representative sample of customers, with “willingness to pay” consumer survey techniques being the most common approach.”

Specifically, it is not a measure of the level of compensation required to compensate the consumer for experiencing the interruption (WTA). Consumers are not able to sue a network for the costs they incur due to the failure to deliver according to the reliability standards under the network’s licence.

This means that they have the choice to take their own mitigation measures to reduce the damages caused by an outage e.g. business interruption insurance, demand management or installation of a back-up power supply.

The key to efficient risk allocation is that the risk should lie with the party that can bear it for the lowest cost. Using a “compensating” measure, that is not tied to the consumers income or ability to pay has the risk of leading to much higher VCR measures that will lead to much higher electricity costs – which, given the consumer’s income, it may not be able to pay.

So, we agree with the Consultation Paper when it discusses the observed differences between WTA and WTP measures and concludes (p.21):

“Considering these issues would affect the design and framing of any contingent valuation survey undertaken. WTP questions may be conceptually closer to the relevant value for use in assessing investment in network augmentation projects.”

Given this starting point, we agree with the concept of exploring different approaches that are more tailored to particular customer classes. This lends in principle support to the approach AEMO used in its 2014 review – residential and business customers surveyed using a combination of choice modelling and contingent valuation (WTP) and direct connected customers using a direct cost approach. We look forward to reviewing this position in the light of other stakeholder views.

VCR Customer Segments

We agree that there is a trade-off between segmentation, accuracy and the requirements on respondents. We believe that the deciding factor in the level of segmentation should be the answer to the question:

“Where does the use of VCR have potentially the largest influence on the price consumers pay for electricity?”

Based on the list of current and potential uses of VCR discussion in Chapter 4 of the Consultation Paper, potentially the greatest impact could be its use in RiT-T or RiT-D analysis. The accuracy of these cost benefit analyses would be greatly enhanced if the network has access to data on separate VCRs for residential, small and large business that could be weighted by the proportion of load served to each customer type impacted by the proposed investment.

The EUAA believes that there should be more rather than less segmentation. This will allow the assessment of differences between different customer segments in different geographic locations and with different levels of reliance on grid supply. The assessment needs to take account of developments since the AEMO 2014 study e.g.:

- Many businesses in South Australia purchased back-up generators following the supply problems in 2016 and 2017 – this would suggest their VCR is lower than what it would otherwise be without that back-up generation.
- Many businesses purchase UPS systems even when they are generally happy with the level of grid supply reliability, simply because of the sensitivity of their particular business e.g. data management. Providing a level of grid reliability at a particular feeder to meet the requirements of the data management company is not the most efficient outcome for all consumers on that feeder.

- Various forecasts suggest that battery penetration, particularly for residential customers, is set to expand significantly in the next 5-10 years, decreasing the reliance on the grid.

In each case, the VCR estimate must take account of the private actions some consumer segments have taken that have effectively reduced their level of VCR that is relevant for assessing grid investment. To fail to take these actions into account disadvantages all consumers:

- Those who have taken the private action are paying twice
- Those who have not taken the private action are paying more than they should on a segment weighted VCR value

Anything less than a comprehensive review of different market segments runs the risk of giving VCR values that are not truly representative of the wide range of consumers in the NEM. Yes (p.25):

“Large sample sizes imply higher accuracy but this comes at a cost in terms of both time and money”

But the cost of a large survey is miniscule in comparison with the potential costs that consumers will bear from network investment above the efficient and prudent level over the 30/40/50-year asset life. The EUAA supports segmentation according to the list on p.24 of the Consultation Paper e.g. jurisdiction, climate, region, customer type and different types of residential and business users.

We support multiple methods being used to cross check derived VCR values.

We would caution on using the argument that the value of lost revenue from DER export to the grid is a reason for a higher VCR. Networks are facing the prospect of increasing roof top solar exports causing congestion and voltage variations in LV networks. The EUAA does not support grid investment to support unlimited export and this view seems to be supported by the networks which are seeking ways to better utilise the existing grid and potentially using dynamic constraints to manage exports at certain times of the day. Given this, it should not be considered a “cost” and hence justify a higher VCR, just because a residential consumer is unable to export excess solar generation to the grid.

Which outage characteristics to test for?

We approach consideration of how to measure the Customer Damage Function in the same way as we approached determination of customer segments. The potential value involved in network investment drives the need to ensure testing for more rather than less outage characteristics. Yes, we do recognise the trade-offs and that respondents would reach survey fatigue a long way prior to the 180th question.

As in 2014, we do not support the development of a VCR for long outages associated with HILP events. We agree with the comment in the Consultation Paper:

“...it may be prudent to prioritise certain outage characteristics that stakeholders identify as the most critical to the majority of envisaged VCR calculations. It may also be prudent to focus on certain outage characteristics that stakeholders identify as meaningful, useful and appropriate given the current level and manner of segmentation of outage data held by or accessible to stakeholders.”

Our concerns are twofold:

- The inherent difficulties in getting these values given it would be very difficult for consumers to properly respond to questions about such events
- The potential use of these unreliable numbers to justify particular market actions or network investment that risks a return of a gold-plated electricity supply chain

Combining segmented VCR values at a point of investment and Applying the Customer Damage Functions at point of investment

The support for more rather than less segmentation in VCRs and CDFs is important to ensure a more accurate weighted VCR value at a point of investment. The EUAA is generally supportive of the approaches outlined in Appendix but is keen to see other approaches that may be suggested by stakeholders. In particular there may be a case for:

- Consideration of weighting segment VCRs by respective peak demand when augmentation capex is considered
- Consideration of weighting segment VCRs by respective average demand when replacement capex is being considered.

Annual adjustments to VCR and frequency of VCR reviews

Having been involved in the 2014 AEMO process, we are well aware of the effort involved by respondents to complete a comprehensive VCR survey. Balanced against this is the impact of rapid technology change in VCR values e.g. increasing off-grid and distributed generation options that can serve to lower VCR values. Given this, we support a comprehensive review every five years. This means that the results of the next comprehensive review would be published no later than 31 December 2024.

The EUAA are open to considering various measure for annual adjustment that might be proposed in this consultation process.

Transitioning to new VCR values

The approach here may depend on the level of change in VCR values the current process produces given the range of uses for VCR.

Our initial view is that, in the case of network investment, the new values should only be applied in the next revenue reset period. For example, in the case of the NSW DNSPs, the final decision on 2019-24 will be made in April 2019. This will be based on an assessment of the required revenue using the current VCR values. To take any different approach would require a re-opening of the AER's determination, which we think is unrealistic.

So, the first application of the new values for NSW DNSPs would be in their 2025-30 reset period. Given the frequency of reviews suggested above, this may mean that the values for determining 2024-30 expenditure might be those coming from the next cycle published in December 2024.

There would need to be detailed consideration of how the new values would be transitioned in the many other areas in which VCR is used and is proposed to be used – particularly to ensure there are not inconsistent outcomes.

We await other stakeholders' submissions on this matter to help us form our views.



Andrew Richards

CEO

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