



Ms Lily Mitchell
Senior Advisor
Australian Energy Market Commission
Level 6, 201 Elizabeth Street
Sydney NSW 2000

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Dear Ms Mitchell

Alternatives to grid-supplied network services consultation paper

CitiPower, Powercor and SA Power Networks welcome the opportunity to respond to the Australian Energy Market Commission's Alternatives to Grid-supplied Network Services consultation paper. In this submission we have outlined:

- the proposed rule change should be considered in the context in which it was proposed—off-gridding is an incidental service that would only be offered to a small number of customers. Nevertheless, it will benefit all customers by reducing overall network costs;
- the proposed rule change will create a new market in which suppliers of distributed energy resources can compete. Distributors have no incentive to restrict competition in the market for off-gridding customers as the amount they can charge customers is limited to regulated distribution use of system charges; and
- off-gridded customers should receive the same consumer protections as network connected customers.

This rule change proposal presents opportunities to reduce network costs by serving high cost remote customers via an off-grid solution where it is a more efficient alternative to continuing to serve them via the network. Off-gridded customers would potentially receive benefits in the form of lower electricity bills and improved reliability. Furthermore, the proposed rule change promotes efficient network expenditure while working within governments' policy positions that customers should pay the same for electricity regardless of where they are located. Therefore this rule change is likely to promote the National Electricity Objective.

If you have any queries on this submission, please contact Frans Jungerth on (03) 9683 2022 or fjungerth@powercor.com.au.

Yours sincerely

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Alternatives to grid-supplied network services

1.1 Purpose and context

The Australian Energy Market Commission (**AEMC**) is consulting on Western Power’s proposed rule to change the definition of distribution services in the National Electricity Rules (**NER**) to enable distributors to off-grid existing customers where doing so is less expensive than servicing them by the network. This would potentially have the following benefits:

- reduce network costs, and hence reduce distributor use of system charges (**DUoS**) to all customers;
- in certain circumstances improve reliability levels for off-gridded customers; and
- reduce fire-start risk.

The need for the rule change arises because network prices (and for the most part, retail prices) are highly averaged, which result from:

- government policy that customers should pay the same for electricity irrespective of location;
- as previously submitted to the AEMC, consumers are unlikely to be ready to accept locational tariffs in the transition towards more cost reflective pricing. Wider exposure to demand or time based pricing is a preferable first step.¹

For CitiPower, Powercor and SA Power Networks (**us** and **we**), the circumstances allowing us to off-grid customers are most likely to arise for a small number of remote customers where network assets require replacing.² This will particularly arise where, for example:

- customers are connected to the end of network lines in remote regions, particularly in South Australia; and
- feeders are located in, or pass through, high bushfire risk areas where the Victorian Government has mandated specific construction standards which will require distributors to underground certain network assets.

In line with network asset lives, customers would be off-gridded over a long period of time as network replacement is needed—30+ years. We will seek to determine the potential number of off-grid customers throughout the AEMC’s consultation process, although our preliminary assessment indicates it would be significantly fewer than the 2,702 customers identified by Western Power, particularly for CitiPower and Powercor.

In this submission we have not contemplated all the legal issues that might arise from the rule change but rather we have focussed on the principles. After the AEMC has narrowed the issues in the draft decision, we will further explore the detailed rules that may affect the proposal.

We support Western Power’s proposed rule change and offer the following comments in response to the AEMC’s National Electricity Amendment (Alternatives to grid-supplied network services Rule 2017) consultation paper (**consultation paper**).

¹ Powercor, Electricity Network Economic Regulatory Framework Review, 1 February 2017.

² While the number of customers is likely to be small, the potential network cost savings could be material.

1.2 Impact on competition

The AEMC has outlined the following potential competition issues from the proposed rule change:³

- service classification may impact on whether distributors will off-grid customers;
- parties may not be able to compete with distributors for off-gridding customers due to a lack of locational pricing;
- after moving, off-grid customers may not be able to choose their retailer; and
- consideration should be given to the most appropriate way to off-grid customers. Services needed to provide off-grid supply, such as generation, metering, operation and maintenance, provision of diesel, could each be provided on a contestable basis or through one provider (who may subcontract the various services).

Other than retailer arrangements, these issues are discussed in this section. As discussed in section 1.3, there may be a continuing role for off-grid customers to have a retailer so they continue to receive retail protections.

1.2.1 Service classification

In its consultation paper, the AEMC considers it uncertain whether the AER will classify off-grid supply as a standard control or alternative control service. If off-gridding is classified as standard control, the AEMC states that off-gridding would only be provided by distributors. On the other hand, if off-gridding is classified as alternative control, distributors may need to charge off-gridded customers significantly higher prices than those currently paid for their electricity.⁴

We do not believe off-grid supply is a service as characterised by the AEMC, but rather, it is correctly characterised as an input. In the AEMC's Contestability of Energy Services consultation paper, it noted that 'it is the services provided by DNSPs that may be classified...not the specific assets that the DNSPs use to provide those services'.⁵ We further consider that a service is not defined by the assets used to provide it, but rather the output that is received by the customer. The service customers receive from distributors is the same regardless of whether it is provided by network assets or 'off-grid' assets, meaning off-grid supply is an input into the service, and not a service itself.

In the Contestability of Energy Services consultation paper, the AEMC also states 'assets can, and often are, used to provide multiple services'.⁶ In this case, off-grid assets are used for only one purpose—to provide customers with the same service they currently receive. The service is, however, provided via a different input.

The relevant service in the context of Western Power's rule change is 'network services'.⁷ Taking the 'constructing the distribution network' subset of network service as an example, Western Power's proposed definition of 'distribution service' would be read as follows:

Distribution service. *A service provided by means of, or in connection with, a distribution system. Without limiting the phrase 'in connection with', [constructing the distribution network] provided by means of a non-network option is a service provided in connection with a distribution system if the non-network option....*

³ AEMC, National Electricity Amendment (Alternatives to grid-supplied network services Rule 2017) consultation paper, 14 June 2017.

⁴ AEMC, National Electricity Amendment (Alternatives to grid-supplied network services Rule 2017) consultation paper, 14 June 2017, p. 22

⁵ AEMC, National Electricity Amendment (Contestability of energy services) Rule 2016, 15 December 2016, p. 15.

⁶ AEMC, National Electricity Amendment (Contestability of energy services) Rule 2016, 15 December 2016, p. 16.

⁷ AER, Final Decision, Powercor distribution determination 2016 to 2020, Attachment 13 – Classification of services.

Network services are, and will continue to be classified by the AER as standard control meaning the rule change as proposed by Western Power will have the intended effect whereby distributors will off-grid customers.

If off-gridding (as an input or a service) forms a standard control service, the AEMC outlined that off-gridding would be provided by distributors 'as a vertically integrated monopoly'.⁸ We disagree with the AEMC because:

- there would be competition for off-gridding customers; and
- we are not seeking to be the customers' retailer.

This is discussed below.

1.2.2 Impact on the market for distributed energy devices and off-gridding

Overall, the rule change would increase the size of the DER market. The rule change is concerned with providing a regulated service via an off-grid system, to customers who would not otherwise be in the market for an off-grid system because it would not be economic for them to disconnect from the network. Competition to provide off-grid systems to these customers would be strong. While we would remain responsible for the performance of the off-grid service, this would be procured in a competitive market, as is the case for other non-network solutions procured by distributors through the RIT-D process.

Further, distributors' participation in DER markets would be minor. Western Power believes there is potential to off-grid around 2,702 customers. We expect there will be fewer customers in our networks because there are fewer and less remote areas than in Western Australia. Nevertheless taking this figure, at most, customers off-gridded by Powercor and SA Power Networks would represent only 0.3% of the DER market in the respective States.⁹ Furthermore, off-gridding these customers will be spread over 30+ years as network assets require replacing.

Under the proposed rule change, distributors have no reason to off-grid customers in order to capture market share in DER markets as distributors could only ever charge DUoS for off-gridding customers, which would otherwise be recovered from other network customers. Additionally, distributors cannot leverage any experience gained in off-gridding customers in competitive DER markets because their participation is prohibited by ring fencing.

This rule change should be considered in context. Distributors would off-grid customers as an incidental service to regular activities in order to reduce network costs, but not attempt to capture a new market in which they could restrict competition to increase returns.

Off gridding as a single service or collection of contestable service

Distributors will select the most efficient way to deliver an off-grid system. This may be delivering it as an integrated service or engaging multiple parties. We do not believe the model needs to be decided on now. The regulatory framework incentivises and requires distributors to procure service inputs in the most efficient way. It does this via:

- the Efficiency Benefit Sharing Scheme and the Capital Expenditure Sharing Scheme which provide incentives for minimising operating and capital expenditure;
- the regulatory investment test for distributors, which requires us to consider the most efficient solutions to investments;

⁸ AEMC, National Electricity Amendment (Alternatives to grid-supplied network services Rule 2017) consultation paper, 14 June 2017, p. 22.

⁹ Commercial and industrial customers have not been included in determining this figure. If included, the percentage of off-grid would represent an even smaller share of the DER market.

- during regulatory determinations distributors face AER and stakeholder scrutiny around the basis of proposed regulatory costs, which includes; the alternatives considered, whether competitive tendering was undertaken, the process and terms under which related parties agreements were made, and how expenditure benchmarks against other distributors; and
- the AER ring fencing guideline requires that distributors must not discriminate between affiliates and other service providers, must provide information to parties on equal terms and must not provide information to affiliates obtained from their competitors. Distributors' compliance will be independently assessed.

When the time arises, distributors will determine the most efficient way to off-grid customers.

1.3 Standards and customer protections

The AEMC has sought comments on the proposed rule change's impact to service reliability and customer protections. This in turn raises issues on whether the distributor should be allowed to off-grid customers without their consent.

1.3.1 Technical standards and regulatory protections

Safety and reliability of supply is a key priority for network connected customers, and these protections should also apply to customers utilising off-grid systems. Many customers would not be aware of service quality parameters and the impact of poor quality on their equipment. Therefore, we believe off-gridded customers should be subject to service levels requirements that distributors must provide to network connected parties. Relevant standards include:

- quality of supply – technical parameters, such as voltage levels should remain within regulated bounds to ensure damage, trip off or stalling electrical equipment does not occur; and
- reliability of supply – the reliability of supply delivered by distributors is subject to Guaranteed Service Level payments, the Service Target Performance Incentive Scheme (**STPIS**) and requirements to publish and use best endeavours to meet reliability targets. Application of the STPIS would fall to the AER, which could treat off-gridded customers based on the feeder category applicable when they were connected to the network or could apply a separate classification for off-grid customers. Off-grid customers should continue to receive these protections.

The AEMC has noted ambiguity and different legislative arrangements as impacting on whether distributors would still be required to comply with the technical standards outlined in regulatory instruments because the instruments in which the standards are outlined were not initially designed to encompass off-grid supply:

- in Victoria, these instruments include the Victorian Electricity Distribution Code (**Distribution Code**) along with national regulations contained in the NER; and
- in South Australia these instruments include the Electricity Distribution Code (**EDC**) administered by the Essential Services Commission of South Australia. The EDC covers reliability measures and Guaranteed Service Levels.

We have not considered whether legally these regulations would apply to off-grid customers, but as a principle, we consider they should.

1.3.2 Customer protections by retailers

The AEMC has noted uncertainty around whether or not off-gridded customers would continue to receive the protections under the National Electricity Retail Law (**NERL**) and Rules (**NERR**) or in Victoria, the Energy Retail Code (**Retail Code**). Similar to the Distribution Code, these regulations were not created with the intention of including off-grid supply. While it is evident in some jurisdictions that the legislation applies only to grid-connected customers, there are other

jurisdictions which have not restricted their application and could in theory, be extended to off-gridding.

In principle, off-grid customers may not need to be treated any differently to customers connected to the network. Retailers could continue to offer all consumer protections as stipulated in the relevant regulatory instruments such as hardship schemes. Retailers could also continue to bill customers.

1.3.3 Distributor discretion to off-grid customers

The consultation paper raises a question on whether off-gridding customers would only be performed with customer consent or whether distributors could make the decision.

If all the existing regulatory protections apply to off-grid customers as they apply to network customers, there is a case distributors should not require customers' consent to be off-gridded. However, in some cases distributors may need to place DER assets on customers' premises, which is likely to require the customer's consent.¹⁰

The proposed rule change offers many potential benefits for off-gridded customers and so we expect that in many cases customers would be willing to move to off-grid supply. These benefits could include:

- potentially lower-cost prices for off-gridded customers given they may not need to pay for wholesale energy;
- improved reliability of supply in the form of lower outages and supply interruptions; and
- reduced bushfire risk.

This is consistent with Western Power's experience which revealed that when customers were approached for installation of off-gridding assets on their premises, the majority of customers actively supported it.

If implemented, we believe that at least initially, distributors should only off-grid supply if they receive customers' consent. This may overcome the AEMC's concern that the NERR may not allow distributors to disconnect customers to move them off-grid or terminate a customer's contract with a retailer.¹¹ Over time and as the benefits to off-gridded customers are proven, this could be changed to be distributors' decision if the off-grid system does not impact on the customers' property.

¹⁰ In some cases, off-grid supply might not require access to a customer's premises. For example, it might be feasible to construct an integrated DER unit adjacent to a customer's premise.

¹¹ AEMC, National Electricity Amendment (Alternatives to grid-supplied network services Rule 2017) consultation paper, 14 June 2017, p. 29.