Ms Kami Kaur
A/Executive General Manager Network Regulation
Australian Energy Regulator
Submission made via email to capex@aer.gov.au

15 October 2026

Subject: Draft network resilience guidelines

Dear Ms Kaur,

SA Power Networks welcomes the opportunity to comment to the Australian Energy Regulator (AER) on the 'Draft network resilience guidelines' ('the Guidelines').

Distribution Network Service Providers (DNSPs) are increasingly exposed to severe weather events due to climate change. Many DNSPs are pursuing proactive investments to prevent widespread/prolonged outages and avoid costly reactive actions. We welcome new Guidelines which support DNSPs to identify and assess resilience investments in a consistent, prudent, and robust manner.

Our key views on the Guidelines, detailed in this submission, are as follows:

1) We broadly support the principles and expectations outlined in the Guidelines, which strike a sensible balance between prescription and flexibility.
2) Timelines for the Value of Network Resilience (VNR) review should be brought forward to enable incorporation into the next rounds of distribution determinations. If the VNR must be integrated with the Value of Customer Reliability (VCR) review, then both reviews should be brought forward.
3) Additional technical references or guidance would support good practice. In the short-term this could be achieved by identifying the proponents of the case studies in the Guidelines and committing to a review of the Guidelines at a future date.
4) The AER should clarify the meaning of 'base year risk'. The expectation that DNSPs should compare base year risk to historic risk can be interpreted in several ways.
5) It should be acknowledged that modelled risk in the first year of a forecast period may rationally differ from historic risk. DNSPs should be permitted to use bias-corrected risk estimates in cost-benefit analysis.
6) Expectations for post implementation review of previous resilience investments should be clarified and kept flexible. DNSPs should be able to incorporate lessons from previous experience, as relevant, into Regulatory Proposals and constituent business cases. This is current practice among many DNSPs.

We look forward to continuing to engage with the AER on how the Guidelines can best promote the resilience outcomes that customers value and desire. If you have questions on our submission, please contact Bruno Coelho, Regulatory Strategy Manager, at [redacted]

Kind regards,

[redacted]

Richard Sibly
Head of Regulation

We broadly support the principles and expectations outlined in the Guidelines

We generally support key features of the Guidelines, including:

- the changes to the definitions of network resilience and community resilience – in particular, we support removing the term 'natural disaster', which can mischaracterise the scope of weather-related risks experienced by DNSPs and their customers, and the inclusion of the term 'severe weather event';
- the reference to 'droughts' as examples of severe weather events, recognising that network services can be impacted by both chronic and acute climate-related hazards;
- the sensible balance between prescription and flexibility in the expectations for prudency and efficiency assessments – in particular, the Guidelines allow networks to apply a range of approaches for risk modelling, cost-benefit analysis and stakeholder engagement that are suited to their circumstances;
- removal of references to the 'probable' benefits of resilience options, noting that resilience investments are often deliberately designed to address high impact, low probability risks and may only deliver material benefits in some scenarios;
- the differing evidentiary requirements for network resilience proposals and community resilience proposals; and
- the absence of a standardised resilience template, noting the diversity of resilience investments delivered by DNSPs and potential overlaps with new and existing requirements in annual information orders, distribution annual planning reports and upcoming distribution network development plans.

Timelines for review of the Value of Network Resilience should be brought forward

We acknowledge the benefits of updating the VCR and VNR concurrently to support methodological consistency and note that the next VCR review is scheduled for 2029. However, in our view, this consideration alone does not support a three-year extension to the timeframe initially proposed by the Australian Energy Regulator (AER) for the VNR review:

- The rule change proposed by the Victorian Minister for Energy and Resources was made in recognition of the fundamental and urgent issue that the electricity distribution sector is not investing in resilience at a prudent and efficient level. The VNR is a key tool for addressing this underlying issue;
- we consider it likely that the final VNR will differ materially from the interim VNR. Delaying the final VNR will defer the ability of both network businesses and the AER to identify and implement an efficient level of resilience expenditure for customers, and inhibit DNSPs' engagement with their customers on how resilience risk should be managed on their behalf;
- in our submission to the 2024 Value of Network Resilience Issues Paper, we expressed support for an interim VNR methodology based on multiples of the VCR, however this was on the condition that the AER would develop a longer-term methodology by 2025; and
- the proposed three-year delay would affect all DNSPs, rather than only those scheduled to submit Regulatory Proposals in 2028. For the VNR to meaningfully inform decision-making, DNSPs need sufficient time to incorporate them into modelling, consumer / stakeholder engagement and other decision-making processes before submitting Regulatory Proposals.

The AER should bring forward the VNR review to a date more closely aligned to with its original commitment of 2026. If the AER maintains that the VNR must occur concurrently with the next VCR update, then the next VCR update should also be brought forward.

The Guidelines should provide additional technical guidance to drive good practice

We welcome the Guidelines preserving flexibility. Resilience assessment techniques are still maturing, and the appropriate information sources, methods and templates for resilience assessment will vary on a case-by-case basis.

However, the Guidelines should include some form of technical guidance which supports DNSPs to undertake good-practice climate risk modelling, cost-benefit analysis, and stakeholder engagement[1]. This can be done without prescribing a single approach or reducing the flexibility of the Guidelines. The AER's industry practice application note for asset replacement planning[2] is a good example of technical, yet non-prescriptive guidance which drives good practice amongst networks. Technical guidance for resilience planning is also becoming increasingly common in other sectors[3] and international standards[4].

The case studies provided throughout the Guidelines could serve as technical benchmarks; however, they are high-level and deidentified. They explain the scope of several recent resilience proposals which the AER deemed as prudent and efficient, but do not explain the sources, methods or tools DNSPs used to complete each component of their assessments. The Guidelines could provide further details without losing discretion or prescribing a single approach.

We suggest that the Guidelines:

- identify the proponents of the resilience proposals in boxes 1-5 of the Guidelines, as well as the relevant determination period. Alternatively, reference could be made to any publicly available documents or models that are relevant to boxes 1-5. This would allow stakeholders to review the details of resilience proposals which the AER has already highlighted as good practice; and
- commit to a review of the Guidelines at a future date. This would allow the AER to update case studies and add technical guidance as resilience assessment techniques continue to mature. Over the long-term we would strongly support the inclusion of non-binding technical information and examples, similar in scope to other guidance provided by the AER and technical documents available in other sectors and jurisdictions[5].

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1 Our submission to the network resilience guidelines consultation paper described several gaps in current assessment techniques which can affect the valuation of resilience investments, including choice of assessment horizons in cost-benefit analysis, approaches for addressing uncertainty, and a lack of consideration for consumer risk preferences in efficiency assessments.

2 Industry practice application notes for asset replacement planning | Australian Energy Regulator (AER)

3 NSW Treasury Disaster Cost-Benefit Framework | NSW Government, National Climate Scenario Guidance - DCCEEW, Coastal Hazard Adaptation Planning Guidelines (LGASA)

4 ISO 14091:2021 - Adaptation to climate change — Guidelines on vulnerability, impacts and risk assessment

5 See footnotes 2-4 above

The Guidelines should clarify the meaning of 'base year risk'

The Guidelines expect DNSPs to compare base year risk in the forecast period against historical revealed risk as part of network resilience proposals. As written, this can be interpreted as:

- an expectation that DNSPs should calibrate the first year of a cost-benefit analysis model to observed risk in a single historic base year, and then compare this 'base year' to a longer historic time series; or
- an expectation that DNSPs should calibrate the first year of a cost-benefit analysis to historic revealed risk over a time horizon that suits their unique circumstances.

We consider the second interpretation to be more appropriate as it provides DNSPs with the flexibility to refer to a historic time horizon that aligns with available data and is a sensible representation of underlying risk. In most cases, there will be no single historic year which can provide an accurate representation of severe weather risk. The AER should clarify the meaning of 'base year risk' to prevent misinterpretation.

The AER should acknowledge that modelled risk in the first year of a forecast period may rationally differ from historic risk

The Guidelines should acknowledge that it may be sensible for modelled risk in the first year of a forecast period to differ from historic risk, if there is evidence to suggest that historic data is materially biased. In many cases it will be suitable for DNSPs to calibrate modelled risk to correct for a range of biases that may be present in historic data:

- climate change is not a new phenomenon, and the severity / frequency of extreme fire weather, heatwaves and heavy rainfall have already been subject to significant change over the last half a century[6]. Consequently, if a network calibrates risk in the first year of a forecast period against the average of historic risk over a long-time frame, rather than the trend in historic risk, they may underestimate present day risk;
- high impact low probability (HILP) events are inherently infrequent but can drive a significant portion of the risk associated with severe weather events. If a HILP event has occurred within a DNSP's historical dataset it may artificially increase estimates of expected risk. Likewise, if a HILP event has not occurred, but there is reasonable evidence to suggest that network assets are exposed to HILP risk, it may artificially decrease estimates of expected risk; and
- the physical characteristics of a distribution network can change significantly over time, affecting its exposure and vulnerability to severe weather events. As a result, an equivalent severe weather event may present a different level of risk to a network in its current condition than it would have in the past.

[6] State of the Climate - CSIRO

The AER should clarify its expectations for reviews of previous resilience investments

We agree that reviews of previous resilience investments can provide valuable context for developing and assessing network resilience proposals, however we would not support a requirement for formal, standardised post-implementation reviews in proposals:

- DNSPs already have a general expectation under the National Electricity Rules and the AER's Better Resets Handbook to explain the need for forecast investment with reference to past spend;
- DNSPs will already be required to report annual resilience expenditure and outcomes from severe weather events through the distribution annual planning report and the upcoming distribution network development plan;
- many resilience investments are intended to mitigate high-impact, low-probability events that may not occur for several regulatory periods[7]. Consequently, these investments may not deliver observable customer outcomes or benefits that can be reported through a post-implementation review in the short term. The absence of immediately observable outcomes should not necessarily indicate that an investment was not a prudent and efficient response to underlying HILP risk; and
- only some lessons from previous resilience investments may be relevant to new resilience proposals.

We acknowledge that the Guidelines do not necessarily prescribe a specific approach for post implementation review. However, we would welcome more clarity on the scope of the expectations. Our preference is for a flexible approach that allows reviews to be incorporated into Regulatory Proposals and constituent business cases, as is current practice by many DNSPs in relation to other areas of expenditure.[8]

[7] For example, a flood event with a 1% annual exceedance probability has an 18.2% chance of occurring at least once over 20 years.

[8] For example, the capital expenditure chapter to SA Power Networks' 2025-30 Regulatory Proposal included reference to what it achieved in the prior regulatory period. Likewise, the business cases for each area of expenditure included sections outlining lessons learnt in the current period, as relevant, to explain the case for change and identified needs.