Telstra submission to the Australian Energy Regulator's draft Network Resilience Guidelines

Executive summary

Telstra welcomes the opportunity to comment on the Australian Energy Regulator's (AER's) draft Network Resilience Guidelines (the Guidelines) and accompanying Explanatory Statement. We thank the AER for their careful consideration of stakeholder views in the first stage of this consultation, including Telstra's submission.

Telstra notes the draft Guidelines, in several areas, recognise the role that collaboration between electricity networks and other resilience actors plays in supporting communities through severe weather events. We particularly welcome:

- The expectation that Distribution Network Service Providers (DNSPs) document how they have worked collaboratively with other resilience actors when developing both network and community resilience proposals.
- The recognition that focused investment on data and information sharing with key resilience actors can be prudent and efficient resilience expenditure.
- The requirement for a frequency analysis of severe weather events at a locational level to support resilience expenditure.

Our submission to this stage of the consultation is deliberately targeted and proposes refinements framed around the prudency and efficiency principles that underpin the AER's proposed assessment approach. Our proposed refinements have the intention of ensuring the Guidelines recognise the cascading impacts electricity network resilience initiatives have on dependent critical infrastructure so that resilience investment decisions are able to take into account downstream impacts.

About Telstra and why we are engaging

Telstra is Australia's largest telecommunications provider operating fixed and mobile networks that connect households, businesses, emergency services, and government agencies across metropolitan, regional, and remote Australia. Telstra's telecommunications networks rely overwhelmingly on the mains power supplied through the electricity distribution network.

We acknowledge that while external collaboration between sectors is an important component of improving resilience outcomes, Telstra remains responsible for the management and resilience of our own networks and continues to take proactive measures within our areas of control.

Telstra invests substantially in the resilience of our own networks – including battery backup, permanent generators at critical sites, a national portable generator fleet, and 24/7 monitoring and assurance. We do this because the impacts of mains power outages on the availability of our telecommunications services within communities are often some of those most acutely felt.

Telstra experiences over 165,000 mains power related interruptions to our networks annually. Our inbuilt resilience and assurance processes enable us to withstand the vast majority of these without impacts to our telecommunications services. However, in some cases, mains power outages last for prolonged periods, exceeding our own ability to manage them. This often occurs as a result of severe weather events. As a result, a small percentage of mains power disruptions result in impacts to our telecommunications services.

A substantial part of Telstra's network footprint is situated in regional and remote areas. The electricity distribution networks connecting many of our facilities include long and, in some cases, ageing electricity feeders. Those distribution networks are often at risk of direct damage due to severe weather events. The resilience challenges this creates flow directly through to connectivity outcomes for the communities we serve.

Fundamentally, resilience depends on both the measures undertaken by individual infrastructure providers and the reliability of interconnected networks outside their direct control. During severe weather events, telecommunications providers often face the same access, safety and environmental constraints as DNSPs, limiting the ability to deploy backup power or restore services until conditions are safe and sites become accessible. This highlights the need for resilience planning that considers impacts of energy outages across interconnected critical infrastructure sectors.

Definition of community and network resilience

Telstra notes the AER's decision not to refer to the interrelationship between DNSPs and other resilience actors in either definition. We understand the AER's reasoning that these definitions should set the boundaries of what DNSPs are responsible for, which is linked to the definition of a network service.

Our underlying concern remains that an assessment of network resilience for DNSPs should not be conducted in a silo as electricity network resilience initiatives have cascading impacts on dependent critical infrastructure, such as telecommunications infrastructure. A prolonged loss of supply at a single connection point can take a mobile site offline, affecting thousands of people's ability to receive emergency information and stay in contact during and after a severe weather event. If these flow-on impacts are not considered, decisions about where to harden the network and how to plan for restoration may overlook some of the most significant consequences of outages for consumers. We accept that this cannot be addressed through the definitions of network and community resilience. However, we consider it can be addressed within the Guidelines' assessment framework, as outlined below.

Reflecting the consequences of prolonged outages on consumers beyond direct electricity supply when assessing network resilience proposals

Telstra considers that the prudency assessment evidence for network resilience proposals should allow DNSPs to show the consequences of prolonged outages for consumers, not just for the network. This matters because the consequences of a prolonged outage are not uniform across connection points and cannot be adequately measured by only calculating the number of lost connections. A telecommunications site, such as a mobile base station, may appear to a DNSP as a single metered connection, yet it may support connectivity for many thousands of people across the surrounding community, including their ability to receive emergency information and stay in contact during and after a severe weather event. The consequences can also extend further, as other services that rely on telecommunications, such as utility operations and electronic payments, may be disrupted in turn. These broader cascading impacts may not be captured in a DNSP's analysis.

If these consequences are not captured, there is a risk that a DNSP's analysis may understate the net benefit of some resilience options relative to others. Recognising them would help DNSPs and the AER identify the options that deliver the greatest net benefit to consumers. It would not create any obligation on DNSPs towards other resilience actors. It simply provides a way for the full consequences to be considered in an efficiency assessment.

Telstra invests significantly in the resilience of our own network, including backup power at our telecommunications sites, and this enables us to withstand the vast majority of power interruptions. However, this is ultimately not a substitute for resilient and reliable mains power supply.

The interlinkage requirement for community resilience proposals

The Community resilience expenditure assessment proposal states that where there are interlinkages with other essential service providers, the AER expects to see *'documentation to demonstrate that the existing interplay between these providers is not providing sufficient assistance to the community, and reasons that the DNSP should be accountable for providing community assistance'*.

Telstra supports the intent behind this provision – electricity customers should not fund activities that others are better placed to deliver, and each provider should remain responsible for the resilience of its own service. However, we consider the wording of this provision can be improved to further foster the collaboration the Guidelines already encourage.

As it is currently drafted, a DNSP proposing to improve that collaboration would first need to show that the existing interplay 'is not providing sufficient assistance' and why a DNSP should be 'accountable' for providing community assistance. We consider the relevant question isn't which party is accountable, but whether DNSP action is the most efficient way to address the identified need and whether it complements existing arrangements. We recommend this provision is reframed as: '*where there are interlinkages with other essential service providers (such as utilities, telecommunications, transport), documentation of the existing arrangements between these providers, how the proposal complements rather than duplicates them, and reasons why DNSP action represents the most efficient means of addressing the identified need.'*

Reflecting the value of information sharing and coordination for both network and community resilience

Telstra strongly supports the AER's recognition that focused investment in data and information sharing with essential service providers is an example of prudent and efficient resilience expenditure. Telstra is actively pursuing information-sharing arrangements with DNSPs aimed at enabling real-time sharing of information during natural disasters and severe weather events, improving restoration coordination, and developing a better understanding of vulnerabilities and interdependencies across our respective networks. and we recognise that better information flows are essential for each sector to coordinate effectively before, during and after severe weather events. Under the proposed arrangements, Telstra shares key details of our network sites with DNSPs for disaster planning and emergency response, and in return Telstra seeks timely information on power impacts and expected restoration times.

At this stage, the Guidelines recognise information as relevant under community resilience. We encourage the AER to recognise information sharing as relevant to supporting network resilience proposals, as well as community resilience proposals. Knowing which parts of the network supply critical sites can help DNSPs prioritise hardening and restoration activities, which is a network resilience benefit.

Conclusion

Telstra thanks the AER for the opportunity to continue contributing to this important work. We welcome the opportunity to discuss any of the perspectives outlined in this submission with the AER team.