



Ergon Energy Ring Fencing Waiver Application

Behind-the-meter generation services
in the isolated networks
25 October 2023



Part of Energy Queensland

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1. INTRODUCTION

Ergon Energy Corporation Limited (Ergon Energy) is a subsidiary of Energy Queensland and is a Queensland Government Owned Corporation. Ergon Energy builds, owns, operates and maintains an electricity distribution network and supplies electricity to more than 750,000 customers over a vast operating area covering one million square kilometres – around 97 per cent of the state of Queensland. Ergon Energy’s supply area covers the expanding coastal and rural population centres to the remote communities of outback Queensland and the Torres Strait. There are over 150,000 kilometres of power lines and approximately one million power poles in the Ergon Energy distribution network, along with associated infrastructure such as major substations and power transformers.

Ergon Energy also owns and operates 33 isolated power stations that are predominantly diesel fired. Those power stations support 39 communities across far western Queensland, through the cape and across 16 islands of the Torres Strait. Ergon Energy also has 35 stand-alone networks (including Mount Isa-Cloncurry) not connected to the national electricity grid, that support the provision of distribution services for these isolated communities. Figure 1 shows the remote locations of the isolated power stations owned and operated by Ergon Energy for the benefit of electricity customers within those isolated communities.

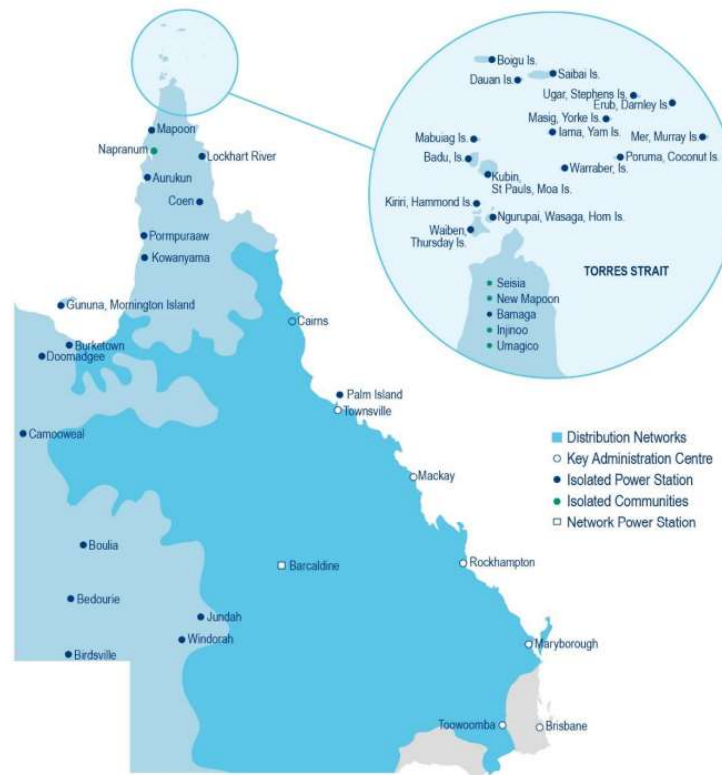


Figure 1 – Ergon Energy’s Isolated Networks

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Customers in the isolated networks are provided retail services by Ergon Energy Queensland (EEQ). As a non-competing retailer servicing non-market customers in Ergon Energy's distribution area, EEQ is unable to actively attempt to acquire new customers or provide them with services on a market contract. It must charge its customers regulated retail (notified) prices,¹ which are set by the Queensland Competition Authority (QCA).²

EEQ receives community service obligation (CSO) payments in support of its delivery of the Queensland Government's uniform tariff policy (UTP).³ The UTP provides that, wherever possible, customers of the same class should pay no more for their electricity and should be able to pay for their electricity via similar common price structures, regardless of their geographic location.⁴ The CSO underpins the UTP and compensates EEQ for the additional costs of supplying electricity customers in regional and remote Queensland.

In September 2022, the Queensland Government released its Queensland Energy and Job's Plan (the Plan). The Plan outlines how Queensland's energy system will transform to deliver clean, reliable and affordable energy, leveraging Queensland's natural advantages. The Plan includes ensuring regional and remote communities, including First Nations communities, can share the benefits of clean, reliable and affordable energy into the future. It also includes a commitment to zero net emissions across the isolated power stations by 2050 and an inclusive Remote and First Nations clean energy strategy that will be co-designed by remote First Nations communities and the Queensland and Australian governments.

Under the Plan's *Action 3.5: Clean energy for remote and First Nations communities*, Energy Queensland is required to update Ergon Energy's *Isolated Networks Strategy 2030* taking into account initiatives to chart a pathway to net zero, and complete feasibility studies to decarbonise isolated power stations in each community, during 2023-25.⁵

Pending its update, the *Isolated Networks Strategy 2030's* ambition statement is "to support community development and participation in renewable energy supply while providing safe, sustainable, cost effective and reliable networks." The strategy's current objectives include:

- a reduction in consumption of imported fossil fuel with the aim to transition from the traditional fossil fuel generation to local renewable generation and imported renewable sourced fuel substitutes;
- providing economic benefit through enabling energy services from the community and stimulating regional development, by realising electricity savings, and by minimising the CSO payment; and

¹ As an assigned retailer under sections 19C and 64D of the National Energy Retail Law (Queensland)

² [09.06.23 - \[27\] Extra Gazette.fm \(qca.org.au\)](#)

³ Queensland Budget 2023-24, Budget Strategy and Outlook, Budget Paper No. 2, Page 209

⁴ Clause 2(a) of the Schedule Terms of Reference of the Electricity (Ministerial) Delegation (no. 1) 2022 to the Queensland Competition Authority

⁵ [Queensland Energy and Jobs Plan \(epw.qld.gov.au\)](#)

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- mitigation of asset and fuel-related risk by reducing reliance on a single technology and fuel source and reducing the need to transport diesel and associated materials across sensitive environments.⁶

Efforts are underway to install centralised renewable energy generation in the isolated networks, for example the solar photovoltaic (PV) and battery systems for Doomadgee, Windorah, Burketown and Boulia announced by the Queensland Government in August 2023.⁷

This ring-fencing waiver application is concerned with the expansion of generation services in the isolated networks beyond exclusively centralised generation to include Ergon Energy installing, owning, operating and maintaining renewable generation behind participating customers' meters.

2. RING FENCING COMPLIANCE

Ergon Energy is committed to complying with the Australian Energy Regulator's (AER's) electricity distribution ring-fencing guideline (the Guideline), which in simple terms imposes two key restrictions on distribution network service providers (DNSPs):

- a DNSP may only offer distribution services to customers, and
- a DNSP must not discriminate in favour of an affiliated entity.

Ergon Energy supports the granting of ring-fencing waivers by the AER where appropriate. This is especially so if the harms that ring-fencing is designed to prevent can be avoided or adequately managed, and therefore certain restrictions imposed by the Guideline can be relaxed.

On 18 December 2017, the AER granted Ergon Energy a waiver from the legal and functional separation obligations under clauses 3.1 and 4.2 of the Guideline⁸ to allow Ergon Energy to continue to own and operate the isolated networks plus the Mount Isa-Cloncurry supply network using its offices, staff, branding and promotions until 30 June 2025, or until there is a change in regulatory arrangements.⁹

This new ring-fencing waiver application should be considered complementary and additional to the existing waiver that enables Ergon Energy to provide 'other services' in the isolated networks.

In this waiver application, we seek to explain how the proposed expansion of Ergon Energy's generation services in the isolated networks (excluding the Mount-Isa Cloncurry supply network¹⁰) to behind customers' meters is designed to deliver benefits to electricity consumers and meet decarbonisation requirements as outlined in the Plan. We also seek to demonstrate that in doing so, we will not adversely affect competitive markets, as ultimately the provision of generation services is simply changing the location of where the generation is located and customers consent will be required, so that they can actively participate in the renewable energy transition. Further,

⁶ [Isolated Networks 2030 Strategy \(ergon.com.au\)](#)

⁷ [Sunshine to savings: remote Queensland communities to save big with solar - Ministerial Media Statements](#)

⁸ Version 2, which was published in October 2017

⁹ [AER Ring-fencing waiver applications final decision - December 2017 13.pdf](#), page 67

¹⁰ The roll-out would be confined to Ergon Energy's isolated networks, with the Mount Isa-Cloncurry supply network excluded because provision of network services there is economically regulated by the AER and because it is also not incorporated into Ergon Energy's *Isolated Networks Strategy 2030*

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there is little competition in the isolated networks and therefore little opportunity to discriminate against third parties. In addition, the services provided in the isolated networks are regulated by the Queensland Government. In this regard, Ergon Energy is seeking a ring-fencing waiver in relation to the obligations to legally and functionally separate services.

Clause 5.2 of the Guideline provides that a DNSP's application for a waiver must contain information and materials necessary to support the application, including:

- a) the obligation in respect of which the DNSP is applying for a waiver;
- b) the reasons why the DNSP is applying for the waiver;
- c) details of the service, or services, in relation to which the DNSP is applying for the waiver;
- d) the proposed commencement date and expiry date (if any) of the waiver and the reasons for those dates;
- e) details of the costs associated with the DNSP complying with the obligation if the waiver of the obligation were refused;
- f) the regulatory control period(s) to which the waiver would apply;
- g) any additional measures the DNSP proposes to undertake if the waiver were granted; and
- h) the reasons why the DNSP considers the waiver should be granted with reference to the matters specified in clause 5.3.2(a), including the benefits, or likely benefits, of the grant of the waiver to electricity consumers.

The remainder of this waiver application addresses these requirements.

3. DESCRIPTION OF WAIVERS BEING SOUGHT

The obligations for which the DNSP is applying for a waiver

Ergon Energy is seeking a waiver from the requirement for legal separation of a DNSP from an entity offering non-distribution services under clause 3.1(b)¹¹ of the Guideline. If granted, this waiver would allow Ergon Energy, subject to a customer's consent, to offer non-distribution (generation) services in the form of behind-the-meter generation products, which could include roof mounted solar PV generation and/or energy storage systems. In addition, Ergon Energy is seeking a waiver from the requirement for functional separation with regard to branding and cross-promotion under clause 4.2¹² of the Ring-fencing Guideline. This waiver would enable Ergon Energy to offer the non-distribution (generation) services under its own brand name.

Retail services will continue to be provided to customers in the isolated networks by EEQ through standard retail contracts and under existing waiver conditions.¹³

¹¹ The legal separation obligation under clause 3.1(b) of the Guideline provides that a DNSP may provide distribution services and transmission services but must not provide 'other services'

¹² The functional separation obligation under clause 4.2.3 of the Guideline provides that a DNSP may not use the same branding and promotion for both regulated and unregulated services

¹³ [AER Ring-fencing waiver applications final decision - December 2017_13.pdf](#), page 70

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The reasons why the DNSP is applying for the waiver

The waiver from the obligations is based on the need for a coordinated approach to installing and connecting renewable energy in the isolated networks including both centralised and distributed.

Ergon Energy, to date, has supported a customer and community led transition to renewable energy. However, in Ergon Energy's experience, customers in the isolated networks have very limited options available to them when investigating and investing in behind-the-meter options, and even less support to ensure the ongoing safe and reliable operation of these assets. As Ergon Energy seeks to decarbonise its isolated networks, we consider that the following challenges are relevant with customer-owned behind-the-meter generation:

- Private sector companies with specialised areas of expertise, such as that required for renewable energy, find it difficult to operate, both from an installation and ongoing maintenance perspective, across the isolated networks. Each isolated network has a limited number of customers and is geographically remote from traditional commercial centres. In addition, access to some communities due to seasonal weather impacts can be difficult and adds to the complexity associated with operating in these locations.
- Where larger customers that are providers of essential services to the remote community¹⁴ install solar PV on their premises, the systems are designed and sized based on their own budgetary and on-site energy requirements. They are not designed or installed based on the opportunity their roof space may present, or the energy needs of the broader community.
- The unmanaged hosting capacity in the isolated networks to maintain stable operation is generally very low. There is a growing requirement for solar PV installations to be orchestrated (as dynamic installations) by the centralised power station, which materially increases the cost of the installation through the addition of a gateway device. The additional device increases the complexity of the systems that need to be installed, which in turn increases the cost and complexity of maintenance requirements.
- While private solar PV installers are engaged by state and local government entities and businesses on occasion, there is generally limited small customer demand and installation for renewable energy. Households in these communities typically have lower-than-average incomes¹⁵ but face higher-than-average installation costs for solar PV due to their remote locations.

The isolated networks currently have around 450 connected solar PV systems, which equates to approximately 5% of customers in these locations having solar PV. By comparison, the percentage uptake of solar PV by customers connected to the main grid is approximately 35%. Furthermore, over half of the connected systems have been funded through some form of Government support, including federal government grants or solar programs for government facilities such as local council buildings, schools, hospitals and police stations. These government-funded systems make

¹⁴ Such as, health, education, social services, and local convenience stores

¹⁵ The estimated isolated community income is about \$380/person/week, versus the Queensland average of about \$670/person/week, based on the 2021 census data

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up 65 per cent (around 3.4MW) of the solar PV capacity in the isolated networks. A significant portion of housing across the communities is also state or local council owned.¹⁶

These figures further demonstrate the very limited extent of private investment in solar PV, strengthening the case that Ergon Energy owning, operating and maintaining behind-the-meter generation would not materially impact competition for the provision of non-government supported installations in the isolated systems.

As the transition to renewable energy in the isolated networks accelerates, increasing the level of renewable energy in remote communities makes economic and practical sense in locations where vacant land is limited but rooftops are available.

Details of services

Ergon Energy proposes to install, own, operate and maintain distributed energy resources behind-the-meter, with the customer's consent. The behind-the-meter generation assets will predominantly take the form of rooftop solar PV systems, with battery energy storage systems a possible addition in some circumstances. However, this waiver should be technology agnostic to allow for future technological advancements, for example small wind turbines.

These behind-the-meter generation assets would be dynamically orchestrated with the local power system, such that Ergon Energy maintains the isolated network's stability and reliability.

There are various models that Ergon Energy could implement. However, the final model will be subject to discussions between Ergon Energy and the Queensland Government, and a final decision will be made by the Queensland Government (if the AER approves this waiver application), given its:

- commitments to zero net emissions across the isolated power stations, development of a Remote and First Nations clean energy strategy to achieve that commitment and the requirement to update Ergon Energy's *Isolated Networks Strategy 2030* under the Plan;
- regulated retail (notified) pricing framework based on the UTP, which is in place across the isolated networks and regional Queensland more broadly; and
- role in determining cost recovery arrangements for Ergon Energy's provision of distribution and generation services (which are not regulated by the AER) in the isolated networks under the CSO arrangement.

The following initiatives will run concurrently to maximise the benefit of Ergon Energy providing the proposed behind-the-meter generation service:

- a new Remote and Isolated Communities Initiative, as outlined in Ergon Energy's 2023-24 Demand Management Plan, focussed on improving demand flexibility, energy efficiency and energy literacy, with the current pilot providing incentives to the highest consuming customers on Thursday Island prior to its roll-out to more isolated networks and customers;¹⁷ and

¹⁶ [Housing | Torres Strait Island Regional Council \(tsirc.qld.gov.au\)](https://www.tsirc.qld.gov.au/housing)

¹⁷ [ergon.com.au/_data/assets/pdf_file/0019/1085005/2023-24-Demand-Management-Plan.pdf](https://www.ergon.com.au/_data/assets/pdf_file/0019/1085005/2023-24-Demand-Management-Plan.pdf)

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- EEQ's Powersavvy program, which is designed to help customers understand how decisions on their electricity use impact their electricity bills.¹⁸

It is important to highlight that this waiver will not provide Ergon Energy with exclusivity for installing solar behind-the-meter, but rather provide additional options to customers whilst also ensuring that the lowest cost solution for maintaining security of supply can occur in these isolated communities, noting that Ergon Energy is working to expand the capacity of the isolated networks to incorporate more distributed energy resources (DER).

Proposed waiver commencement and expiry dates

Ergon Energy proposes that the waiver commences upon the AER's approval and expires on 30 June 2045.¹⁹ This aligns with the Australian Taxation Office's 20-year asset life for solar PV generation systems.²⁰

Potential costs if the waiver application is not granted

The costs if the waiver is not granted are difficult to quantify in dollar terms. However, they include:

- The loss of an efficient approach to meet the Queensland Government's commitment to net zero emissions across the isolated power stations under the Plan, jeopardising its achievement.
- A customer-only approach to deployment of DER in isolated networks, requiring more centralised generation that can in some cases be more costly and less practical in certain isolated networks, and increasing the challenges in maintaining and improving security, reliability and resilience of supply. This is particularly the case in locations such as Ugar (Stephen) Island (see Figure 2 below) where the existing cleared land mass is very small, preventing larger centralised solar PV generation facilities. It is clear in these cases that rooftops of existing structures are likely to be the most suitable locations for renewable transformation.
- Potential delays in the phase-out of diesel-powered generation, prolonging risks associated with the price of diesel and potential impacts on environments with cultural significance and high ecological value.

¹⁸ [5-20-0009-Power-Savvy-Booklet-June-2023-www-V03.pdf \(ergon.com.au\)](#)

¹⁹ Covering the remainder of the current 2020-25, 2025-30, 2030-35, 2035-40 and 2040-45 regulatory control period

²⁰ [TR 2021/3 - Income tax: effective life of depreciating assets \(applicable from 1 July 2021\) S \(Published on 30 June 2021\) | Legal database \(ato.gov.au\)](#)

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Figure 2 – Ugar (Stephen) Island

There would be no benefit to isolated network customers from the associated potential increased costs of supply. Higher costs will not drive greater retail competition due to the UTP/CSO arrangement, nor will it expand the limited competition for behind-the-meter DER in these remote locations.

Additional measures in support of the waiver

Ergon Energy will continue to apply its AER-approved Cost Allocation Method (CAM) in relation to the isolated networks. The CAM sets out how we allocate costs towards the provision of services.

Capital and operating expenditure in the isolated networks, including the proposed behind-the-meter generation service, would continue to be attributed and allocated to unregulated services. Separate accounts are being maintained to demonstrate this clearly and transparently. This should address concerns about the potential for cross subsidisation by customers connected to Ergon Energy's regulated distribution network.

In addition, funding for the behind-the-meter generation service would be via an arrangement between Ergon Energy and the Queensland Government.

Reasons why the waiver should be granted

The granting of this waiver is consistent with the National Electricity Objective (NEO) because it will promote efficient investment in, and efficient operation and use of, electricity services in the

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isolated networks. The proposal's decarbonisation aspect is also directly aligned with the incorporation of an emissions reduction objective in the NEO, as agreed by Energy Ministers on 19 May 2023.²¹

In addition to the measures described above to address cross-subsidisation, there is no retail competition and little competition for behind-the-meter generation in these remote locations, and therefore little opportunity to discriminate against third parties. Rather, Ergon Energy would promote market benefits by maximising the numbers and sizes of behind-the-meter solar PV systems (and potentially storage and other renewable energy solutions) installed in the isolated networks.

In contrast to the potential costs if the waiver is not granted as outlined further above, the proposal will deliver the efficient optimisation and coordination of the deployment of renewable energy generation in each of the isolated networks:

- such that the zero net emissions commitment under the Plan is met within the required timeframe at least cost; and
- ensuring that Ergon Energy can maintain and improve security, reliability and resilience of supply during the transition.

There would also be reductions in the use of and dependency on diesel-generated electricity at a community level, resulting in reductions in the environmental risks associated with the transport and use of diesel for electricity generation, particularly through and in remote locations with significant cultural heritage value and ecological sensitivities.

In line with the objectives of the existing *Isolated Networks Strategy 2030*, and where feasible, Ergon Energy would seek to provide employment opportunities in remote communities through this new behind-the-meter initiative.

4. CONCLUSION

Ergon Energy submits that the proposal in this waiver application promotes the NEO, avoids cross subsidisation and does not result in discrimination.

If the AER grants a waiver from the legal and functional obligations of the Guideline as proposed, Ergon Energy considers that there will be no harm to electricity consumers. Rather, pending an agreement with the Queensland Government on the sharing of financial benefits, participating communities would benefit from a smoother transition to decarbonisation while maintaining reliability of supply.

Risks of cross subsidisation will be managed by Ergon Energy continuing to use its CAM to ensure regulated operating and capital expenditures are not being used to provide unregulated services in the isolated networks.

In addition, there is no or little competition in these remote locations and therefore little opportunity to discriminate against third parties. Rather, Ergon Energy would promote market benefits by maximising behind-the-meter solar PV systems installed in the isolated networks.

²¹ [Incorporating an emissions reduction objective into the national energy objectives | energy.gov.au](https://www.energy.gov.au/energy-objects/energy-objects-2023)