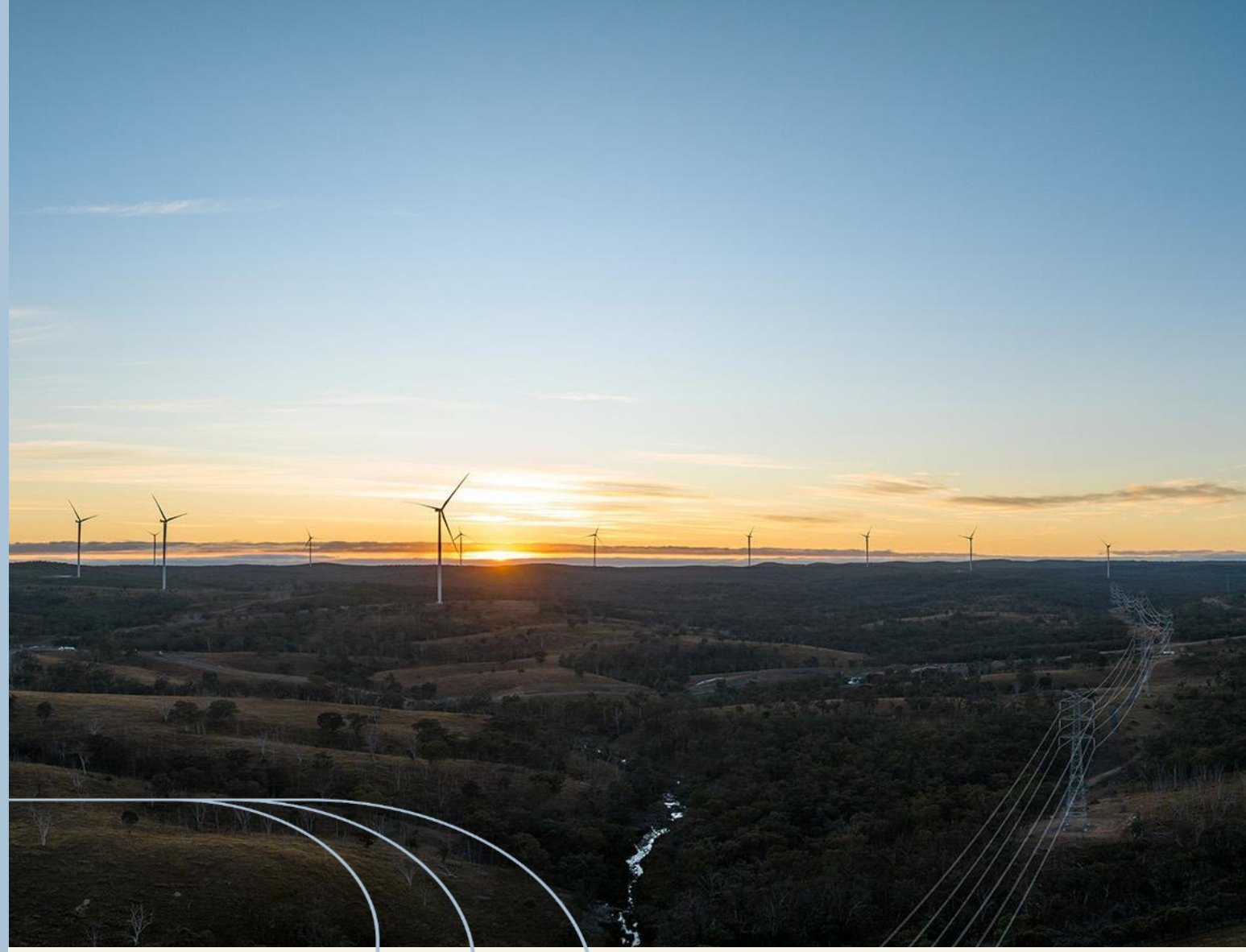
Queensland system strength planning and regulatory investment webinar

Draft Material Change in Circumstances assessment (MCC) and Central Queensland synchronous condenser and Contingent Project Application (CPA) update

4 November 2026



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.



Disclaimer

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Thank you

Key terms

Term	Description
CPA, Application	2026 Contingent Project Application For four synchronous condensers in Central Queensland during 2029
CQ	Central Queensland
MCC, Assessment	System Strength RIT-T, 2026 Material Change of Circumstances assessment
RIT-T	Regulatory Investment Test for Transmission – completed June 2025 *Addressing System Strength Requirements in Queensland from December 2025*
Syncon	Synchronous Condenser

Today's session

What's changed, what the updated analysis indicates and how stakeholders can have their say
+
Update on the four synchronous condensers for Central Queensland

Background

- System strength need
- Journey to date

2026 MCC

- Why we updated the assessment
- Draft findings and implications
- MCC public consultation

4 syncons in CQ

- Project development progress
- Upcoming CPA lodgment
- CPA public consultation

Questions

Moderated Q&A is open. Please submit your questions at any time.

The need for system strength

As synchronous generation retires or changes how it operates, replacement system strength services must be available at the right time and location.

What it supports

- Stable voltage during and following disturbance
- Protection systems operate correctly
- Connected equipment remains stable

What is changing

- Generation mix, locations and technologies
- Generation operating patterns

Powerlink plans for

Right amount — Sufficient service

Right time — Available when needed

Right location — Where it supports the network

Network and non-network solutions

Planning must balance delivery certainty with opportunities for the market to respond.

Powerlink's role in system strength



Australian Energy Market Operator

Forecasts system strength requirements



Powerlink Queensland

Plans and procures network and non-network solutions to meet requirements



Australian Energy Regulator

Oversees regulatory investment processes and assesses proposed expenditure

As system strength service provider for Queensland, Powerlink must plan for and meet Queensland's system strength needs and monitor developments that may materially change those needs or the preferred solution.

Understanding each process

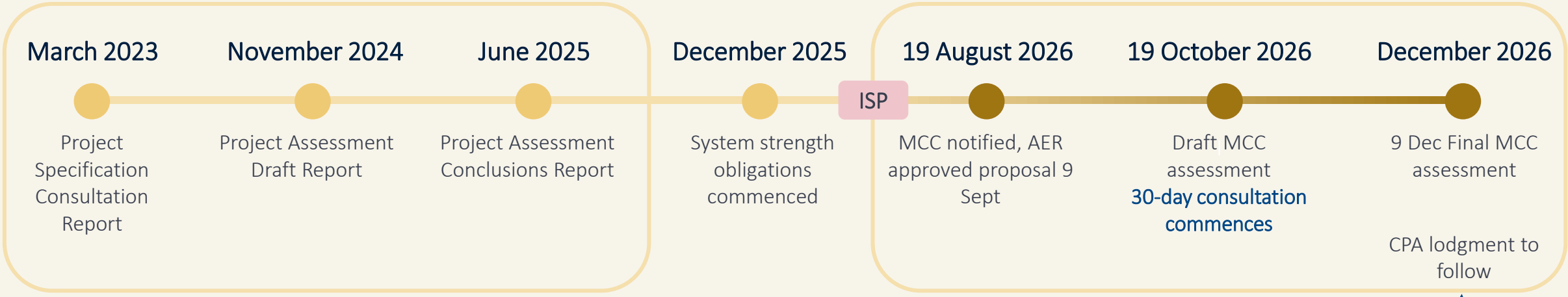
Supplementary resource

MCC assessment aims to confirm need, timing, preferred system strength solutions portfolio to 2034.

CPA will test the prudent and efficient cost of four synchronous condensers for Central Queensland (all MCC scenarios confirmed these are required during 2029).

MCC assessment	Syncon CPA
Reassesses system strength RIT-T need and preferred portfolio	Follows from the RIT-T/MCC. Focuses on four Central Queensland synchronous condensers being progressed
Covers the broader 2025 to 2034 planning horizon	Tests prudency and efficiency of proposed expenditure
Reassesses what is needed, when and what are the preferred options	Determines what expenditure is prudent and efficient for customers to fund
Powerlink consults on draft MCC	AER consults on lodged CPA (Powerlink engagement prior to lodgement)

Queensland regulatory journey to date



Queensland System Strength RIT-T

Engagement with non-network solution providers has been ongoing.

Queensland System Strength RIT-T, MCC

4 CQ syncons project development and estimate maturation

Contingent Project Application
for 4 syncons in CQ
AER will publicly consult

RIT-T MCC: reassesses need, timing, preferred system strength solutions portfolio to 2034.

CPA: tests the prudent and efficient cost of 4 CQ syncons

The draft 2026 MCC

- Why we updated the assessment
- Draft findings and implications
- MCC public consultation



Why update the assessment?

Changed generation retirement assumptions activated a reopening trigger in the 2025 Regulatory Investment Test for Transmission.

- Queensland Energy Roadmap
- CS Energy announced the potential closure of Gladstone Power Station in March 2029, bringing forward the previously advised 2035 closure date
- Other generator potential closures moved out

These were accordingly reflected in updated AEMO ISP assumptions, in June 2026

Powerlink has undertaken this MCC to reassess the need and preferred system strength portfolio using the same RIT-T framework, incorporating updated inputs and assumptions, costs and procurement information.

Draft findings and implications

Five credible portfolios identified, Portfolio 2 top-ranked option

Overview of Draft MCC Portfolio 2

During 2029

4 CQ syncons

Included in the upcoming Contingent Project Application

By January 2031

CQ non-network service/s or 1 syncon

A focus of current and ongoing engagement with non-network services

Beyond RIT-T planning horizon

(2035 - 2050)

Potential 1 SQ and 4 CQ syncons

Subject to future reassessment

Portfolio 2 was also the preferred option in the June 2025 RIT-T assessment, though timing of system strength requirements has changed.

How Portfolio 2 has changed since the previous assessment

The MCC identifies five system strength services are required to 2034, compared to up to nine previously.

June 2025 PACR	Timeframe	2026 Draft MCC
3 syncons CQ by March 2029	2029	4 syncons CQ during 2029
3 syncons CQ + 1 SQ by June 2030	2030 - 2031	Non-network service/s or 1 syncon CQ by January 2031
1 syncon CQ in 2033 1 syncon CQ in 2034	2033 - 2034	No additional units in this period
No additional portfolio components after 2034	Beyond 2034	Needs and solutions will be reassessed closer to relevant dates: 1 SQ in 2038 2 CQ in 2045 2 CQ in 2047 Or equivalent non-network service/s

Why MCC Portfolio 2 remains the preferred option

MCC portfolio	Economic analysis period		MCC Net economic benefit ($bn)	MCC Rank
	2025 – 2034 Decision-relevant horizon	2035 - 2050*		
1 – Balanced Technology	4 syncons and 1 clutched gas turbine	+ 3 syncons and 1 clutched gas turbine	3.130	4
1A – Balanced Technology: BESS in Minimum in 2044^	4 syncons and 1 clutched gas turbine	+ 2 syncons, 1 clutched gas turbine, 1 grid forming BESS	3.134	3
2 – Synchronous Condensers	4 CQ syncons during 2029 + 1 CQ syncon or **equivalent by 2031**	+ 4 syncons	**3.380**	**1**
3 – Clutched Gas Turbines	4 syncons and 1 clutched gas turbine	+ 3 clutched gas turbines	3.176	2
4 – Pumped Hydro Energy Storage	5 syncons	+ 2 clutched gas turbines and 3 pumped hydro units	2.277	5

* Will require reassessment

^ Grid-forming batteries not yet considered technically feasible for minimum system strength; Portfolio 1A tests economic outcome if feasible in future.

All credible portfolios require the same four Central Queensland synchronous condensers during 2029. The key difference is how later system strength needs are met.

Robustness of preferred option Portfolio 2

Supplementary resource

Assumption tested	Reason test	Finding
Future syncon costs	Whether 40% higher or 20% lower future syncon costs change the preferred option.	Even with **40% higher** future syncon costs, Portfolio 2 remained the preferred option.
Commercial discount rate	Whether the preferred option changes under higher or lower financing and investment assumptions.	Portfolio 2 remained the preferred option under both lower and higher discount rate assumptions.
Break point analysis	Point at which preferred option would change.	Syncon costs would need to rise by **more than 310%** before Portfolio 3 became preferred.

Sensitivity testing not undertaken for the Value of Customer Reliability (VCR), Value of Emissions Reduction (VER) or non-network costs as they do not materially differ across portfolios.

Queensland non-network solutions

Market engagement directly shaped the options assessed

Powerlink sought proposals throughout the RIT-T, tested different technology mixes and continues to engage on later requirements.

20+ proponents at RIT-T PSCR stage

With 78 solutions submitted

25+ proponents at RIT-T PADR stage

With 51 solutions submitted

2 solutions contracted for NQ

One through the System Strength RIT-T; one through the previous Gin Gin shortfall EOI (for NQ)

Ongoing engagement

Four portfolios informed by proponent feedback. Requirements remain open to credible alternatives

Far North Qld needs have been supported by solutions. For CQ 2029 need, no non-network option had reached committed or anticipated status and could meet the required delivery and commissioning timeframe. Currently, a strong focus is on the 'by January 2031' CQ need.

Have your say

By 30 November 2026

You may request to meet with Powerlink before submitting

MCC Submissions must be written

Email: networkassessments@powerlink.com.au

Subject: System Strength RIT-T MCC Submission

- Include your name and contact details.
- Clearly identify any information claimed as confidential.

All stakeholders	Non-network solution providers
Provide feedback on whether the assessment: • Reflects updated assumptions • Appropriately reassesses the identified need and preferred portfolio • Clearly explains the draft findings and supporting evidence	• New proposals • Evidence a proposal is now anticipated or committed • Updated technical, commercial or delivery information **Focus is on the Central Queensland need by January 2031.**

Central Queensland's four syncon project

- Confirming the need
- Project development progress
- The CPA application
- 2026/2027 CPA public consultation



The need

Four syncons are required in CQ during 2029

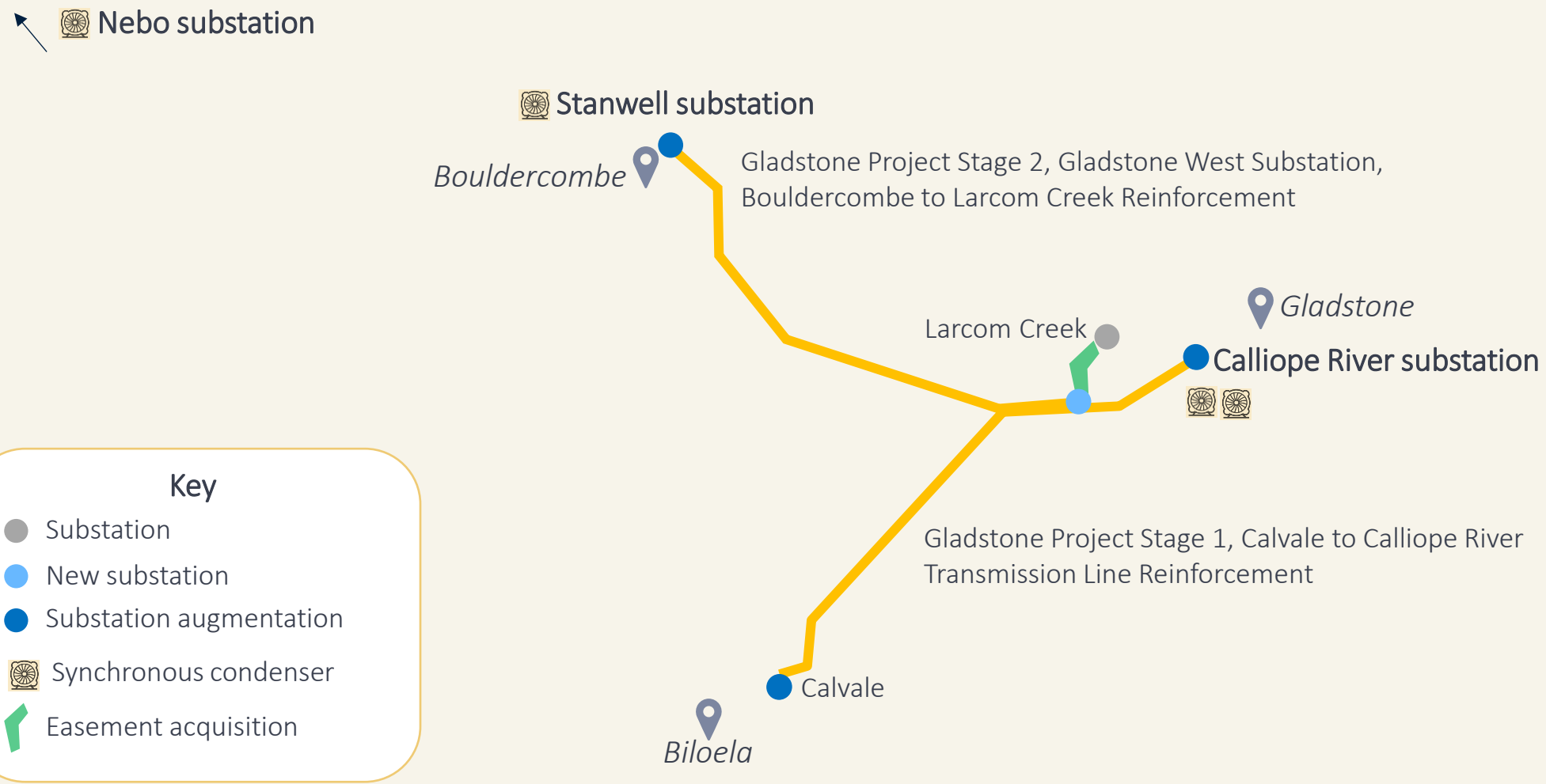
- Announced potential closure of all six Gladstone Power Station units in March 2029 drives the near-term requirement.
- Alternatives lack the required certainty for 2029.
- Updated analysis reflects latest retirement dates, generator availability, market proposals and procurement costs.
- Four CQ syncons during 2029 are common to all credible portfolios.



Image: Synchronous condenser

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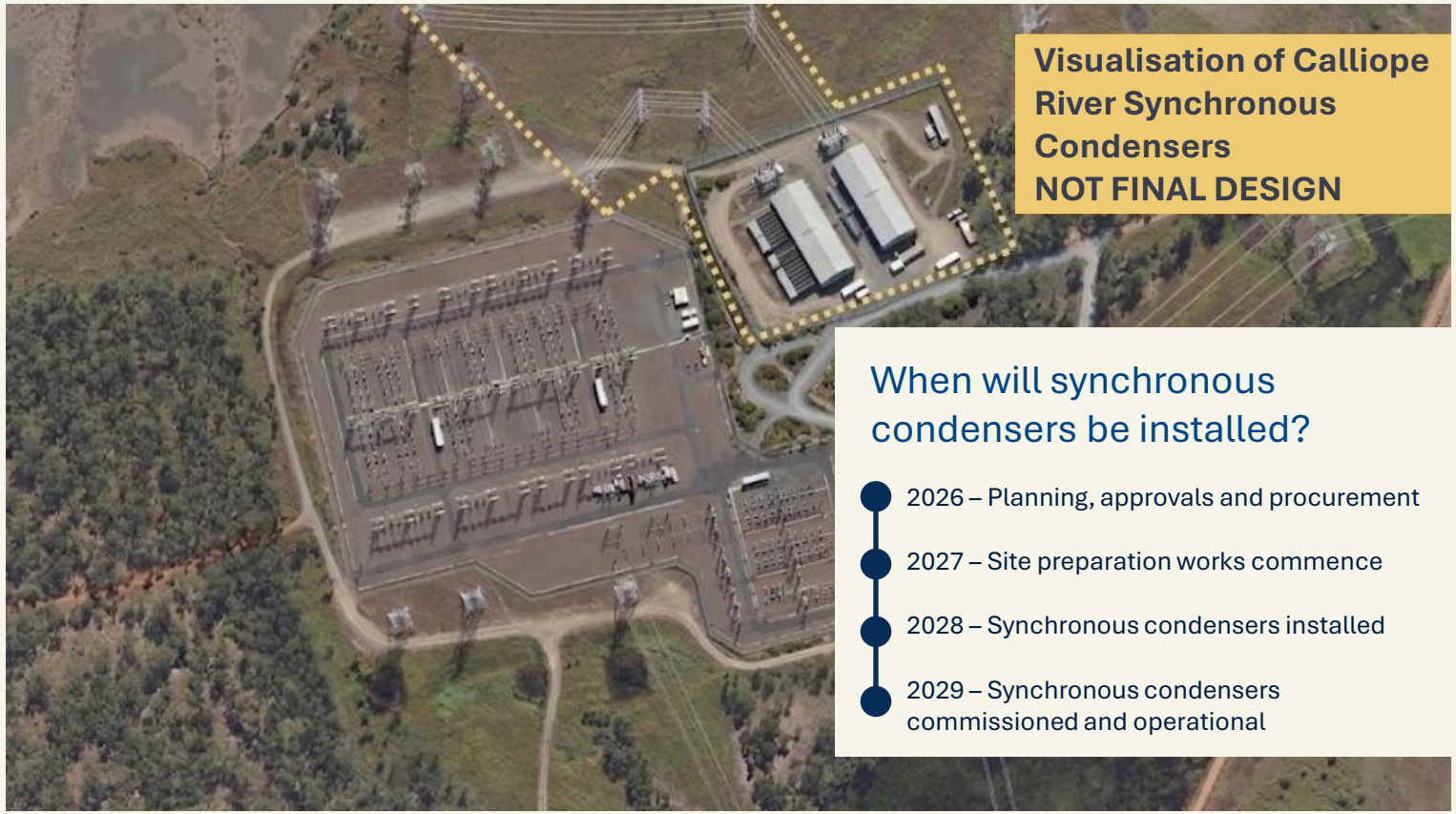
CQ Syncon project overview



CQ Syncon project overview

Effective planning and development to ensure timely deliverability and cost efficiency

- Selection of suitable sites
- Land, approvals and stakeholder engagement
- Conceptual design and equipment specifications
- OEM procurement process and selection
- Balance of Plant procurement process
- Cost estimating and CPA preparation
- Construction Readiness



When will synchronous condensers be installed?

- 2026 – Planning, approvals and procurement
- 2027 – Site preparation works commence
- 2028 – Synchronous condensers installed
- 2029 – Synchronous condensers commissioned and operational

What to expect in the Contingent Project Application

The AER will assess whether the proposed expenditure for the four Central Queensland synchronous condensers is prudent and efficient.

Information Powerlink must provide

Eligibility	Evidence that the project meets the requirements to enable a CPA to be submitted
Project information	Detailed scope, risks and governance
Expenditure and customer impacts	Capital and operating expenditure, incremental revenue and indicative bill impacts
Financial models	Required financial models, including the post-tax revenue model

What happens next

1. **Final MCC published**
   CPA lodged with the AER
2. **AER public consultation opens**
   As soon as practicable after AER receives compliant application
   ~30 calendar days for submissions
3. **AER assessment**
   Stakeholders can comment on prudency and efficiency

If approved, Powerlink's Revenue Determination would be amended and approved revenue would then be recovered.

Questions

Network Investment and Development Updates

Register to be notified

Resources and information

Learn more about our System Strength Project and synchronous condensers in Central Queensland:

- Calliope River Synchronous Condensers project
- Nebo Synchronous Condenser project
- Stanwell Synchronous Condenser project
- System Strength Project fact sheet

Investing in and providing system strength services in CQ

- Customer Panel Information Resource – 26 March 2026

System Strength RIT-T and MCC information:

- Web page and documentation

Contingent Project Application information:

- Web page and registration link for updates

