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09 July 2026

Ms Kami Kaur
Executive General Manager Network Regulation (A/g)
Australian Energy Regulator
Via email: aerinquiry@aer.gov.au

Dear Ms Kaur,

ESSENTIAL ENERGY RESPONSE TO NETWORK RESILIENCE GUIDELINES CONSULTATION PAPER

Essential Energy welcomes the opportunity to contribute to the Australian Energy Regulator (AER) on its development of Network Resilience Guidelines through its response to the AER's Consultation Paper. As a distribution network service provider (DNSP), Essential Energy manages over 194,000 km of powerlines, covering 95% of NSW and parts of southern Queensland, serving more than 900,000 customers across regional, rural and remote communities, including homes, hospitals, schools, businesses, and community services.

Essential Energy is acutely aware of the importance of network resilience for our customers. With climate change driving increasingly frequent and severe weather events across our network footprint, the resilience of our network is becoming ever more important for safeguarding the physical and economic wellbeing of the communities we serve. Essential Energy has a strong commitment to improving this resilience over time, and this was reflected in our 2024-2029 regulatory proposal, which included an increase in resilience-driven expenditure, reflecting customer engagement showing a growing demand for a more resilient network.

Regulatory guidance on network resilience will play a fundamental role in helping DNSPs plan for and invest in measures that help communities withstand and recover from severe weather events. Given the increasing frequency and intensity of climate-related events, the stakes for getting this guidance right are high. The Network Resilience Guidelines will be far more than words on a page – they will form the basis of how DNSPs plan for and respond to extreme weather events, keeping staff and communities safe, and supporting their recovery from potentially catastrophic impacts. It is therefore essential that these Network Resilience Guidelines are clear, accessible to a broad audience, and applicable to the dynamic circumstances under which they may be applied.

Essential Energy strongly supported the intent of the rule change request made by the Victorian Minister for Energy and Resources to account for resilience in the National Electricity Rules (NER) capital and operating expenditure factors. We actively contributed throughout the Australian Energy Market Commission's (AEMC) development of a preferable final rule¹ that has triggered the AER's development of these Guidelines and explicitly recognised distribution network resilience in the NER.

¹ AEMC 2025, Final determination and rule, [Including distribution network resilience in the National Electricity Rules](#)



The objectives and framework established in the AEMC's Final Determination should provide the foundation for the Network Resilience Guidelines

The AEMC's rule change process highlighted gaps and shortcomings in the regulatory treatment of resilience, including a lack of a formal framework for distribution network resilience creating regulatory uncertainty for DNSPs and the AER about what constitutes efficient resilience-related expenditure and insufficient focus on consumer outcomes related to power outages from severe weather events. The body of evidence generated through this rule change process, including through detailed submissions from stakeholders, strongly supports the need for greater regulatory clarity about distribution network resilience, and for the AER to play a critical role in providing this clarity.

The AEMC considered the AER's 2022 Note on network resilience² in arriving at its conclusions in this process, and established the case for greater regulatory clarity as part of its findings. On this basis, Essential Energy suggests that the AEMC's Final Determination in this rule change process is a much better starting point for the development of the Network Resilience Guidelines than the AER's 2022 note, contrary to the AER's framing in its Consultation Paper.

Beyond the wording of the Final Rule, the AEMC's commentary in the Final Determination highlights the underlying challenges of a lack of clarity in the regulatory framework that the rule change was seeking to solve. The Final Determination, and the wording of the Final Rule, highlight the importance of focusing on consumer outcomes – specifically reducing 'the risk and impact on consumers of power outages caused by severe weather events' in relation to both operating³ and capital⁴ expenditure forecasts.

This framing can form the basis of the AER's objectives through its development of the Network Resilience Guidelines, with a focus on providing stakeholders (including consumers) with a much clearer understanding of how resilience-related expenditure should be proposed by DNSPs, and how it will be assessed by the AER through its decision-making framework. Essential Energy is concerned that a narrow focus of these Guidelines – as the Consultation Paper appears to propose – would not address the fundamental issues the rule change sought to solve.

The Network Resilience Guidelines should clearly define key terms

Throughout the rule change process, Essential Energy called for greater prescription and defined terms about how resilience-related expenditure will be assessed by the AER. Providing this clarity upfront, through definitions and worked examples, helps DNSPs to focus on investments that are likely to have the greatest resilience impacts, and avoids the inefficiency of expenditure being re-categorised or excluded by the AER throughout regulatory proposals. These definitions should seek to enable the development of appropriate capital and operating expenditure proposals by DNSPs to enhance the resilience of their networks over the long term.

In line with the intent of the rule change request and the AEMC's objective as stated in the Final Determination of 'improv[ing] clarity, flexibility and accountability for electricity distribution network

² AER 2022, [Network resilience: A note on key issues](#)

³ NER, Clause 6.5.6(e)(4)

⁴ NER, Clause 6.5.7(e)(4)



resilience', Essential Energy calls for each of these terms to be defined clearly in the Network Resilience Guidelines:

- **Network resilience:** The experience of DNSPs through regulatory proposal processes over recent years suggests that the definition in the AER's 2022 note provides insufficient clarity. This definition needs to balance the need to be sufficiently broad to encapsulate the range of potential circumstances that DNSPs need to be resilient to in the current and changing climate, while being sufficiently specific to provide clarity about the forms of expenditure that fall within this definition. This term should operate as an 'umbrella' concept, under which are forms of network resilience (e.g. community resilience and asset hardening). As the Final Rule requires, the AER must support this definition by sharing examples of resilience expenditure to illustrate how the concept should be applied by DNSPs, while clarifying the broader thresholds and expectations outlined below.
- **Community resilience:** The AER's definition of this term should encapsulate both the resilience of individual communities and a broader sense of resilience at the community level. DNSPs support community resilience in both ways. Some investments may necessarily be location-specific, however the most efficient form of expenditure to enhance community resilience may be mobile assets (e.g. mobile response units and portable generators) that can be deployed where and when required across a DNSP's footprint. This definition should also recognise DNSPs' role as effectively an emergency service provider during and immediately following extreme weather events. Essential Energy is a Participating Organisation under the NSW Electricity Supply Emergency Sub Plan⁵ and NSW Energy & Utility Services Functional Area Supporting Plan⁶, which outline our roles and responsibilities throughout the prevention, preparation, response and recovery phases of an emergency event. Essential Energy's geographic footprint means that network personnel are often among the first responders to these emergency events, helping to keep communities safe, providing support in emergency operation centres, and committing operational and administrative staff to joint government operations during extreme events. Many of these commitments come with substantial operating and capital costs that we have to factor in ahead of time, as part of a ground-up approach to scoping our community resilience, and ensuring we can meet the communities' needs when they arise.
- **Severe weather event:** In Essential Energy's submissions to the rule change process, we argued for a definition of 'severe weather event' to provide clarity for DNSPs in their resilience-related planning and investment activities. This term is not defined in the NER, and the AEMC chose not to define it in its Final Determination, but Essential Energy requests the AER to provide this definition in the Network Resilience Guidelines. In the face of increasingly dynamic, compounding and wide-ranging impacts of weather events, previous definitions of related concepts may no longer be relevant or useful. For example, there are growing risks to networks from sea level rise, more frequent or longer duration hot weather or low rainfall events, and climate-induced phenomena that form part of the same weather event but occur separately across a large area. Some weather events may appear relatively small on an individual basis but cumulatively present a major risk to assets and consumers. This issue is more pronounced for Essential Energy, given our large footprint across regional NSW. This effect is demonstrated during storm season where widespread thunderstorms regularly impact many communities each with limited resources to safely repair and restore network. On the other hand,

⁵ NSW Government 2024, [Electricity Supply Emergency Sub Plan](#)

⁶ NSW Government 2022, [NSW Energy & Utility Services Functional Area Supporting Plan](#)



there may also be a gap in how low-probability, high-impact events will be treated by the AER as part of ex-ante resilience planning. On this basis, the Guidelines should adopt a sufficiently broad definition of ‘severe weather event’ to allow DNSPs to plan and invest for the resilience of their assets over the long term, as the forms of climate-induced phenomena evolve.

- **Preparedness:** Essential Energy also suggested through the rule change process that the Guidelines should define ‘preparedness’ to include proactive measures like asset hardening, vegetation management, strategic spares and contingency planning. While the final rule allows DNSPs to propose expenditure that reduce the risk and impact of severe weather events on consumers, this provides little clarity about how the AER would assess different forms of proposed upfront expenditure for risk reduction, and how this would be applied across different environments – i.e. whether one form of resilience expenditure may be assessed different across different zones, such as coastal flood zones and fire-prone hinterlands.

It is important for the AER to set clear thresholds and expectations for expenditure-related expenditure

Building on these definitions, the Network Resilience Guidelines should clearly articulate the parameters of how the AER will assess expenditure-related expenditure. Important points of clarification should include:

- **Managing overlapping expenditure:** Many forms of resilience-related expenditure will have broader network benefits, especially where some business-as-usual expenditure (e.g. pole replacement) is brought forward to enhance resilience and/or because climate change has shortened assets’ effective lives. The lines between the purpose of some expenditure may further be blurred where there is community or government co-funding in community initiatives.
- **Scale of customer impact:** It would be useful to understand whether there is a minimum threshold of customer or asset impact for resilience-related expenditure. Essential Energy operates a large network, including some long feeders supplying one or few customers or critical community loads, many of which are in parts of NSW that are prone to bushfires, lightning strikes, storms and other events. It may be efficient to make investments to improve the resilience of these assets, but it is unclear whether the AER would view smaller-scale investments on the same terms as other forms of resilience-related expenditure.
- **Severity of impact:** Building on the definition of ‘severe weather impacts,’ the Network Resilience Guidelines should clarify whether the AER intends to make a distinction between severe weather events of up to 12 hours, where the Value of Customer Reliability (VCR) applies, and those over 12 hours, managed through the Value of Network Reliability (VNR). As detailed above, the evolving nature of climate-induced events means that this 12-hour threshold may not be a useful gauge of impact or severity. For example, a series of severe thunderstorms may impact many communities over a large area – while individual outages may be shorter than 12 hours, the total duration of outages may last days and have a major cumulative impact on networks. Essential Energy would like to confirm that a resilience investment, as defined under the Network Resilience Guidelines, addresses outages caused by severe weather events broadly, and that the expenditure will have both VCR and VNR value, not just VNR. Investments that have VNR will also experience many outages of less than 12 hours due to severe weather, but it is not clear whether the primary driver for the investment needs to be VNR only due to outages being greater than 12 hours.
- **Consumer engagement:** Essential Energy’s customers have consistently told us they value resilience, but given the significant increase in the frequency and severity of weather events,



resilience – including community resilience – is shifting to being a BAU expectation. On this basis, Essential Energy supports aligning engagement on resilience with engagement on other forms of expenditure as part of regulatory proposal processes. Undertaking consumer engagement on resilience-related expenditure later in the proposal process may also enable more useful feedback on specific investments once their scope and core purpose have been refined through early engagement with the AER.

- **Treatment of important loads:** Customers may reasonably expect that DNSPs will preference the resilience of certain loads, such as hospitals and water infrastructure, meaning some loads will hold higher values than others. Some important loads, for example telecommunications towers, may be located in exposed locations (e.g. the tops of hills vulnerable to lightning strikes and bushfires) that may necessitate additional expenditure to mitigate risks. In some cases, there may be an overlay of jurisdictional expectations in relation to critical infrastructure – in NSW, this is a risk-based approach. For the purpose of clarity and consistency, it would be useful for the AER to provide some general guidance on how important loads would be treated through the resilience expenditure factors, and how jurisdictional expectations will be taken into account.
- **Interpretation of the term ‘maintain’:** Essential Energy raised the issue of the AER’s interpretation of the term ‘maintain’ in NER clauses 6.5.6(3) and 6.5.7(3), with a strict interpretation of this term limiting the capacity for DNSPs to attain regulatory approval for forward-looking investments to address escalating climate risks. The Network Resilience Guidelines should clarify how these clauses will be applied in light of the AEMC’s stated objective that the rule change would ‘improve customer outcomes by increasing the likelihood that DNSPs consider, plan and deliver improved network resilience’.⁷

There is an opportunity for improved efficiency in evidence building to support resilience expenditure

Essential Energy supports DNSPs working from a consistent evidence base in relation to the impacts of climate risks on networks, and for there to be flexibility in how these are applied on a network-by-network basis. The final rule places a responsibility on the AER to provide examples of the types of information DNSPs should provide to support resilience expenditure forecasts. It would be useful for the AER to work collaboratively with DNSPs towards a common objective in this regard, particularly because it is in the interests of customers for DNSPs to be able to meet the AER’s expectations efficiently and transparently. The NSW Government has provided practical guidance on how to assess and manage climate change risks that may provide a useful basis and benchmark for the AER’s advice.⁸

Essential Energy would welcome the opportunity to work with the AER to help satisfy this obligation and drive general improvements in modelling the impacts of climate change on network resilience.

The Network Resilience Guidelines should be integrated with related guidance and processes

The Consultation Paper indicates a need to include resilience reporting in DNSPs’ Distribution Annual Planning Reports (DAPRs) but does not acknowledge the AEMC’s *Enhancing distribution network planning & reporting* rule change⁹, for which the Final Determination and Rule is expected to be published

⁷ AEMC 2025, Final Determination, [Including distribution network resilience in the National Electricity Rules](#), p. i

⁸ NSW Government 2021, [Climate Risk Ready NSW Guide](#)

⁹ AEMC 2026, [Enhancing distribution network planning & reporting](#)



on 16 July 2026. The Draft Determination and Rule recommended that DAPRs be abolished – with the 2026 DAPR to be the last for NSW DNSPs – with a new Distribution Network Development Plan (DNDDP) to supersede the DAPR. Given the current misalignment of these two processes and the uncertainty this brings due to a lack of detail on the scope of the DNDDP¹⁰, the AER should consider providing interim advice – ahead of any Draft Guidelines – about how it anticipates the Network Resilience Guidelines will be integrated with the new DNDDP once the detail of this rule change is confirmed. It would also be beneficial for the AER to engage directly with DNSPs on this, given the compressed timeframes for development of the Network Resilience Guidelines and the overlap with multiple other regulatory planning and approval processes, including several planning and reporting processes being developed separately by the NSW Government.

Additionally, although the network resilience final rule does not require the AER to explicitly set out how the Value of Network Resilience (VNR) should be taken into account in DNSPs' resilience expenditure proposals in the Network Resilience Guidelines, the AEMC's Final Determination suggested this may be something the AER elects to provide. Given this was suggested by a range of stakeholders and aligns strongly with the overarching objective of enhancing clarity, flexibility and accountability for electricity distribution network resilience, Essential Energy encourages the AER to provide this guidance and seek to integrate the separate workstreams to the greatest extent possible given their significant overlap. If the AER does not believe there is sufficient time to provide this guidance in the first iteration of the Network Resilience Guidelines, Essential Energy would welcome the AER providing a timeline for when this additional guidance and integration of processes can be provided.

Conclusion

Essential Energy strongly supports measures to enhance distribution network resilience and welcomes the opportunity to engage with the AER in the development of its Network Resilience Guidelines.

Essential Energy, alongside other NSW DNSPs, has already commenced initial engagement with customers, stakeholders and the AER as part of its 2029-34 regulatory proposal. We therefore encourage the AER to be as open and collaborative as possible in its development of these Network Resilience Guidelines. It is in the interests of energy consumers, both now and in the future, that Essential Energy can effectively and efficiently plan its network resilience expenditure over the next regulatory period, and the AER's guidance and engagement throughout development of these Guidelines will be crucial to achieving that outcome.

If you have any questions in relation to this submission or would like to arrange a discussion, please contact me at [REDACTED] or Jon Frazer, Regulatory Strategy Senior Specialist at [REDACTED]

Yours sincerely,

[REDACTED]

Hilary Priest
Head of Regulatory Affairs

¹⁰ The draft rule proposes that the detail of the DNDDP should be determined by the AER through the development of separate guidelines.