

19 August 2024

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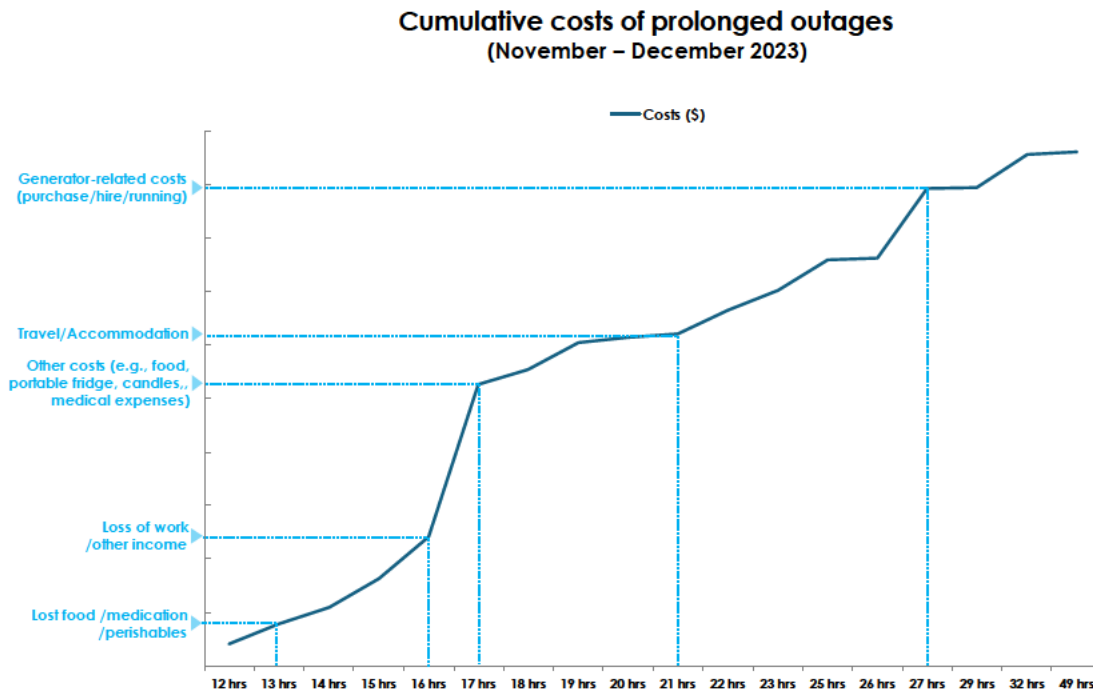
Dear Dr Funston

## Submission to AER's Value of Network Resilience Review

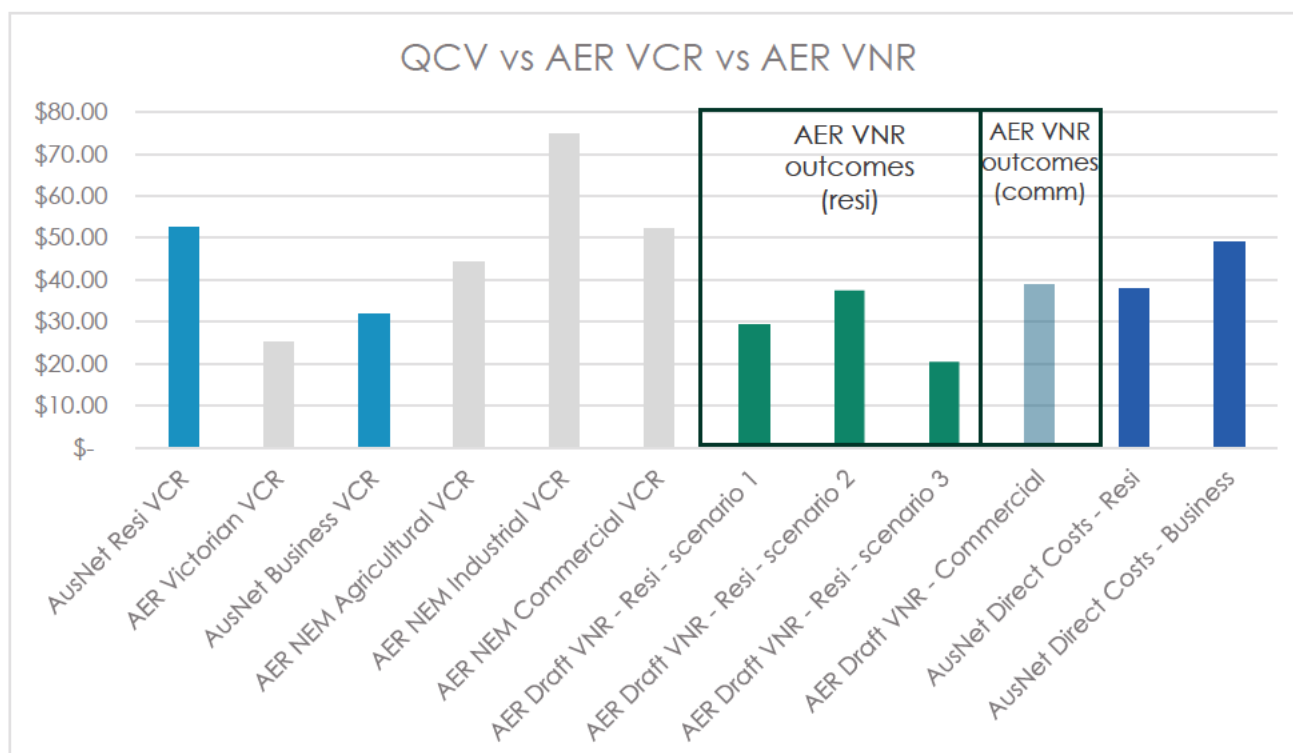
AusNet appreciates the opportunity to provide feedback on the AER's review of the Value of Network Resilience (VNR). We also appreciate the significant amount of work carried out by the AER VNR team in a short time horizon to meet the timelines of the Victorian distribution determination processes.

Our submission provides some additional data and highlights several key points where we believe further consideration is needed to ensure that the VNR appropriately reflects the realities faced by network businesses and the customers they serve.

Overall, many of the findings in the AER's draft decision and customer research report are consistent with our findings on this topic. This includes the tipping points in the cumulative costs of prolonged power outages, as shown on the chart below:



However, the VNR values look relatively low compared with our direct cost data and QCV VCR, as shown in the chart below.



We make the following observations:

- This direct cost data has been adjusted to remove the cost of generator purchases that may be utilised for multiple outages, decreasing AusNet's direct costs (as originally presented) for residential customers from \$45 to \$38 per kWh; the equivalent decrease for business customers is from \$63 to \$49 per kWh.
- Using a daily consumption value of 17kWh (sourced from our QCV research) applied across a 7-day outage, combined with an upper bound of \$3,494, implies a VNR residential VCR of \$29 per kWh (scenario 1).
- Using a daily consumption value of 13kWh applied across a 7-day outage, combined with an upper bound of \$3,494, implies a VNR residential VCR of \$38 per kWh (scenario 2)
- Using a daily consumption value of 17kWh (sourced from our QCV research) applied across a 10-day outage, combined with an upper bound of \$3,494, implies a VNR residential VCR of \$21 per kWh (scenario 3).
- A commercial customer with a daily consumption value of 25kWh applied across a 7-day outage, implies a VNR commercial VCR of \$39 per kWh – this is far below the AER's NEM commercial VCR of \$52 per kWh.

We consider it likely that adjusted direct costs should be a lower bound on the VNR, as direct costs do not capture the cost of trauma, distress or economic costs associated with the prolonged outage. Further, removing generator purchase costs in their entirety (as the above chart shows) results in a conservatively low measure of direct costs, given the relevant customers were motivated to make these purchases because of the prolonged outages experienced.

Therefore, the draft VNR values looks low relative to other measures. To address this, we consider the following changes can be made in the AER's limited timeframes:

- Adjust the VCR multiplier to bring the VNR metrics (at least) into line with the adjusted direct cost data;

- The upper bound should be tested for higher daily consumption values, as the current upper bound (\$3,494) corresponds to a relatively low daily consumption value of 13kWh per residential customer.
- Ensure the VCR review picks up concerns about the granularity of willingness to pay data leading to inaccurate outcomes for specific networks (see Section 2); and
- Ensure the cap includes ongoing generator fuel costs (see Section 5).
- The draft decision to apply a 0.5 multiplier to outages greater than 72 hours, for business customers, implies that the value attached to prolonged outages is less than current business VCRs. The multiplier should be at minimum 1, across all time periods.

## 1. Flexibility in Applying the AER's VNR

While we appreciate the amount of work that the AER has undertaken in relative short timelines to develop a VNR, we support flexibility to use different VNRs where they are more robust and better supported through stakeholder engagement. Just as networks have the discretion to apply different VCR values in their proposals, this same flexibility should extend to the resilience metrics. Flexibility is crucial in capturing the diverse circumstances across different networks, where a one-size-fits-all approach may fail to reflect the unique characteristics and needs of our customers.

## 2. Use of AusNet-Specific VCRs

While we acknowledge the use of a multiplier on the VCR as an acceptable method given the time constraints of this review, it is contingent on the VCR being accurate and reflective of customer preferences for the relevant network. Applying a multiplier to a less accurate VCR will lead to an inaccurate VNR.

The current AER VCRs may not accurately reflect the localized conditions and current customer expectations within AusNet's network, potentially leading to undervaluation of network resilience benefits.

We have duplicated the AER's Value of Customer Reliability (VCR) study using a much larger sample size and AusNet specific data on unserved energy and outage probabilities and duration. We undertook extensive stakeholder engagement on this survey, the methodology and results. Our VCRs are different to the current AER VCR. In respect of the residential VCRs derived through our study, which are materially higher than current AER VCRs, this is because:

- Customers' expressed willingness to pay for reliability was either in line or higher than captured in the AER's current VCR survey; and
- AusNet-specific data was used, rather than average data across large climate regions. This materially increased the VCR results.

We would welcome feedback from the AER on the use of AusNet VCRs when calculating the VNR.

Paragraph 4 on page 20 of the draft decision implies that the VCR approach to granularity is sufficient because network businesses develop their own VCRs through the business case process. We do not agree that this is the case. If the AER's \$/kWh VCR figures are highly averaged across very large areas (e.g. some climate zones span Victoria, South Australia and New South Wales) such that granular insights on willingness to pay are lost, adjustments network businesses may make for the purposes of cost-benefit analysis (including using their own load forecasts and outage probabilities) do not 'recover' the lost granular insights on customer willingness to pay.

We have demonstrated this point by applying our own VCRs to our business cases and seeing very different outcomes and expenditure levels.

#### 4. Support for removing 'Impact on Network Expenditure Proposals' from assessment criteria

We support the removal of the impact on network expenditure proposals from the assessment criteria in this review. The focus should remain on objectively estimating customers' willingness to pay for resilience; the impact on an expenditure proposal is not a direct input into this.

#### 5. AER's Upper Bound for Resilience Benefits

While we recognise the practicality of an upper bound being applied to the VNR, the current cap at 7 days does not align with lived experience nor customer expectations for the following reasons:

- In the 2021 and 2024 storms customer frustration and government concern continue to intensify beyond the seven-day mark. One of the focus areas of the Victorian Government's Network Outage Review Panel has been on shortening the 'tail' of the event due to customer dissatisfaction with very long power outages.
- The cost of fuelling a generator can be \$100 per day; there is a need to factor these costs into the cap to more accurately proxy the economic substitute for power after 7 days.
- Feedback from customers on the experience of powering their home with a generator has indicated it is often not a suitable ongoing substitute. For example, some customers only have a generator sized to power the fridge or the freezer and must switch between the two to keep food cool. While the generator assumed in the cap has been costed with size in mind, generators vary greatly in terms of size and quality and it shouldn't be assumed that the customers surveyed about the June and October 2021 storms would have brought generators that can act as a suitable substitute in future events.

If the VNR adopts a cap of 7 days, it may need to be complemented through mechanisms to allow higher Digital or non-network expenditures to reduce the tail of prolonged power outages, to enable networks to meet government and customer expectations through means other than network investment. Ensuring that extreme weather event risk is appropriately accounted for in the benchmarking methodology is one way to support this. Furthermore, our analysis demonstrates that an upper bound cap of ~\$3.5k may in fact be equivalent to a cap of 5.5 days (using 17 per kWh per day), not the 7 days assumed in the draft decision.

#### 6. AER surveys going forward

In its draft decision the AER outlined that it will develop a survey that could be administered by networks to enable the AER to better understand the lived experiences of those affected. AusNet supports this approach, however, we have done significant research and engagement with customers impacted by extreme weather events on our network, and we must be mindful of over surveying customers. Therefore we would only expect this to apply for future events.

We would also need this survey to have flexibility for us to ask customers tailored questions relevant at the time, so we can continue to improve our performance. For example, this may include questions about what we could have done to help; awareness of any communication before or during the events; and their experiences relative to previous events the customer may have been impacted by. If we do not retain this flexibility, there may be duplication in surveying which would not be optimal.

## Conclusion

AusNet Services believes that the AER's review process is an important step in refining how network resilience is valued. We look forward to continuing to work with the AER to ensure that the regulatory framework supports the delivery of reliable and resilient network services to our customers.

Please contact me with any questions about this submission.

Sincerely,



Charlotte Eddy  
General Manager, Regulation and Policy (Distribution)  
**AusNet Services**