



An Australian Government Initiative



RDA FAR WEST

Legislative Assembly
Committee on Environment and Planning

March 2025

Supplementary questions for witnesses appearing at the hearing on 06 March 2025 – Inquiry into the electrical outages affecting Far West NSW in October 2024

Thank you for the opportunity to provide additional information about the power issues in Unincorporated Far West NSW.

Overview of Unincorporated Far West NSW

Unincorporated Far West NSW covers an area of approx. 96,000 km² and consists of the communities of Silverton, Tibooburra, Packsaddle, Milparinka and Little Topar.

The Unincorporated area have no Local Government Authority (LGA) to develop infrastructure on the community's behalf; infrastructure development, liveability and growth are managed by the individual communities. Without an LGA these communities have no means of significant income generation. The communities are driven by volunteer community members through the Silverton Village Committee, Tibooburra Village Committee, Milparinka Heritage and Tourism Association and the Packsaddle Progress Association.

These community groups are run by local volunteers, dedicated to the growth of their community.

Far West NSW attracts significant visitor numbers annually, however the communities of the Unincorporated Area are unable to cater for the needs and expectations of these visitors. The communities of Tibooburra and Silverton in particular, have significant opportunities for growth and investment, however the lack of reliable access to power is a barrier preventing the realisation of any real growth.

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The communities of the Unincorporated Area contribute greatly to the economic output of the Far West region, with a relatively small population the Unincorporated Area recorded a GDP of \$185M (2023), and Data AU predicts an increase of 62% growth in visitor numbers and 60% increase in visitor nights over the coming 12 months.

The communities in Unincorporated Far West NSW are proactive in the development, sustainability and liveability of their communities. For example, Tibooburra remain responsible for the safe and constant operations of their water treatment plant, and many other aspects of life taken for granted by the majority of Australians. These services are self-managed by the communities in Unincorporated Far West NSW, including waste management, strategic planning, infrastructure development promotion and marketing and liveability.

Silverton have developed strategic plans and comprehensive strategies to encourage new business development and recently welcomed a bakery and cafe into the community, however further opportunities must now be held in abeyance until electricity capacity is improved.

Unfortunately, even residential growth is now restricted with the current electricity access.

Umberumberka Reservoir offers significant potential for regional growth, enhanced liveability and growth of the visitor economy, however, to enable this project to progress and create significant regional growth and opportunities the network capacity must be enhanced.

The Mundi Mundi bash attracted approx. 14,000 attendees in 2024 and the potential to retain visitors for longer periods is significant, however the region must meet their expectations and needs to cater for their extended stay and ensure they become ambassadors when they travel on.

Current participants of the "bash" are unable to extend their stay in the Unincorporated Area in comfort and safety as the capacity and reliability of electricity supply impacts their ability to recharge battery systems, operate fridges, heating/cooling, lighting and medical equipment.

Opportunities for employment growth in the region are significant, especially with consideration of planned new mining ventures. Critical to the development of these opportunities is the regions' ability to attract a skilled workforce and significant to that ability is the need for access to basic services to meet the needs and expectations of potential new residents.

Crucial to the ongoing success of the recently established Sturts Steps Project (Corner Country) and realisation of the full value of this investment is the regions' ability to meet basic needs and cater for the increased visitation from the project's delivery.

In your submission, you advised that "access to reliable electricity in Unincorporated Far West NSW has been an ongoing issue for many years and in 2023 RDA Far West developed a submission to enhance electricity access in the Unincorporated Area."

a. What are some of the particular challenges to the Unincorporated Far West NSW relating to electricity reliability?

In early 2023 Regional Development Australia Far West (RDA Far West) developed an Expression of Interest under the NSW Governments Growing Regional Economies Fund to upgrade the electricity supply to Unincorporated Far West NSW.

To understand the needs of these communities, with consideration that RDA Far West, nor any of their personnel are experts in power distribution or generation the guidance and expertise of a local with significant industry experience was obtained.

Tibooburra, Milparinka and Packsaddle have issues with capacity and reliability, all communities record significant issues with current capacity and all communities are impacted by reliability issues with storms and significant weather events regularly impacting the supply of electricity in their communities and regularly suffer outages of 5-6 days, significantly impacting liveability, health and wellbeing, tourism, sustainability and investment.

As I am led to understand, Tibooburra, Milparinka and Packsaddle (Corner Country) suffer from regular power outages. Generally, these outages are associated with power lines and poles down from storm damage. The power lines run North/South and storms generally approach West/East significantly impacting the poles and lines. When established the poles met requirements and needs and provided access to grid power for these communities, however over time it has become obvious that the current situation no longer meets the requirement or needs of these communities.

When the lines and/or poles go down from storms it often takes the provider days to be able to access them and identify the issues due to the nature of the country, the vast distances and the wet ground. Once the issue is identified it can then take time to source the required materials, transport the expertise, and address the issue.

Whilst the grid electricity supply to these areas was provided under the Far West Electrification Scheme within the early 1990's, reliability has been a major concern due to significant weather events impacting on the 300km long supplying 33 kV powerline on a number of occasions.

The issues for Silverton vary from Corner Country.

Silverton access electricity from a 2-wire single phase supply, established in the 1960's significantly impacting availability and restricting new infrastructure, liveability and investment. Recently opened new businesses are impacted by supply and capacity and restricted in the equipment they can purchase and utilise within their business, creating additional expenses and restricting sustainability and efficiencies.

Silverton have opportunity for growth and economic diversity, however without access to three phase power and significantly more power they will never realise the opportunities for growth. Consumption really is at its peak, or beyond peak.

To provide context, the Hotel, Bakery, Penrose Park (and every other business and resident) only have access to single phase power in a limited supply. Most commercial equipment operates on 3 phase power which is significantly more economical in operational costs, reduces capital expenditure

and enhances the range of options available for capital equipment. Three phase power offers far greater consistency in delivery than single phase power.

b. How could access be enhanced to the minimise the impact of possible future outages in that area RDA Far West look forward to a positive outcome for Far West NSW.

Corner Country

Following consultation with Essential Energy, the proposed scope was primarily to enhance the reliability of electricity supply to regional service customers adjacent to the Silver City Highway between Broken Hill and Tibooburra, and within the Tibooburra township. The secondary objective was to increase the supply capacity to the Packsaddle Roadhouse and Milparinka Village, both supplied from constrained Single Wire Earth Return (SWER) single-phase powerlines. This will provide additional capacity immediately for community development, increased accommodation and development at Packsaddle Roadhouse and within Milparinka Village. The current facilities at both of these locations, which service immediate grazing communities as well as increased tourist and commercial travel along the sealed Silver City Highway, are severely constrained by lack of electricity supply capacity.

The information provided in 2023 as part of the EOI included;

Packsaddle Roadhouse

SWER Isolator upgrade to 150KVA
SWER sub install 50KVA
Possible HV extension
Protection Upgrades/alterations.
Network support/BESS for reliability if not individual behind the meter generation
Estimate: (2022)
Sub upgrade/install \$70K
Protection Upgrades \$30K
HV extension \$50K
Hybrid BESS with Genset \$1M
Totalling \$1.15m - \$1.5m

Milparinka Village

SWER Isolator upgrade to 200KVA
SWER sub install 50KVA
Possible HV extension
Protection Upgrades/alterations.
Network support/BESS for reliability if not individual behind the meter generation
Estimate: (2022)
Sub upgrade/install \$70K
Protection Upgrades \$30K

HV extension \$50K
Hybrid BESS with Genset \$1M
Totalling \$1.15m - \$1.5m

Tibooburra

Is already on EE radar 500KVA generator and BESS connected to existing 300KVA TX at existing generator site.

Would require Protection upgrades/alterations for these to occur.

Estimate. (2022)

Protection upgrade \$75K

Hybrid BESS with Genset \$1.7M

Totalling \$2.0m rounded

Silverton

Following consultation with Essential Energy, the proposed scope was to convert the single-phase supply to Silverton and Penrose Park by conversion of the 22 kV 2-wire Overhead High Voltage originating from the BHL82 feeder adjacent to the Barrier Hwy to 3-phase. Convert 22 kV within Silverton Village and across the Umberumberka Creek to Penrose Park to 3-phase allowing connection of larger 3-phase HV/LV transformers.

This will provide additional capacity immediately for community development, increased accommodation and development within Silverton and the adjacent Penrose Park reserve. The current Penrose Park facilities upgrade does not allow for 3-phase low voltage supply for increasing caravan, motorhome, and future electric vehicle charging facilities.

Augmentation of the single-phase supply first connected in the 1960's, to 3-phase supply will allow for increased capacity to be available to Umberumberka Reservoir Reserve.

The proposed works included;

1. Approximately 20km of third conductor on existing 22 kV 2-wire overhead high voltage.
2. Upgrade recloser protection adjacent to Barrier Highway tee-off to 3-phase.
3. Upgrade 22 kV voltage regulator at Silverton to 3-phase.
4. Additional 3-phase high voltage upgrades within Silverton Village.
5. Replace approximately 4 pole substations to 3-phase.
6. Additional 3-phase low voltage upgrades within Silverton Village.
7. Convert overhead high voltage across Umberumberka Creek to Penrose Park to 3-phase.
8. Protection upgrade of high voltage across Umberumberka Creek.
9. Replace existing 67 kVA single-phase substation at Penrose Park to at least 315 kVA 3-phase.
10. Install single-phase high voltage protection past Penrose Park on existing single-phase high voltage to Belmont Station and beyond.
11. Estimate \$1.5m - \$2.0m (2022)

All information and costing in this document were obtained in late 2022 as part of the EOI under the NSW Governments Growing Regional Economies Fund and costings especially could now be outdated.

During the development of this EOI, without an LGA in Unincorporated Far West NSW and with very limited funding RDA Far West were forced to rely on the expertise of a local industry expert volunteering his time, knowledge and significant skills.

RDA Far West remain committed to supporting the growth and development of Unincorporated Far West NSW and supporting the region to realise its potential for sustainable growth.

Yours sincerely



Michael Williams
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Director Regional Development