

Review of stand-alone power systems

The AEMC has published the final report for its review of regulatory arrangements to support the efficient delivery of stand-alone power systems by distributors while preserving access to retail competition and consumer protections

The report sets out final recommendations for a national framework that facilitates the provision of stand-alone power systems by distribution businesses to their existing customers, where these provide an efficient alternative to traditional poles and wires investment. The cost savings arising from the use of lower cost stand-alone power systems will flow through to all users of the distribution network, through lower network prices.

Context for this review

Changes in technology and technology costs are creating new opportunities for distribution businesses to pursue more efficient alternatives to traditional electricity supply arrangements. In particular, stand-alone power systems are becoming an increasingly viable option for providing electricity services to customers, particularly where the costs of providing a grid-connected service might be high — for instance, in remote locations and areas which are difficult to access or susceptible to bushfires.

As their costs fall, SAPS solutions may increasingly represent a more efficient alternative to replacing existing network assets in these high cost to serve areas. Information provided to the Commission by distribution businesses suggests that they may seek to transition a few thousand customers to stand-alone power systems over the next ten years. These numbers are likely to be higher in Western Australia (which is not part of the NEM), largely due to the unsuitability of some forms of low cost network supply there.

Despite their likely relatively small numbers, customers that are candidates for stand-alone supply account for a disproportionally high share of distributors' costs. Facilitating the use of the most efficient technological solutions to supply these customers will have benefits for the entire community by reducing all customers' distribution charges. To realise these benefits, the regulatory frameworks must adequately support the use of stand-alone power systems and the transition of grid-connected customers to stand-alone solutions.

While stand-alone power systems could potentially be used in a range of situations in the future, the COAG Energy Council asked us to look at regulatory frameworks to support their use by NEM distributors as a first priority for the review. The Commission is continuing to develop its recommendations for regulatory frameworks for the provision of stand-alone systems by parties other than local distributors, with a draft report for this second priority due to be published by 30 June 2019.

The review has built on work undertaken by the Commission in 2017 on a rule change request proposed by Western Power that could not be made due to its inconsistency with the national electricity law.

It also addresses recommendations made by the Independent Review into the Future Security of the National Electricity Market, and the Australian Competition and Consumer Commission (ACCC) in its retail electricity pricing inquiry, in respect of the need to review the regulatory frameworks to ensure they are able to support the efficient provision of stand-alone power systems.

Overview of the final report

The Commission is making a suite of recommendations for changes to energy laws and rules to support the efficient delivery of stand-alone power systems by distributors while preserving consumer protections comparable to those afforded to customers supplied via the interconnected grid.

In particular, the Commission's recommendations will support efficient and transparent investment decisions to allow distributors to use stand-alone systems to supply their existing customers, where these offer a lower cost substitute to investing in, and maintaining, traditional network solutions.

Customers who receive stand-alone systems will retain all of their existing consumer protections, including access to retail competition and existing reliability standards. As such, individual customers would not be disadvantaged where a distributor determined that it would be more efficient to supply them on a stand-alone basis. Further, cost savings arising from the use of lower cost stand-alone systems would flow through to all distribution network users, through lower network prices. The Commission's recommendations have been developed in consultation with stakeholders and are outlined below.

Facilitating efficient and transparent investment decisions

The existing distribution planning and investment framework – which includes the distribution annual planning report (DAPR), demand side engagement obligations and the regulatory investment test for distribution (RIT-D) – has been designed to support the identification, assessment and implementation of the most efficient option to address a need for investment in the network. Provisions already exist to encourage distributors to consider non-network solutions. The Commission considers that this framework is largely appropriate and fit-for-purpose to encourage distribution businesses to make efficient planning and investment decisions in respect of stand-alone power systems.

However, to further support distribution businesses in achieving efficient planning and investment outcomes in the context of stand-alone solutions, the Commission recommends two changes to existing arrangements to increase transparency around both the opportunities for, and decisions made in respect of, stand-alone power systems. To this end, the Commission recommends that the DAPR reporting requirements be amended to include items specific to stand-alone power systems. In addition, the Commission recommends the introduction of a new set of customer engagement obligations on distribution businesses aimed at supporting effective and timely engagement with parties affected by a decision to implement a stand-alone power system.

Maintaining access to retail competition

The Commission has concluded that the delivery of services to customers by means of a distributor supplied stand-alone power system would best be supported by arrangements which broadly emulate the conditions under which a customer would be supplied if they were connected to the grid. Retail services should be provided by competing grid retailers, thus allowing customers to maintain their relationships with existing retailers, and to retain their existing retail offers.

These arrangements would be underpinned by the existing wholesale energy market arrangements, including AEMO's settlement system. However, rather than the usual wholesale spot price, the Commission recommends that retailers should be charged an administered settlement price for that energy. This approach would avoid the need for retailers to seek hedges against the wholesale price with NEM generators, and remove any incentive for retailers to send customers price signals which are inconsistent with minimising the cost of the stand-alone system.

Enabling customers to be left no worse-off in terms of retail prices following the transition to stand-alone supply will facilitate the seamless transition of existing grid-connected customers, and support the ability of distributors to transition customers without having to seek their consent.

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Reliability standards and other consumer protections

Similarly, customers should not be disadvantaged as a result of being transitioned to a stand-alone power system in terms of the reliability of the supply they receive. To enable stand-alone customers to receive reliability protections equivalent to grid-connected customers, and on the basis that network reliability standards are the responsibility of the states and territories, the Commission recommends that the jurisdictions review their legislative instruments governing reliability standards and guaranteed service level schemes, and make any required changes. The Commission notes that, in practice, customers in remote areas are likely to see a significant improvement in reliability if transitioned to stand-alone supply.

In addition, other existing energy-specific consumer protections should be extended to customers who have been transitioned to stand-alone supply by a distribution business. For national protections, this outcome will largely be achieved through the continued supply of electricity to customers by NEM authorised retailers. To ensure that existing jurisdictional protections, including safety and technical regulation, continue to apply to distributor-led stand-alone supply will require jurisdictional governments and jurisdictional regulators to review, and where necessary amend, their legislative frameworks to ensure they cover stand-alone power systems and relevant customers.

Implementation and next steps

Implementation of the recommended regulatory framework will require a package of changes to the national energy law and rules, and to jurisdictional legislative instruments. To this end, the Commission has prepared recommended drafting instructions for amendments to the National Electricity Law and National Energy Retail Law for consideration by the COAG Energy Council.

The next stage of work involves the development of detailed revisions to the National Electricity Rules and the National Energy Retail Rules to apply the final recommendations. The regulatory framework for stand-alone power systems will not be implemented until the complete package of national energy law and rule changes have been made.

The Commission anticipates that the implementation of the requisite rule changes could be achieved in one of two ways. Firstly, a rule change request could be submitted to the AEMC following the passage of the law changes through the South Australian parliament. Alternatively, following endorsement of its recommendations by the COAG Energy Council, the AEMC could commence work to develop rules to implement the recommended framework that would subsequently be made by the South Australian Minister.

Importantly, the successful and timely implementation of the recommended regulatory framework for stand-alone power systems is also contingent on jurisdictional governments and regulators reviewing and amending relevant jurisdictional legislative instruments to support, and ensure consistency with, the recommended framework. Following the introduction of the national framework, once the relevant legislative instruments have been amended by a jurisdiction, that jurisdiction would then expressly opt in to the application of the national arrangements.

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