

**Submission
No 20**

THE ELECTRICITY OUTAGES AFFECTING FAR WEST NSW IN OCTOBER 2024

Organisation: Pastoralists Association of West Darling (PAWD)

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PASTORALISTS' ASSOCIATION

OF WEST DARLING est. 1907

The Pastoralists' Association of West Darling (PAWD) represents livestock producers in Far West NSW. Almost all of the Association's membership was impacted by the power outage when the main transmission line from Buronga to Broken Hill was brought down by severe weather on the night of 16th October 2024.

The Pastoralists Association conceived, mapped and managed construction of the electrification scheme that brought grid power to outlying towns and pastoral properties across far west NSW in the early 1990's via ~4000kms of new powerlines. The mapping component of this scheme was twofold, firstly to ensure the transmission lines took the most direct route possible from dwelling to dwelling avoiding overly rough terrain and secondly to also connect (where possible) stock water bores as added connections improved economies of scale. Pastoralists contributed financially to the electrification scheme by paying a minimum connection fee of \$53,000 towards poles, transformers and wires (in 1995 dollars). Grid power connections eliminated the cost and workload associated with maintaining stand-alone power generation and extended the convenience of 24 hour power to residents and businesses across outback NSW. Living and working conditions, employee retention, water reticulation and property values all improved as a direct result of grid connections.

Storm damage to the 220KV transmission line supplying power to Broken Hill and far west NSW on 16/10/24 and subsequent blackouts on account of existing and new problems with the ageing backup power generators, coupled with the inability to use power from the 53MW Broken Hill Solar Plant and 199MW Silverton Wind Farm and initial unavailability of AGL's 50MW Battery Energy Storage System has unequivocally demonstrated that the region's electricity security falls short of community expectations. Furthermore, it is unlikely that AGL's 50MW battery and Hydrostor's proposed 200MW Silver City Energy Storage Centre (with one hour and eight hours reserve respectively if fully charged, as referenced online by RenewEconomy [here](#)) will have the capability to fully power Broken Hill and far west NSW without supply interruptions in the event of extended disconnections from the national electricity grid.

Fortunately, many remote pastoral properties still have backup generators hard wired to the main dwellings as a legacy of the time before mains power was installed, or smaller generators on hand for property maintenance that were utilized to run fridges and freezers during this series of sustained outages which meant there was minimal lose of perishables. There were many other examples of why grid power is now an essential service that we cannot go without.

One very serious consequence of the outage was the majority of telephone communications outside of Broken Hill failed as Telstra phone towers used their backup battery power up and went offline. Some of these towers went offline as soon as two hours after losing power and some stayed offline for more than 24 hours. In some instances generators were installed then retrieved then reinstalled at towers as the gravity of the situation became clearer. The community can be thankful that the severe storm that brought the transmission line down with estimated wind speeds of 200kmh didn't impact any heavily populated areas, as trying to co-ordinate a major rescue and recovery effort without any form of communication would have been challenging.

Another very frustrating aspect of this incident was the lack of communication from Transgrid back to the community. Transgrid's unwillingness to be open and frank with the public added stress to what was already a trying experience. Given that remote area communications had failed and taken internet and mobile coverage with it, the main information feed was via the public broadcaster ABC radio. The evasive and non-committal answers from Transgrid regarding the gravity of the situation and the length of impending outages was disgusting, then to not respond at all for two days is pathetic.

The company spokesperson was using language like "we are investigating the issue" and "we will have supply restored as soon as possible". This is of no help to the public. There were two major impacts on the network - the first was the line coming down and the second was a fire in the only serviceable backup generator. Messaging along the lines of "we have a major fault and will expect the outage to last up to 24 hours" would be much better to allow for planning - for instance, properties that rely on mains power to supply water to livestock can then move to put contingencies in place to ensure water supply continues.

The main delay to getting full supply reinstated to Broken Hill was the time it took to get the required components and equipment to the site and construct seven temporary towers. As a work around for future events, the option of laying heavily insulated cable around and away from any site of damage should be investigated. The cable could be hooked into the existing uncompromised line and full power could be restored much quicker. On completion of suitable repairs the bypass could be recovered and made ready for use at a different site as required. This emergency response appliance could be set up on a semi-trailer/s and located centrally in NSW to be available within a few hours statewide. In the instance in Broken Hill restoration of full power within 48 hours of the initial outage would have saved the community and government millions of dollars and would pay for such an appliance very quickly. Given the forecast for more severe storms more often due to climate change it may well be a prudent investment.

Transgrid has an obligation to deliver reliable power to the region. The company should investigate if it may be better served by investing in a second transmission line to Broken Hill as opposed to persevering with the existing old backup generators once local storage projects are brought online. Additional connection to the national grid would provide the reliability, stability and security of supply across the network that the intermittent nature of renewables and storage cannot.

An appropriate regulatory response arising from the October 2024 blackouts could be a decision to build a second transmission line feeding Broken Hill and far west NSW on a different route to the Buronga – Broken Hill transmission line. The construction of a second transmission line along a new route (by negotiation with pastoralists and utilising existing easements wherever possible) would deliver the following benefits:

- Eliminate total reliance on the ageing 220KV transmission line from Buronga
- Provide grid connection for Broken Hill in the event that one line fails
- Provide growth opportunities for renewable energy generation in the Broken Hill area
- Create local employment and business opportunities during construction and operation

Additional stakeholders who would derive benefit from construction of a second transmission line include but are not limited to Tilt Renewables (owner of the Broken Hill Solar Plant and Silverton Wind Farm) and proponents of planned additional wind farms in the Broken Hill region.

PAWD offers in principle support for the generation of renewable energy in far west NSW. PAWD's support is conditional on agreements between pastoralists and renewable energy project developers being to the satisfaction of burdened pastoralists (including neighboring properties that are negatively affected). Any move or threat to compulsorily acquire Western Lands pastoral leases for renewable energy projects will be viewed as being highly inappropriate and will be strenuously opposed. Confidentiality agreements that prevent pastoralists from speaking out or seeking advice will also be opposed. Renewable energy project agreements should include clauses to make good damage to existing infrastructure and the environment, and require the project proponent to be responsible for the removal of generation and transmission infrastructure that has reached its end-of-life.

If western NSW is to be burdened with the visual impact and inconvenience of renewable energy projects that are also a concern for aircraft flying at low level in support of mustering operations then PAWD has an expectation that such developments deliver cheap and reliable grid power to all residential and commercial users in far west NSW.

PAWD acknowledges and appreciates the efforts of the Essential Energy workforce who promptly repair the power network across far west NSW in the event of storm damage.

Recommendations.

1. An obligation to construct an alternate transmission supply line to Broken Hill is considered as part of, or in lieu of any possible sanctions imposed on Transgrid by authorities.
2. NSW Government investigates the feasibility of a purpose built appliance that can deliver emergency cable connection to quickly reinstate electricity supply from the grid on a temporary basis.
3. Telephone towers in the Unincorporated Area of NSW that are not easily accessible from the sealed road network be fitted with backup generators that have the capacity to maintain tower function for at least 24 hours and are to remain onsite all the time.
4. Communication language from essential service providers must be open and honest to allow for better planning by members of the public and emergency service providers. Failure to disclose known vital information that would assist community planning should be viewed as a serious breach corporate responsibility.

Terry Smith.
President.