



Regulatory Consultation Team
Transgrid
180 Thomas Street,
Haymarket NSW 2000

Email: regulatory.consultation@transgrid.com.au

Monday, 24th March 2025

Dear Transgrid Regulatory Consultation Team,

Re: Wagga North Capacity Increase PSCR

Introduction:

Junee Operationsco Pty Ltd (ACN 624 601 967) as trustee for Junee Operations Trust (the “Owner” or the “Applicant”) is the owner and operator of the 30MW solar PV power plant Junee Solar Farm located approximately 29 km Northeast of the township of Junee in the Riverina region in New South Wales.

The summary of Junee Solar Farm is detailed below:


Project Details	
Project Name:	Junee Solar Farm
Owner:	Junee Operationsco Pty Ltd (ACN 624 601 967) as trustee for Junee Operations Trust
Size:	30 MW
Technology:	Solar PV
Operating date:	11/2021
Voltage Level:	66 kV
Location:	

Table 1 - Project Details



Metlen Energy and Metals Group ("Metlen") is a multinational listed company in the Athens Stock Exchange ("ASE") and a leading renewable energy and resources company dedicated to advancing Australia's clean energy transition. As ultimate owners of Junee Solar Farm, a significant renewable generation asset in the Riverina region, Metlen is committed to delivering sustainable energy solutions that reduce emissions and support grid reliability. Our investment in renewable infrastructures aligns with the national decarbonisation goals and contributes positively to the National Electricity Market (NEM) by providing low-cost, reliable power. We are proud to play a key role in shaping a more sustainable and resilient energy future for Australia.

Impact of Grid Congestions on Junee Solar Farm and Metlen's Business Strategy:

Metlen provides long-term equity capital to renewable energy projects in Australia positioning itself as a key player in the Australian renewable energy transition, leveraging financial, operational and strategic advantages to adequately manage, operate and optimise its renewable energy projects within the broader company business strategies.

The ongoing grid congestion issues in the Wagga North area are having a direct and negative impact on Junee Solar Farm and Metlen's broader business strategy. As an active renewable energy generator, Junee Solar Farm is facing increasing curtailment due to the transmission constraints on Lines 9R5 and 9R6. This results in lost generation revenues and reduces the economic viability of our renewable investments and puts Metlen in a difficult position with its financing partners.

Furthermore, these constraints hinder Metlen's ability to maximise its contributions to Australia's clean energy transition. Our business strategy focuses on expanding renewable generation and integrating energy storage solutions to support the National Electricity Market (NEM). However, the limitations of the existing grid infrastructure are heavily restricting our ability to operate efficiently and invest in further capacity expansions.

We note that since operation commencement, Junee has incurred in increasing losses as represented in the following graph:

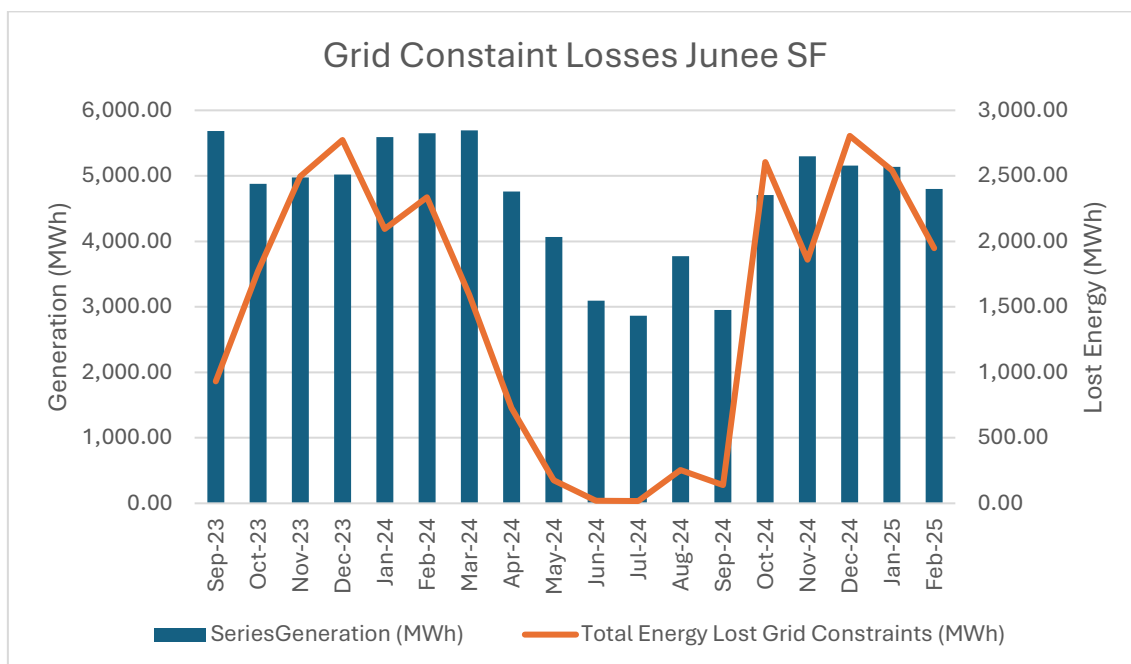


Figure 1 - Grid Constraint Losses

The operational data summary is represented in the following table:

Operational Data:	
September 2023 to August 2024	
Generation:	56,062.69 MWh
Grid Constraint Energy Loss:	15,193.16 MWh
Constraint Percentage:	28%
Revenues not captured:	A\$ 996,213.17
CO ₂ Emissions not avoided	8.00 tCO ₂ e
September 2024 to February 2025	
Generation:	28,056.45 MWh
Grid Constraint Energy Loss:	11,898.17 MWh
Constraint Percentage:	42%
Revenues not captured:	A\$ 1,035,730.00
CO ₂ Emissions not avoided	6.30 tCO ₂ e

Table 2 - Operational Data Representation from September 2023 to February 2025

Further assessing the missed opportunities of revenues not captured due to the network constraints in the region from September 2023 to February 2025 is shown in the chart below:

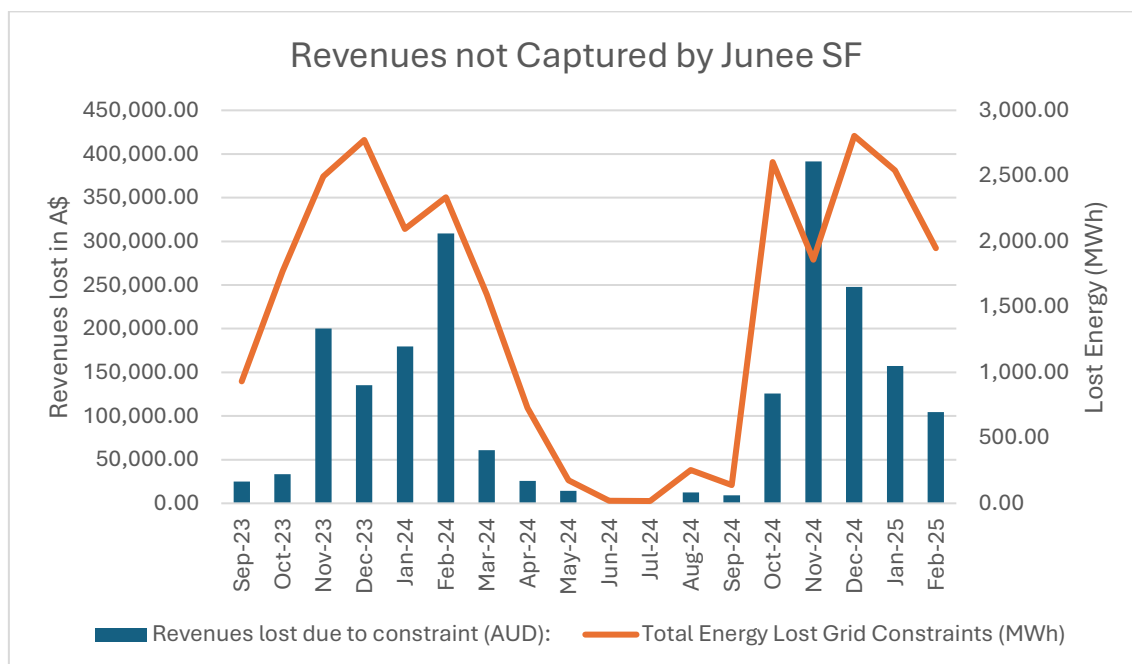


Figure 2 - Revenues not captured due to network constraints over the assessed period.

CO₂ emissions not avoided by the grid constraints applied to Junee Solar Farm over the same assessed period can be represented in the below chart as tons of CO₂ equivalent:

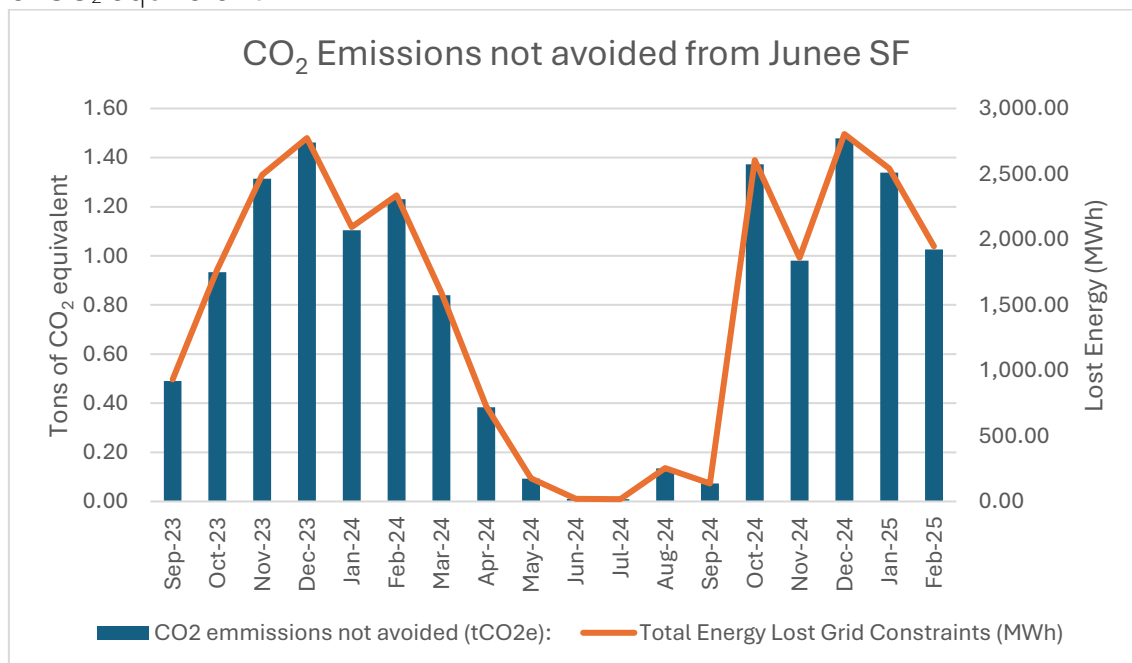


Figure 3 - Carbon dioxide emissions not avoided due to network constraints over the assessed period.



By implementing a cost-effective solution that relieves these constraints, and considering the data provided above, we believe we can unlock the full potential of Junee Solar Farm, improve investment certainty, not only from Metlen but from other international investment companies, and continue supporting Australia's decarbonisation goals.

Support for the Identified Need:

The identified need for this RIT-T, as outlined in the PSCR, is well justified given the increasing penetration of renewable generation in the Wagga North area and the resulting network constraints. The presence of approximately 409MW of in-service renewable generation, along with proposed Battery Energy Storage Systems (BESS) totalling 120MW, underscores the urgency of relieving thermal constraints on Lines 9R5 and 9R6 to maximise market benefits. Addressing these constraints will help:

- Reduce curtailment of renewable generation
- Lower overall fuel costs by increasing renewable dispatch
- Minimise reliance on high-cost fossil fuelled conventional generation
- Support Australia's emission reduction and net zero emission goals

Considerations of Credible Options:

Metlen acknowledges Transgrid's thorough evaluation of four credible network options:

Option Summary			
Option	Description	Estimated capital cost (\$MM 24/24)	Expected delivery time
Option 1	Restrung Lines 9R5 and 9R6 with a "Mango" ACSR/GZ conductor (or equivalent) operating at 85°C.	14.3 (+/- 25%)	2027/2028
Option 2	Restrung Lines 9R5 and 9R6 with a high temperature conductor operating at 180°C.	12.5 (+/- 25%)	2027/2028



Option 3	Construct a new double circuit 132kV transmission line from Wagga 330 kV substation to near Wagga North 132/66 kV substation with Line 991 re-routed	49.9 (+/- 25%)	2030/2031
Option 4	Construct a new double circuit 132 kV transmission line between Wagga North 132/66 kV substation and Wagga 330 kV substation	42.1 (+/- 25%)	2029/30

Table 3 - Transgrid's option summary as per the PSCR published in December 2024

While all options present benefits, Metlen's recommendation is to prioritise solutions that provide a balance of cost-effectiveness and long-term reliability. Given the anticipated demand growth in the Wagga Wagga Special Activation Precinct (SAP), options involving new infrastructure (Options 3 & 4) may provide greater resilience and futureproofing, despite their higher costs.

After careful evaluation, Metlen believes that Option 2 – Restrunging Lines 9R5 and 9R6 with a high-temperature conductor operating at 180°C is the best option for implementation under the RIT-T. This option provides the most effective balance between cost, delivery timeline, and long-term network benefits. Key reasons supporting this choice include:

- **Cost-Effectiveness:** At an estimated cost of \$12.5MM, Option 2 is the most affordable of the proposed network solutions, offering significant congestion relief without the substation investment for new transmission lines as proposed in Option 3 and Option 4.
- **Rapid Implementation:** With an expected commissioning in 2027-2028, this option provides a timely solution to current constraints, enabling increased renewable energy dispatch sooner than Options 3 and 4.
- **Maximising Renewable Output:** by increasing the normal rating of the lines to a minimum of 223 MVA, this solution will significantly reduce curtailment of renewable generation, improving overall market efficiency.
- **Minimal Environmental and Land Impact:** Unlike new transmission infrastructure, this option leverages existing rights-of-way, avoiding disruptions to local communities and minimising the need for extensive environmental approvals.



Given these advantages, we strongly support the implementation of Option 2 under the RIT-T process.

Considerations of Non-Network Solutions:

Metlen also appreciates Transgrid's openness to non-network solutions such as Battery Energy Storage Systems (BESS). While the PSCR notes that a standalone 120MW/600 MWh is not commercially viable, hybrid solutions that combine network and non-network investments could be further explored. Demand-side management and grid forming inverters could complement network investment to optimise economic benefits.

However, Metlen notes that given that all known non-network projects in the region are still in early development, their ability to effectively and reliably address the identified need remains uncertain. The long lead times, regulatory approvals, and technical feasibility challenges make it difficult to consider them as viable standalone solutions at this stage. Therefore, while non-network options could play a supporting role, they should not replace the immediate need for a proven, network-based solution like Option 2.

Community and Stakeholder Engagement:

Effective community engagement is crucial to the success of any major infrastructure project. As our preferred option, Option 2 – Restrunging with a high temperature conduction operating at 180°C provides significant advantages for local communities and stakeholders. Unlike the construction of a new transmission infrastructure, this option minimises land acquisitions, reduces environmental impact, and ensures faster implementation while still delivering critical improvements in grid reliability and renewable energy integration.

Metlen acknowledges the importance of meaningful and continuous engagement with affected communities to ensure their concerns are appropriately addressed. Transmission upgrades have the potential to affect land use, agriculture, and local businesses, making it imperative that impacted stakeholders are consulted early and regularly throughout the process. Ensuring transparency in project scope, construction timelines, and long-term benefits will help build trust and cooperation.

We strongly advocate for an inclusive engagement process that includes:



- Community forums and stakeholder workshops to facilitate open dialogue with landowners, councils and business operators.
- Direct engagement with affected landowners to discuss potential disruptions and mitigations strategies.
- Proactive engagement with the First Nations people to ensure cultural heritage considerations are properly incorporated into the project's planning and execution.
- Ongoing participation throughout the project completion
- Maintaining the relationship even after the immediate project has been completed
- All participants being treated with dignity and respect
- Our methodology is firmly grounded in adherence to regulatory requirements, alignment with globally recognised standards, and the application of industry best practices.

By selecting Option 2, Transgrid has the opportunity to implement a solution that significantly mitigates community impact compared to large-scale infrastructure projects. This approach fosters goodwill and long-term collaboration between Transgrid, renewable energy developers, and local stakeholders while ensuring an efficient and effective resolution of the grid congestion.

Metlen is dedicated to fostering positive impacts within local communities by actively participating in and endorsing various community initiatives, projects, and events. Our goal is to strengthen local communities through lasting impact within the communities we operate in.

Metlen is fully committed to working alongside Transgrid and the local communities to ensure a well-structured, transparent engagement process. We look forward to contributing to a project that balances economic, environmental and social considerations while delivering critical benefits to the region.



Conclusion:

We strongly support Transgrid's efforts to enhance transmission capacity in the Wagga North area. After careful consideration as detailed above, we believe that Option 2 – Restrunging Lines 9R5 and 9R6 with a high-temperature conductor operating at 180°C represents the most efficient cost-effective solution under the RIT-T. This option will provide timely relief to existing congestions issues, minimise renewable curtailment, and allow for the continued growth of renewable generation in the region. It also aligns with Metlen's strategic objectives of maximising the potential of Junee Solar Farm and supporting Australia's energy transition.

Addressing the network constraints in this region will provide significant economic, environmental and reliability benefits. We urge Transgrid to ensure a thorough cost-benefit analysis in the next state (Project Assessment Draft Report) while also considering possible hybrid solutions that integrate non-network solutions as projects stand in their current development stages.

Thank you for the opportunity to provide input on this important initiative. Please do not hesitate to contact us for any clarifications or further discussions.

Yours sincerely,

Signed for and behalf of Junee Operationsco Pty Ltd (ACN 624 601 967) as trustee for Junee Operations Trust.

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Mr. Ian B. Kirkham

Mr. Matthew T. Tilbrook

Company Director

Company Director