



16 November 2018

Mr Mark Feather
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Australian Energy Regulator
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Dear Mr Feather,

Values of Customer Reliability Consultation Paper

AusNet Services welcomes the opportunity to engage in the AER's review of the Values of Customer Reliability (VCR). VCRs are fundamental to the planning and development of the Victorian transmission and distribution networks, which apply probabilistic planning. We would encourage the AER to continue its positive engagement with stakeholders on such an important and independent input into the broader regulatory framework.

The customer research and engagement we have carried out in the lead up to our distribution revenue reset (including through the Customer Forum) has confirmed that different customer types place very different values on reliability – for example, there is a distinctly higher value placed on reliability by our business customers relative to our residential customers. Also, reliability events in particular parts of the network will have greater societal impacts than in others – e.g. the impact of poor reliability on the viability of a large regional employer can have disproportionate effects on the local community. These nuances can be lost in the necessary averaging that is applied in deriving robust VCRs. AusNet Services understands that in order to better serve our communities, a localised understanding of the needs and expectations of its customer base is a complement to the use of a VCR in its planning decisions.

The timing of the final VCR estimates (being December 2019) is between submission of our initial distribution revenue proposal and the AER's final decision. The VCR should be relatively stable over time and we do not expect it to change significantly between reviews – however, establishing a transitional approach will reduce the impact of any large step changes to the VCR during price review process, leading to greater certainty and confidence in forecasting expenditure.

The rest of this submission is concerned with the questions put forward by the AER in its Consultation Paper.

If you have further questions regarding the information set out in this letter you can contact Charlotte Eddy on 03 9695 6309 or charlotte.eddy@ausnetservices.com.au.
Sincerely,

A handwritten signature in black ink, appearing to read 'Tom Hallam', written in a cursive style.

Tom Hallam
General Manager Regulation and Network Strategy

Responses to specific questions contained in the Consultation Paper

Wholesale market and potential uses of VCR

AusNet Services considers there is no direct link between the wholesale market price cap and the VCR. Where the VCR is considered as a cross check, there is no compelling case to change the current arrangements.

The potential new applications that the AER has raised appear to be more relevant for network security rather than reliability. As a result, these assessments should not incorporate the VCR in a direct manner. Instead, a more appropriate application would be that the VCR helps to inform, not derive these measures. It is important to emphasise that VCRs are primarily tools for network planning and the composition and survey design should be developed to reflect this.

Load-shedding

The power system has to remain in balance between supply and demand and thus load shedding occurs when there is a major supply shortfall. Therefore, load-shedding is primarily concerned with system security. Distributors already prioritise and protect loads, particularly sensitive loads and essential services in their load shedding plans. Therefore, VCR may not provide much additional benefit for load-shedding priorities.

Ancillary services

The function of FCAS and NSCAS is to maintain a secure and stable operation of the network. Successful, safe and secure market operation is much broader than the VCR alone. In addition, setting a price cap on these services which depends on the VCR implies it is part of the standard operation of the system to shed load, in circumstance when the price of ancillary services exceeds the price cap. It is debateable and untested whether this is acceptable for customers.

Therefore, VCR should not have a significant role in informing a price cap for ancillary services.

RERT procurement

The AEMC calculates a probability-weighted unserved energy (USE) assessment which uses the VCR as an input in the derivation. Consequently, the VCR could be considered when informing RERT procurement as customers bear the cost of maintaining the reliability standard. However, as aforementioned, this potential use is a network security issue so direct VCR application should be limited in order to remain fit for purpose.

HILP events

For networks, weather events or other catastrophic incidents that are categorized as 'once in 50 years' are considered HILP. A recent example of this would be the System Black outage in South Australia where a major storm collapsed transmission towers, the resultant tripping of wind farms and the interconnector to Victoria, compromising the stability of the network.

AusNet Services suggests that the VCR not be used for prolonged and extensive outages without a disproportionality factor being applied. It is unlikely that standard VCRs which measure direct impacts of outages will capture societal impacts of wide-scale events. This is similar to the approach taken to quantify and value safety risk.

Scheduling planned outages

While we agree with the AER statement that, VCRs for planned outages are likely to be lower than those for unplanned outages, we have reservations about the use of VCRs to schedule planned outages. Planned outages often affect many hundreds of customers at once, who will not have homogenous preferences in relation to planned outage scheduling. Networks already trade off many

complex factors when scheduling outages including; employee safety, community safety, the specific localised impact on schools and businesses, and the costs and benefits from coordination in addition to the direct reliability impact. It is not clear whether the use of a specific planned outage VCR, which will be an average of the preferences of many customers, will lead to better outcomes overall than the approach currently applied by networks.

Customer research suggests a more important, but undervalued factor, is effective, accurate and timely communication from the network. This enables customers to better prepare for and accommodate planned outages

The only substantive reason for determining a planned outage VCR would be to use for a financial incentive to improve performance. However, in the current STPIS review, the AER chose not to include planned outages in the scheme.

Recovery of investment costs

It is not appropriate to use the VCR to apportion the recovery of investment costs between different customer classes. As noted above, our recent customer research confirms that business customers generally place a higher value on a reliable supply than residential customers for a number of reasons which generally depend on the sector in which they are operating. However, business customers may also make an economic decision to exit an industry if expenses exceed a particular threshold, while households do not have this option (i.e. business customers have a higher price elasticity of demand). A business ceasing operations can have significant societal flow-on impacts, such as job losses, which may be magnified if the business is located in a rural community. Therefore, in the case of an essential service with network benefits, it is not clear that willingness to pay is a desirable way to allocate recovery of investment costs where benefits are dispersed in dynamic and complex ways.

In addition, it is not clear whether this approach would reconcile with the over-arching pricing objective to move towards greater cost reflectivity in pricing. The approach would add unwarranted complexity to an already complex area.

Approaches to deriving VCR

AusNet Services considers the current combination of modelling techniques to be appropriate for each sector. In particular, the CVS and CM survey based approaches across large populations are the most effective and informative for the majority of customers (those being residential and small to medium enterprises). Also, specific techniques such as DCA for direct connected customers is a suitable approach due to there being fewer numbers of this customer type.

In addition, higher sample sizes should be preferred to less, as this reduces instances where estimates are imprecise thereby improving accuracy. Therefore, the AER should utilise other techniques as cross checks to counter the known disadvantages of current methods.

We also strongly emphasise that there should be stability of VCR values over time. Recent experience has seen very significant changes in values between VCR reviews. AusNet Services prefers that the AER build on current VCRs and the survey work that supports these.

VCR Customer Segments

VCRs are averages which do not detect the nuances of different customer types. There could be greater value to the decision making process in establishing VCRs on a regional or sector specific basis. As network development generally occurs geographically, a regional VCR could provide better information on customer preferences to ensure more efficient network planning and performance. This in turn could then be categorised by sector in that region. Calculating VCR at the regional or sector-specific level has its benefits, however there is a trade-off between accuracy and costs.

At the very least, the existing categories should be retained. However, categories by sector such as commercial, industrial or agriculture could usefully be further broken down given customers within these segments will place very different values on reliability. The recent research and engagement we have carried out for our distribution price review confirms that there are wide disparities between the reliance on a reliable supply of electricity between different business customers – depending on a range of factors, including industry and location.

For example, a 2-hour duration could have a considerable impact on the VCR depending on the type of customer and the time of day it occurred. To illustrate, it would be highly problematic for a dairy farmer without back up supply during milking time, but less important to a beef farmer.

The validity of disaggregating by additional categories to those currently in use will depend on the sample size of the survey. Given the materiality of inaccuracies in the VCRs applied by networks in their planning practices due to averaging, an investment in a large sample size to ensure more robust and granular VCRs is warranted.

Further guidance should be provided on the ability of networks to apply a bespoke VCR in certain circumstances, for example, in instances where a particular business is the cornerstone of a regional economy. This could be a dairy processor supporting 400 local farmers – ongoing poor reliability may have societal impacts beyond the financial losses incurred by the processor. In one-off circumstances where accurate information is available this should be used in the decision making process.

Determining which outage characteristics to test for

AusNet Services agrees that the outage characteristics listed in the AER's paper will likely drive VCRs. As VCRs are used for planning to meet peak demand, testing the impact of outages at the typical time and seasons that these peaks occur will be the most relevant characteristics to capture.

It would be prudent to take into account the season of occurrence of the outage. VCR should be able to recognise 'holiday resort' areas where for a short period of time there will be a significant population increase in those areas. For example, in the Mt Buller ski resort during winter, a large number of customers descend on the area placing increased strain on the network. The current VCR does not appear to be helpful in justifying investments in these situations. We suggest that the AER consider this seasonality factor when deriving VCRs.

As the AER suggests, the use of a Choice Modelling survey approach can capture a number of different characteristics simultaneously and may be an effective way of dealing with different outage scenarios.

Combining segmented VCR values at a point of investment

We support the weighting of VCRs by customer load and type. This is consistent with our current approach to planning and remains the most logical approach to combining the segmented VCRs.

As outlined above, where the VCRs derived for average customers are deemed to be a poor proxy for the value of reliability in specific circumstances at a particular investment point, then we would welcome further guidance on the derivation of bespoke VCRs.

Adjustments and frequency of VCR reviews and transitioning to new VCR values

AusNet Services considers a 5 yearly update of VCR reviews sufficient given expectations the VCR value should be relatively stable over time. More frequent material adjustments to the methodology and data gathering would increase costs that would be better invested in getting the 5 yearly reviews right. Reviews that are more frequent than 5 years are not warranted unless it can be shown VCR values will move rapidly over time. Importantly, VCR values should not vary significantly as a consequence of customer survey results which reflect a recent high impact reliability experience or lack of one.

Predictability and consistency amongst businesses should be the key priorities for adjustments and updates.

For example, the timing of the final VCR estimates (being December 2019) is between submission of our initial distribution revenue proposal and the AER's final decision. A large movement in VCR creates uncertainty and a lack of confidence in forecasting expenditure for both networks and customers.

This reasoning also applies to the significant number of RITs currently underway across transmission and distribution networks, and risks rendering obsolete a substantial volume of regulatory processes and customer engagement with unwarranted and unpredictable changes.

If newly derived VCRs materially differ from previous values, a predictable and smooth transition from the prevailing values is efficient and intuitive.

The AEMO surveys conducted in 2014 retain explanatory power and should not be automatically discarded. Rather, these should be enhanced with information from the new surveys by the AER. There is no reason to expect that residential and small to medium enterprises will have experienced substantial changes to their VCRs since 2014.