

Queensland SuperGrid

Priority Transmission Investment (PTI) Framework and the Gladstone Project PTI

17 July 2024



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Thank you

Powerlink acknowledges the Traditional Owners and their custodianship of the lands and waters of Queensland and in particular the lands on which we operate.

We pay our respect to their Ancestors, Elders and knowledge holders and recognise their deep history and ongoing connection to Country.



Agenda

Investment context

Priority Transmission Investment Framework (PTI)

Assessing the Gladstone Project Candidate PTI

First consultation: Gladstone Project draft submission

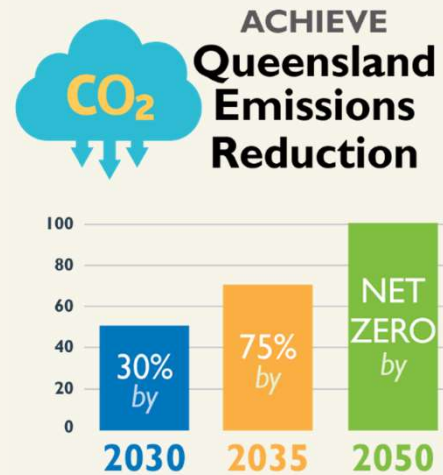
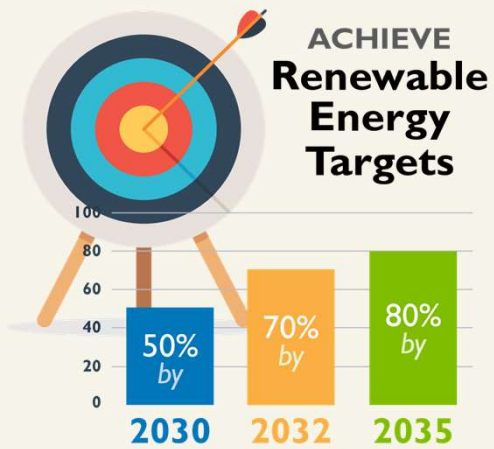
Investment context

- Targets
- Queensland SuperGrid
- Regulation

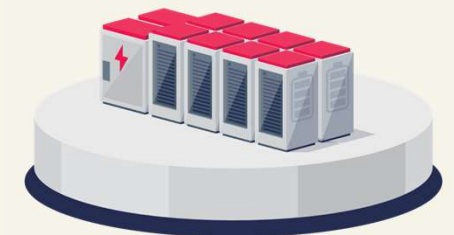
Daniel Andersen, GM Energy Markets



QEJP key targets & objectives



Develop at least **6GW** PUMPED HYDRO



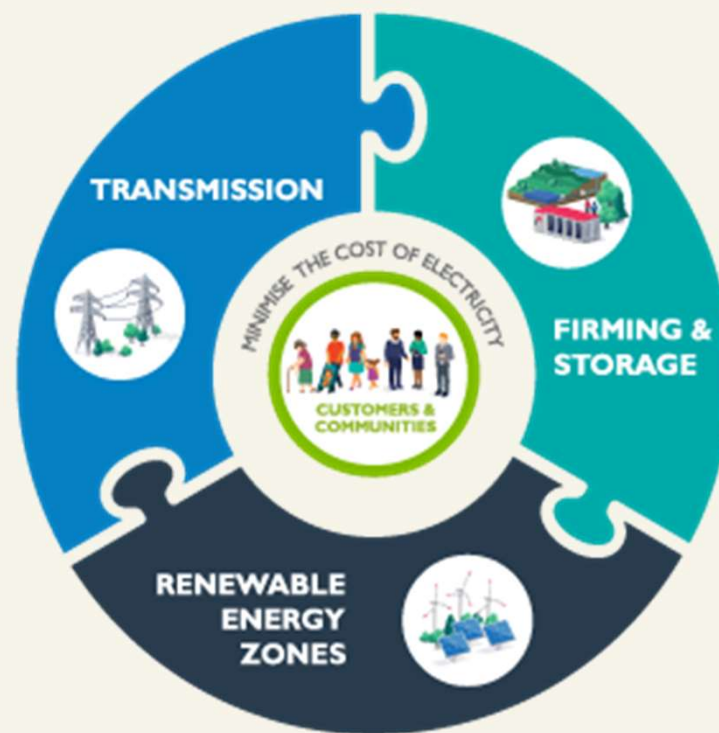
Support growth of utility scale **BATTERY STORAGE**



Queensland SuperGrid

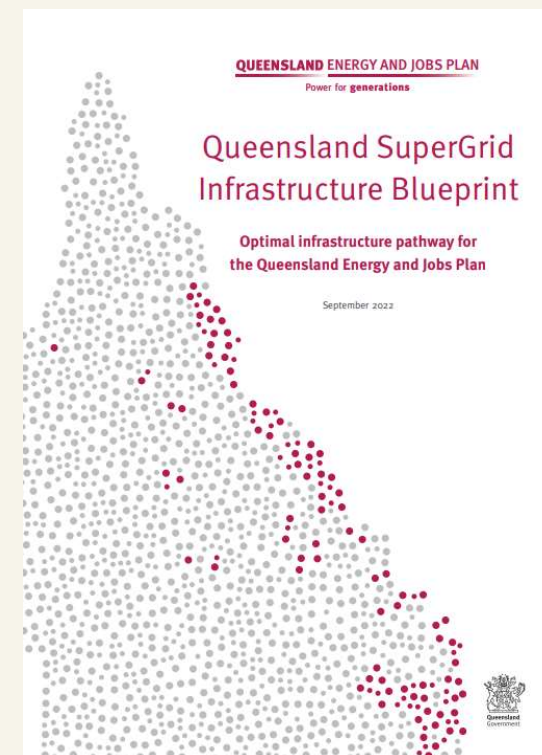
The Queensland SuperGrid is all of the elements in the electricity system, including the towers, poles, wires, solar, wind and storage that provides Queenslanders with clean, reliable and affordable power for generations.

- Together, renewable energy, storage (from pumped hydro and batteries) and the transmission network form the foundations of our future energy system in Queensland.
- Investment in the transmission network is critical to connect new large-scale renewable energy projects.
- The optimal infrastructure development pathway is detailed in Queensland Government documents.
- Non-network solutions are an important part of this future



The PTI: From Blueprint to individual investment

- Queensland Energy and Jobs Plan (QEJP)
- Queensland SuperGrid Infrastructure Blueprint
- Energy (Renewable Transformation and Jobs) Act 2024
- Energy (Renewable Transformation and Jobs) Regulation 2024



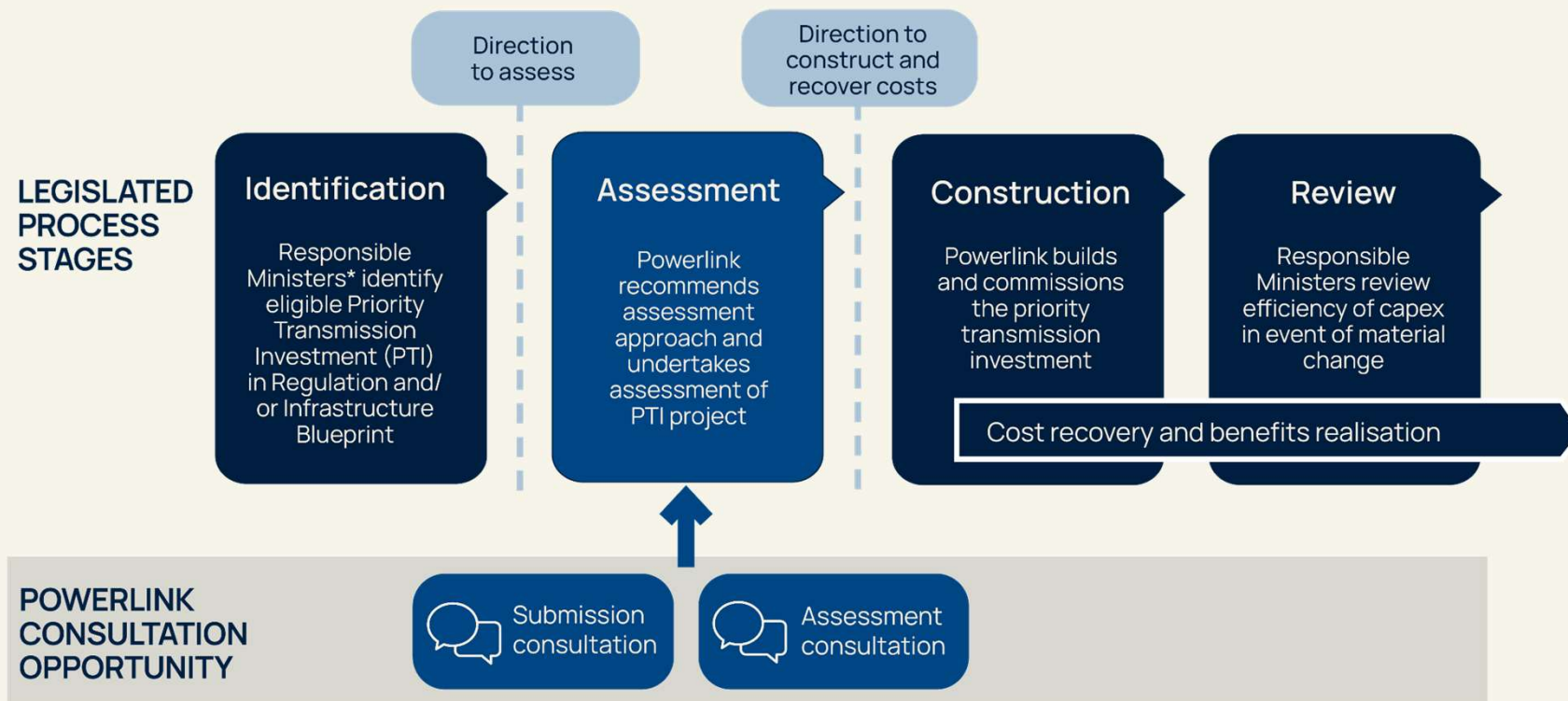
Queensland Priority Transmission Investment Framework

- Overview of stages
- Key roles
- Consultations

Roger Smith, GM Network Portfolio



PTI Framework overview



*The Responsible Ministers are the Minister for Energy and the Queensland Treasurer

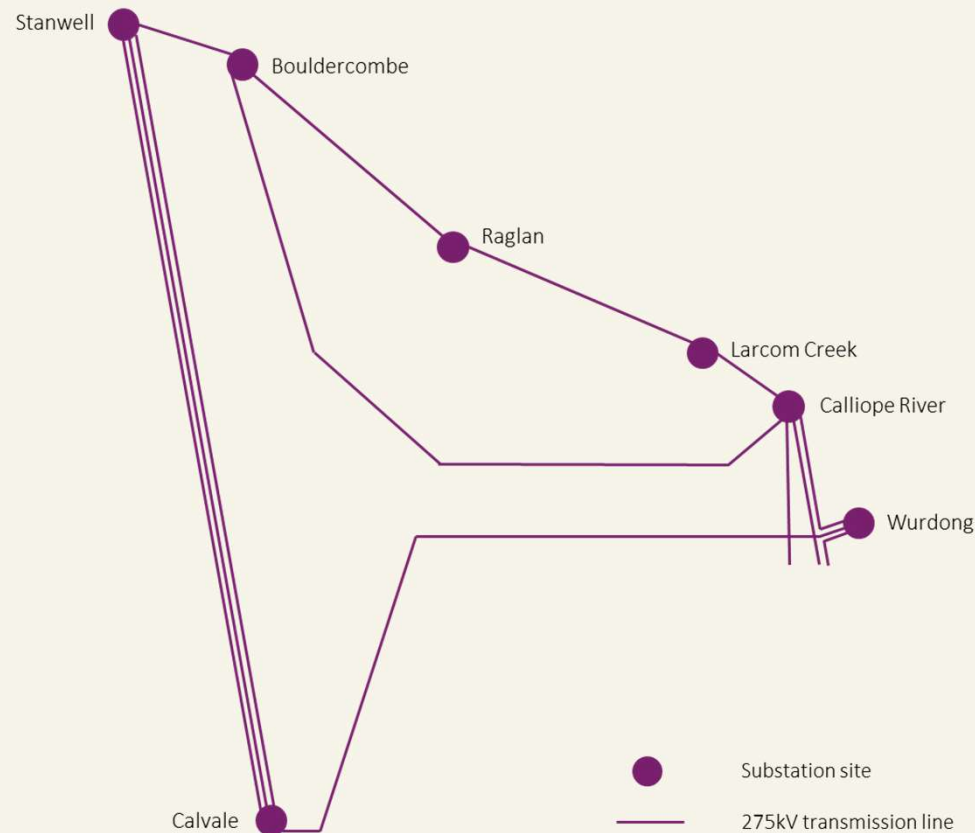
Gladstone Project PTI: Assessment Stage

- Overview of the Gladstone Project
- Understanding the consultation activities
- First consultation: Gladstone Project PTI Draft submission (now open)

Roger Smith, GM Network Portfolio



Overview of the Gladstone Project

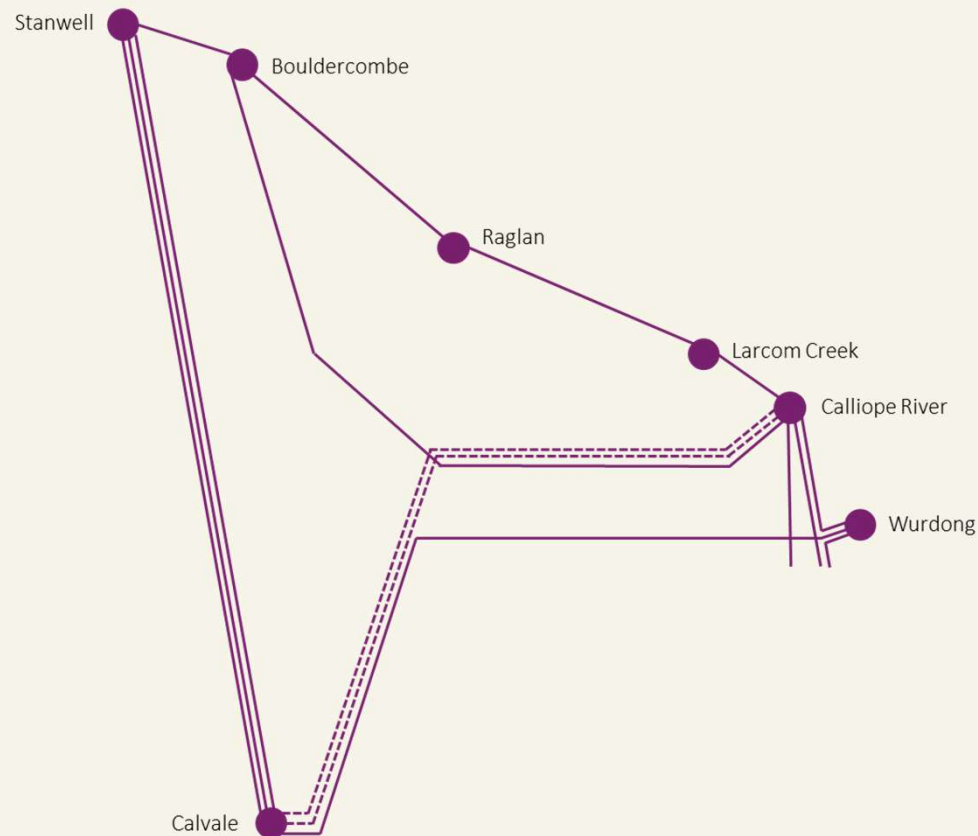


The primary purpose of the Gladstone Project is the reinforcement of the Gladstone network to support decarbonisation in the region

The proposed investment also provides some incremental renewable connection capacity

The PTI project comprises six components

Overview of the Gladstone Project



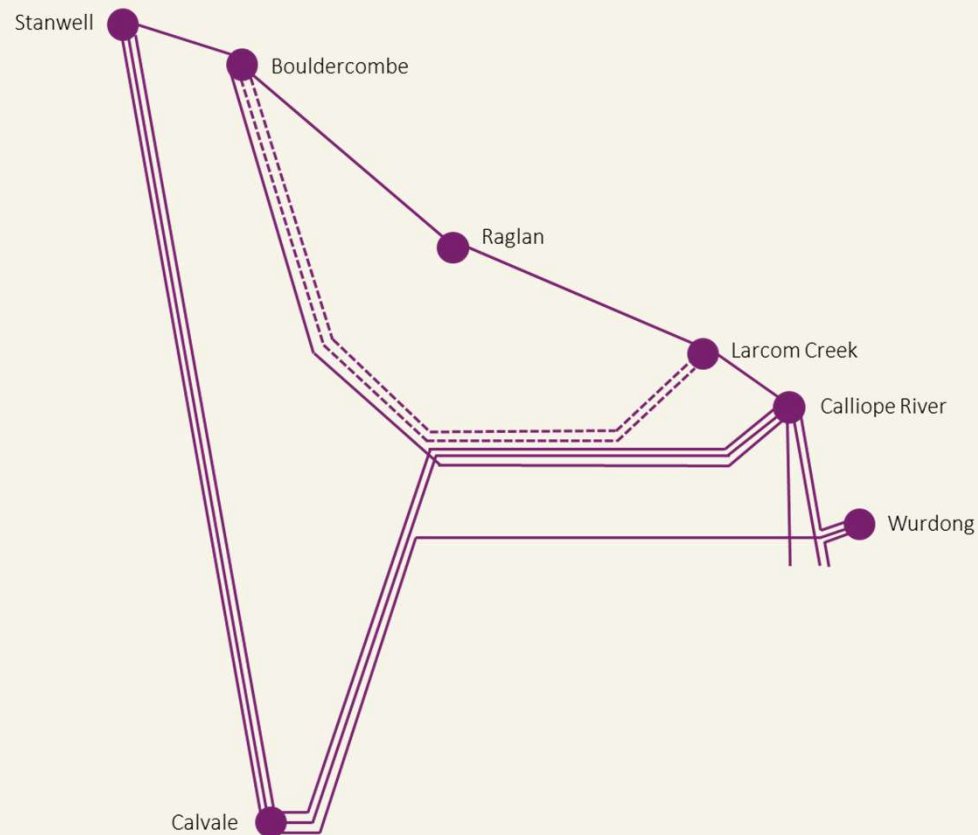
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The PTI project comprises six components:

- 275kV transmission line between Calvale and Calliope River
- 275/132kV transformer at Calliope River
- up to two synchronous condensers in Central Queensland
- up to two Static Var Compensators in Central Queensland

Overview of the Gladstone Project



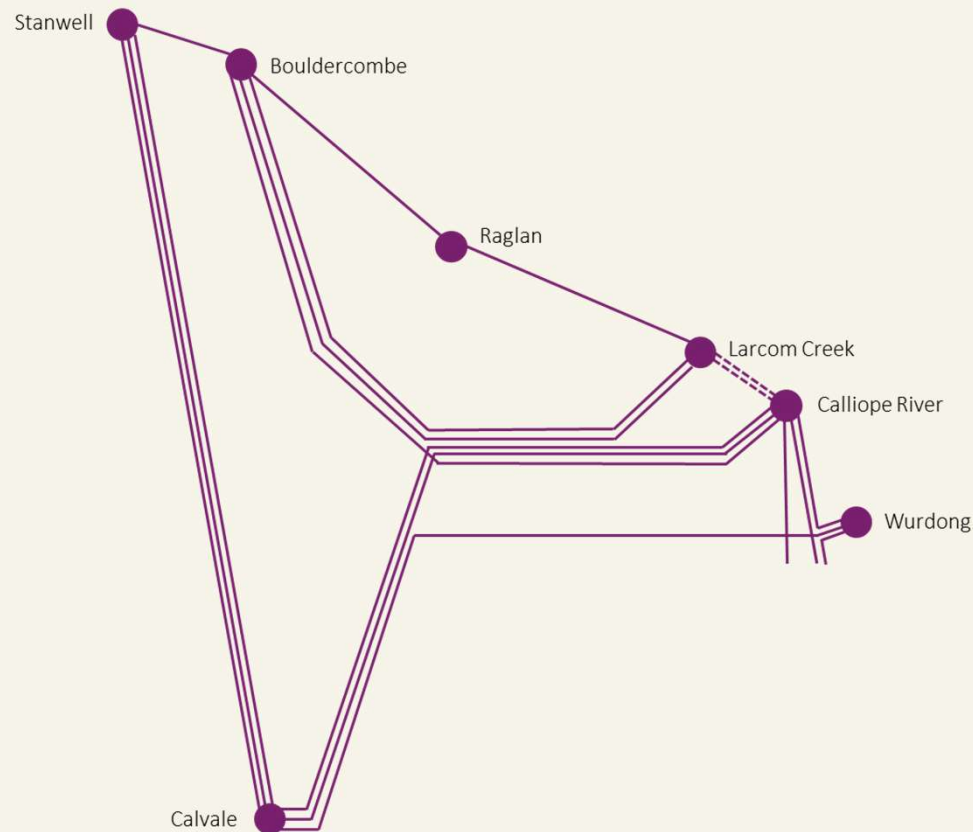
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- 275kV transmission line between Calliope River and Larcom Creek.

Assessment stage: two opportunities to engage

Assessment

Powerlink recommends assessment approach and undertakes assessment of PTI project

Powerlink produces two documents in the Assessment stage:

Submission:

- describe identified need
- confirm when construction must commence
- recommend assessment methodology

Assessment:

- description of options
- overview of assessment and parameters
- conclusions and recommendations

POWERLINK CONSULTATION OPPORTUNITY



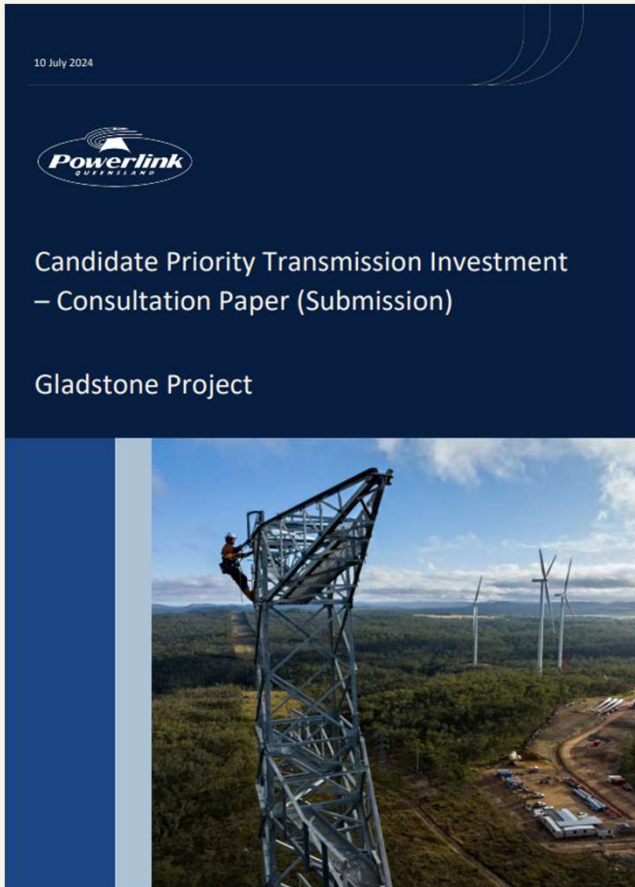
Submission
consultation
(now open)



Assessment consultation

1. Expert panel input **ongoing**
2. Engage with QESAB **1 Aug**
3. Public consultation **closes 7 Aug**
4. Non-network solution provider submissions **closes 4 Oct**

Gladstone Project- Consultation on draft submission



Submissions are invited, particularly on the following elements:

1. the proposed identified need
2. the proposed assessment documents, and reasons for their selection
3. the recommended modifications to, and reasons for modifications of, assessment documents
4. potential credible network and non-network options that may address the identified need, in part or full, and/or replace or defer capital investment.

Proposed identified need

[See page 4 of Consultation paper](#)

“Provide sufficient power transfer capability to:

1. reliably supply the forecast electrical load in the Gladstone area in anticipation of the closure of the Gladstone Power Station;
2. support the decarbonisation of major industries in the Gladstone area;
3. compensate for loss of supply of essential system services, such as inertia, system strength and voltage control capability, following the closure of Gladstone Power Station.”



Assessment methodology and modifications

[See pages 7-8 Consultation paper and Appendix](#)

Recommended assessment methodology means the assessment documents Powerlink recommends the Responsible Ministers should direct Powerlink to use to assess the investment, and any modifications that should be included.

Recommended assessment methodology: the [RIT-T Instrument](#) and [RIT-T Application Guidelines](#) to assess the investment.

Recommended modifications to the assessment documents: as outlined in the tables in Appendix B

Key recommendations would ensure:

- scenario development for the assessment reflects assumptions from the Blueprint instead of the ISP;
- the base case (against which credible options would be compared) includes new renewable generation and deep storage projects, and changes in operations to coal-fired power stations aligned with those identified in the Blueprint; and
- the engagement process for the candidate PTI assessment reflects the direction from the Responsible Ministers.

Recap – key dates and scope of consultation



Consultation Paper is on our website

- Submission requirements detailed on p.8-9
- Draft submission in Appendix p.10-18
- Contact email. pticonsultations@powerlink.com.au

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Step	Timing
Submissions on this consultation paper and draft submission	7 August 2024
Powerlink submission to Responsible Ministers	By 16 August 2024
Submissions from potential non-network solution providers	By 4 October 2024

Thank you

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(during business hours)

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