

12 September 2019



Mr John Pierce  
Chairman  
Australian Energy Market Commission  
PO Box A2449  
SYDNEY SOUTH NSW 1235

Dear Mr Pierce

**Draft Rule Determination: *National Electricity Amendment (Wholesale Demand Response Mechanism) Rule 2019, National Energy Retail Amendment (Wholesale Demand Response Mechanism) Rule 2019 (ERC0247)***

Energy Queensland Limited (Energy Queensland) appreciates the opportunity to provide a submission to the Australian Energy Market Commission (AEMC) in response to the *Draft Rule Determination: National Electricity Amendment (Wholesale Demand Response Mechanism) Rule 2019, National Energy Retail Amendment (Wholesale Demand Response Mechanism) Rule 2019* (draft rule determination). The draft rule determination implements a wholesale demand response mechanism to facilitate wholesale demand response in the national electricity market.

Energy Queensland's comments on the draft rule determination are provided in the attached submission. Energy Queensland appreciates the extensive consultation the AEMC has undertaken on this rule change to date and remains committed to contributing further to this discussion via the AEMC's technical working group.

Should you require any additional information or wish to discuss any aspect of this submission, please do not hesitate to contact me on (07) 3664 4970 or Charmain Martin on (07) 3664 4105.

Yours sincerely

A handwritten signature in black ink, appearing to read "a wold", is positioned below the text "Yours sincerely".

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# Energy Queensland

**Submission to the Australian  
Energy Market Commission**

**Wholesale Demand Response  
Mechanisms draft rule determination**

Energy Queensland Limited

12 September 2019



## About Energy Queensland

Energy Queensland Limited (Energy Queensland) is a Queensland Government Owned Corporation that operates a group of businesses providing energy services across Queensland, including:

- Distribution Network Service Providers, Energex Limited (Energex) and Ergon Energy Corporation Limited (Ergon Energy);
- a regional service delivery retailer, Ergon Energy Queensland Pty Ltd (Ergon Energy Retail); and
- affiliated contestable business, Yurika Pty Ltd (Yurika).

Energy Queensland's purpose is to safely deliver secure, affordable and sustainable energy solutions with our communities and customers and is focussed on working across its portfolio of activities to deliver customers lower, more predictable power bills while maintaining a safe and reliable supply and a great customer experience.

Our distribution businesses, Energex and Ergon Energy, cover 1.7 million km<sup>2</sup> and supply 37,208 GWh of energy to 2.1 million homes and businesses. Ergon Energy Retail sells electricity to 740,000 customers.

The Energy Queensland Group also includes the new energy services business Yurika which will provide customers with greater choice and control over their energy needs and access to the next wave of innovative technologies and renewables.

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12 September 2019

**AEMC Wholesale Demand Response Mechanisms**

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# 1 Introduction

On 18 July 2019, the Australian Energy Market Commission (AEMC) published the *Draft Rule Determination: National Electricity Amendment (Wholesale Demand Response Mechanism) Rule 2019, National Energy Retail Amendment (Wholesale Demand Response Mechanism) Rule 2019* (draft rule determination). The draft rule determination implements a wholesale demand response mechanism to facilitate wholesale demand response in the national electricity market (NEM).

The draft rule determination introduces a new category of market participant, a demand response service provider (DRSP), who will be able to bid demand response into the wholesale market as a substitute for generation. The draft rule determination also sets out the obligations that will be placed on DRSPs, the processes for determination of baselines, settlement and cost recovery, other consequential changes to the National Electricity Rules (NER) and proposed implementation timeframes for the new mechanism.

The draft rule determination follows consultation on three rule change requests received by the AEMC seeking to introduce a mechanism for wholesale demand response in the NEM and is a more preferable draft rule. The AEMC considers that the more preferable draft rule will not only promote greater demand side transparency and price and reliability related benefits but will also assist in transitioning the NEM to a two-sided market in the longer-term.

The AEMC has requested that interested parties make submissions on the draft rule determination by 12 September 2019. Energy Queensland's comments are provided in Section 2 and 3 of this submission.

We are available to discuss this submission or provide further detail regarding the issues raised.

## 2 General comments

Energy Queensland remains supportive of promoting greater levels of demand side participation in the market to lower customers' electricity costs and increase system reliability and security in the NEM. We are also generally supportive of the AEMC's longer-term view that the electricity market should move towards becoming a two-sided market in which both the supply and demand side actively participate in dispatch and price setting. However, Energy Queensland considers the value and effectiveness of the mechanism proposed in the draft rule determination may be limited due to the following:

- Demand response is already occurring in the NEM and large customers are able to participate in the wholesale market under the current regulatory framework (i.e. by entering into bilateral off-market contracts with retailers and aggregators) without the need for an additional market participant role and significant process and system changes that will impose further costs and complexity on the market; and
- There are enduring issues associated with the use of artificial baselines for settlement and billing purposes, resulting in the need for a rigorous process for the development of baseline methodologies and an onerous monitoring, compliance and enforcement regime to mitigate the risk of inaccuracy and "additionality".

Due to these issues, in conjunction with the fact that demand response will be treated in a similar manner to scheduled generation, Energy Queensland considers participation in the wholesale market via this new mechanism is likely to be limited to a small subset of large customers who have loads suitable for entering into firm demand response arrangements with DRSPs and for whom the benefits are sufficiently attractive to warrant curtailing their load when called upon.

Notwithstanding the above, should the AEMC proceed with the introduction of the proposed wholesale demand response mechanism, Energy Queensland is supportive of limiting participation to large customers until the effectiveness of the mechanism can be assessed and a review of energy-specific consumer protections for small customers has been completed.

Energy Queensland appreciates the extensive consultation the AEMC has undertaken on this rule change to date and would welcome providing any further assistance if required.

## 3 Detailed comments

Energy Queensland provides the following comments on the draft rule determination for further consideration by the AEMC:

### 3.1 Impacts at the local distribution network level

In its draft determination, the AEMC has highlighted that network service providers “may have some network augmentations savings” from third parties bidding demand reductions into the wholesale market as a substitute for generation under the proposed mechanism.<sup>1</sup> While Energy Queensland agrees that promoting greater levels of demand side participation can increase system reliability and security in the NEM and may reduce transmission network augmentations, this principle does not necessarily translate to network benefits at a local level due to the reduction of diversity in generation and load on the weaker distribution networks. Demand response at the local level is used by distribution network service providers (DNSPs) to respond to local network issues that will be different to broader market demand issues. As a result, it is very unlikely that DNSPs will be able to defer augmentation for capacity and / or voltage control. Therefore, demand response in the wholesale market does not necessarily offset distribution network augmentation and uncontrolled demand response can in fact have an adverse impact at a local network level (particularly in weaker parts of the network).

An example of a situation where there may be adverse local consequences is where there is a solar farm which is located near a large customer who is participating in the wholesale demand response mechanism (e.g. a mine, smelter, water pump or commercial and / or industrial complex) and the solar farm is dependent upon the load of that customer for its generation, i.e. the network is deemed sufficient at the local level under normal loading and generation patterns and is particularly sensitive to the actions of the large generator and the large load. In this situation, when the large customer is called

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<sup>1</sup> AEMC, *Draft Rule Determination: National Electricity Amendment (Wholesale Demand Response Mechanism) Rule 2019, National Energy Retail Amendment (Wholesale Demand Response Mechanism) Rule 2019*, 18 July 2019, p. 15.

upon to provide demand response into the wholesale market and is dispatched, there is the potential that the loss of load will cause the solar farm's generation to be curtailed and give rise to local network voltage control issues.

Consequently, while the AEMC has highlighted the benefits of the proposed mechanism, Energy Queensland is of the view that further consideration is required as to the potential for any unintended consequences that the new mechanism may impose on other customers and market participants as well as possible impacts on system stability and strength when the demand response mechanism operates and how these issues will be addressed. Energy Queensland also recommends that further consideration is given as to whether DNSPs and other impacted participants should be provided with advance notice when a large-user is intending to enter into an agreement with a DSRP and when they will be participating in the wholesale demand response mechanism, including when they will be dispatched.

Furthermore, it should be noted that DNSPs can and have entered into bilateral agreements with large customers to curtail or maintain their load depending on the local generation and network conditions. Consequently, apart from the obvious operational issues, there may be issues with respect to "additionality" in a situation where customers are called upon to provide wholesale demand response at a time that coincides with a requirement for local network support under these bilateral contracts. In this situation, it is Energy Queensland's understanding that the customer will not be eligible for a market payment if they receive a payment from the DNSP but it is unclear how this will be managed in practice. Therefore, further clarity is required as to how the wholesale demand response mechanism processes will interact with and take into consideration other existing "off-market" arrangements to ensure the additionality principle is upheld.

## **3.2 Transparency in bidding and baselines**

Energy Queensland supports DRSPs being treated in a similar manner to scheduled generators. It is vital that demand response being dispatched, and the quantity of the demand response being offered in the wholesale energy market is transparent to ensure not only the successful operation of the mechanism but also to provide all market participants with confidence in the mechanism's ability to deliver the intended outcomes.

Further, as retailers will bear the majority of the volume risk between the baseline and actual consumption, it is important that the setting and reviewing of baselines is transparent as far as is possible. In this regard, when retailers are offering to supply a customer that has a demand response arrangement with a DRSP, the retailer will need to have visibility of the details of historic and proposed baselines as well as actual consumption so that the customer can be priced correctly.

### **3.3 Reimbursement rate**

Energy Queensland notes that the AEMC proposes that the reimbursement rate to be paid by the DRSP via the Australian Energy Market Operator (AEMO) to retailers will be calculated by the Australian Energy Regulator quarterly and that it will be based on average wholesale spot prices over the previous 12 months. Energy Queensland considers that using forward contract prices would be a better reflection of retailers' hedging costs and therefore a more appropriate method for determining the reimbursement rate.

### **3.4 Implementation timing**

Energy Queensland notes that the substantive parts of the rule implementing the wholesale demand response mechanism are proposed to commence on 1 July 2022. We further note that a number of other significant reforms are also due to commence at and around this time (such as five-minute settlement and global settlements) and that significant resources have been allocated by participants to ensure readiness for these reforms.

While Energy Queensland has not undertaken an assessment of the potential system and process changes that may be required as a result of this rule change, we note that AEMO has advised that "due to the amount of systems and procedures that need to be updated to accommodate the mechanism",<sup>2</sup> earlier commencement may not be possible.

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<sup>2</sup> AEMC, *Draft Rule Determination*, p. vi.

Energy Queensland therefore considers a full assessment of the system and process modifications required to implement the mechanism is required to ensure that any further impacts on market participants are minimised and managed appropriately and that the proposed commencement date is practical and achievable.

### **3.5 Other matters for consideration**

As noted previously, the AEMC has stated that the intent of the rule change is to treat scheduled demand response in a similar manner to scheduled generation in the wholesale market. However, it does not appear that other obligations that currently apply under the NER with respect to embedded generators, for example the requirement for DNSPs to make avoided transmission use of system payments to embedded generators (rule 5.3AA), have been considered by the AEMC in its draft rule determination. Energy Queensland therefore recommends that further clarity is provided in the final rule determination on this and similar matters.