



## Wholesale demand response mechanism – Technical working group

### Meeting 5

8 April 2020

The fourth working group meeting was held online on 8 April 2020. The attendees of the meeting are listed below.

Member	Organisation
Kyle Auret	AGL
Luke Barlow	AEMO
Mark Byrne	Total Environment Centre
Bridgette Carter	Bluescope
Dan Cass	The Australia Institute
Nabil Chemali	Flow Power
Ruth Guest	AEMO
Lance Hoch	Oakley Greenwood
Emma Fagan	Tesla
Joel Gilmore	Australian Energy Council
Rebecca Knights	South Australia Government
Matt Lady	AER
Craig Memery	Public Interest Advocacy Centre
Rob Murray Leach	Energy Efficiency Council
Ben Pryor	ERM Power
Elizabeth Ross	Enel X
Jon Sibley	ARENA
Mark Williamson	Energy Queensland

The AEMC's project team attended and is listed below.

Name	Position
Michael Bradley	Acting Executive General Manager – Retail and Wholesale Markets
Declan Kelly	Senior Adviser – Security & Reliability
Mitchell Shannon	Senior Adviser – Security & Reliability
Lily Mitchell	Senior Lawyer

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The AEMC has formed the working group to provide advice and input into the progression of the three rule change requests relating to wholesale demand response:

- *Wholesale demand response mechanism* (ERC0247)
- *Wholesale demand response register mechanism* (ERC0248)
- *Mechanisms for wholesale demand response* (ERC0250).

On 12 March 2020, the AEMC released a second draft determination to implement a wholesale demand response mechanism.

Under the draft rule, a new category of registered participant, a demand response service provider (DRSP), would be able to bid demand response directly into the wholesale market as a substitute for generation. A DRSP could also engage directly with a customer without the involvement of that customer's retailer.

### **Meeting commencement**

At the start of the meeting, an update was provided to the technical working group on the impact of COVID-19 on the market bodies and the various market reforms underway.

Following this, the project team provided an overview of the second draft determination.

The second draft rule implements a wholesale demand response mechanism that is similar in form to the mechanism set out in the previous draft determination. Following the extension to the project in December 2019, the Commission made several improvements to the mechanism design. These improvements are designed to achieve:

- lower implementation costs for AEMO due to reduced investment in systems that are expected to become redundant if a two-sided market is introduced.
- an earlier start date. By reducing the costs and complexity of implementing the mechanism, the implementation date has been brought forward from 1 July 2022 to 24 October 2021.
- greater opportunities to learn about demand side participation in the event that a two-sided market is introduced.

The overview also highlighted differences between the two draft rules, including:

- changes to the integration of DRSPs into central dispatch (discussed further below)
- removing the requirement for DRSPs to submit information to be used in medium term projected assessment of system adequacy (MT-PASA), and instead requiring DRSPs to submit to the demand side participation portal
- removing the ability for market participants to submit baseline methodologies for use in the mechanism
- changes to the telemetry requirements for DRSPs (discussed further below).

The meeting then focussed on four policy areas: 1) scheduling and integration with central dispatch; 2) the telemetry requirements for DRSPs; 3) registration and portfolio management for DRSPs; and 4) the interaction of the second draft rule with the potential development of a two-sided market.

### **Scheduling and integration with central dispatch**

- The second draft rule set out a more cost-effective approach to the scheduling of DRSPs when compared to the first draft rule. Under the second draft rule:
  - DRSPs would still be required to be scheduled and participate in central dispatch.
  - The scheduling process would more closely resemble how scheduled loads are dispatched.
  - In classifying wholesale demand response units, DRSPs would need to nominate the maximum responsive component of the load. This would be the portion of the load that would need to be scheduled in the wholesale market.
- The project team worked through some examples of the scheduling process under the second draft rule.
- Attendees noted:
  - The DRSPs should be settled on the difference between the baseline and the actual consumption and not be related to dispatch targets.

- Greater clarity would be useful on the variability of the underlying load and how this impacts on the baseline compliance requirements.

### **Telemetry requirements**

- Under the second draft rule:
  - In order for a qualifying load to be classified as a wholesale demand response unit, the load must have adequate communications and telemetry
  - The rule does not specify how that information must be conveyed to AEMO. Instead, AEMO will have the flexibility to specify a process through which it would be able to receive information from DRSPs
  - The requirements for telemetry and communications equipment will be specified in the wholesale demand response guidelines to be developed by AEMO in consultation with stakeholders. This approach seeks to enable the greatest amount of demand response to be provided through the mechanism without posing operational challenges to AEMO.
  - AEMO has the ability to set an upper limit on the amount of non-visible demand response (i.e. demand responsive loads not using SCADA) that can participate in the mechanism in each region, above which AEMO could impose more onerous telemetry requirements on any loads seeking to be classified as wholesale demand response units in that region.
- At the technical working group meeting, attendees noted:
  - Greater clarity should be provided on when the telemetry specifications will be decided.
  - The thresholds for less onerous telemetry could be driven by the error inherent in ST PASA.

### **Registration and portfolio management**

- AEMO gave a presentation on how it expected to manage the registration process and portfolio management under the second draft rule.
- Under the second draft rule:
  - There would be a process established for DRSPs to register in the NEM. DRSPs would be able to classify loads at wholesale demand response units.
  - There would also be processed for setting up aggregations of wholesale demand response units for participation in central dispatch.
- AEMO set out a proposed portfolio management approach that would facilitate the aggregating of loads into these aggregations.
- Attendees noted:
  - If ramp rates are established for loads participating in the mechanism, these ramp rates should be accommodating of the potentially lower level of flexibility of demand side participants.
  - Compliance with dispatch targets should be for the aggregated portfolio.

### **Interaction with two-sided markets**

- The project team presented on the linkage between the mechanism set out in the second draft rule and the ESB project looking at the move to a two-sided market. The project team noted:
  - Moving to a two-sided market should enable the transition to a future NEM characterised by increased variable supply and more flexible, price responsive demand.

- there is opportunity for this rule change to simultaneously provide greater opportunities for consumers to participate in wholesale demand response while also informing how a two-sided market can be designed to best facilitate consumer participation.
- Attendees noted:
  - Greater clarity would be appreciated in terms of how the two-sided market would support the provision of wholesale demand response by small customers.
  - It would be important that the two-sided market design is not contingent on retailers driving the demand response.
  - there are some good elements to support a move to two-sided market - particularly exploring alternative telemetry options.

## **Conclusion**

- The project team thanked participants for their time over the course of the project and noted that this would be the final technical working group meeting for this project.