

Reapplication of Charleville RIT-D by Ergon Energy

AER Assessment

July 2025

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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 Distribution (RIT-D) and accompanying RIT-D Application Guidelines. The RIT-D is an economic cost benefit analysis that is used by distribution businesses to assess and rank different investment options.

Ergon Energy Corporation Limited (Ergon) is responsible for electricity supply to the Charleville, Quilpie and Cunnamulla area in South West Queensland.

Between January 2018 and May 2019, Ergon applied the RIT-D to address the identified need of replacing the static var compensator (SVC) at Charleville substation in the electrical network that supplies Charleville, Quilpie and Cunnamulla areas (the Charleville Project).

Following the publication of the Draft Project Assessment Report (DPAR) in July 2018, the AER recommended that Ergon extend its consultation period to allow stakeholders more time to provide submissions, accounting for information received from Ergon after the publication of the DPAR. Ergon did not extend the consultation on the basis that the Charleville Project was urgent.

Two and a half years later (in October 2021), Ergon published a Request for Proposal seeking submissions from non-network proponents to propose solutions to address the identified need.

On 4 February 2025, Ergon wrote to the AER, advising that, in its opinion, there had been a material change in circumstances in relation to the Charleville RIT-D. Ergon requested that the AER determine that a reapplication of the Charleville RIT-D is not required in accordance with clause 5.17.4 of the NER.

Having considered this request, the AER confirms that Ergon is required to reapply the RIT-D in respect of the Charleville Project.

Based upon the limited information provided by Ergon in response to several requests, it appears that the factors underpinning the material change in circumstances were largely caused by Ergon's own actions. Having contributed to this, Ergon now seeks to move ahead with a network option rather than undertaking a RIT-D process. We consider that reapplying the RIT-D is appropriate to provide an opportunity to identify the most efficient solution in the long-term interest of consumers.

The AER's reasons are set out in further detail below.

For the purpose of this request, clause 5.17.4 of version 202 of the NER is applicable because the Charleville RIT-D for the Charleville Project was undertaken prior to the 2023 rule changes in relation to material change in circumstances obligations.

2 Background

2.1 Charleville RIT-D

Ergon is responsible for electricity supply to the Charleville, Quilpie and Cunnamulla area in South West Queensland. The Charleville area is supplied via a single 276km 66 kV sub-transmission feeder from T83 Roma Bulk Supply Point. Quilpie and Cunnamulla customers are supplied via separate 200km long 66 kV feeders from Charleville.

The Charleville zone substation contains a SVC, which performs the function of maintaining stable voltages at both high and low load times. The Charleville SVC is approaching the end of its design life, and it was recommended for replacement on the basis of its age and reliability in 2019.

In January 2018, Ergon commenced a RIT-D application to identify and assess potential credible options to address the identified need of replacing the SVC at Charleville substation in the electrical network that supplies the Charleville, Quilpie and Cunnamulla areas (the Charleville Project).

Ergon published a DPAR in July 2018, which identified two credible non-network options received in response to the Non-Network Options Report. Ergon provided stakeholders with 6 weeks to make submissions in respect of the DPAR.

Following the publication of the DPAR, the AER received a complaint from a stakeholder in respect of requiring additional time to make a submission. The stakeholder noted that it had waited during the DPAR consultation period to receive additional information from Ergon which was required to inform its submission. The AER recommended that Ergon provide stakeholders with additional time to provide their submissions. Ergon did not extend the due date for submissions based on its opinion that 6 weeks was appropriate, given the urgent risk to the network.

On 22 May 2019, Ergon published a Final Project Assessment Report (FPAR), which concluded its RIT-D process for the Charleville Project. The FPAR contained the following options:

- a. Option A: The network option composed of two separate 5 Mvar static synchronous compensators (STATCOM), connected to the 11 kV and 22 kV buses respectively, and with the capability to be easily expanded up to 7.5 Mvar units in the future.
- b. Option B: A non-network option that includes a 10 Mvar STATCOM with optional 2.8 MW of embedded generation.
- c. Option C: A non-network option that includes 10 MW solar farm with battery storage and possibly a small STATCOM.

Option C was identified as the preferred option in the FPAR and was expected to be operational by June 2020.

In October 2021, Ergon published a Request for Proposal, which requested non-network proponents to submit proposals for a network support agreement to implement the preferred option of providing reactive power through a solar farm and battery storage connected to Charleville substation.¹ Two submissions were received, and a preferred provider was selected. Ergon worked with the preferred provider until January 2025 when the provider withdrew its offer on the basis of a higher than anticipated connection cost quoted by Ergon.

2.2 Ergon Energy's request to the AER

On 4 February 2025, Ergon wrote to the AER advising that, in its opinion, there had been a material change in circumstances in relation to the Charleville RIT-D due to:

- an increase in the urgency of the timing to address the identified need described in the FPAR
- a significant increase in the costs of the preferred option identified in the FPAR.

Ergon's letter requested that the AER determine that a reapplication of the RIT-D to the Charleville Project is not required. In support of this request, Ergon noted that in its opinion:

- there has been a material change in circumstances, which means that Option C is no longer the preferred option
- further delay of the project would increase the risk of a material effect on the reliability and secure operating state of the distribution network
- there is no net economic benefit from a reapplication of the RIT-D.

Credible options and change in circumstances

In its request to the AER, Ergon identified that the cost of the preferred option (Option C, as identified in the FPAR) had increased significantly such that it is no longer the preferred option for the purposes of a RIT-D cost benefit analysis.

Ergon provided updated net present value (NPV) analysis which assessed the impacts of the material changes in key assumptions since the FPAR in 2019. The changes in key assumptions were an increase in the costs of each option and a change in the weighted average cost of capital (WACC).

The updated NPV analysis determined that the preferred non-network option identified in the FPAR is no longer the preferred option. Instead, the second ranked option in the FPAR, (the network option – Option A as identified in the FPAR), is the option that maximises the net economic benefit. The outcomes of Ergon's updated 2024 analysis are presented below, alongside the results from prior analyses at the Request for Proposal and FPAR stages in 2022 and 2019 respectively.

- Option A: Network option
 - 2019 FPAR NPV -\$11.64m (WACC=6.40%)

¹ Ergon, Request for Proposal Charleville 66kV Voltage Management, 1 October 2021.

- 2022 Request for Proposal NPV -\$10.42m (WACC=2.62%)
- 2024 NPV -\$15.41m (WACC=2.62%)
- Option C: Non-Network Option
 - 2019 FPAR NPV -\$10.58m (WACC=6.40%)
 - 2022 Request for Proposal NPV -\$7.51m (WACC=2.62%)
 - 2024 NPV -\$23.1m (WACC=2.62%)

Ergon did not provide further assessment of the cost of Option B (the third ranked option in the FPAR). We understand that the estimated cost of Option B in the FPAR (at an NPV of \$26.1m to \$31.3m) was significantly higher than the estimated costs of Option A and Option C even after the increases in the 2024 estimates. Therefore, if Option B were estimated again with a similar increase in its cost, it would remain the third ranked option.

As noted above, the non-network proponent for Option C withdrew its proposal in January 2025. Ergon advised that this was mainly due to higher connection costs than the non-network proponent had anticipated for connecting its solar farm to provide network support. To offset the higher connection costs, the non-network proponent had requested an increase in compensation in the network support agreement.

In its request to the AER, Ergon stated an additional material change in circumstances had occurred from an increase in the urgency of the timing to address the identified need described in the FPAR. Ergon noted that the FPAR was published in 2019 with an expectation that the preferred option would be built, commissioned, accepted by Ergon, and fully operational by June 2020. As a result of the delay in addressing the identified need, Ergon claimed that the Charleville SVC has risk of imminent failure, and that the urgency of the Charleville Project is now critical.

Effect on the reliability and secure operating state of the network

In its request to the AER, Ergon asserted that a significant delay in addressing the identified need in the FPAR could negatively impact the reliability and secure operation of its distribution network. To support this claim, Ergon provided the following reasons:

- The SVC is essential for maintaining stable voltages during both high and low load periods across a large area of South West Queensland. The SVC is well beyond its design life and is in poor condition. Due to its condition, the SVC requires increased maintenance, leading to significant operating costs.
- A failure of the SVC or its components could cause voltage compliance issues, customer complaints, loss of revenue, and operational constraints in the South-West Queensland distribution network.
- If the SVC fails, it would reduce the expected availability of the plant and therefore lead to lower reliability for customers in Charleville, Cunnamulla, Quilpie, and surrounding areas.

Ergon advised that the original timeframe to address the identified need in the FPAR has already been exceeded, as the preferred option was expected to be operational by June

2020. Due to the potential impact on network reliability and security, Ergon now seeks an urgent solution for replacing the SVC. Ergon noted that the network option (Option A in the FPAR) could be implemented within 5 years, depending on procurement and delivery activities.

2.3 Reapplication of RIT-D

The AER has responsibilities under the NER in relation to the RIT-D. The RIT-D is a cost benefit analysis which network businesses must apply before making major investment in their networks to address an identified need, unless exempt from doing so. Distribution businesses must apply the RIT-D to proposed distribution investments that do not fall under certain exemption criteria specified under NER clause 5.17.3(a) (for example, where the cost is below a defined threshold or the investment addresses an urgent and unforeseen network issue).² The RIT-D aims to promote efficient distribution investment decision making in the NEM and provide greater consistency, transparency and predictability.³

The AER's role in relation to the RIT-D includes developing and publishing the RIT-D application guidelines and monitoring compliance with the elements of the RIT-D which are required under the NER. The AER does not have a role in approving the RIT-D outcome or assessing the costs and benefits that are estimated within a RIT-D application. The RIT-D proponent is responsible for applying the RIT-D in accordance with the RIT-D Guidelines.

The process for applying the RIT-D is set out in NER clause 5.17.4. For the purpose of this request, clause 5.17.4 of version 202 of the NER is applicable because the Charleville RIT-D, for the Charleville Project was undertaken prior to the 2023 rule changes in relation to material change in circumstances obligations. From here on, references to the NER are references to version 202.

Clause 5.17.4(t) of the NER requires RIT-D proponents to reapply the RIT-D, unless otherwise determined by the AER, if:

- a RIT-D proponent has published a FPAR in respect of a RIT-D project,
- a network service provider still wishes to undertake the RIT-D project to address the identified need, and
- there has been a material change in circumstances, which in its reasonable opinion means that the preferred option is no longer the preferred option.

A material change in circumstances may include, but is not limited to, a change to the key assumptions used in identifying the identified need described in the FPAR or the credible options assessed in the FPAR.⁴

In making a determination that a RIT-D proponent is not required to reapply its RIT-D,

² NER, cl.5.17.3(a)

³ NER, cl.5.17.1(b)

⁴ NER, cl.5.17.4(u).

the AER must have regard to:

- a) the credible options (other than the preferred option) identified in the FPAR,
- b) the change in circumstances identified by the RIT-D proponent, and
- c) whether a failure to promptly undertake the RIT-D project is likely to materially affect the reliability and secure operating state of the distribution network or a significant part of that network.⁵

⁵ NER, cl 5.17.4(v)

3 AER Assessment

The AER has decided against making a determination that Ergon is not required to reapply the RIT-D. Accordingly, Ergon is required to reapply the RIT-D in respect of the Charleville Project in accordance with clause 5.17.4(t) of the NER.

In making our assessment, we have considered whether the criteria for a reapplication of the RIT-D under clause 5.17.4(t) are satisfied. We acknowledge Ergon's opinion that there has been a material change in circumstances due to the increased cost of the preferred option and the increased urgency of the identified need.

We have also considered the FPAR for the Charleville RIT-D published in 2019 and information provided by Ergon in response to the AER's information requests.

We have had regard to the prescribed matters in clause 5.17.4(v) of the NER, as well as the national electricity objective, the intent of the reapplication provisions and the purpose of the RIT-D.

In seeking to understand the issues behind the request from Ergon, we have identified significant concerns with Ergon's conduct in applying the Charleville RIT-D and its subsequent approach to implementing the preferred solution (including its engagement with the provider of the preferred non-network option and the circumstances that have led to the material changes in circumstances). In summary:

- In 2019, Ergon failed to implement the AER's recommendation to extend the DPAR consultation period to enable non-network proponents to engage appropriately, citing the urgency of the project.
- Ergon did not seek to implement the preferred option with any haste, taking time to issue a Request for Proposal in 2021 following the RIT-D in 2019. Ergon also does not appear to have expeditiously advanced the project with the identified delivery partner.
- Based upon the limited information provided by Ergon, it appears as if the factors underpinning the material change in circumstances were largely caused by Ergon's own actions and its very late consideration of the connection requirements and costs of the project.
- Having contributed to this, Ergon now seeks to move ahead with a network option rather than undertaking a RIT-D process that will help identify an efficient solution in the long-term interests of consumers.
- Notwithstanding the claim of urgency, Ergon recently indicated that a solution (either non-network or network) may take up to 5 years to implement.

These concerns are discussed in further detail below.

In light of the above, we consider it entirely appropriate that Ergon reapply the RIT-D to determine the most efficient investment to address the identified reliability concerns.

The delays to the project appear to have been caused largely by Ergon's inaction. We are deeply concerned about these delays and the way in which the project has unfolded. We

consider that Ergon's inaction has contributed to increased reliability risks associated with the potential failure of the ageing Charleville SVC.

Lack of stakeholder engagement on original RIT - D

After the publication of the DPAR in July 2018, stakeholders expressed concerns with Ergon's consultation, noting that adequate time to make a submission was not provided. Relevantly, stakeholders had to wait to receive information from Ergon during the DPAR consultation period, which would inform their submissions. We therefore recommended that Ergon allow additional time for stakeholders to provide their submissions. Despite this recommendation, Ergon did not extend the consultation period from the minimum statutory requirement of 6 weeks, on the basis of its opinion that the 6 weeks consultation was appropriate, given the urgent risk to the network.

Lack of urgency to progress project

Despite this claim of urgency, after the RIT-D process was completed in May 2019, Ergon did not act expeditiously to advance the project.

While the FPAR was published in May 2019, a Request for Proposal to undertake the preferred option was not published until October 2021. Moreover, it appears there were further delays in Ergon providing information to the provider of the preferred option in the period following the Request for Proposal stage, which would enable the provider to move forward with the project.

We consider that Ergon's failure to undertake adequate stakeholder engagement during and after the RIT-D potentially reduces incentives for non-network proponents to bring forward projects given the cost of engaging with the RIT process.

Concerns with basis of cost changes

Based on the limited information Ergon has provided, we consider that there is some uncertainty in relation to the basis of the cost of the preferred option. Specifically, it appears that Ergon has not undertaken detailed work in determining the appropriate connection cost to connect the preferred option.

Reliability concerns driven by Ergon's delays

Ergon's request to not reapply the RIT-D is premised on reliability risks to Ergon's network. However, we note that these risks have been driven by delays and inaction on the part of Ergon. We also note that the original RIT-D to find a solution to address these risks was conducted in 2019 and Ergon has not materially advanced the project some 6 years later.

Ergon has confirmed that there are backup mechanisms available involving operational measures which may address impacts on the secure operating state of the network. These mechanisms could be implemented if the Charleville SVC fails and requires replacement. However, these measures may involve some additional risk, as well as operational costs through the need for control room staff to remotely switch the reactive plant at the Charleville substation.

Further, we understand that proceeding with the non-network option would likely take approximately 2 years to implement. In comparison, Ergon has advised that the network option (its new preferred option) would take 2 to 5 years to implement.

Reapplying the RIT to support consideration of most efficient options

A reapplication of the RIT-D is appropriate to provide an opportunity for stakeholders to propose options to address the identified need for the Charleville RIT-D, including lower cost and non-network options. A consideration of all available credible options (which may be expanded through submissions to the options screening report) will promote efficient investment in the long-term interest of consumers.

It is important that RIT-D proponents apply the RIT-D in a manner which is consistent with the NER and the RIT-D Guidelines, providing a transparent process based on quality engagement and reasonable conclusions.

Reapplying the RIT-D will add approximately 5 to 7.5 months to the time required to address the identified need. Ergon's preferred approach of a network solution without reapplication of the RIT-D will take 2 to 5 years. It is also our understanding that non-network solutions will not take a materially greater amount of time than the network solution.

The AER urges Ergon to closely consider the intent of the RIT-D in determining the way forward. It has been some time since the RIT-D and credible options for this project were subject to input from the market. We expect that Ergon be fully transparent in its decision making on next steps.

We expect Ergon will undertake the RIT-D on the basis of transparent, fair and reasonable connection costs. We also expect Ergon to engage early on the connection requirements for all credible options. Early engagement will ensure that Ergon has greater accuracy in estimating the connection costs of each credible option, and enable any proponents of non-network solutions to meaningfully consider what they can offer.

The AER will closely monitor Ergon's progress in reapplying the RIT-D for this project to ensure that it complies with the requirements of the NER and our RIT-D guidelines. Given the issues with the process to date, we consider the interests of consumers are best served by this close monitoring and that this may also mitigate the risk of further delays.