AER price-responsive reporting guideline

Explanatory statement

17 November 2025

AUSTRALIAN ENERGY REGULATOR

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Shortened forms and definitions

Term	Definition
AEMO	Australian Energy Market Operator
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
DRSP	Demand response service providers – which classify and aggregate the demand response capability of large market loads for dispatch through the NEM's standard bidding and scheduling processes as part of the wholesale demand response mechanism.
FCAS	Frequency control ancillary services
Forecast deviation	The difference between forecast load for a particular trading interval, developed for pre-dispatch and for dispatch, and the actual load during that trading interval.
Guideline	AER price-responsive reporting guideline
IRP	Integrated resource providers – which own, control or operate an integrated resource system connected to a transmission or distribution network.
MW	Megawatt
MWh	Megawatt hour
NEL	National Electricity Law
NEM	National Electricity Market
NER	National Electricity Rules
Report	AER price-responsive report
RERT	Reliability and emergency reserve trader
Unscheduled price-responsive resource	A resource that: 1) is not a scheduled resource 2) is capable of changing output or consumption depending on changes in forecast or actual spot prices 3) includes a voluntarily scheduled resource only if it is a hibernated voluntarily scheduled resource.
WDR	Wholesale demand response

1 Executive summary

The Australian Energy Regulator (AER) has published the AER price-responsive reporting guideline in response to a recent rule change to the National Electricity Rules (NER). The guideline takes effect immediately on publication. This document accompanies the guideline and sets out the proposed approach and consultation process.

On 19 December 2024, the Australian Energy Market Commission (AEMC) made a final determination on the Integrating price-responsive resources into the NEM rule change that seeks to address the growing amount of unscheduled price-responsive resources in the National Electricity Market (NEM). The determination introduced new AER and Australian Energy Market Operator (AEMO) monitoring and reporting functions to understand the forecasting challenges and errors from unscheduled price-responsive resources. The AEMC's determination also enables aggregated consumer energy resources (CER), demand response and independent small generators/batteries to be scheduled and dispatchable in the NEM.

Unscheduled price-responsive resources refer to a range of energy resources and load that are unscheduled but can and/or do respond to the market price (individually or through aggregation). These include:

- household consumer energy resources, such as batteries, electric vehicles, flexible hot water systems and pool pumps
- home energy management systems that control traditional assets, such as hot water systems and air conditioners
- industrial assets with components of controllable demand, such as smelters, foundries and manufacturing facilities
- small unscheduled generation and storage units, such as backup generators and community batteries below 5 MW.[1]

The rule change also requires the AER to develop and publish the AER price-responsive reporting guideline under rule 3.10C.3(g) of the NER.[2] The rule change requires the AER to either:

- publish a standalone guideline in accordance with the Rules consultation procedures, or
- include the guideline as part of the Wholesale Market Monitoring and Reporting Guideline, in which case, the AER must consult on the amendment in accordance with clause 8.7.2 (and the Rules consultation procedures do not apply). [3]

Given the need to develop and publish the guideline by 31 December 2025, and the specific scope of the guideline, we considered it appropriate to publish a standalone guideline in accordance with the Rules consultation procedures.

1 AEMC, Rule Determination, Integrating price-responsive resources into the NEM, 2024, p. 6.

2 NER, cl 11.180.3(b).

3 NER, cl 3.10C.3(g) and (i), cl 11.180.3.(b).

1.1 Role of the AER price-responsive reporting guideline

The guideline specifies how we will meet our monitoring and reporting obligations under rule 3.10C.3(b) of the NER to prepare and publish annual reports that analyse the impact of unscheduled price-responsive resources on forecast deviations and the consequential impacts on the efficiency of the market.[4] The objective of our monitoring and reporting obligations is to provide transparency on the impacts of unscheduled price-responsive resources on efficient market outcomes to inform future market reform.[5]

The guideline sets out our proposed approaches and considerations to meet our obligation to prepare and publish an annual report in respect of the previous financial year by 31 December each year, in accordance with the AER price-responsive reporting guideline. The rule determination requires that the AER's reporting analyse the impact of unscheduled price responsive resources on forecast deviations and the consequential impacts on the efficiency of the market, including estimates in relation to:

1. additional amounts paid to generators, integrated resource providers and demand response service providers for different quantities and prices of electricity and wholesale demand response that are dispatched
2. the costs incurred by generators, integrated resource providers and demand response service providers for different quantities and prices of electricity and wholesale demand response that are dispatched
3. additional amounts paid to:
   a) ancillary service providers for additional market ancillary services that are enabled
   b) cost recovery market participants for ancillary service transaction payments under clause 3.15.6AA
4. additional amounts paid under the RERT for scheduled reserves that are dispatched and unscheduled reserves that are activated
5. additional greenhouse gas emissions resulting from the relative increases referred to in 1 to 4 above.

The report must also include:

6. identification of trends and outcomes on the efficiency of the market as a result of the matters set out above when compared to previous financial years (as applicable)
7. the AER's recommendations for how to improve the efficiency of the market in respect of the matters set out above
8. any other relevant information the AER considers necessary or convenient to include in the report.

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4 NER, cl 3.10C.3(h).

5 NER, 3.10C.3(a).

2 Consultation on the draft guideline

We used the expedited rules consultation procedure for the development and publication of the guideline, which involves a single stage of consultation.[6] We consider the guideline to be a 'non-material proposal' and not an amendment of a minor or administrative nature. Non-material proposal means that the guideline, if implemented, will be unlikely to have a significant effect on the National Electricity Market (NEM) or on the activities of Registered Participants to which the guideline relates.[7]

The purpose of the guideline is to provide transparency on the approach we will take to meet our new monitoring and reporting functions under rule 3.10C.3(b) of the NER. These monitoring and reporting functions do not place any requirements on Registered Participants and do not affect operation or participation in the NEM. Our annual report will provide information on the impact of unscheduled price-responsive resources on the efficient operation of the NEM. This information may be used by the AEMC in its consideration of additional market reforms.

Stakeholders had until close of business 23 September 2025 to make a procedure change request if they considered the guideline not to be a non-material proposal. We received no requests.

2.1 Submissions

We commenced consultation on the AER price-responsive reporting guideline on 9 September 2025 by publishing a draft of the guideline and an accompanying explanatory statement. The consultation period closed on 8 October 2025. We received one submission from Energex Limited (Energex) and Ergon Energy Corporation Limited (Ergon Energy Network).

Energex and Ergon Energy Network submitted that the analysis set out in the guideline would be more appropriately incorporated in the AER's Wholesale electricity market performance report, rather than published as a separate report. Energex and Ergon Energy Network considered that doing so would:

- avoid the implication that the impact of CER and other price-responsive resources is non-material to wholesale market performance
- provide a more integrated and comprehensive view of market dynamics
- avoid fragmentation of reporting
- better reflect the evolving significance of price-responsive resources in the NEM.

Energex and Ergon Energy Network also indicated preference for the guideline to be included in the AER's existing Wholesale market monitoring and reporting guideline, rather than as a standalone guideline. Energex and Ergon Energy Network considered this would

6 NER, clause 8.9.3(a).

7 NER, clause 8.9.1(a).

streamline regulatory reporting and align with the AER's broader market monitoring functions under the National Electricity Law.

2.1.1 AER response to submissions

We acknowledge the points made by Energex and Ergon Energy Network in its submission and generally support the principle to consolidate our reporting.

However, at this stage, we maintain our decision not to specify how we will publish the annual AER price-responsive report in the guideline. We consider this provides an opportunity to focus on the impacts of unscheduled price-responsive resources and establish a basis of understanding. We note this decision does not preclude us from consolidating the reporting in the future, instead it provides us with flexibility to identify the best reporting option informed by preliminary findings. The approach will also enable us to adapt reporting as the impact of unscheduled price-responsive resources changes in the future. Moving forward, we will continue to seek opportunities to consolidate our guidelines and reporting and minimise administrative burden.

We also maintain our decision to not include the guideline in the Wholesale market monitoring and reporting guideline. The rule change provides the AER with the option to either:

- publish a standalone guideline in accordance with the Rules consultation procedures, or
- include the guideline as part of the Wholesale market monitoring and reporting guideline – in which case, the AER must consult on the amendment in accordance with clause 8.7.2 (and the Rules consultation procedures do not apply).

Given the need to develop and publish the guideline by 31 December 2025 and the added flexibility to focus on and respond to changes in the impact of unscheduled price-responsive resources, we consider it appropriate to publish a standalone guideline in accordance with the Rules consultation procedures.

3 Summary of approaches in the guideline

The approaches in the guideline are driven by the objective of our monitoring and reporting functions, and the new clause 3.10C.3(b), which sets out the information required to be analysed under these. A summary of the approaches and considerations in the guideline is contained in Table 1.

Table 1 Summary of approaches in the guideline

Section	Approach
Defining efficient market outcomes	To examine the extent to which unscheduled price-responsive resources impact whether the market is functioning efficiently, we will analyse and discuss inefficiencies in the market, their causes and whether they are likely to be detrimental to the efficient functioning of the market in the long term. Inefficiencies may include: • higher spot prices and FCAS and RERT costs that lead to higher costs for consumers • lower spot prices that create inaccurate price signal for resource availability. While the National Electricity Law (NEL) does not provide an explicit definition of efficiency, it is a well understood concept in economic literature. Economic efficiency is concerned with maximising overall welfare (or the sum of consumer and producer surplus) in a market, given the available resources. Consumer surplus is the difference between the value consumers place on a good or service and the price they actually pay. Producer surplus is the difference between the price producers receive and their marginal costs of production. Economic efficiency has 3 dimensions: • allocative efficiency – resources are allocated to their highest valued uses • productive efficiency – the value of resources used are minimised for a given level of outputs • dynamic efficiency – resources are allocated efficiently over time. We will discuss the impact of unscheduled price-responsive resources; however, a range of factors, such as participant conduct, market design and other external features, can also create inefficiencies in each of these categories.
Impact of unscheduled price-responsive resources on forecast deviations	While the scale of the forecast deviations is known, the amount caused by unscheduled price-responsive resources is not known. We will quantify the impact of unscheduled price-responsive resources on forecast deviations by estimating the portion of the forecast deviation due to unscheduled price-responsive resources. The portions will be informed by AEMO's price-responsive reporting, forecast deviations and any other relevant information.

Section	Approach
	Given the challenges with estimating an unknown portion, we may use a range to account for the uncertainty of the estimate.
Additional amounts paid to generators, integrated resource providers (IRPs) and demand response service providers (DRSPs)	We will use a 'simplified bid stack approach' to estimate a counterfactual spot price that is representative of a scenario where AEMO was able to account for unscheduled price-responsive resources in its demand forecast. The simplified bid stack approach estimates which participants would have been dispatched, and thus set the spot price, if the demand forecast included the estimated impact of unscheduled price-responsive resources. This counterfactual spot price will then be multiplied by the metered quantity of generated energy and wholesale demand response (WDR) to estimate the additional amounts paid.
Costs incurred by generators, IRPs and DRSPs	We consider any additional costs incurred by generators, IRPs and DRSPs for additional generation and WDR dispatched due to the impact of unscheduled price-responsive resources on forecast deviations are likely to be immaterial. This is because the costs on generators for operating at sub-optimal levels is expected to be immaterial and the market distributes the burden of balancing supply and demand across many generators.
Additional amounts paid to ancillary service providers and cost recovery market participants	We will re-publish, attribute and discuss AEMO's estimates of the additional amounts paid to market ancillary service providers and cost recovery market participants. This approach ensures consistency and supports AEMO's role as the single source of information for the impact of unscheduled price responsive resources.
Additional amounts paid under RERT	We will compare the estimated impact of unscheduled price-responsive resources on forecast deviations with the quantity of RERT dispatched. We will then assign a portion of the total RERT costs to the impact of unscheduled price-responsive resources.
Additional greenhouse gas emissions	We consider any additional greenhouse gas emissions due to the impact of unscheduled price-responsive resources on forecast deviations are likely to be immaterial. This is because the effect of the deviation in generation mix is expected to be immaterial and the market distributes the balancing of supply and demand across many generators.
Identification of trends and outcomes on the efficiency of the market and recommendations for how to improve the efficiency of the market	We will use the information produced above and in AEMO's reporting on the impacts of unscheduled price-responsive resources to identify and discuss trends and outcomes on the efficiency of the market. We will provide recommendations for how to improve the efficiency of the market based on the identified information and trends.