07 June 2024

Mr. Kris Funston
Executive General Manager
Australian Energy Regulator
vnr2024@aer.gov.au

Dear Kris,

Issues paper: Value of network resilience 2024 (Issues Paper)

CitiPower, Powercor and United Energy welcome the opportunity to provide feedback on establishing a value of customer resilience associated with long duration outages, as requested of the Australian Energy Regulator (AER) by the Energy and Climate Change Ministerial Council (ECMC). We are supportive of the development of a value to quantify the impact to customers associated with long duration outages and enabling prudent investment to reduce customer impacts.

Our key views in response to the Issues Paper are as follows, with further detail in the attached appendix:

- The requested value of customer resilience should be upheld, with a narrowed focus on the value of network resilience having the potential to discount customer and community experience.
- The criteria should focus on the value customers and stakeholders place on resilience, as opposed to the impact on expenditure proposals.
- The value should be suitably flexibly to account for the change in value to customers over time due to increasing reliance on electricity and escalating climate events.
- Options should consider customer experience and willingness to pay, which may be achieved through a customer survey-based approach.
- The wealth of knowledge from customer and stakeholder engagement to date should be appropriately utilised in the value calculation.
- There remains uncertainty as to the incremental resilience expenditure that may be approved through the regulatory reset process.

Thank you for the opportunity to engage on this topic. We look forward to continuing to work with the AER to deliver on tangible resilience investments that are needed to match our networks' customers' needs and preferences.

If you have any questions, please contact Genevieve Hart directly on [redacted].

Sincerely,

[redacted]

Brent Cleeve
Head of Regulatory Policy & Compliance
CitiPower, Powercor and United Energy

A.1 CitiPower, Powercor & United Energy response: Value of network resilience 2024

Value of network resilience (VNR)

The introduction of the Issues Paper refocuses from the requested value of customer resilience to a value of network resilience. This establishes a concerning tone for the Issues Paper, with the definition of resilience being narrowed to a network focus, as opposed to a customer focus. We have undertaken extensive customer engagement on network resilience over the past 3 years. Resilience is consistently recognised by all customer cohorts as a vital element of their energy service, particularly when considering climate related disruptions and the potential impact on their lives and businesses. Our customers place value on both practical support (e.g., temporary power supply) and psychological support (e.g., a gathering point for community).

The Resilience Investment Framework Customer Workshop[1] hosted by Victorian distributors in October 2023 found Victorian customers support social costs and benefits being incorporated as an input to cost benefit analysis and questioned the robustness of current economic based analysis. Customers suggested further engagement and data collection is necessary to understand the relationship between customer values and benefit analysis. Further, our Customer Advisory Panel (CAP) have recommended that the historical AER definition of network resilience should be broadened to be more customer centric. By limiting the focus of the VNR there is a risk that the customer focus is discounted, or even excluded, from the consideration of this value.

The options proposed in the Issues Paper are skewed towards the financial cost to a customer and community, to their disadvantage. There are additional costs to communities who experience resilience events beyond the direct financial cost. These include community trauma and cumulative consequential impacts from an extended loss of power. Where these long duration outages occur on multiple occasions creates further cumulative impacts on customers. Without consideration of these costs these options are likely to undervalue customers experience, and subsequent value of network resilience (response to 3.3.2, 3.4.3, 3.5.3, 3.6.3, 3.7.3, 3.8.3). We note this was a key challenge in the AER's exploration of wide area long duration outages (WALDO), resulting in the removal of this calculation from the 2019 value of customer reliability (VCR) methodology.

Option 4 – conducting follow up surveys to actual prolonged outages has some merits. We encourage the AER to directly engage with customers in developing the VNR, especially in Australia's many rural and regional areas. The challenges identified with this approach are valid, however not insurmountable. We suggest these should not be considered a barrier to the approach, and this to be the most suitable approach of the options listed (response to 3.6.1-3).

Assessment criteria

- Regarding outage length, as outages >12 hours are not considered in the current framework we propose the VNR should be applied for all outages >12 hours (response to 3.1.1).
- In terms of localisation, the VNR should serve communities most at risk, as opposed to those that may be more densely populated. Our research into customer values has indicated that customers are willing to pay for the impacts to worst served customers, even if they are not directly impacted. The bias in the application of the VCR to densely populated regions is an inherent limitation in the VCR that should be avoided in the development of a VNR (recognising those communities most exposed to extreme climate events are likely to be in regional and rural locations) (response to 3.1.2).
- The unserved energy is not an accurate representation of the actual impact to customers vulnerable to extreme climate events. Where customers have their own forms of grid-connected generation, such as solar PV, some of their energy usage is from consuming the solar they are generating. Unserved energy is calculated based on the energy coming from the electricity network, however in an outage the customer will lose both the energy from the network and the energy from their solar panels, which is

[1] Resilient Network Investment Framework: workshop wrap-up and survey | Engage Powercor CitiPower

unaccounted for. In these events, a customer's ability to be able to use electricity to meet their immediate needs is crucial. By focussing on an unserved energy valuation, the broader customer impact and value will not be captured (response to 3.1.3).

- The assessment criteria also highlight the consideration of the impact on network expenditure proposals when determining the VNR approach. We suggest consideration should instead be placed on whether the VNR will support the value that customers and stakeholders place on resilience, and the outcomes that can be achieved for those customers (response to 3.1.4).
- Fundamental to the value proposed are the social costs and cumulative impacts and consequences to customers (response to 3.1.5).

Temporal impact on the value of network resilience

Customers are facing an increasing reliance on a resilient power supply, with gradual electrification of homes, businesses, and transport. The value of the resilience will naturally increase as the reliance on a single source of power, electricity, increases. Monash University's Future Home Demand report found a low tolerance in outages when considering energy used for caring, and a need for contingencies such as smart charging of EVs to be prepared for emergency events. Climate change will also impact the frequency of these events, leading to a need for informed escalation when pursuing resilience investments over a 5-year period. A VNR should consider the temporal nature of this value and have appropriate mechanisms to adjust based on the increasing value to customers and stakeholders.

We appreciate the consideration given to the Victorian reset process in the timing outlined and recognise that the AER is on a journey in determining the appropriate treatment and value of network resilience. We ask that this early-stage maturity of the VNR process be taken into consideration when making determinations for Victorian distributors, who are at risk of being limited by this when pursuing resilience investments up to 2031. The AER should consider using the VNR informatively (including with values from distributors own customer surveys), particularly when proposed investments are supported by stakeholders and customer engagement.

Consideration of existing feedback and engagement

There has been an extraordinary level of customer and stakeholder engagement on the topic of resilience, particularly in Victoria. We have undertaken extensive engagement with our customers and worked closely with the Victorian government on their review recommendations. The Issues Paper provides a high-level reference to the Electricity Distribution Network Resilience Review (the Review) and the Victorian Government's Response. It is unclear how the findings of the Review, and other engagements such as the joint distributor workshop[2], are being considered in this Issues Paper.

For example, the review found 'many individuals and businesses had chosen to invest in their own backup generation sources, often at a personal cost of exceeding $6,000. While this provides an insight into the true value of electricity reliability and resilience under such conditions, it comes with significant safety and fire risks, as well as localised air and noise pollution issues.' It is important to note that many customers may not be able to afford this personal outlay, which doesn't consider ongoing maintenance and operation costs.

Customer feedback in the Review also highlighted 'the burden of resilience falls more heavily on customers', indicating this should be a responsibility appropriately balanced between individuals and businesses had chosen to invest in their own backup networks and customers. This would be informative for Option 1 presented in the Issues Paper and highlights the challenges in using rational alternatives (response to 3.3.2). We encourage the AER to review and utilise the comprehensive evidence base that can be garnered from resilience engagements

[2] Resilient Network Investment Framework: workshop wrap-up and survey | Engage Powercor CitiPower

to date. This includes insights from Victoria's rural networks which have independent, robust, qualitative, and quantitative evidence and includes customers outside of major metropolitan centres.

Recent network proposals and AER decisions

Notably lacking discussion in the Issues Paper is the 65.2% reduction in proposed resilience investment provided to Ausgrid in their revenue determination process. The final decision acknowledges that extensive customer engagement was undertaken on the topic of resilience, and the importance of climate resilience to Ausgrid customers. It does not, however, outline how, or if, this impacted the final decision. The final decision outlines concern that prioritisation of investments was not applied based on the value of unserved energy of past climate events. We note historic observed performance is not the best predictor of future outcomes for resilience investments.

While other New South Wales (NSW) networks had no adjustment made to capital expenditure forecasts for resilience, the final determinations found the forecast resilience investment to not be consistent with prudent and efficient decision-making and alluded to approval being linked to meeting early signal pathway requirements. The AER acknowledges their assessment from recent determinations that 'networks did not demonstrate a causal relationship of network impact between the proposed resilience expenditure and the expected increase in the extreme weather events'. This conflicts with the AER's guidance note which states where networks propose resilience expenditure, they should demonstrate there is a causal relationship between the proposed expenditure and the expected increase in extreme weather events.

This provides a challenging environment when attempting to interpret what, if any, resilience activities will be funded, and the evidence required to support their approval. It is important that this process, and the resilience funding is consistent with customer and stakeholder expectations. We appreciate the intent behind the requirement for a causal link, however as demonstrated from the NSW determinations, there are challenges in robustly demonstrating this.

Review engagement plan

It is encouraging to see the AER's process will involve direct engagement with customers. We are supportive of this approach, and appreciate the consideration given to our VCR 2024 review. We agree that this type of engagement will provide crucial context in framing the discussion on network resilience.