

Impact Analysis Statement

Summary IAS

Details

Lead department	Queensland Treasury
Name of the proposal	SAPS national framework opt-in with derogations
Submission type	Summary IAS
Title of related legislative or regulatory instrument	<i>Electricity—National Scheme (Queensland) (Stand-alone Power Systems) Amendment Regulation 2026</i>
Date of issue	January 2026

For all other proposals

What is the nature, size and scope of the problem? What are the objectives of government action?
In May 2019, the (then) Council of Australian Governments Energy Council tasked the Australian Energy Market Commission (AEMC) to investigate the regulatory updates required to enable regulated Stand-alone Power Systems (SAPS). This resulted in amendments to the National Electricity Rules (NER) as per the National Electricity (Regulated Stand-alone Power Systems) Rule 2022¹, which introduced a Distribution Network Service Provider (DNSP)-led SAPS regulatory framework from August 2022. The national framework removed regulatory barriers enabling SAPS to become part of the economic regulatory framework of the National Electricity Market, while maintaining appropriate consumer protections and service standards. SAPS supply electricity to customers through a combination of solar, batteries and back-up diesel generator. SAPS are installed where it is more economically efficient than a grid-connection. Advances in battery management systems and reductions in the cost of battery technologies mean SAPS are now becoming a more economically viable option to a grid connection for some customers through addressing the above issues. To allow Queensland's DNSPs—Ergon Energy Network (Ergon Energy) and Energex— to utilise SAPS, Queensland needs to opt into the national framework. Without this framework Queensland DNSP's must continue to provide a physical grid connection (for areas within their Distribution Authority) even where a SAPS could offer substantial benefits as a lower-cost solution for reliable electricity supply, particularly in regional areas at the fringe of the electricity network. Electricity customers in remote locations in Queensland account for a disproportionately high share of network costs managed by Queensland's DNSPs. To illustrate, 40% of Ergon Energy's distribution network is Single Wire Earth Return (SWER) line supplying only 4% of Ergon's (mostly remote) customer base (approx. 30,800 from a total 772,000 customers), and around 30% of SWER line poles exceed 40 years of age and will soon require costly replacement. The following issues have necessitated technological advancements in electricity supply, particularly for remote customers: • high costs to maintain or replace traditional ageing network infrastructure assets (i.e. poles and wires) servicing a small customer base • grid instability caused by long distribution lines prone to faults • risks to network infrastructure from natural disasters like bushfires • high costs for vegetation management around SWER lines; and • a lack of incentive for private investment in alternative energy supply solutions in regional Queensland due to high level of subsidisation in the regulated market. Alternative market-led solutions that could evolve in other jurisdictions are unlikely to emerge in regional Queensland. The high level of subsidisation in regional Queensland's regulated retail electricity market, through

¹ [SAPS NER amending rule final 2022.pdf \(aemc.gov.au\)](#)

the Community Service Obligation (CSO)² subsidy paid by the Queensland Government under the Uniform Tariff Policy (UTP)³, removes the incentive for customers to seek energy solutions from third party SAPS providers.

Regulated SAPS would benefit Queensland through:

- improved network reliability
- continued access to consumer protections for fringe-of-grid customers converting to a SAPS
- cost savings achieved through a lower cost to serve for remote customers
- enabling the retirement of sections of Ergon Energy's ageing SWER network.

SAPS-related savings reduce operational and capital costs, supporting the cost-effective management of the Regulatory Asset Base (RAB) of Queensland's energy government-owned corporation (GOC), Energy Queensland Limited (EQL). The savings would also flow through in the form of lower network costs, minimising the CSO subsidy paid by the Queensland Government. Although regional customers are unlikely to access lower prices directly, they will still benefit from improved reliability, and consumers more broadly will benefit from lower overall regulated network costs.

Adopting the national SAPS framework (with derogations) in Queensland will also support achievement of the Queensland Government's broader objective of delivering affordable, reliable and sustainable power for all Queenslanders, through allowing DNSPs the ability to provide the lowest cost option for delivering reliable, secure power to customers.

What options were considered?

Four options were considered and analysed to determine the best approach regarding an alternative reliable and quality electricity supply solution that is economically efficient, while maintaining appropriate consumer protections and service standards:

- Option 1 – Develop regulation to amend the *Electricity—National Scheme (Queensland) Regulation 2014* to opt into the national SAPS framework, with derogations (preferred option)
- Option 2 – Develop regulation to opt into the national SAPS framework with no derogations
- Option 3 – Non-regulatory approach
- Option 4 – No action

Option 1 – Develop regulation to opt into the SAPS framework with derogations (recommended)

Under this option an Amendment Regulation would amend the *Electricity—National Scheme (Queensland) Regulation 2014* to allow Queensland's DNSPs to deploy regulated SAPS where economically viable.

This option involves adopting the national SAPS rules by opting into the NER framework, while tailoring certain aspects of the national regulations to better align with Queensland's objectives and existing policies. It also enables Queensland to utilise the established economic regulatory framework, benefiting from the Australian Energy Regulator's (AER) expertise in assessing the prudence and efficiency of SAPS projects.

Under section 6B(1) of the National Electricity Law (NEL), which commenced in May 2021, jurisdictions can opt into all or part of the NER regulatory framework. Section 6B(2) of the NEL outlines options of how a 'local regulation' may regulate SAPS but more importantly, section 6B(3) allows a local regulation to modify the application of both the NEL and the NER.

Queensland proposes to adopt the framework, with derogations, for the regulation of SAPS provided by section 6B of the NEL. The proposed Queensland regulations will serve two purposes:

1. Provide a means of identifying and declaring certain networks to be able to install SAPS.
2. Modify the application of provisions of the NER which negatively impact the economic viability of SAPS.

Opting into the DNSP-led SAPS framework will enable:

- DNSPs to manage the conversion of customers' electricity supply from grid-connection to a SAPS where it has been demonstrated as economically feasible, while maintaining existing retailing and consumer protections.
- DNSPs continued access to the existing ring-fencing exemption that enables DNSPs to provide generation services once registered as a 'SAPS Resource Provider'.

² an annual subsidy paid to Ergon Retail to cover the difference between the cost to supply customers with electricity and the regulated retail electricity prices Ergon Retail can charge customers.

³ a policy that ensures wherever possible, customers of the same class should pay no more for their electricity and should pay for their electricity via similar price structures, regardless of their geographic location.

- The application of SAPS performance and quality of supply standards (Rule 5.13B.1, NER) and appropriate consultation processes with affected parties (5.13B.2, NER) as well as a robust and detailed monitoring and reporting framework (Schedule 5.8(d2), (l) and (p), NER) (allowing customers to realise the benefits in transitioning from a grid connection to a SAPS and ensures a customer is no worse off following the transition to a SAPS).

Additionally, the regulation of SAPS enables the removal of redundant network infrastructure, which can put further downward pressure on the cost of the CSO subsidy paid by the Queensland Government. If SAPS remain unregulated, infrastructure cannot be decommissioned, and the financial benefits will not be maximised.

This option will support achievement of the government's broader objective of delivering affordable, reliable power and will allow the retirement of obsolete network infrastructure in regional and remote areas, leading to a more cost-effective management of EQLs RAB.

Option 2 – Develop regulation to fully opt into the national SAPS framework

This option requires Queensland to opt into the national SAPS regulations without derogations or modifications to the SAPS regulatory structure set out in the NER.

Opting in without derogations would represent a missed opportunity to address broader implications of the use of SAPS in Queensland and the potential to put downward pressure on the cost of the CSO, as well as having a SAPS framework that is not fit-for-purpose for Queensland.

This option is not recommended.

Option 3 – Non-regulatory approach (i.e. DNSPs continue to install 'unregulated' SAPS)

Under a non-regulatory approach option, Ergon Energy would continue to install 'unregulated' SAPS as a network support solution for fringe-of-grid customers, to improve the reliability and quality of power supply.

This option would require the DNSP to also maintain the existing physical connection between the customer and electricity grid, an unnecessary duplication of electricity supply that is not economically feasible for the DNSP.

This option is not recommended.

Option 4 – No action (no SAPS deployment)

Under this option Ergon Energy will cease to install unregulated SAPS due to the uneconomical cost. This option would preserve regulatory barriers that discourage DNSPs from installing regulated SAPS and present a missed opportunity to utilise this technology to better serve customers and lower the overall cost to deliver services.

What are the impacts?

Option 1 is the recommended option because these amendments will provide Queensland with an additional tool to deliver affordable, reliable power to Queenslanders with no adverse impacts on government, distributors, retailers or customers.

Option 1 – Develop regulation to opt into the SAPS framework with derogations

This option has been identified as the most suitable for Queensland and the cost savings from the deployment of SAPS will support lower network prices and put downward pressure on the amount of CSO subsidy paid under the UTP.

Importantly, regional Queensland customers who transition to SAPS under the regulated SAPS framework will be no worse off, rather, they will benefit from improved reliability and quality of power supply and will also retain all existing consumer protections afforded to them when they were grid-connected, including access to existing reliability and safety standards. Additionally, regional customers that transition to a regulated SAPS will continue to be serviced by their retailer, Ergon Retail, and will not pay more or less for their electricity. The tariffs will remain the same due to regulated pricing in regional Queensland.

The Amendment Regulation under this option will have the following impacts, with the targeted derogations ensuring the framework is fit-for-purpose for the Queensland context:

The remote communications requirements for SAPS generation meters will be removed

SAPS will typically be deployed in remote locations where access to cost-effective 4/5G communications networks are limited or non-existent. These limitations require costly upgrades such as satellite communications, with approximate total upfront costs of \$2,500 to \$3,450 and ongoing annual costs for data plan service charges of between \$2,200 and \$2,400.

The Amendment Regulation will remove the requirement for SAPS to have a communications-enabled generation meter with remote capabilities (that transfers data from the generation meter to the AEMO to meet AEMO settlement requirements). It is proposed to instead obtain SAPS generation data from the customer meter for settlement purposes.

This derogation mirrors a non-controversial rule change request submitted by the AEMO to the AEMC (currently pending), that proposes type 4A manual-read meters for SAPS generation points with a single generator connection (i.e. removal of the requirement for remote communications functionality in SAPS generation meters).

This derogation is supported by the AEMO and has no adverse impacts on the market or the AEMO settlement process. It will support the deployment of more cost-effective SAPS through avoiding the added costs of upgrading communications networks.

Higher metering costs may undermine the economic argument for SAPS which may lead to fewer SAPS installations, especially in areas where they are most needed. Fewer SAPS installations mean fewer opportunities to enhance grid resilience and reliability in remote areas.

New customer SAPS connections (greenfield SAPS) will be permitted within the Ergon Energy Network

Historically, some customer requests for new grid connections have required uneconomical augmentation of network infrastructure before the new customer can be connected to the grid, with the high costs borne by Ergon Energy and recovered through higher network prices.

EQL advise it may only take one customer in a 12-month period to request a connection that has a significant grid-connection cost of over \$1 million, for it to be more technically and economically feasible (and deliver a more reliable supply) for Ergon Energy to offer the customer a connection to a regulated SAPS rather than augment the network to enable a grid connection.

Permitting greenfield SAPS provides Ergon Energy with an additional connection option allowing them to choose the most economical solution that meets new customers' needs. A traditional poles and wires grid connection solution will continue to be the most appropriate and cost-effective solution for most new customers that are close to existing assets.

However, a SAPS option could be the lowest capital cost option, meet higher reliability standards for customers in remote locations and avoid unnecessary high expenditure on extending the life of ageing network infrastructure connecting new customers. This would then put downward pressure on the amount of CSO subsidy paid by the Queensland Government.

Of importance in allowing greenfield SAPS, is ensuring new customers being connected to a regulated SAPS do not pay more or less than the equivalent connection charge and capital contribution that would apply if it was a new grid connection.

Compliance costs relevant to implementation of the regulations discussed in option 1, have been assessed as zero for government because the regulatory function of DNSP-led SAPS is undertaken by the AER as part of their portfolio, who are funded accordingly. Queensland has no regulatory function in this space.

There are also nil compliance costs for DNSPs in the deployment of SAPS under the framework because SAPS are essentially an alternative network supply option available for these already regulated network distributors, to be deployed only when it is considered by Ergon (and approved by the AER) as a more economical supply solution.

Retailers and customers are also not impacted by compliance-related costs relating to the regulations or other costs relating to installation of SAPS. Retailers will service SAPS customers in the same manner as grid-connected customers and AEMO will continue to manage the settlement process for SAPS generation.

SAPS customers converting from the grid to a SAPS will not pay any money to transition to a SAPS and new (greenfield) SAPS customers in regional Queensland will pay no more or less for their SAPS connection under the framework, than they would pay if it was a new grid connection. All Ergon Retail SAPS customers will also continue to pay the same regulated retail tariff as grid-connected customers.

Option 2 – Develop regulation to opt into the national SAPS framework in full

Option 2 would see Queensland opting into the full regulatory framework with no derogations, which means although SAPS customers would still benefit from a more reliable and quality power supply, it will not enable DNSPs to maximise cost savings in the deployment of SAPS. This option would have the following (predominantly financial) impacts:

- *Costly upgrades to communication infrastructure if generation metering requires communications functionality:* The likelihood of eligible SAPS customers being in remote areas where telecommunication is often poor is high. This means upgraded communications like satellite, will be necessary to enable generation meters to feed data back to AEMO for settlement purposes. Satellite infrastructure to address this requirement is estimated at ~\$2,500 per SAPS, plus communications functionality on generation meters is estimated at ~\$2,200 per year, per meter, in annual service fee charges.
- *Uneconomical connection costs if the NER prohibition on greenfield SAPS is maintained:* EQL has historically been required to install uneconomical connections due to a legal obligation to connect new customers to the network, which has resulted in high net connection costs (after the customer connection charge is paid) that are subsidised through increased network prices. These customer applications ranged between \$530,000 to \$2.6 million (per application) in network augmentation costs, which were ultimately added to EQLs RAB and shared across the network through an increase in network prices, which also increased the CSO subsidy.

Permitting greenfield SAPS would've provided EQL with an alternative option to supply some of these customers at a lower cost, noting a SAPS deployment is currently estimated to cost between \$600,000 to \$1 million per system, depending on customer requirements.

No compliance costs apply to this option but given this option does not provide the benefits gained through the proposed Queensland derogations outlined in Option 1 that ensure the framework is fit-for-purpose for Queensland, it is not preferred.

Option 3 – Non-regulatory approach (continue to install 'unregulated' SAPS)

Not adopting the SAPS framework in Queensland will mean DNSPs deploy unregulated SAPS, but only as a network support solution, not as an alternative supply option to a grid connection.

If DNSPs convert a customer to an unregulated SAPS connection, they:

- cannot recover installation costs of the SAPS via network charges
- cannot add the capital costs of the SAPS generation plant to the RAB
- must retain the customer's physical connection to the grid and energisation of the SWER line (i.e. maintain and replace costly, ageing network infrastructure that connects the customer to the grid, when the customer is no longer using the connection, because DNSPs are legally prohibited from removing it if the SAPS is unregulated).

Although offering unregulated SAPS would improve reliability of power supply for customers, the limitations listed above make this option uneconomical and unsustainable for DNSPs and so reduces the likelihood of unregulated SAPS being deployed. This option places a significant financial burden on DNSPs, does not allow for a reduction in the RAB (through removal of obsolete network infrastructure) and therefore does not contribute to minimising the CSO, therefore this option is not supported.

Option 4 – No action (no deployment of SAPS)

Under this option SAPS technology will not be regulated, and no further deployment of SAPS (including unregulated SAPS) will occur.

This option would result in the continuation of some customers experiencing poor power quality and reliability issues, while continuing to account for a disproportionately high share of network costs for the DNSPs.

No SAPS regulatory framework would also mean DNSPs will not have an alternative connection option available for existing customers or new customer connection requests that otherwise would require significant network augmentation, potentially leading to uneconomical connections that ultimately increase the CSO.

Without an alternative connection option, the ageing SWER network supporting these customers' grid connection will soon require costly upgrades or replacement, which will be added to EQLs RAB and will increase the CSO subsidy paid under the UTP, therefore this option is not supported.

Who was consulted?

The amendments and derogations to the SAPS Rules were developed alongside extensive consultation with EQL, including targeted consultation with their network and retail business areas.

Further consultation was undertaken with the AER and Australian Energy Market Operator to confirm if the proposed Queensland derogations were acceptable from a regulator and market operator perspective.

Essential Energy (the DNSP in New South Wales (NSW)) was also consulted on a proposal to opt into the SAPS framework in full for their distribution area that operates in Queensland, which they supported. NSW has opted in to the SAPS framework without derogation, therefore this will ensure application of the SAPS regulatory framework is consistent across all Essential Energy's network distribution areas.

What is the recommended option and why?

Option 1 to opt into the SAPS framework with derogations is the recommended option.

With no current regulatory framework in place, Queensland's DNSPs must provide a grid connection for new and existing customers, even where a SAPS could offer a lower-cost solution for a reliable electricity supply, particularly for customers in remote locations at the fringe of the electricity network.

Through applying the national regulatory SAPS framework in Queensland (with targeted derogations to ensure it is fit-for-purpose for the Queensland context), savings from the deployment of regulated SAPS as a lower-cost supply solution would have positive fiscal impacts for the Queensland Government and would also support the Queensland Government's broader objective of delivering affordable, reliable power.

Deployment of regulated SAPS enables DNSPs to provide the lowest cost option for delivering reliable, secure power to customers, and allows DNSPs to remove obsolete network infrastructure that is uneconomical to maintain or replace, lowering network costs and leading to a more cost-effective management of EQLs RAB. This will place downward pressure on the cost of the CSO subsidy paid by the Queensland Government under the long-standing UTP

Electricity customers connected to a SAPS will be no worse off than if they were grid connected. They will benefit from improved reliability and power quality, maintain access to all customer protections under the NER and will pay the same retail tariffs that applied when grid connected. Ergon Retail's will maintain status quo in its operations when servicing SAPS customers (compared to grid connected customers).

Overall, option 1 provides significant benefits with zero compliance costs applicable, and no adverse impacts on government, distributors, retailers or electricity customers.

Impact assessment

All proposals:

	First full year	First 10 years
Direct costs – Compliance costs	Zero	Zero
Direct costs – Government costs	Zero	Zero

Signed



Under Treasurer

Date: 7 May 2026



Treasurer, Minister for Energy and Minister for Home Ownership

Date: 17 May 2026