Submission No 35

THE ELECTRICITY OUTAGES AFFECTING FAR WEST NSW IN OCTOBER 2024

Organisation: NSW Government

Date Received: 10 February 2025

The Hon Penny Sharpe MLC

Minister for Climate Change, Minister for Energy, Minister for the Environment, Minister for Heritage, Leader of the Government in the Legislative Council



Mr Clayton Barr MP
Chair
Committee on Environment and Planning
Member for Cessnock
By email: environmentplanning@parliament.nsw.gov.au

DOC25/52370

Dear Chair Clayson,

Thank you for inquiring into the electricity outages affecting the Far West region of NSW in October 2024. Please find enclosed a submission on behalf of the NSW Government.

The electricity outages had significant impacts on the communities of the Far West. There should never be a circumstance like this where a large population is left without adequate back-up power supply.

Spending time in the Far West during the outages, it was clear to me how the provision of clear information was essential for the community to plan their daily lives and rebuild confidence. Even in our largely privatised electricity market, Government has a clear role to play in ensuring communities have timely access to information they can trust.

I want to thank NSW Police Superintendent David Cooper and his team for hosting me and staff from my office and Department during our time in Broken Hill. I also want to acknowledge the efforts of the local member, Roy Butler MP and his electorate staff, whose strong community links proved essential in streamlining the Government's response to the emergency.

The Government response to the electricity outages included coordinating with energy companies and the local mines, delivering generators and food hampers, establishing new systems to provide emergency payments, and community check-ins. Government agencies learned from this experience. We are already talking about how to improve responses to future emergencies.

Although the damaged transmission line was repaired ahead of schedule, I acknowledge this emergency had a deep impact on Broken Hill, Milparinka, Menindee, Packsaddle, Silverton, Tibooburra, White Cliffs, Wilcannia and surrounds. This inquiry is an important opportunity for those affected by this emergency to tell these stories.

While it should never have happened, this incident demonstrated the profound resilience of the communities of the Far West. I am grateful to the many community members who stepped up to help, as well as the electricity crews and public servants who worked around the clock to restore power and provide support.

I appreciate your consideration of the Government's submission and look forward to the recommendations.

Sincerely

Penny Sharpe MLC

Minister for Climate Change, Minister for Energy, Minister for the Environment, Minister for Heritage

10/2/25

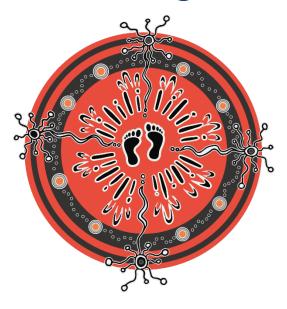
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NSW Government submission

February 2025



Acknowledgement of Country



Department of Climate Change, Energy, the Environment and Water acknowledges the traditional custodians of the land and pays respect to Elders past, present and future.

We recognise Australian Aboriginal and Torres Strait Islander peoples' unique cultural and spiritual relationships to place and their rich contribution to society.

Artist and designer Nikita Ridgeway from Aboriginal design agency – Boss Lady Creative Designs, created the People and Community symbol.

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Executive summary

This is a NSW Government submission to the Legislative Assembly Committee on Environment and Planning for the inquiry into electricity outages affecting far west NSW in October 2024. The submission aims to provide the Committee with factual information on matters addressed in the inquiry terms of reference. The NSW Government welcomes the inquiry and the opportunity to provide this submission.

On 17 October 2024, a storm destroyed seven towers on the transmission line between Buronga and Broken Hill. Communities in the region were supplied with generator power until power supply was restored on 31 October 2024. As outlined in this submission, communities faced a number of planned and unplanned outages during this time.

The NSW Government's role and response to the emergency spanned across numerous agencies and a number of key actions are outlined in this submission. Some of these actions are underway and agencies are still providing support to Far West communities at the time of this submission.

This submission also outlines actions by energy companies to restore power to the region between 17 and 31 October 2024 and work currently underway to improve the resilience and redundancy of this power system.

There are currently three inquiries related to the outages, which will provide key insights for the NSW Government.

Responsibilities of electricity companies

Network reliability

The National Electricity Rules govern the operation of the national electricity market. Under clause 5.2A.5 of the National Electricity Rules, Transgrid must provide the design standards specific to its network that ensure it remains safe and reliable.

The *Electricity Supply Act 1995* defines the powers and responsibilities of electricity network operators in NSW. It requires Transgrid, as a transacted transmission operator, to hold and maintain a licence, and Essential Energy to hold a distributor's licence. These licences are issued by the Minister for Energy and Minister for Climate Change.

A licence allows a Minister to impose specified performance standards for the reliability of operation of a distribution or transmission system and provide for reliable performance monitoring and reporting. A licence also ensures that a network operator has arrangements in place to identify, assess and manage business continuity risks and disruptions.

Condition 3 of Transgrid's current licence requires it to comply with the reliability and performance standards set out in Appendix 2 of the licence.

The NSW Reliability and Performance Standards identify a level of redundancy and an allowance for minutes of annual unserved energy that Transgrid is required to meet for Broken Hill. Broken Hill is categorised with one level of redundancy and an unserved energy allowable maximum of 10 minutes per year at average demand.

Transgrid publishes an annual report on its Electricity Network Safety Management System in accordance with:

- the Electricity Supply (Safety and Network Management) Regulation 2014
- Australian Standard AS 5577
- The Independent Pricing and Regulatory Tribunal's (IPART) Electricity Networks Reporting Manual (Safety management systems performance measurement) September 2022.

Condition 5 of Essential Energy's current licence, which was issued September 2023, requires Essential Energy to comply with reliability and performance standards which are set out in Appendix 1 of the licence. It sets out performance, investigation and rectification requirements that a licence holder must undertake when these performance standards are exceeded.

As the Far West NSW electricity outages were an interruption caused by a failure of transmission connection assets, Essential Energy was not required to report the outage to IPART under Appendix 1 (7)(b)(iii) of the licence. However, Essential Energy chose to do this.

Life Support Customers

The National Energy Customer Framework was implemented in the NSW market from 1 July 2013 to support Life Support Customers. The framework is regulated through the National Energy Retail Law, National Energy Retail Rules and the National Energy Retail Regulations.

Part 7 of the National Energy Retail Rules details requirements to register a property with a resident using life support equipment. It also outlines distributor obligations for information and data management and sharing information with customers about planned and unplanned interruptions.

Each distribution network service provider has internal procedures for managing unplanned outages and life support customers.

Impact on the outages on far west communities

Timeline of electricity outages and restoration of power supply

Broken Hill and surrounding communities are supplied by one 220 kilovolt transmission line from Transgrid's Buronga substation. On 17 October 2024, a storm destroyed seven towers on the transmission line between Buronga and Broken Hill, cutting power to 12,700 properties across the Far West region of NSW.

On 17 October 2024, Transgrid started one of its large-scale backup generators in Broken Hill, estimating a 20-day timeline for temporary towers to be installed. Power was restored to Broken Hill progressively throughout the day, but several communities remained without power including Wilcannia, Menindee and White Cliffs. By around 6:30pm on 18 October 2024, power was restored to the remaining communities.

On 18 October 2024, due to insufficient supply to meet customer demand during the evening peak, Essential Energy activated load shedding, cutting power to around 950 customers for one hour and 45 minutes and another 1,300 customers for one hour.

Late in the night of 20 October 2024, there was a planned outage for the Far West Region to enable maintenance on the large-scale backup generator. While it was expected that power would be restored by 5am on 21 October 2024, the planned maintenance took longer than expected and some communities had power restored around 11am that day.

At around 5:30pm of 21 October 2024, the large-scale backup generator unexpectedly tripped, cutting power to all 12,700 properties across the region. Customers had power restored progressively from 2pm on 22 October 2024 until the early morning of 23 October 2024. However, due to load cycling and efforts to maintain stable supply, intermittent power cuts occurred throughout 23 October 2024.

On 24 October 2024, Essential Energy commissioned a set of mobile back-up generators at Pinnacles Place substation to supply around 1,800 customers in the communities outside Broken Hill. Power was briefly interrupted as Essential Energy switched these customers from the gas turbine to the generator bank. In the evening, this generator bank tripped, but power was quickly restored.

In the early morning of 25 October 2025, Transgrid's large-scale backup generator tripped, cutting power to Broken Hill customers. Power was restored to all customers just before midday.

Temporary transmission towers were erected on site from 26 to 28 October 2024.

On 28 and 29 October 2024, islanded communities outside Broken Hill experienced brief outages.

On 31 October, Transgrid re-energised the transmission powerline at 6:08pm. Following a power outage for Perilya mine, the Far West was reconnected to the NSW electricity network at 9:15pm. Essential Energy confirmed it had reconnected the communities surrounding Broken Hill to the main electricity network. Power was briefly interrupted during the reconnection.

Number of impacted customers

All customers in Broken Hill were impacted for a total of 49 hours with some customers being impacted for up to an additional 34 hours. There were four outages due to infrastructure failure and additional four due to rotational load shedding.

All customers in the rural islanded communities which included Kinalung, Menindee, Milparinka, Mount Gipps, Packsaddle, Sunset Strip, Stephens Creek, Tibooburra, White Cliffs, Wilcannia and surrounding areas were impacted for a total of 80 hours, with some additional customers in the region impacted for up to an additional 20 hours. There were six outages due to infrastructure failure and one additional planned outage as part of switching rural communities to dedicated generators at Pinnacles Place.

Government response to the outages

Declarations to facilitate the response

The response to an electricity emergency is set out in the NSW Electricity Supply Emergency Sub Plan. This is a subordinate plan to the NSW State Emergency Management Plan, which outlines how Emergency Services and other government agencies will prepare for, prevent, respond to, and recover from emergencies. Sub plans may be prepared when the management arrangements required to respond to a hazard or event differ from the general coordination arrangements set out in the main or supporting plans for the area.

On 17 October 2024, the NSW Department of Climate Change, Energy, the Environment and Water partially activated the NSW Electricity Supply Emergency Sub Plan and requested the State Emergency Management Committee convene.

A Natural Disaster Declaration was made by the NSW and Australian governments on 20 October 2024.

On 23 October 2024, the Premier declared an Electricity Supply Emergency under the *Electricity Supply Act 1995*. The declaration enables the Minister for Energy to give directions to address the emergency, such as mobilising additional emergency services operations. The emergency declaration by the Premier was effective until 10 November 2024, but was revoked on 4 November following re-energisation of the transmission power lines on Thursday 31 October 2024. The Minister for Energy did not need to issue directions to address the emergency.

A Natural Disaster Declaration was made by the NSW and Australian governments.

Coordinated NSW Government actions

The Department of Climate Change, Energy, the Environment and Water, via the Energy and Utility Services Functional Area, is the combat agency under the NSW Electricity Supply Emergency Sub Plan. This means, the department was identified to take the lead for controlling the response.

As the combat agency, the department managed the response to the outages and coordinated NSW Government agency involvement. This involved a number of agencies.

As part of the response, the NSW Government transported generators, fuel pods, cool rooms, lighting towers, satellite connections, food and other essential amenities to the region.

On 4 November 2024, an exchange of correspondence between the Incident Controller and the State Emergency Recovery Controller enabled the formal transition from response to recovery. The NSW Reconstruction Authority, in collaboration worked with partner non-government organisations and other government agencies, to implement measures to support households, businesses and communities.

Between 29 October to 29 November 2024, the NSW Government established a Recovery Assistance Point to provide residences and businesses with support and resources in Broken Hill, including outreach to Menindee, Tibooburra, White Cliffs and Wilcannia. The NSW Government also conducted mobile outreach in the impacted areas, which continue to assist businesses to apply for financial support and provide ongoing assistance for insurance claims and referrals for mental health support.

A Mobile Service Centre was deployed to assist outlying communities, including Menindee, Tibooburra, Packsaddle, Wilcannia, White Cliffs and Ivanhoe, with support for individuals and businesses also available over the phone. Outreach services were also provided to assist Aboriginal communities through Maari Ma Health Aboriginal Corporation and through the Wilcannia Council Agency.

From 29 October 2024 to 13 December 2024, 5,366 customers (individuals and business owners) were assisted at the Recovery Access Point, 1,703 were assisted at Broken Hill Service Centre and 134 were assisted through the Mobile Service Centre. A total of 9,396 customers were assisted through these and other avenues of assistance that were provided, such as outreach activities and grant information sessions. This includes assistance specific to the electricity outage and general services provided by Service NSW.

There were multiple communications service interruptions across the Far West and Central Darling, which impacted the ability to make Triple Zero calls. The NSW Government worked with telecommunications carriers to ensure that critical telecommunications infrastructure was supported by mains or back-up power generation and to allocate additional resources to minimise impacts to telecommunications services if further gas turbine generator outages occurred.

The power outage coincided with the peak of Higher School Certificate exams and the NSW Government identified that power was interrupted at 13 public schools. To minimise impacts to students, the NSW Government opened up its Broken Hill Education Office. It also sourced generators for schools, and by the end of 23 October 2024, all NSW public schools across the Far West were on generator power. These arrangements remained in place in schools for up to a week following the restoration of transmission lines on 1 November 2024. As a result, there was no direct

disruption to Higher School Certificate exams in the Far West region associated with the power outage.

The NSW Reconstruction Authority has established a Regional Recovery Committee involving relevant councils, government agencies and other stakeholders, which continues to meet.

Communication with impacted communities

As the combat agency, the Department of Climate Change, Energy, the Environment and Water activated the energy emergency communications response as part of the Electricity Supply Emergency Sub Plan.

- Within the first 24 hours, a dedicated emergency webpage was launched which became the primary source of information for Far West communities.
- A fast-tracked, multi-channel advertising campaign was conducted, which included 168 radio spots across the three Far West commercial stations and a full-page press advertisement in the Broken Hill Times.
- A paid and organic social media campaign.
- Extensive media coverage which included daily on-the-ground press conferences in Broken Hill.

The NSW Reconstruction Authority informed households of support available through outreach to outer suburbs in Broken Hill and surrounding communities via social and mainstream media and the distribution of flyers and posters in key locations.

In addition, energy providers maintain outage data on their websites, which is normally accessed by searching for outages for a specific address.

Essential Energy directly contacted life support customers without power and where there were life sustaining energy needs, loaned small generators.

Financial support for households and businesses

The NSW Government is providing financial support to impacted residents and small-to-medium sized businesses. The support package totals \$4 million, including a \$1.5 million contribution by Transgrid. This provides eligible adults with a single, one-off payment of \$200. Business owners can claim a one-off payment of \$400. Applications for grants are available via Service NSW until 31 March 2025.

As of 20 January 2025, Service NSW has paid \$2.06 million to 9,799 eligible applicants (9,290 individual / 509 business).

Between 29 October and 29 November 2024, an estimated 4,935 people received 2,419 grocery vouchers (value of \$251,900) and 1,920 fuel vouchers (value of \$96,000) distributed via the Recovery Outreach Service and a Recovery Assistance Point in Broken Hill.

NSW Reconstruction Authority also collaborated with NSW/ACT Foodbank to provide approximately 2,000 non-perishable food hampers and 5 pallets of water to community members in need, in partnership with non-government organisations, including the Salvation Army, Maari Maa, Mission Australia, and the NSW State Emergency Service.

The Natural Disaster Declaration for the outages enabled disaster assistance through jointly funded Commonwealth-State Disaster Recovery Funding Arrangements to be available in the Broken Hill and Central Darling Shire Local Government Areas.

Improving the resilience of the Far West power system

Both Transgrid and Essential Energy have existing work underway to improve the resilience and redundancy of the power system in the Far West region of NSW.

Hydrostor is developing the Silver City Energy Storage Project in Broken Hill to deliver 200 megawatts of storage capacity with eight hours duration (1600 megawatt hours).

In May 2022, as part of the Regulatory Investment Test for Transmission, Transgrid published its Project Assessment Conclusions Report for maintaining a reliable supply to Broken Hill. Transgrid found the continued operation of the existing diesel-fired turbines as an interim measure, followed by the Silver City Energy Storage Project, to be the best long-term option to provide back-up power supply for Broken Hill.

In December 2023, the project was awarded a Long Duration Storage Long-Term Energy Service Agreement under the NSW Electricity Infrastructure Roadmap. It has also received grant funding under the NSW Emerging Energy Program and from the Australian Renewable Energy Agency.

Essential Energy is also developing a microgrid in Tibooburra and is offering standalone power systems to customers at the end of very long powerlines in remote locations. Essential Energy is investigating the use of these systems in Packsaddle and Milparinka.

Current inquiries

There are two other inquiries into the outages which are currently underway.

IPART is investigating Transgrid's compliance with its regulatory obligations including licence conditions. This includes investigating the transmission towers and back-up generators and whether the current failures of supply at Broken Hill breach the reliability standards included in its licence.

The Australian Energy Regulator is investigating the power system events that affected the transmission infrastructure supplying Broken Hill and surrounding areas.

The NSW Government awaits the outcomes of the current inquiries.