Submission No 40

INQUIRY INTO 2024 ANNUAL REPORT OF THE NET ZERO COMMISSION

Organisation: Ausgrid

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The Hon Jeremy Buckingham MLC
Chair
NSW Joint Standing Committee on Net Zero Future
Cc: netzero@parliament.nsw.gov.au

Dear Mr Buckingham MLC and Committee Members

Ausgrid submission re Inquiry into 2024 Annual Report of the Net Zero Commission

Ausgrid thanks the NSW Joint Standing Committee on Net Zero Future for the opportunity to provide a submission into the Inquiry into the 2024 Annual Report of the Net Zero Commission (the **Inquiry**). Ausgrid operates a shared electricity network that powers the homes and businesses of more than 4 million Australians living and working in an area that covers over 22,000 square kilometres from the Sydney CBD to the Upper Hunter.

The Net Zero Commission (the **Commission**) was established to provide the NSW Government with independent advice on how to progress the State's legislated adaptation objective to make 'NSW more resilient to a changing climate'[1]. The Commission's first Annual Report, released in November 2024, reflects how ambitious and broad the task ahead of them is. We applaud the Joint Standing Committee for establishing this Inquiry to provide the Commission with further direction on how to best support this adaptation objective.

To this end, Ausgrid's submission provides two recommendations, for the Committee's consideration, regarding the direction and focus of the Net Zero Commission's upcoming four-year work plan.

Recommendation One: The Inquiry should recommend that the Net Zero Commission investigate and advise on the roles and responsibilities of the NSW Government and electricity network service providers in making NSW communities more resilient to withstand and recover from climate-induced electricity outages. The Commission's advice should include opportunities for further funding support.

The increase in frequency and severity of climate related events is impacting the resilience of the NSW electricity network. Over the 15-year period to FY2023, only 12 percent of outages across Ausgrid's overhead network were caused by climate events but were responsible for 62 per cent of customer downtime. And, as other critical sectors such as transport, telecommunications, water and heating electrify,

[1] S10(1) *Climate Change (Net Zero Future) Act 2023* (NSW)

the broader customer impacts of electricity outages, and consumer expectations for how networks manage their resilience is changing and growing.

For example, the January 2025 east coast storms were among the most destructive weather events to hit Ausgrid's network in the past 20 years, causing over 5,400 hazards including fallen powerlines, snapped poles and flood damage. While Ausgrid's field crews worked around the clock to restore power as quickly as possible, these back-to-back storms on Wednesday 15 January and Friday 17 January 2025 left more than 210,000 Ausgrid customers (over half a million NSW residents) without power for up to 7 days, during which time, many tens of thousands were without internet or phone signal, and some without water supply.

Despite this, networks face uncertainty over their resilience expenditure. Every five years, distribution network service providers (**DNSPs**) must submit a plan to the Australian Energy Regulator (**AER**) detailing their proposed service delivery, costs, and prices. The AER is required under the National Electricity Rules **(NER)** to make determinations that deliver efficient outcomes for the benefit of electricity consumers in the long term. The NER do not provide any formal guidance on how to interpret these Rules in relation to resilience expenditure, making it difficult for DNSPs to know which expenditure proposals are appropriate to submit to the AER versus which may be more appropriate to be funded directly through Government.

The lack of clarity is having a direct impact on NSW electricity consumers:

1. **It is preventing Ausgrid from taking long-term action on climate resilience:** In our 2024-29 regulatory proposal, Ausgrid sought $120 million for the first five years of a 25-year resilience work plan. Development of this proposal was a major undertaking for our business, relying on deliberative forums with more than 100 customers, expert advice from climate scientists, and modelling and investment analysis that showed clear customer benefits. Despite this, the AER's final determination approved just one third ($41 million) of our proposed program. As a result, Ausgrid has reduced the scope of its climate resilience work program. This has included reducing the scale of certain capital investments such as the installation of 'automatic fault restoration systems" on critical lines, which reduce the response time for temporary system faults. In coming to this finding, the AER acknowledged "Ausgrid's efforts to adhere to our network resilience guidance note [and] appreciate that Ausgrid has undertaken an extensive and ambitious customer engagement process'.[2] This highlights the difficulty DNSPs like Ausgrid face in securing funding to improve the resilience of electricity networks for consumers under the existing regulatory framework.

2. **It is preventing Ausgrid from addressing climate exacerbated inequality:** In our 2024-29 regulatory proposal, Ausgrid proposed to allocate its resilience investment to those in our network who value it most; Lake Macquarie, Central Coast and Port Stephens. These areas are disproportionately impacted by climate events as shown by the fact that these were three of the regions most severely impacted by the January 2025 storms. They also negatively over-index on measures of socio-economic disadvantage and advantage, compounding the impact of prolonged outages and customers' capacity to withstand and recover from extreme events. Based on the AER's determination, Ausgrid had to scale these programs back.

3. **It is hindering NSW Government targets:** The NSW Government's target for 40% urban canopy coverage by 2036 currently conflicts with Ausgrid's vegetation management protocols for street level assets, which requires trees to be trimmed clear of Ausgrid's powerlines. Resolving this conflict would require upgrading Ausgrid assets with technologies that could are compatible with

[2] AER, Final decision: Ausgrid 2024-29 determination, April 2024, p. 7

denser canopies (i.e. aerial bundled cable). However, we have not been able to fund these activities through the AER's five-yearly revenue determination process because the economic and community benefits, such as avoided health costs, do not clearly fall within what can be assessed under the NER. Meanwhile, there is no clear funding pathway for Governments to fill this gap. Local councils have limited resources, while government grants, such as the Federal Government's Disaster Risk Reduction Fund, currently exclude privately owned businesses so cannot be accessed by many DNSPs, including Ausgrid, for these programs.

DNSPs are engaging with the Australian Energy Market Commission (**AEMC**) to build a clearer framework around network resilience expenditure in the NER as part of a rule change proposal submitted by the Victorian Minister for Energy.[3] We welcome the AEMC's more preferable draft rule[4], published on 13 February 2025, which acknowledges the need for, and seeks to provide, further certainty for DNSPs, the AER, and electricity consumers around the climate resilience activities which can be funded under the NER. The AEMC's draft determination reinforces the need for a detailed investigation by the Commission to clarify how the NSW Government can best complement this new framework, and play a role in supporting DNSPs to deliver network and community resilience work programs.

More broadly, we also note that growing climate risk and the rapidly changing nature of the energy sector is creating greater uncertainty in how electricity networks are planned and operated. These uncertainties require a different approach to how electricity networks are regulated, as five-year network determinations are unable to respond to rapid changes in the sector and environment. New approaches to network regulation, such as the ability to more easily and dynamically make adjustments to five-year network determinations when circumstances change, would provide greater flexibility for networks to meet customer needs.

Recommendation Two: The Inquiry should recommend the Net Zero Commission explore opportunities and advise on ways the NSW Government can further support distribution networks to:

A. Progress alternative network projects that support the connection of new renewable generation and storage while taking pressure off delayed and over budget transmission projects, and

B. Continue to empower consumers to take up consumer energy resources in an optimised way that brings benefit to the network and consumers more broadly.

To accelerate the decarbonisation of the electricity sector, the Commission, in its Annual Report, notes:

"NSW needs to make greater use of existing transmission and distribution networks to connect new renewable generation. Continued expansion of consumer energy resources also needs to be a priority."

DNSPs are uniquely placed to deliver both these priorities and can do a lot more than what we are currently being called upon to contribute. We encourage the Inquiry to recognise the opportunities available within the

[3] AEMC Rule Change: Including Distribution Network Resilience in the NER

[4] AEMC Draft Determination Including Distribution Network Resilience in the NER

distribution network to connect new renewable generation and storage and to make recommendations for the Commission to explore these further.

For example, on 18 December 2024 Ausgrid was formally established as the preferred Network Operator for the Hunter Central Coast Renewable Energy Zone. In this role, we will deliver the backbone infrastructure needed to connect at least 1 GW of new renewable energy by 2028, powering around one million homes and setting up these regions to take advantage of the energy transition through increased economic and employment opportunities. Ausgrid will deliver this project through the upgrading of approximately 85km (representing 98 per cent of the project) of our existing sub-transmission network.

We are also working with NSW Government to explore further opportunities to leverage existing easements and network infrastructure to connect more renewables and storage in the area. Our initial analysis suggests existing network upgrades could unlock a further 5.3 GW of capacity with considerably less impact on the local communities than new network infrastructure projects in other areas of NSW.

At the lower voltage levels, Ausgrid's network area includes 25 million square metres of rooftop area on commercial and industrial buildings that could unlock significant new solar generation with minimal grid investment. We are also advancing our thinking around future models and are developing a 'Distributed Energy Zone' concept for consideration by the AER for a sandbox trial. The Distributed Energy Zone (**DEZ**) would see an accelerated deployment of both supply and demand Distributed/Consumer Energy Resources (**DER/CER**) in a local network area, planned and funded by Ausgrid. The DEZ would pool surplus solar generated on available rooftops in the zone to redistribute during the evening peak as a cheap source of power; the storage used to do this would be strategically placed across the network.

Our hypothesis is that this DNSP-coordinated approach would be able to extract more value from assets employed, lowering unit rate energy costs for all customers in the zone, not just those with CER, decoupling the need to personally own DER to share in its benefits and support a faster realisation of national decarbonisation targets

With regard to the broader expansion of consumer and distributed energy resources, we agree with the Commission's Annual Report that the NSW Government plays an important role "developing and progressing initiatives to make greater use of consumer energy resources".[5] Ausgrid is already working closely with the NSW Department of Climate Change, Energy, the Environment and Water to support on the delivery of its Consumer Energy Strategy but barriers remain that would benefit from the Commission's review and advice. For example:

- A lack of **electric vehicle charging infrastructure** is a major factor cited for people being reluctant to purchase EVs. Distribution businesses, like Ausgrid, are uniquely placed to roll out kerbside electric vehicle charging infrastructure at scale, faster and at lower cost. To deliver these benefits, regulatory changes are needed to enable DNSPs to install, own and maintain these assets as a regulated network service. NSW Government funding, through the NSW Government's Electric Vehicle Strategy, would also support an expedited roll-out.
- Ausgrid has just launched its sixth **community battery** under the Federal Government's Community Batteries for Household Solar Program. However, DNSPs are currently prevented from scaling up these battery deployments as a regulatory waiver from the AER is required for DNSPs to build community batteries. These barriers could be alleviated through reforms by the AER and/or a rule

[5] Net Zero Commission, 2024 Annual Report Page 11

change to the Australian Energy Market Commission, or regulations made under section 192A of the *Electricity Supply Act 1995* (NSW), led by the NSW Government. This would enable more consumers to benefit from cheap solar electricity beyond those who have the means and roof space to afford solar themselves.

We welcome the opportunity to further discuss our submission with the Inquiry. Please contact Emma Vlatko, Senior Policy Advisor at for further information.

Regards,

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