

Resilient Sydney

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Our Ref: 2023/694559

Arek Gulbenkogu
General Manager
Australian Energy Regulator
GPO Box 1313
Canberra ACT 2601

Dear Arek

As Chief Resilience Officer of the Resilient Sydney Program in collaboration with the 33 Councils of Greater Sydney, I urge AER to support the Extreme Heat Resilience Project bid in Ausgrid's revised proposal to coinvest with councils in ABC cables for urban cooling priority precincts up to \$6M (Ausgrid 2024-2029 Revised Proposal Attachment 5.5 p19 project C3).

Resilient Sydney urges the regulator to consider its responsibilities across network resilience, climate risk, and community safety in its consideration of Ausgrid's proposal.

Network resilience

Ausgrid has already confirmed to AER in its original regulatory proposal that alternative technology including Low Voltage (LV) **Aerial Bundled Cables (ABC) typically have lower fault rates than bare overhead mains** as they have less exposed parts and are therefore less sensitive to wind, vegetation and animal induced interruptionsⁱ. Heat is a significant contributor to network outages, with Ausgrid reporting **double the number of outages on heatwave days compared to non-heatwave days**. Converting cabling to ABC also supports network resilience outcomes by enabling heat mitigation efforts such as tree planting that State government has identified as a pivotal mitigation intervention, with vegetation cover reducing local land surface temperatures by up to 5-6 degrees as well as reducing energy billsⁱⁱ.

Climate resilience

AER Strategic Plan 2020 – 2025¹ notes that 'The Australian Energy Regulator (AER) exists so that energy consumers are better off, now and in the future'ⁱⁱⁱ. The AER plays an important role in regulating energy network infrastructure and protecting consumers against rising costs.

However, there is an urgent need for the AER to recognise its role in protecting consumers from the risks posed by electricity infrastructure in local streets. While the AER considers

RESILIENT SYDNEY

A program for metropolitan Sydney to survive, adapt and thrive in the face of chronic stresses and acute shocks. The Resilient Sydney Office is funded by local government and hosted by the City of Sydney.

www.resilientsydney.com.au

RESILIENT CITIES NETWORK

Resilient Cities Network is a urban resilience network to build safe and equitable cities for all.

www.resilientcitiesnetwork.org

climate change risks in terms of the ‘impact on electricity networks among the community’, it is yet to recognise the risk that the network poses to the resilience of the community. The AER has a responsibility to ensure that the needs of the electricity network do not undermine the needs of the community in terms of resilience to urban heat.

While DNSPs are allowed to consider the risks of climate change on their infrastructure, and can submit funding proposals to this effect, the AER has yet to recognise the risk that the network poses to community resilience and this impact is excluded from cost-benefit analyses of DNSP climate resilience projects.

The AER Note on Network Resilience^{iv} references a **shared responsibility for community resilience and the need for a collaborative approach** with other entities. In this spirit of collaboration, the AER needs to recognise its role in regulating DNSPs and address the difficulty of sharing the risks and costs of climate change between service providers, government and the broader community.

Greater Sydney and community heat risk

Worsening heat impacts in our region directly correlates to spikes in energy demand and is increasing energy bills for local communities. This project will improve network resilience, reduce heat induced outages, and leverage significant investment by government to increase urban tree canopy that mitigates urban heat (and therefore energy bill impacts) for our region’s communities.

Ausgrid’s investment would accelerate conversion of legacy wiring in a co-funded program where local councils would work with the utility to identify and fund upgrades to priority spans. One criteria will be linked to Urban Forest and greening imperatives for areas most vulnerable to heat. By aligning with heat mitigation efforts (and by implication energy demand mitigation), this project supports AER’s imperative **to ensure energy consumers have access to a reliable and secure market and that they pay no more than necessary for energy for their homes and businesses**.

The Resilient Sydney Strategy 2018, endorsed by all 33 General Managers of Greater Sydney, identified extreme heat as **Greater Sydney’s greatest risk**. Heat waves kill more Australians than bushfires, cyclones, earthquakes, floods and severe storms combined. Greater Cities Commission^[1] confirms heat risk is worsening. In 2019–20 hot days (at or above 35 degrees) was above long-term average across all districts including Parramatta (in Central City District) nine hot days were recorded and at Observatory Hill (3.2 average).

All Greater Sydney’s districts other than North District have **lower than benchmark tree canopy cover**, exacerbating urban heat. Since 2019, NSW Government and Sydney’s councils have invested over \$36.5M in urban greening, and the State intends to plant an additional 4 million trees across the region by 2036. Legacy electricity cabling is severely curtailing these efforts to increase the size and number of trees to reduce heat impacts. Tree trimming is no longer just an amenity issue, it is directly affecting our ability to meet our canopy targets to cool the city.

Heatwave conditions are directly responsible for spikes in energy demand, placing additional strain on the network, increasing consumer costs. By increasing energy demand for cooling, heatwaves are also implicated in emissions increases. Since September 2023, the emissions reduction objective added to the National Electricity Objective, National Gas Objective and National Electricity Retail Objective^v prompts the regulator to have regard to emissions implications of its decisions, with AER guidance noting that *“emissions reduction will no longer be part of the external context for our decision making, but **one of the central considerations in determining if our decisions are in the long-term interest of consumers**”*.

We urge you to support Ausgrid’s proposal to accelerate Aerial Bundled Cabling in collaboration with local councils for the network resilience, heat mitigation and community risk reduction reasons cited above. If you have any questions about this submission, please do not hesitate to contact me at [REDACTED] or on [REDACTED].

Yours sincerely

[REDACTED]

Beck Dawson
Chief Resilience Officer - Sydney

ⁱ Ausgrid Attachment 5.6e Reliability program 31 Jan 23

ⁱⁱ NSW Government's Greener Neighbourhoods Guide

ⁱⁱⁱ Australian Energy Regulator (2020) Strategic Plan 2020 – 2025: Our commitment to make energy consumers better off, now and in future. https://www.aer.gov.au/system/files/AER-Strategic-Plan_2020-2025.pdf

^{iv} Australian Energy Regulator (2022) Network resilience – a note on key issues. Commonwealth of Australia. <https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/aer-note-on-network-resilience>

^v Statutes Amendment (National Energy Laws) (Emissions Reduction Objectives) Act 2023 (the Act)