6 June 2025

John Diesendorf
Principal Grid Consultant
John Diesendorf Grid Consultant
ABN 27 303 690 794

Dear John Diesendorf,

Thank You for Your Non-Confidential Submission on the Draft Assessment Report – Gladstone Project PTI

Powerlink Queensland thanks you for taking the time to provide your perspectives on our Draft Assessment Report for the Gladstone Project Priority Transmission Investment (PTI).

We appreciate the effort involved in preparing a submission and recognise the value of your contribution to this consultation process.

All submissions have been considered in the development of our Final Assessment Report. A snapshot of Powerlink's written response to the key matters raised is included below. Further information is included within the Final Assessment Report.

Issue	Powerlink response
Gladstone West Substation John Diesendorf endorsed the establishment of the Gladstone West Substation to separate sub-regional flows from supply to Gladstone loads, enabling the lines from Gladstone West to the load centres to not be congested by north-south flows.	• Powerlink notes this endorsement and the associated reasoning.
New line from Calvale to Gladstone West John Diesendorf endorsed the proposed new double circuit 275kV line from Calvale to Gladstone West, noting that TL 871 should not be allowed to constrain flows on the new high capacity line and that it can be split into two radial line sections connecting new renewable generation projects to Calvale and to Gladstone West.	• Powerlink notes this endorsement and highlights the inclusion of the power flow controller on TL 871 within scope to avoid constraining of the new high-capacity lines. TL 871 plays an important role in supplying Wurdong and will be integral during conditions of planned and unplanned outages.
New line between Gladstone West and Calliope River John Diesendorf suggested: • that two new circuits to Gladstone load areas from Gladstone West should be provided; • a superior solution is for one circuit to go to Calliope River on the route proposed and the second circuit from Gladstone West to Wurdong; and	• Powerlink agrees that further reinvestment will be required as assets reach end of technical life on the arc Larcom Creek – Calliope River – Wurdong. Injection into Wurdong will be addressed on a future consultation. Powerlink considers the network augmentation options and their proposed architecture holistically with end of technical life drivers. Sections 6.11.1, 8.2.5 of the 2024 Transmission Annual Planning

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• under a separate project, the arc Larcom Creek – Calliope River – Wurdong should be strengthened on the existing alignments.	Report (TAPR) discusses these longer-term plans further.
New line from Bouldercombe to Gladstone West John Diesendorf supported the new high capacity 275kV line from Bouldercombe to Gladstone West, and suggested: • the TL 812 route has excellent potential to new generation (particularly wind farms); and • the route is not as environmentally sensitive as through Raglan.	• Powerlink notes this endorsement and the associated reasoning.

Kind regards,

Wendy Miller
Customer Strategist
on behalf of the PTI Consultations Team
Powerlink Queensland

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Gladstone Project PTI Draft Assessment Consultation Submission

1. Gladstone West

The establishment of a new grid hub, initially at 275kV is endorsed. The establishment of Gladstone West substantially separates sub–regional flows from supply to Gladstone loads enabling the lines from Gladstone West to the load centres to serve just that purpose and not be congested by north–south main grid flows. Note: It is also considered that the 500kV development should preferentially have its Gladstone Terminal at Gladstone West and that the route should predominantly be kept out of the cyclonic wind zone.

2. New double circuit 275kV line from Calvale to Gladstone West

This is needed and endorsed. See also the next point. The existing low capacity line 871 should not be allowed to constrain flows on the new high capacity line. TL 871 can be split into two radial line sections connecting new renewable energy generation projects to Calvale (some) and to Gladstone West (others) by having a normally open link at one of the generator connections proposing to connect to this line 871.

3. New double circuit 275kV between Gladstone West and Calliope River

Two new circuits to Gladstone load areas from Gladstone West must be provided. This submission contends that a superior solution is for one circuit to go to Calliope River on the route proposed and the second circuit from Gladstone West to Wurdong. Under a separate project the arc Larcom Creek –Calliope River–Wurdong should be strengthened on the existing alignments. (See concise reasons below.)

4. New high capacity 275kV line from Bouldercombe to Gladstone West

This proposal is excellent and preferable on the TL 812 route rather than that of TL 811& 8875 via Raglan, and to continue from Gladstone West to Larcom Creek. TL 812 route has excellent potential to connect new generation, especially wind farms, and its route is not as environmentally sensitive as the route through Raglan. Note that the proposed new circuit between Larcom Creek and Calliope River can be an underground cable.

Concise reasons

- **It is highly desirable to provide direct reinforcement of supply to the Aluminium smelter.**
- **Once Gladstone West to Wurdong is in place other circuits could conveniently be upgraded.**
- **An existing double circuit line in the Wurdong corridor carries only one circuit and could be used subject to structural capability**
- **Calliope River stands on an island and access to construct a new double circuit parallel to TL812 would be extremely challenging. (Powerlink Engineers no doubt can overcome this, but it would involve works with a great deal of environmental impact.)**



John Diesendorf

Principal, John Diesendorf Grid Consultant