

Jo Benvenuti
Chair of the Network Resilience Review Expert Panel
Phase 2 Consultation Paper
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8 April 2022

Dear Ms Benvenuti

Re: Submission to Network Resilience Review consultation paper

Thank you for the opportunity to comment on the Network Resilience Review consultation paper (the Network Resilience Paper). We appreciate the engagement we have had with the Expert Panel and Department of Environment, Land, Water and Planning staff during the consultation stage.

We recognise that climate change is a global issue with localised impacts that can profoundly affect communities. These localised impacts – severe bushfires, storms and floods – have devastated communities, raising the awareness about the role that different entities have in supporting community resilience to prepare, plan and recover from natural disasters. Network Service Providers (NSPs), as providers of an essential service, have an important part to play in understanding the needs and preferences of consumers in responding to these challenges.

The AER has been considering the issue of network resilience, given our role as the economic regulator of energy networks in all states and territories except Western Australia. We aim to ensure consumers pay no more than necessary for safe and reliable energy, and we promote the efficient supply and use of energy. Consumers are at the heart of our work, and we focus on ensuring a secure, reliable and affordable energy future for Australia.

We will be releasing a note on network resilience shortly that will be available on our website. We would be happy to provide you with an embargoed version. The purpose of this note will be to assist NSPs, consumer groups and advocates understand how resilience-related funding would be treated under the National Electricity Rules (NER). This may assist in discussions on resilience-related issues in NSPs developing regulatory proposals in consultation with their consumers.

Our guidance note addresses some of the issues raised in the Network Resilience Paper. In particular, the note addresses the following issues:

What is network resilience and how does it relate to community resilience?

Network resilience can have a different meaning depending on the context. From an economic regulator's point of view, our focus is on how network resilience seeks to achieve service level outcomes (namely, maintenance of reliability, safety, network security), as these service level outcomes align with the long term interest of consumers.

Under the NER, reliability is defined as:¹

The probability of a system, device, plant or equipment performing its function adequately for the period of time intended, under the operating conditions encountered.

This definition reflects that reliability is about continuous adequate supply of electricity under different conditions – in effect, that electricity that consumers want is available when they need it. This includes the capacity to maintain and restore supply during extreme events.

Network resilience is a different but related concept to community resilience.

A resilient electricity network can assist in building community resilience. But many different entities have a role in supporting communities to withstand and recover from the impacts of natural disasters. Government bodies, individual themselves and several critical infrastructure operators (beyond electricity networks) have a role to support community resilience.

Do the National Electricity Rules accommodate resilience-related funding?

As a characteristic or feature of a network that directly influences service level outcomes, we consider that resilience-related funding is accommodated by the NER, even though it is not explicitly mentioned in the NER.

To manage network risks from a weather-related event:

- An NSP can request funding in its revenue proposal, forecasting the likely costs to be incurred in the upcoming five year regulatory control period (ex-ante funding); and
- An NSP can request funding after a revenue determination, applying for the recovery of actual costs incurred after extreme weather-related events through the cost pass through mechanism (ex-post funding).

We appreciate that while an ex-post arrangement would allow for cost recovery, it may not redress the adverse outcome of extreme weather events, like a prolonged outage, for consumers.

We agree with the comment in the Network Resilience Paper that:²

It is important, therefore, to assess how investment programs can be optimised to strike an appropriate balance between proactive investment to avoid or mitigate the full impact of major natural hazard events and reactive asset replacement of damaged assets after a prolonged outage has occurred.

Further to this, we consider that in assessing the optimal balance between ex-ante and ex-post arrangements, the risks of managing and responding to unforeseen extreme weather events should be allocated to the party that is best able to manage them.

As noted in the Network Resilience Paper, NSPs have an incentive to improve reliability of supply through the use of the Service Target Performance Incentive Scheme (STPIS). Major event days (MEDs) are excluded from the calculation of the STPIS reward/penalty so the STPIS is not designed to incentivise improvements in managing the impact of unforeseen

¹ NER, Chapter 10, p. 1379.

² DELWP, *Network Resilience Review, Phase 2 Consultation Paper*, March 2022, p. 14.

extreme weather events. It is designed to incentivise reliability improvements under standard conditions.

Current service incentives under STPIS do not cover the impact of major events but there is scope to consider incentives in regard to major events within the NER. Better understanding the value of reliability in such events is an important first step – as discussed below. We agree with the Network Resilience Paper’s finding that including MEDs within the STPIS would result in significant penalties for events outside of the business’ control which could increase their financial risk, with that higher risk impacting on the affordability for consumers.

What evidence should NSPs provide to demonstrate that the funding is in the long term interests of consumers?

We recognise that climatic conditions are changing and there is uncertainty of the impact this will have on electricity networks. We consider that our assessment framework is sufficiently flexible to have regard to an uncertain future environment. In particular, there is scope for our framework to respond and evolve as more information is revealed over time about the impact of climate change and its effect on networks and communities.

To support broader discussions around network resilience, our note sets out the supporting evidence required to demonstrate that resilience-related funding is a prudent and efficient response given that uncertainty and therefore in the long term interests of consumers. We are also mindful that in an environment of significant uncertainty, we need to be flexible and realistic in our requirements on the burden of proof.

We agree with the comment in the Network Resilience Paper that, through better evidence/data collection, there are opportunities to better understand the primary root causes of prolonged outages from natural disaster events. Identifying the main cause(s) of the prolonged outages will assist in determining the best treatment option to ensure that the risk allocation across ex-ante and ex-post arrangements strikes the right balance. Studies that look into consumer preferences such as willingness-to-pay studies will also inform the type of investments that are in the long term interests of consumers.

The Network Resilience Paper also notes that there may be value in reconsidering the development of a Value of Customer Reliability (VCR) for widespread and long duration outages (WALDO) as this would also facilitate a better understanding of the balance of proactive and reactive investment options valued by customers.

We concur with the Network Resilience Paper that the VCRs for WALDO which the AER published in September 2020 has limited application for the consideration of network resilience at this stage.³ The WALDO model was not supported by stakeholders in its draft form, mainly due to concerns about how certain costs like the social costs were estimated in the model. Going forward, we are considering revisiting VCRs for WALDO to accommodate longer unplanned outages with localised impacts. We would be happy to collaborate with DELWP, and other jurisdictions as we consider this work that would inform our assessment of resilience-related investments.

In the absence of this work, our guidance note encourages NSPs to demonstrate consumer preferences for proposed resilience-related expenditure using other supporting evidence such as through willingness-to-pay studies.

³ AER, *Widespread and Long Duration Outages – Values of Customer Reliability: Final Conclusions*, September 2020.

What is an NSP's role in supporting community resilience?

We acknowledge the finding in the Network Resilience Paper that there are opportunities for NSPs to partner with consumers, councils and local communities to help build community resilience. Our guidance note also makes the point that the role of NSPs in supporting network resilience is a collaborative one with other responsible entities. We expect NSPs to work together with affected communities, and other responsible entities involved in disaster management to understand what the communities' needs are to plan and prepare for, as well as recover from a natural disaster.

We look forward to working collaboratively with DELWP and other stakeholders on these important issues. We would be happy to provide any assistance as DELWP works through these resilience-related issues. If you would like to discuss these issues further, please contact Arek Gulbenkoglou on [REDACTED] in the first instance.

Yours sincerely

A handwritten signature in grey ink, appearing to be 'CS', with a long horizontal flourish extending to the right.

Clare Savage
Chair
Australian Energy Regulator