

INCLUDING DISTRIBUTION NETWORK RESILIENCE IN THE NER ERC0400

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INTRODUCTION AND SUMMARY

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

There is no doubt that recent extreme weather events in Victoria and forecasts of an increased incidence of these events throughout the NEM have brought the issue of how networks and their customers deal with those events to the forefront of public debate on the impact of climate change. While the AER issued its Resilience, Guidance Note in April 2022¹ to provide guidance to networks seeking to justify additional ex-ante (forecast) capital expenditure (capex) and operating expenditure (opex) to improve resilience, the experience so far of networks seeking to justify increased expenditure has been, at best, mixed.

Of those networks seeking relatively small amounts, two have been successful in the final AER decisions (Endeavour Energy and TasNetworks) and two have seen significant cutbacks in their Draft Decisions (Ergon and Energex). Both networks seeking much larger amounts – Ausgrid and Essential – have seen a significant cutback in the AER's final decisions. The main reason for this lack of success is the failure to show causation and/or the lack of a business case meeting the capex expenditure factors in the rules.

Following the major storms in Victorian in February 2024 and the subsequent review recommending a raft of changes to improve the ability of Victorian networks to improve their resilience, the Victorian Government has now proposed a rule change to include a formal national framework for distribution network resilience to be included in the national electricity rules that apply to all NEM distribution networks.

Make no mistake, we are not against improving network resilience where it is evidence based, proportional and efficient. We strongly support the need for networks getting better clarity from the AER on how it is going to assess network resilience expenditure proposals and how networks should balance ex-ante and ex-post expenditure. However, we do not support the rule change proponent's approach in its rule change because we believe it will result in an unnecessary cost burden on electricity consumers for many years into the future given the long asset lives of resilience capex.

Specifically, we see the proposed additional expenditure factors in the rules making it too easy for networks to justify ex-ante resilience capex and opex that may not be prudent and efficient.

¹ <https://www.aer.gov.au/system/files/Network%20resilience%20-%20note%20on%20key%20issues.pdf>

The proposal does this through proposing a binding guidance note that:

- weakens the current requirement to demonstrate a causal relationship between the proposed resilience expenditure and the expected increase in extreme weather events
- allows networks to include a much broader range of potential benefits in their justification
- allows networks considerable latitude on how it justifies its proposed expenditure through a more principals based than prescriptive AER guidance note, and
- is not required to define resilience or provide any distinction between the roles of DNSPs and other organisations that may contribute to, and pay for, community resilience.

This last factor blurs the line between what a network should or should not be responsible for and hence what electricity consumers must pay for. This provides networks with considerable latitude to build business cases for additional expenditure that are less robust than required under the current expenditure factors. We also note the feedback from a range of consumer engagements on resilience where their primary concern is on quick restoration of supply rather than supporting extensive expenditure to harden the grid that might or might not help in the future.

Our main conclusions are:

- While the current framework for distribution network resilience should be amended to provide greater clarity, the proponent has not provided a convincing case that its approach meets the Commissions assessment criteria and is appropriate either for Victorian electricity consumers or for electricity consumers in the wider NEM who have difference experiences with network resilience
- The proposed additions to the expenditure factors and the high level of discretion left to networks has the risk that it will lead to a bias to expand capex that is not prudent and efficient
- We support an alternative draft rule change where the AER still develops a binding guideline on how it will assess proposed resilience capex and opex expenditure, but it is within the existing expenditure factors. This would include how networks develop their business cases using VCR and 2025 VNR values and the requirements for consumer engagement under the Better Resets Handbook on how the results of that engagement can support the networks' expenditure business cases.

SOME OBSERVATIONS ON ISSUES RAISED

We begin by making some observations that provide background for our responses to the questions asked in the Consultation Paper.

What is the climate science telling us and not telling us?

The just released BoM/CSIRO State of the Climate 2024² report describes Australia's future climate as including (p.29):

- A further decrease in in cool season rainfall across many regions of the south and east
- A longer fire season for much of the south and east, and an increase in the number of dangerous fire weather days for many regions
- More intense short-duration heavy rainfall events, even in regions where the average rainfall decreases or stays the same

² <https://www.csiro.au/en/research/environmental-impacts/climate-change/state-of-the-climate>

- Fewer tropical cyclones, but a greater proportion projected to be of high intensity, with ongoing large variations from year to year. The intensity of rainfall associated with tropical cyclones is also expected to increase and, combined with higher sea levels, is likely to amplify the impacts from those tropical cyclones that do occur
- Fewer east coast lows on average, particularly during the cooler months of the year, but a greater impact from those that occur due to heavier rainfall and higher sea levels
- More frequent extreme sea levels linked to coastal inundation and coastal erosion. For most of Australia, coastal floods that currently occur occasionally will become chronic later this century. Extreme sea levels that had a probability of occurring once in a hundred years are projected to become an annual event by the end of this century with lower greenhouse gas emissions, and by the mid-21st century for higher emissions, and
- An increase in the risk of disasters from extreme weather, including ‘compound events’, where multiple hazards and/or drivers occur together or in sequence, thus compounding their impacts.

In its 2024-29 expenditure proposal, Ausgrid submitted the results of climate modelling shown below³.

Table A: Projected risk increase to climate perils on Ausgrid’s network (medium emissions scenario)

| Metric | What this means | Change 2050 | Change 2070 | Change 2090 | Confidence |
|--------------------------------------|---|-------------|-------------|-------------|------------|
| Consecutive Hot Days – Total | The total number of heatwave days, where a heatwave is defined as 3 or more consecutive days > 35 deg C | 103% | 123% | 123% | Very High |
| Consecutive Hot Days – Maximum | The longest run of consecutive hot days > 35 deg C | 22% | 24% | 29% | Very High |
| Windspeed maximum | Speed of sustained wind gusts in m/s | 3% | 3% | 3% | Medium |
| Windstorm | Primarily related to days where East Coast Lows make landfall | 23% | 30% | 30% | Medium |
| Very heavy Precipitation Days | Days with more than 30mm of precipitation which is linked to flooding | 20% | -4% | 4% | Medium |
| High Fire Danger Days | Days with a forest fire danger index above 25 | 0% | 23% | 17% | High |
| Extreme (and above) Fire Danger Days | Days with a forest fire danger index above 50 | 13% | 21% | 11% | High |
| Average across network | | 26% | 31% | 31% | n/a |

The highest risk areas were assessed as the heavily vegetated suburbs on the coast that bear the brunt of the so-called ‘east coast lows’⁴. This was due to the high winds, risk of vegetation breaking off and hitting network assets, and the configuration of the network⁵. The evidence was a ‘medium’ confidence of a 23% increase in risk by 2050.

The difficulty this data presented to the AER, and to consumers participating in Ausgrid’s comprehensive engagement process, is that while this qualified evidence discusses what might have happened by 2050 and later, there is even less certainty about where (e.g. what part of a distribution network) and when (e.g. what is the risk over 2024-29) they will occur. The Ausgrid proposal was for the first 5 years of a proposed 25-year resilience work plan which is subject to a great degree of uncertainty. The most accurate forecast of impact of an extreme climate

³ See p. 7 <https://www.aer.gov.au/system/files/Ausgrid%20-%20Att.%205.5.b%20-%20Climate%20impact%20assessment%20-%2031%20Jan%202023%20-%20Public.pdf>

⁴ The most famous of these was the NSW Central Coast Pasha Bulker storm in 2007

<https://knowledge.aidr.org.au/resources/case-study-east-coast-lows-and-the-newcastle-central-coast-pasha-bulker-storm/>

⁵ Op cit p. 12

event is still only possible a week or less out from the event and, even then, the intensity and area of impact can change in a couple of days as we recently saw with the hurricanes hitting Florida.

Has here really been a bias towards cost pass through at the ‘expense’ of ex-post?

The Consultation Paper notes (p. 8):

“The proponent considers that the lack of a formal framework to demonstrate the efficiency of ex ante versus ex post expenditure has made it difficult for DNSPs to demonstrate how prudent and efficient ex ante resilience expenditure will be. This does not result in efficient ex ante network resilience expenditure and results in consumers bearing the costs of long-duration outages.”

The rule change provides no data to support this proposition apart from the difficulty of getting AER approval for ex ante capex. The AER would argue this is because the network has not made the case. Now this may have been partly due to the lack of clarity on what the AER requires which is why we support the provision of greater clarity.

We would remind stakeholders that consumers bear the costs of long duration outages if the climate event impact is not in the area where the ex-ante resilience capex was spent. Consumers also bear some costs even if the outage is reduced by ex-ante capex. Ex ante capex may still only reduce rather than eliminate all consumer costs with the residual borne by the consumer or others (e.g. Government compensation payments). From what we have seen there is no reason to believe that ex-ante expenditure is more efficient than ex-post expenditure and there is no evidence provided in the material supporting the rule change that would give reason to believe otherwise.

How to compare the efficiency of ex ante vs ex post expenditure?

The Consultation Paper, referring to the proposed rule change, says (p.13):

“The proposal would require DNSPs and the AER to compare the efficiency of upfront expenditure versus cost pass throughs”

We are not told how this is going to be achieved. While the AER does provide a VCR and a VNR, how does a network:

- Assess the ‘without resilience’ expenditure base case and the ‘with resilience’ alternative case?
- Assess the probability of the severe weather event hitting in the location where resilience expenditure has occurred?
- Decide, even if it did occur in that location, how much shorter will the duration of the interruption be and how many less customers will it impact because of the resilience expenditure?
- Incorporate in the analysis the risk that consumers will pay up to five times for improved resilience? The recently published report on distribution network resilience completed for ECA described these 5 ways⁶:
 - (i) Consumers fund routine electricity network business operation with aspects of routine reliability investments, such as routine maintenance and asset replacement, that support resilience
 - (ii) Consumers fund electricity network business investment in a (location) specific resilience solution (“ex ante”)
 - (iii) Consumers fund repairs following an event that damages electricity network equipment (“ex post”)

⁶ <https://energyconsumersaustralia.com.au/network-resets-funding-program>

- (iv) Consumers fund compensation for long outages, such as Guaranteed Service Level payments
- (v) Consumers invest in their own electricity resilience (regulator’s “rational alternative”)

Ausgrid went to considerable effort in its 2024-29 resilience submission to develop a robust business model but fell well short, with the AER concluding in its final decision⁷:

“We note Ausgrid’s investment in different models to support its proposal. We accept the climate modelling underpinning it. But we had concerns with Ausgrid’s modelling of the network impact from a projected expected increase in climate risk. We found that Ausgrid did not provide sufficient evidence to support its premise that its network will be materially impacted from windstorms to justify a total expenditure investment of \$90.4 million. For remaining parts of its climate resilience proposal, we found a lack of supporting cost benefit analysis. Given these concerns, we were not satisfied that Ausgrid’s proposed climate resilience investment is prudent and efficient and have included an alternative forecast of \$41.6 million for its climate resilience program in the total capex forecast.” (p. vi)

“...we consider that Ausgrid’s assumption that there is a 100% probability of a wind event occurring in the same location (the return frequency) every year is overstated. As Ausgrid is proposing targeted investments at a feeder level, it is appropriate to apply locational specific return frequency. While the network as a whole may see a yearly recurrence of a major storm, the benefits from investment at a specific location can only be realised at the frequency at which a major storm occurs at the specific investment location itself.” (p. 19)

We would note that Ausgrid disagreed with the AER’s conclusion on the wind modelling methodology, which is a further reason for having a prescriptive Guidance Note.

Nevertheless, the AER’s decision came despite Ausgrid doing best practice consumer engagement. This engagement resulted in strong support for the proposed expenditure by both the consumers in the three LGAs considered to be the most impacted by future resilience risk and by the network wide consumer group that would have to pay a substantial part of the concentrated expenditure in the three LGAs as well as the smaller resilience expenditure outside of the three LGAs.

The proposed rule change does not provide details on how a network will give confidence to consumers on the ‘principles of efficiency’ criteria. How will consumers have confidence they are unlikely to be paying for investment that is too much, too soon? What happens if the relative risks change as climate modelling continues to improve its sophistication and forecast confidence? How do we minimise stranded asset risk?

The only significant case we found that might offer some assistance in assessing the requirement for robust business cases is the initial functional REFCAL review by Energy Safe Victoria completed in 2020⁸. A further review was due to take place in 2022 but unusually mild summers over 2021 and 2022 reduced the number of times REFCALs were called upon to operate so data required for meaningful analysis was limited. Then the review was due to be completed in 2024, but perhaps the mild summers in 2022 and 2023 may have again limited data availability.

⁷ <https://www.aer.gov.au/system/files/2024-04/AER%20-%20Final%20Decision%20-%20Overview%20-%20Ausgrid%20-%202024%E2%80%9329%20Distribution%20revenue%20proposal%20-%20April%202024.pdf>

⁸ <https://www.energysafe.vic.gov.au/about-us/our-organisation/reports/rapid-earth-fault-current-limiter-refcl-reports>

The 2020 initial review cost benefit analysis concluded⁹:

“There are large and inherent uncertainties involved in quantifying the benefits of the REFCL program, due to the unpredictability of the cost and probability of an extreme bushfire. There is compounding uncertainty in the risk reduction rate due to REFCLs at each zone substation, and in the proportion of future catastrophic bushfire costs that will be caused by electricity assets.

For that reason, a single benefit figure has not been calculated. This would convey a false sense of precision. Instead we have calculated a ‘benefit range’ in Figure 6 overleaf, which represents a plausible range of benefits...”

The report’s authors make a judgement call on the range of benefits across different probabilities of a catastrophic fire in a given year. They conclude that even though the actual cost of REFCLs was substantially above the initial cost estimate, it was probably a good investment over most of the range of probabilities, though¹⁰:

“This conclusion comes with important caveats. REFCLs have been in service for only a brief period, and their operational reliability and impact can only be conclusively assessed over several years. This conclusion relies on the valuation of intangible costs which by definition cannot be directly valued. And if the probability of a fire event comparable to Black Saturday proves to be at the low end of the range we have employed, the benefits of the program would not be justified by its costs.”

While climate modelling may indicate that there is still a risk of another event similar in consequence to Black Saturday occurring in the future, what is unclear is how improved fire management practices might mitigate the costs and hence reduce future REFCL benefits. For example, a large part of the benefits of avoiding another Black Saturday are avoiding the deaths that resulted. What impact will change in bushfire management e.g. leave orders and better community preparedness, have on reducing the future benefits of avoidance?

At the time of the Government’s decision to mandate REFCLs there was only limited understanding of the potential negative impacts they would have on network reliability and they were not considered in the 2020 CBA. AusNet Services customers in Euroa and other parts of the network have had recent first-hand experience of the operational impact of REFCLs in reducing their network reliability.

This REFCLs case study had the advantage of being an ex-post review of an investment made a number of years previously. How much harder it will be for networks and the AER to assess whether the proposed ex ante capex is prudent and efficient in the next 5-year regulatory period given the inability to forecast the when and where of extreme weather events and what difference ex ante investment will make. Indeed, how will the AER and consumers paying the bills be able to assess the success of major capex when they look back in say 20 years’ time?

The AER Resilience Guidance Note (p.11) requires the network to demonstrate that there is a causal relationship between the proposed resilience expenditure and the expected increase in the extreme weather events over the next five years. Even if we have a high confidence that a particular event will occur sometime before 2050, how do we decide whether to spend the capex now or in 5,10- or 15-years’ time? How do consumers understand the potential stranded asset risk they are being asked to pay for?

⁹ See p. 25 <https://content.esv.vic.gov.au/sites/default/files/2022-12/REFCL-CBA-Public-Report.pdf>

¹⁰ Op cit p.26

The problem now is that the uncertainty about the AER approach is not helping. The prudent and efficient ‘bar’ seems too high because of the lack of transparency around where it is. We support greater transparency about where the bar is, as long as they does not lead to a material reduction in where the ‘bar’ is.

How to compare the efficiency of ex ante resilience capex vs ex-ante opex?

There are further complications in this assessment. In its 2026-31 Draft Plan¹¹ AusNet Services proposes to spend \$100s millions on resilience capex on areas such as network hardening, but only \$8m on hazard tree reduction. Given the importance of tree damage to the prolonged outages following the 2021 and 2024 storms, it is important that network consumers have a clear understanding of how the economic trade-offs have been made between capex and opex.

The proposed rule change will materially lower the ‘bar’ for AER resilience capex and opex approval

Appendix A of the Consultation paper, a comparison of the existing AER guidance note and the proposed AER guideline, supports this proposition. It shows that the proposed Guideline:

- weakens the current requirement to demonstrate a causal relationship between the proposed resilience expenditure and the expected increase in extreme weather events
- allows networks to include a much broader range of potential benefits in their justification,
- allows networks considerable latitude on how it justifies its proposed expenditure through a more principals based than prescriptive AER guidance note
- is not required to define resilience or provide any distinction between the roles of DNSPs and other organisations that may contribute to community resilience.

There needs to be a clear definition of resilience and the role of the DNSP. DNSP expenditure is paid for by electricity consumers and there are provisions in the rules around what are considered benefits to electricity consumers and paid for as part of the network component of the bill. Any other benefits are considered wider community benefits and should be paid for by the Government. There needs to be clear guidelines on where the networks responsibility ends and where the responsibility of other actors e.g. telecommunications companies, local governments, State and Federal Government disaster relief agencies, begins.

The evidence suggests that consumers highly value the network response after the event

The 2022 network resilience outage review focussed on both network response and resilience investment. Given that focus on network response, the problems AusNet Services experienced in responding to the February 2024 storms meant there was an increased focus on network response in the 2024 Network Outage Review.

The interim report¹² highlighted significant customer feedback the importance of communications during and immediately after the storm event – and how it was not available for AusNet Services customers due to both the lack of internet/mobile coverage but particularly because of the failure of the AusNet Services outage tracker and limitations of its SMS and call centre to handle demand. Those customers were more interested in ex post response than the level of ex ante expenditure. Many recommendations in the final report focussed on improving the post storm operational response e.g. the focus on the planning and preparation for business continuity for the first 72

¹¹ https://hdp-au-prod-app-ausnet-communityhub-files.s3.ap-southeast-2.amazonaws.com/2617/2706/0012/23_Sept_2024_-_FINAL_EDPR_Draft_Proposal_2026-31.pdf

¹² <https://engage.vic.gov.au/network-outage-review>

hours of an event and then performance during those 72 hours and co-ordination of future responses with State emergency management.

The Ausgrid 2024-29 engagement showed strong support for a large ex post expenditure. The three LGAs that were the focus of expenditure in the 2024-29 period had some experiences of long duration outages and had the worst reliability of any location across Ausgrid.

Powercor’ consumer engagement post the 2021 storms showed two contrasting views¹³. For those in communities that had experienced a major outage, extreme weather events were ‘by nature unpredictable’ and their resilience goals ‘tended to be strongly tactical and based on survival until service can be re-established’ i.e. a quick network response to bring fast restoration. For those communities that had not experienced a major outage, residents supported more longer-term ‘strategic’ resilience goals to ‘ensure a future where reliance on energy was likely to be greater. They were ‘more focussed on avoiding set-back, rather than responding to set-backs...’

The extensive research undertaken by AusNet Services on Quantifying Customer Values (a network specific VCR/VNR measure) as part of its 2026-31 distribution reset, showed a strong support/willingness to pay for investment to reduce the risk of prolonged power outages.

But what about those areas that have regular long duration outages – like Ergon?

How much is this a Victorian issue and how much is it a NEM wide issue?

The severe weather events in Victoria in 2021 and 2024 led to long duration outages that were previously very rare in Victoria. Both outages inquires made similar findings about the lack of preparedness of the Victorian DNSPs to cope with such events. This is perhaps particularly the case with AusNet Services which seemed to fail to learn from its experiences in the 2021 storms in its flawed response to the 2024 storms¹⁴. Still, Victorian networks have had relatively little experience (compared to Queensland) in responding to prolonged network outages. This suggests that they are still trying to find the right balance between ex ante and ex post expenditure for their customers.

Given this, it is understandable that the network outage review made a number of recommendations to improve networks’ responses that would result in increased ex ante expenditure for network hardening. It is understandable that the Victorian Government would proceed with the recommended rule change proposal. Given recent experience with networks having limited success in getting AER approval for ex ante resilience capex, it is understandable that the rule change involves lowering the rules ‘bar’ to enable higher ex ante expenditure without providing convincing evidence that ex ante expenditure will always better meet the Commission’s assessment criteria than ex post cost recovery. However, just because it is understandable to think this way given the lack of experience, does not make it the correct decision, especially given consequences are national.

¹³ https://ehq-production-australia.s3.ap-southeast-2.amazonaws.com/431eac3eb3f60bb7b1123b247cbe54fdc96ac1dc/original/1679371069/3403afdba46a4748bbc5d64aef4c1b00_Community_Roundtables_Report_Oct22.pdf?X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIA4KKNQAKIOR7VAOP4%2F20241105%2Fap-southeast-2%2Fs3%2Faws4_request&X-Amz-Date=20241105T225750Z&X-Amz-Expires=300&X-Amz-SignedHeaders=host&X-Amz-Signature=e336c1d52a0bae1a1b2a2ec6ccae289288a8755d0911ff6b7aa16e4083e54ba3

¹⁴ See the numerous AusNet Services specific recommendations in the Network Outage Review Panel’s Final Report in September 2024 https://www.energy.vic.gov.au/data/assets/pdf_file/0035/717749/network-outage-review-report.pdf

It is useful to look at how Queensland consumers, who are used to extreme weather events and long network outages, like to see their networks respond to network resilience. It has some similarities to the Powercor response described above.

Ergon consumers don't like outages, but they and Ergon seem much more prepared for them than Victorian networks. Ergon customers consider extreme weather as part of the package of living in the tropics and they love living in the tropics. Apart from expecting extreme weather outages, a key part of these consumers appearing to be more accepting is the long-term approach of Ergon and Energex to restoration. There is a well-known saying inside Ergon that goes something like:

“Half a year a construction company, half a year an ambulance business.”

Ergon and Energex have built a high level of trust with their customers that both networks will 'go the extra mile' to restore power as quickly and safely as possible. Key to this response is:

- They have always considered extreme weather events in their planning and asset management, even if it was seen more as 'reliability' than 'resilience' e.g. BAU policies on Bush Fire Risk Management¹⁵ and Natural Hazards Plan¹⁶ (which includes their summer preparedness plans) which are regularly updated, and which now seek to explicitly take account of the increased climate risks
- Extensive advertising in various media alerting customers to coming summer storm risk and providing advice on how they can get their homes and businesses ready to increase their resilience¹⁷
- Comprehensive 'on the ground' response in an emergency event; this is a combination of rapid deployment of restoration resources (which have generally been placed so as to be easily accessible once the cyclone/storm has passed) and support for the impacted community through the Community Outreach Major Event Team (COMET); this team played a major role in community recovery from the Christmas 2023 storms in SE Queensland for customers not used to prolonged outages¹⁸.

Neither Energex nor Ergon undertook engagement on resilience expenditure as part of its 2025-30 reset proposal – although they did propose a relatively small resilience capex expenditures that were substantially cut back in the Draft Decision because the proposals did not meet the Guidance Note requirements¹⁹.

We observe that Queensland has a focus on its network and customers being prepared for an interruption and then the timely and safe restoration of power to support network and customer resilience. Victorian DNSPs have a below par record of customer communication and restoration after a storm, perhaps because they are not as experienced in it as Energy Queensland.

¹⁵ https://www.energex.com.au/_data/assets/pdf_file/0007/1013686/Bushfire-Risk-Management-Plan-2022-24.pdf

¹⁶ <https://www.energex.com.au/outages/storms-and-disasters/how-we-prepare-of-severe-weather-season>

¹⁷ For some recent examples leading up to the 2024/25 storm season see <https://www.ergon.com.au/network/news>

¹⁸ <https://www.dropbox.com/scl/fi/3c76dhfbz11dbnxq6gts1/ENACustomerEngagementSEQStorms.mp4?rlkey=idlpivt35cnzrz01sxsce5c&e=2&dl=0>

¹⁹ E.g. Ergon proposed \$53.1m reduced to \$26.8m in the Draft Decision; see pp. 79-81

<https://www.aer.gov.au/system/files/2024-09/AER%20-%20Draft%20Decision%20Attachment%205%20-%20Capital%20expenditure%20-%20Ergon%20Energy%20-%202025-30%20Distribution%20revenue%20proposal%20-%20September%202024.pdf>

While all resilience expenditure whether ex ante or ex post is designed to shorten or avoid the period without power, we consider it could be useful to divide this into two categories (noting there will be some overlap):

- that associated with improving the ability to quickly restore the network e.g. more spares or EWPs, and
- that associated with hardening the network e.g. undergrounding, aerial bundled cables, concrete poles

We are concerned that, given the high level of uncertainty around the business case for hardening the network, the rule change will result in too much of the latter and too little of the former.

Our alternative draft rule change would have a binding AER Guideline based on the existing expenditure factors. This would enable much clearer guidance on the role that consumer engagement would play in supporting a network's proposed resilience expenditure. Our concern with the addition of the proposed expenditure factors would make it very difficult for the AER to assess the quality e.g. 'depth and breadth' of the consumer engagement in supporting the expenditure.

How will the AER judge the results of network consumer engagement if consumers are presented with masses of data on the network's business case based on imprecise cost benefit analysis that may lead to a bias for capex rather than opex and with no ability or time to question the results they are presented with? In the absence of prescriptive advice for the AER there is a risk that the AER might conclude the network has presented the information in a way that leads to the result the network is seeking in the willingness to pay discussion.

Consumers may get a false sense of security that the hardening expenditure will have a major impact when it may have little or no impact. There is the risk of disappointment when the future storm hits, and the recovery effort is again prolonged because the network focussed on hardening in the wrong place or focussed too much on hardening and not enough on communications and restoration? We would suggest that the proponent's approach does not meet the Commission's assessment criteria (p.ii):

- "Outcomes for consumers: Would the rule change support outcomes for consumers by improving distribution network resilience to extreme events, at a cost that consumers are willing to pay?"

We might make a further distinction between ex ante resilience expenditure for different extreme weather events – there is an argument for having different guidelines applying to storm/wind damage, floods and bushfires. Grid hardening e.g. perhaps raising transformers, is of limited use when the network is flooded. Expensive undergrounding only increases the delay in restoring following a flood.

In considering the rule change the Commission needs to take account of the variation in resilience responses across the NEM from both Governments and networks. Victorian networks are starting to see the State Government implement the recommendations of the Outage Review e.g. new minimum reliability standards. If the proponent wants to have higher standard in Victoria then they are best achieved through jurisdictional polices, not by imposing higher standards on the whole NEM.

How should cyber security be treated?

The issues networks face in cyber security have some similarities and some differences from extreme weather events. The similarity is that they will occur but with uncertainty around frequency and impact. The difference is that Governments are developing standards that can apply to networks.

Our observation of network engagement on this issue has shown consumers are generally willing to pay for the highest level of cyber security. In recent resets, there has been a debate between the network and the AER on whether there is a regulatory requirement for DNSPs to reach a certain Security Profile under the Australian Energy Sector Cyber Security Framework (AESCSF). The AER ruled that Transgrid did have an obligation to meet the highest Security Profile (SP-3), but Ausgrid did not, although Ausgrid’s proposed cyber capex and opex that would get it to SP-3, were approved as²⁰:

“...our review of its revised proposal confirmed that its preferred option results in the greatest overall net economic benefit.”

The best way to deal with cyber is for the SP level to be set by the Australian Government as a regulatory requirement and the AER assesses the prudence and efficiency of that investment to reach and maintain (given the same level gets more complex/demanding over time) the mandated level. This takes away the uncertainty from being part of the resilience framework.

RESPONSES TO CONSULTATION PAPER QUESTIONS

Question 1: Does the current framework for distribution network resilience create regulatory uncertainty for DNSPs and the AER around efficient expenditure for long duration outages? Should the framework be amended to provide clarity?

Answer: Yes, it does. While the AER Resilience Guidance Note was welcome, networks have faced uncertainties in how the AER is seen to implement it.

Question 2: How material is the lack of clarity in the rules around network resilience?

(a) Do you consider the issue with the NER raised by the proponent to be a substantive problem? If so, why?

(b) Are there any other programs or energy sector reforms that may partially or fully address the problem raised by the proponent?

Answer: Yes, it is a substantive problem because of the difficulty DNSPs have in seeking to follow the existing Guidance Note. This is not only in building the business cases but also in the level and sophistication of the consumer engagement the AER expects.

The Better Resets Handbook sets out the AER’s expectations on networks’ consumer engagement. The EUAA was directly involved in observing Ausgrid’s extensive engagement on its 2024-29 resilience expenditure and consider it best practice in the way it explained the capex and opex expenditure options and then presented bill impacts of different options. Consumers involved from the three LGAs and the wider Ausgrid community could not understand why the AER

²⁰ See the discussion at pp 12-17 https://www.aer.gov.au/system/files/2024-04/AER%20-%20Final%20Decision%20Attachment%205%20-%20Capital%20expenditure%20-%20Ausgrid%20-%202024%E2%80%9329%20Distribution%20revenue%20proposal%20-%20April%202024_0.pdf

rejected much of the proposed expenditure on the options they preferred and were all prepared to pay for.

It is important for networks and their consumers' confidence in the regulatory framework to have a very clear understanding how consumers can influence resilience expenditure proposals.

Question 3: Do you agree with the proposed solution to include resilience expenditure factors in the NER?

(a) Is including resilience as expenditure factors in the NER an appropriate solution? Is there a more preferable way to incorporate distribution network resilience into the NER?

(b) Do you have any comments on the proposed drafting of the resilience expenditure factors? Should they be drafted in the same way for capital and operating expenditure?

(c) Should the resilience expenditure factors cover severe weather events and other catastrophic events that may result in long-duration outages?

Answer: No, we do not think the proposed rule change is the best approach for consumers. The proposed expenditure factors are too vague and give networks too much leeway on proposing new expenditure that we are not confident meets the Commission's assessment criteria.

Question 4: Do you agree with the proposed solution to require the AER to develop resilience guidelines?

(a) Do you agree that requiring the AER to develop binding resilience guidelines will address the issue?

(b) What level of prescription should the NER include relating to the AER's guidelines? Should the NER include content requirements for the AER guidelines?

(c) Do you agree that both including resilience as capital and operating expenditure factors in the NER and an AER binding guideline are required to address the issue?

Answer: We support an alternative draft rule that would still require the AER to develop a binding resilience guideline based on the existing expenditure factors and developed through a comprehensive engagement process. It would cover both capex and opex and have a high level of prescription on issues such as:

- networks are clear on their role and responsibilities and electricity consumers are clear on what they are paying for (and not paying for)
- how networks are to interpret climate forecasts and whether there should be one source of reference (CSIRO/BoM?)
- what events are covered (not cyber),
- what benefits can be included
- consistency with incentive schemes
- accommodating jurisdictional resilience directions

- sample business case models to allow reasonable network specific adaptation
- reporting requirements on DNSPs

Question 5: What are your views on the costs and benefits of the proposed solution?

- (a) What do you consider will be the benefits and costs of the proposed solution?
 (b) Do you consider the proposal appropriately allocates risk between DNSPs and consumers?
 (c) Is there anything the Commission could do in designing the rule that would help to minimise the costs and maximise the benefits?

Answer: We consider there is a high risk that the net costs of the rule change will be material as a result of the addition of the new expenditure factors and the non-prescriptive nature of how the Guideline would be written. We do not think the proposal meets the assessment criteria 'outcomes for consumers' or 'principles of efficiency'. There is a high risk that adding the new factors will lead to a significant increase in total resilience expenditure across the NEM that cannot be justified on a rigorous cost benefit analysis.

Question 6: What transitional arrangements would be required to implement the proposed rule?

Answer: We support the development of the binding guideline to be complete by the end of 2025, the same time as the revised VNR.

Question 7: Are there any interactions with the VNR that should be taken into account in the NER?

Answer: As the AER noted in its final VNR decision, it took a pragmatic approach to develop the initial VNR within the required timeframe in 2024 and it will work on a longer VNR methodology in 2025. The proposed AER resilience guideline should make explicit how these 2025 VNR values should be used in revenue proposals.

Question 8: Are there alternative solutions to those proposed in the rule change request?

- (a) Do you consider that more preferable solutions exist to address the identified issue?
 (b) Should the rule change clarify the role of DNSPs in relation to providing resilience?
 (c) To what extent would the VNR, alongside the AER's existing guidance note, resolve the issue raised in the rule change request?

Answer: Yes. See response to Question 4.

Question 9: Assessment framework

Do you agree with the proposed assessment criteria? Are there additional criteria that the Commission should consider, or criteria included here that are not relevant?

Answer: Yes



Andrew Richards
Chief Executive Officer