

Material change in circumstances – Addressing System Strength Requirements in Queensland from December 2025

AER Determination

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1 Summary

The Australian Energy Regulator (AER) is the economic regulator for electricity transmission and distribution services in the National Electricity Market (NEM). Our electricity-related powers and functions are set out in the National Electricity Law (NEL) and National Electricity Rules (NER). We are responsible for developing, publishing and maintaining the Regulatory Investment Test for Transmission (RIT-T) and accompanying RIT-T Application Guidelines. The RIT-T is an economic cost benefit analysis that is used by transmission businesses to assess and rank different investment options.

Powerlink is responsible for the electricity transmission system in Queensland and is the system strength service provider responsible for system strength services in Queensland.

Between March 2023 and June 2025, Powerlink applied the RIT-T to assess options for meeting Queensland's system strength requirements to June 2034. These requirements comprise the minimum and efficient levels of system strength determined by the Australian Energy Market Operator (AEMO) at each system strength node. In its project assessment conclusions report (PACR), published on 30 June 2025, Powerlink identified a preferred option comprising 9 synchronous condensers, contracts for 2,150 MW of grid-forming Battery Energy Storage Systems (BESS), and contracts with a range of synchronous units to meet minimum system strength requirements.

On 19 August 2026, Powerlink notified the AER that a material change in circumstances (MCC) had occurred for this project. Powerlink considered that a RIT-T reopening trigger had been met. The PACR defined the trigger as credible evidence that changes to the retirement dates or operating arrangements of coal-generating units would alter the identified need or preferred option. Powerlink also identified two other potentially material changes: higher costs for procuring synchronous condensers and new planning inputs.

Consistent with the requirement of clause 5.16.4(z3) of the NER, the MCC notice identified the nature of the MCC, the actions Powerlink intends to take in response, the timeframes for completing those actions, and information to support the proposed actions and timeframes.

Powerlink proposes to undertake a MCC analysis and publish a draft analysis for stakeholder consultation. Powerlink proposes to then publish a final statement by 9 December 2026. The final statement would confirm whether the preferred option identified in the PACR has changed and if so, identify the new preferred option.

Having considered Powerlink's notice of MCC and having had regard to the criteria set out in NER clause 5.16.4(z5), the AER approves the actions proposed by Powerlink in response to the MCC. Powerlink must complete these actions by 9 December 2026.

The AER considers that requiring Powerlink to reapply the RIT-T would create unnecessary risk to the timely delivery of assets needed to maintain the secure operation of the grid, specifically in Central Queensland to maintain system security when Gladstone Power Station retires. Reapplying the RIT-T would likely increase project delivery cost without producing benefits that would justify that approach compared with the proposed actions.

2 Background

2.1 System strength requirements for Queensland

In December 2022, AEMO published the first System Strength Report introduced under the *Efficient management of system strength on the power system* Rule. Under the new rule, AEMO must provide an annual assessment of system strength requirements in the NEM for the following decade, comprising a minimum three phase fault level (minimum level) requirement and a requirement for stable voltage waveforms (efficient level) at each system strength node.¹

The report defined Queensland's system strength requirements over a 10-year outlook period and identified an adjustment to an existing shortfall at the Gin Gin system strength node for the period to 1 December 2025.²

2.2 Powerlink's application of the RIT-T

Powerlink initiated the RIT-T process with the publication of the project specification consultation report (PSCR) in March 2023 to source and assess options that would meet both the system strength shortfall projected by AEMO and the forecast system strength requirement in Queensland.³

AEMO's Integrated System Plans (ISPs) identify system strength as critical to the security of the NEM. Although the ISP does not identify specific actionable projects to meet system strength requirements, it reinforces the need identified in AEMO's 2022 System Strength Report. Together, these publications demonstrate the importance of Powerlink's RIT-T process.

Powerlink published the PACR for *Addressing system strength requirements in Queensland from December 2025* on 30 June 2025. The PACR identified Portfolio 2 as the preferred option. This option involves:⁴

- 9 synchronous condensers across Central Queensland (CQ) and Southern Queensland (SQ) by June 2034
 - tranche 1 - up to three synchronous condensers in CQ by March 2029, two of which are to address the potential closure of the Gladstone Power Station;
 - tranche 2 – three synchronous condensers in CQ and one synchronous condenser in SQ by June 2030;
 - tranche 3 – one synchronous condenser in CQ by June 2033; and

¹ AEMO, [2022 System Strength Report](#), December 2022, p. 3

² AEMO, [2022 System Strength Report](#), December 2022, p. 79

³ Powerlink, [Addressing System Strength Requirements in Queensland from December 2025 – Project Specification Consultation Report](#), March 2023.

⁴ Powerlink, [Addressing System Strength Requirements in Queensland from December 2025 – Project Assessment Conclusions Report](#), June 2025, p. 18

- tranche 4 – one synchronous condenser in CQ by June 2034.
- Contracting with a range of synchronous units in Southern and Northern Queensland for minimum system strength requirements, and
- Contracting for 550 MW of grid-forming BESS in Southern Queensland and 1,600 MW of grid-forming BESS in Central/Northern Queensland for efficient system strength requirements.

The PACR estimated that Portfolio 2 would cost \$2.002 billion (\$2023) and deliver a net economic benefit of \$1.660 billion (\$2023). Most of this benefit arose from avoided unserved energy relative to the base case. Under the base case, no action would be taken during periods of insufficient system strength, creating a risk that parts of the network would be de-energised and resulting in high expected levels of unserved energy.

2.3 Powerlink’s notice of MCC

On 19 August 2026, Powerlink notified us that an MCC had occurred since publication of the PACR for *Addressing system strength requirements in Queensland from December 2025*. The notice sets out the actions Powerlink proposes in response.

Powerlink’s notice states that an MCC has occurred because a RIT-T reopening trigger in the PACR has been met. The trigger applies where credible evidence shows that changes to the retirement dates or operating arrangements of coal-generating units would alter the identified need for system strength. Powerlink identified three events as activating this trigger:

- The release of the [Queensland Energy Roadmap](#) in October 2025
- CS Energy publicly announcing in September 2025 the [potential closure of the Gladstone Power Station in March 2029](#); and
- AEMO’s publication of the [2026 ISP](#) in June 2026 which included the most recently announced generator retirement dates which significantly differed to those used in the PACR analysis.

In addition to the RIT reopening trigger, Powerlink has identified two changes in key assumptions that may separately also have resulted in an MCC:⁵

- Release of the 2026 ISP – specifically the changes in the anticipated timing of coal unit retirements for Tarong, Gladstone Power Station and Callide B which will require an assessment to understand the materiality of the impact on the RIT-T analysis. The PACR applied the 2024 ISP coal generation forecasts.
- Updated costing information from ongoing procurement activities – with preliminary updated costing sourced from procurement of four synchronous condensers in Central Queensland by 2029 suggesting an increase in cost of 40% or more compared to the unit cost in the PACR. Powerlink notes this is still below the 75% threshold set out as a RIT reopening trigger in the PACR.⁶

⁵ Powerlink, Notice of MCC, August 2026, p. 7

⁶ Powerlink, [Addressing System Strength Requirements in Queensland from December 2025 – Project Assessment Conclusions Report](#), June 2025, p. 20

The MCC identified by Powerlink concerns the system strength solutions in the preferred option that respond to the retirement of generating units at Stanwell, Callide C and Tarong power stations. Powerlink considers that the part of the preferred option addressing the earlier closures of Gladstone Power Station and Callide B remains time critical.

As a result of the MCC, Powerlink proposes to:

1. Not reapply the RIT-T.
2. Conduct an MCC assessment and publish the draft assessment and statement on Powerlink's website by 19 October 2026.
3. Undertake public consultation for a period of 30 business days on the draft MCC assessment.
4. Publish a final MCC assessment and statement.

Powerlink also proposes to complete this process and publish the final MCC assessment and statement by 9 December 2026.

Powerlink notes the following information in support of these actions:

- By undertaking an MCC assessment, Powerlink expects to be able to better support near-term activities for project delivery and avoid longer term delays.
 - Powerlink states a RIT-T reapplication would remove their eligibility to submit a contingent project application under transitional NER clause 11.143.18.⁷ This pathway is available to Powerlink until 30 June 2027.
 - Powerlink notes the delay of near-term system strength services would incur substantial unserved energy risks due to insufficient system strength to meet minimum requirements in Central Queensland.⁸
 - Powerlink has continued engagement with non-network proponents which, when combined with the portfolio-based approach of the preferred option, allows identified changes to be assessed without the need to reapply the RIT-T.
- The MCC assessment is consistent with the principles of the RIT-T and will:
 - utilise the same approach to quantifying the need as that in the PACR analysis.
 - include updated planning inputs such as coal retirement dates, procurement costings and assess any additional non-network options
 - assess the quantity and timing of synchronous condensers beyond those needed for the Gladstone and Callide B Power Stations.
- Powerlink notes its commitment to timely engagement and genuine consideration of feedback and proposes a consultation period of 30 business days following publication of the draft MCC analysis and statement. This consultation would focus on changes to the project since the PACR and would:
 - take into consideration responses from general and targeted consultation in their final MCC analysis and statement

⁷ Powerlink, Notice of MCC, August 2026, p. 10

⁸ Powerlink, Notice of MCC, August 2026, p. 10

- undertake targeted engagement with interested parties who lodge submissions to inform the final MCC statement
- Seek submissions on the preferred option presented and matters addressed in the draft analysis.

Powerlink states these actions are intended to provide transparency to customers and the NEM, while preserving the availability of solutions to meet the near-term need.

2.4 The MCC determination process

A RIT-T proponent must notify us in writing if it has published a PACR, still intends to undertake the project and considers that an MCC has occurred. The notice must describe the MCC, the actions proposed in response and the timeframes for completing those actions.⁹

The RIT-T proponent must also provide us with any information necessary to support any actions the RIT-T proponent proposes to take, including any information necessary to demonstrate that the RIT-T proponent has had regard to the matters in NER clause 5.16.4(z4A).¹⁰

Clause 5.16.4(z4) of the NER provides that an MCC includes, but is not limited to:

- a change to the key assumptions used in identifying the identified need described in the project assessment conclusions report
- for a RIT-T project contemplated by NER clause 5.16.4(k)(10), one or more RIT reopening triggers applying to the project having been triggered; or
- a change in circumstances which, in the reasonable opinion of the RIT-T proponent, means that the preferred option identified in the project assessment conclusions report may no longer be the preferred option.

Within 40 days of receiving the notice, we must determine whether to approve or reject any actions (and/or associated timeframes) notified by the RIT-T proponent, and where we approve any such actions, specify a reasonable timeframe within which such actions must be completed.¹¹ Where we reject the actions (and/or associated timeframes), we must specify the actions (if any) we require the RIT-T proponent to take, as well as a reasonable timeframe within which any such actions must be completed.¹²

We must also publish the notice, notify the RIT-T proponent of the determination and publish the determination.¹³

In making a determination, we must have regard to:¹⁴

⁹ NER, cl. 5.16.4(z3)(4)

¹⁰ NER, cl. 5.16.4(z3)(5)

¹¹ NER, cl. 5.16.4(z5A)(2)

¹² NER, cl. 5.16.4(z5A)(4)

¹³ NER, cl. 5.16.4(z5A)

¹⁴ NER, cl. 5.16.4(z5)(1)

- the credible options identified in the PACR
- the MCC identified by the RIT-T proponent
- whether a failure to promptly undertake the RIT-T project is likely to materially affect the reliability and secure operating state of the transmission network or a significant part of that network
- whether the RIT-T proponent has had regard to:¹⁵
 - whether, in the RIT-T proponent's reasonable opinion, the reapplication of the RIT-T to the RIT-T project is justified in the circumstances
 - the costs and delay that may result from the actions the RIT-T proponent proposes to take as a result of the MCC; and
 - the costs and delay that may result from the reapplication (in whole or in part) of the RIT-T to the RIT-T project

We may request additional information or analysis from the RIT-T proponent that we consider reasonably necessary to assist us in making a determination.¹⁶ A request for additional information or analysis automatically extends the period of time for making a determination by the amount of time it takes the RIT-T proponent to provide the additional information or analysis, provided that we make the request for additional information at least seven business days prior to expiry of the period of time for making a determination.¹⁷

¹⁵ NER, cl. 5.16.4(z4A)

¹⁶ NER, cl. 5.16.4(z5)(2)

¹⁷ NER, cl. 5.16.4(z5C)

3 Our assessment

Under clause 5.16.4(z5A)(2) of the NER, we approve the actions and timeframes as proposed by Powerlink in its notice of MCC for the *Addressing System Strength requirements in Queensland from December 2025* RIT-T. Accordingly, we require Powerlink to:

- Undertake an MCC assessment that maintains the principles of the RIT-T and the same approach to quantifying the need as the PACR, but with updated planning inputs, costs and timings from recent publications like the Queensland Energy Roadmap and 2026 ISP and from procurement activities.
- Publish this analysis and a draft MCC statement on its website by 19 October 2026 and consult on these publications for no less than 30 business days.
- Publish the final analysis and MCC statement on its website by 9 December 2026, setting out (with supporting analysis and justification) whether the preferred option in the RIT-T PACR remains the preferred option, or any refinement to the makeup of the option and its timing.

We are satisfied that Powerlink has met the requirements in NER clause 5.16.4(z3) to notify us of the MCC and propose actions and timeframes in response. The PACR included a reopening trigger for credible evidence that changes to the retirement dates or operating arrangements of coal-generating units would alter the identified need or preferred option. We consider that this trigger has been met and has resulted in an MCC.

We consider that an MCC assessment and public consultation consistent with the RIT-T would provide the best outcome for consumers. This approach would account for the changed context without unnecessarily delaying investment in critical near-term assets. It would also give Powerlink sufficient scope and time to assess changes to the preferred option before the announced closure of Gladstone Power Station in March 2029.

We consider that requiring the reapplication of the RIT-T would, through a longer process, increase the risk to the secure operating state of the network without being likely to yield analysis or outcomes that are superior to the proposed assessment for this project. Reapplication of the RIT-T would also incur additional costs and delays without commensurate benefit.

In making our determination, we have had regard to the matters under clause 5.16.4(z5) of the NER as well as the National Electricity Objective and the purpose of the RIT-T.

Adequacy of proposed MCC assessment

Powerlink's MCC notice proposed to undertake an MCC assessment, undertake a round of consultation and publish a final MCC statement and analysis by 9 December 2026. Powerlink states that these actions will:

- use the same approach to quantifying the need as in the PACR
- incorporate new data sources, planning inputs and costing information

- identify the quantity and timing of synchronous condensers needed beyond the near-term plant retirements

In considering the actions proposed by Powerlink, we had regard to the criteria set out in NER clause 5.16.4(z5). Powerlink identified only one option in the PACR: a portfolio of 9 synchronous condensers and contracts for a range of synchronous generators and grid-forming Battery Energy Storage Systems. We consider that additional hypothetical options may be available, and Powerlink's proposed actions provide an adequate opportunity for non-network solution proponents to make submissions. We also note Powerlink's ongoing engagement to identify and assess options.¹⁸

Cost recovery process for Central Queensland synchronous condensers

Powerlink's MCC notice explains how the closure of Gladstone Power Station would affect the availability of system strength in Central Queensland. The announced extension of Callide B to 2031 would offset the initial reduction in available synchronous generation. However, system strength services would still be needed to replace 6 units retiring in 2029. Powerlink has identified a need for 4 synchronous condensers, or equivalent services, following these retirements. Its analysis also assumes that the remaining Callide B units will experience more frequent outages before retiring in 2031. Powerlink has announced an agreement with Hitachi Energy to supply and install the synchronous condensers.

We understand that the available solutions for the early part of the identified need are generally unchanged and that addressing this near-term need remains critical. Approving the proposed process preserves Powerlink's ability to deliver the synchronous condensers in a timely manner, if they remain part of the preferred option. This should help ensure that adequate system strength is available in Central Queensland as Gladstone Power Station and the Callide B units retire, consistent with the 2026 ISP.

Justification to not reapply the RIT-T

Powerlink, in proposing its actions, considered that a reapplication of the RIT-T is not justified in the case of this project. It argued a reapplication:

- would require substantial time, resourcing and effort beyond that which is necessary to assess the changes identified in this MCC process
- is unlikely to identify alternative near-term options for meeting system strength requirements in Central Queensland by 2030
- requires a far longer timeframe than the proposed MCC assessment
- may impact Powerlink's ability to meet its system strength service provider obligations and provide adequate, economic, safe and reliable transmission of electricity
- adds uncertainty to contract negotiations undertaken to date with non-network proponents

Powerlink's proposal addresses whether reapplying the RIT-T is justified, as required by NER clause 5.16.4(z4A). Powerlink states that its proposed MCC assessment will maintain

¹⁸ Powerlink, Notice of MCC, August 2026, pp. 8-9

the principles of the RIT-T and provide transparency. We expect the assessment to be comparable in depth to an analysis undertaken through a RIT-T. It should assess how the MCC affects the identified need, the contribution of coal-generating units to meeting that need and any resulting changes to the preferred option. Given Powerlink's commitment to this level of analysis and engagement, we do not consider that reapplying the RIT-T would deliver a material benefit to consumers.

Glossary

Term	Definition
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
BESS	Battery Energy Storage System
EOI	Expression of Interest
ISP	Integrated System Plan
MCC	Material Change in Circumstances
MW	Megawatt
NEL	National Electricity Law
NEO	National Electricity Objective
NER	National Electricity Rules
PACR	Project Assessment Conclusions Report
PSCR	Project Specification Consultation Report
RIT-T	Regulatory Investment Test for Transmission