



INFORMATION

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Integrating price-responsive resources into the NEM

The Australian Energy Market Commission (AEMC or Commission) has made a draft rule to allow aggregated consumer energy resources (CER) to be scheduled and dispatchable in the National Electricity Market (NEM). The draft rule also establishes new monitoring and reporting functions to evaluate the magnitude and effect of unscheduled price-responsive resources on AEMO's operational demand forecasts. We are seeking stakeholder submissions by 12 September 2024.

Unscheduled price-responsive resources present a problem and opportunity

There are a wide range of energy resources (for example, batteries) that enable consumers or parties acting on their behalf to respond to spot prices. The increasing number and magnitude of these unscheduled resources is a significant opportunity for consumers, retailers and the broader electricity system. However, this responsiveness isn't currently effectively integrated into the NEM. It is not directly considered when determining the level of demand, how best to meet this demand or the spot price.

Energy, security and reliability services could be provided more efficiently if these resources were fully integrated. Our modelling indicates that successful integration of these resources would result in \$834m in cost savings. Our draft rule establishes:

- Dispatch mode that allows currently unscheduled price-responsive resources to be scheduled and dispatchable in the NEM, either in aggregations or individually.
- A time-limited incentive scheme to drive participation in the mechanism in its early years. It does this by allowing AEMO to conduct tenders to pay participants to enter dispatch mode in the first five years of the mechanism.
- Monitoring and reporting obligations for AEMO and the AER to transparently evaluate the effect of price-responsive resources on the accuracy of AEMO's short-term demand forecasts and the efficiency consequences of these effects.

Dispatch mode provides a flexible framework for price-responsive resources to participate in central dispatch

Our draft rule introduces a framework known as 'dispatch mode' into the NEM. It will allow currently unscheduled price-responsive resources to be scheduled and dispatchable, in aggregations or individually. Virtual power plants, community batteries, flexible large loads and other price-responsive small resources will be able to compete with large-scale generators and storage. It will allow them to bid into the spot market, set prices, receive dispatch instructions and earn revenue in markets which require scheduling (e.g. regulation frequency control ancillary services). By explicitly including unscheduled price-responsive resources in dispatch, AEMO will no longer need to forecast their actions, therefore reducing demand forecast errors and their consequential inefficiencies.

The key features of dispatch mode and their benefits are that it:

- Is **voluntary**. No consumer or market participant is required to participate. Instead, it allows participants to nominate and aggregate small resources to participate in dispatch.
- **Leverages existing rules and processes to minimise costs and increase certainty:**
 - Builds on the bidirectional unit (BDU) framework, allowing bids for generation and load.
 - The underlying classification for resources participating as voluntary scheduled resources (VSR) does not change. For instance, if a retailer (Market Customer) nominates a market connection point as a VSR, this will still be a market connection point but will also have the nomination of VSR. By not creating a new classification, or

requiring a change in the classification of connection points participating, participants will have greater flexibility and implementation costs will be reduced.

- Follows existing conventions regarding decision making. Most importantly:
 - The NER will set out the key legal requirements for participation in central dispatch, such as bidding, dispatch and conformance. This will create certainty for market participants as the NER provides stability and familiarity.
 - AEMO guidelines will establish the specific operational and technical details for participants to follow. This will allow AEMO to update these details more regularly than if they were placed in the rules and allow them to be tailored to the requirements of participants utilising aggregated small resources.
- Provides **greater flexibility** for participants than existing scheduling requirements. It recognises that continuous operation may be difficult and creates flexibility to allow participants to drop in and out of dispatch smoothly.

A time-limited incentive scheme is required to drive participation initially

Our draft rule includes a time-limited incentive scheme to drive participation in the mechanism in its early years. It does this by allowing AEMO to conduct tenders to pay participants to enter dispatch mode in the first five years. This recognises that market-based incentives may be insufficient in the short term to attract participation.

While necessary, this incentive framework is not a natural fit within the NER and is therefore not our preferred approach. Between the draft and final determination, the Commission will be working with ARENA, the Commonwealth and jurisdictional governments regarding alternatives to having an incentive scheme in the NER.

We consider that long-term participation incentives are likely to be best provided through market and network access.

AEMO and the AER will report on the impact of forecast deviations due to unscheduled price-responsive resources

The combination of the level of control required to participate in dispatch mode and the wide range of functions, capabilities and business models for CER mean that many price responsive resources are unlikely to participate in dispatch mode. As the magnitude of these resources grows, they will create challenges for AEMO's demand forecasting.

The draft rule introduces a monitoring and reporting obligation for AEMO to identify the presence and issues created by increased unscheduled price-responsive resources. The AER will then assess the efficiency implications and costs associated with these issues.

Collectively, the monitoring and reporting framework will help us understand the operation of unscheduled price-responsive resources and their impact on market outcomes. It will also provide evidence for the AEMC to consider whether to introduce structural changes to demand forecasting or a visibility market model in the future.

The draft rule would enable participation in 2026

Our draft rule sets out an implementation schedule. Dispatch mode would commence on 5 November 2026, with the tenders for early participation beginning in February 2027. AEMO and AER would publish their first annual monitoring and reporting publications in late 2026.

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