

MARKET AND SYSTEM OPERATION PROCEDURES, METHODOLOGIES AND GUIDELINES (WHOLESALE DEMAND RESPONSE)

DRAFT REPORT AND DETERMINATION

Published: **December 2020**





NOTICE OF SECOND STAGE CONSULTATION – MARKET AND SYSTEM OPERATION PROCEDURES, METHODOLOGIES AND GUIDELINES (WHOLESALE DEMAND RESPONSE)

National Electricity Rules – Rule 8.9

The publication of this Draft Report and Determination (Draft Report) commences the second stage consultation by AEMO on proposed changes to the Market and System Operation Procedures, Methodologies and Guidelines (Wholesale Demand Response) (Procedures) under the National Electricity Rules (NER).

Date of Notice: 11 December 2020

This notice informs all Registered Participants and interested parties (Consulted Persons) that AEMO is conducting the second stage consultation on proposed changes to the Procedures. This consultation is being conducted in accordance with the Rules consultation requirements detailed in rule 8.9 of the NER.

Invitation to make Submissions

AEMO invites written submissions on this Draft Report.

Please identify any parts of your submission that you wish to remain confidential, and explain why. AEMO may still publish that information if it does not consider it to be confidential, but will consult with you before doing so.

Consulted Persons should note that material identified as confidential may be given less weight in the decision-making process than material that is published.

Closing Date and Time

Submissions in response to this Notice of Second Stage of Rules Consultation should be sent by email to wdr@aemo.com.au, to reach AEMO by 5.00pm (Melbourne time) on 29 January 2021.

All submissions must be forwarded in electronic format (both pdf and Word). Please send any queries about this consultation to the same email address.

Submissions received after the closing date and time will not be valid, and AEMO is not obliged to consider them. Any late submissions should explain the reason for lateness and the detriment to you if AEMO does not consider your submission.

Publication

All submissions will be published on AEMO's website, other than confidential content.

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EXECUTIVE SUMMARY

The publication of this Draft Report and Determination (Draft Report) commences the second stage of the Rules consultation process conducted by AEMO on proposed changes the Market and System Operation Procedures, Methodologies and Guidelines (Wholesale Demand Response) (Procedures) under the National Electricity Rules (NER).

These changes result from the Wholesale Demand Response (WDR) rule changes, which take effect from 24 October 2021.

AEMO has prepared this Draft Report to facilitate feedback on these proposed changes.

In summary:

- The key proposals involve changes to the Market Suspension Compensation Methodology, with the focus on optimal approaches to meeting the market suspension compensation objectives in clause 3.14.5A of the NER.
- The other proposals – which involve changes which AEMO considers to be mostly minor, or reflect obligations already described in the NER – are to:
 - Procedures for Issue of Directions and Clause 4.8.9 Instructions.
 - Intervention Pricing Methodology.
 - Constraint Formulation Guidelines.

The final rule clause 3.14.5A(f1) provides for the determination of the compensation payable to each Market Suspension Compensation Claimant for the purposes of WDR (Claimant).

For these purposes, the benchmark value for WDR is to be determined by the capacity-weighted average of the benchmark costs in respect of a class of Scheduled Generator in the same region as the Claimant, as selected by AEMO in accordance with the Market Suspension Compensation Methodology (Methodology).

AEMO is required to specify, in the Methodology, the approach to be adopted by AEMO in selecting the class of Scheduled Generator to be used when determining the capacity-weighted average of the benchmark costs (Final Rule, clause 3.14.5A(h)(2A)).

AEMO's draft determination is to amend the documents listed above in the form published with this Draft Report.



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1. STAKEHOLDER CONSULTATION PROCESS

AEMO’s indicative timeline for this consultation is outlined below. Future dates may be adjusted depending on the number and complexity of issues raised in submissions.

Deliverable	Indicative date
Notice of First Stage Consultation and Issues Paper published	9 October 2020
First stage submissions closed	17 November 2020
Draft Report & Notice of Second Stage Consultation published	11 December 2020
Submissions due on Draft Report	29 January 2021
Final Report published	12 March 2021

The publication of this Draft Report marks the commencement of the second stage of consultation.

A glossary of terms used in this Draft Report is at **Appendix A**.

2. BACKGROUND

2.1. NER requirements

In accordance with the Rules consultation requirements in NER clause 8.9, AEMO is conducting this consultation in respect of:

- Methodology under NER clause 3.14.5A(h) and (i).
- Procedures for Issue of Directions and Clause 4.8.9 Instructions under NER clause 4.8.9(b).
- Intervention Pricing Methodology under NER clause 3.9.3(e).
- Constraint Formulation Guidelines under NER clause 3.8.10(c).

2.2. Context for this consultation

On 11 June 2020, the Australian Energy Market Commission (AEMC) published the final determination in respect to the rule change to facilitate WDR in the National Electricity Market (NEM), principally through implementing the WDR mechanism.

Under this final rule, large consumers will be able to sell demand response in the wholesale market either directly or through specialist aggregators for the first time.

The rule changes:

- Introduce a new market participant category, a Demand Response Service Provider (DRSP).
- Place obligations on DRSPs that replicate those applied to scheduled participants, including similar information provision and scheduling obligations.
- Set out a process for having baseline methodologies determined and applied to wholesale demand response units (WDRUs).
- Provide for DRSPs to be settled in the wholesale market for the WDR they have provided at the prevailing spot price.
- Set out consequential changes to the NER, including changes to Reliability and Emergency Reserve Trader (RERT) provisions.
- Make additional changes the NER, such as the demand side participation information provisions, to improve the integration of the demand side.



On 10 September 2020, the AEMC published the final determination in respect to the rule change to improve the intervention mechanisms in the NEM. The final rule removes the obligation on AEMO to counteract and minimise the effect on interconnector flows during an intervention to contribute to minimising costs for consumers. This final rule came into effect on 17 September 2020.

2.3. First stage consultation

On 9 October 2020, AEMO issued the Notice of First Stage Consultation.

In summary, the Issues Paper proposed:

- Changes to the Methodology, with the focus on optimal approaches to meeting the market suspension compensation objectives in clause 3.14.5A of the NER.
- Changes – which AEMO considers to be mostly minor, or which reflect obligations already described in the NER – to:
 - Procedures for Issue of Directions and Clause 4.8.9 Instructions.
 - Intervention Pricing Methodology.
 - Constraint Formulation Guidelines.

The final rule clause 3.14.5A(f1) provides for the determination of the compensation payable to each Claimant for the purposes of WDR.

For these purposes, the benchmark value for WDR is to be determined by the capacity-weighted average of the benchmark costs in respect of a class of Scheduled Generator in the same region as the Claimant, as selected by AEMO in accordance with the Methodology.

AEMO is required to specify, in the Methodology, the approach to be adopted by AEMO in selecting the class of Scheduled Generator to be used when determining the capacity-weighted average of the benchmark costs (Final rule, clause 3.14.5A(h)(2A)).

AEMO received **one** written submission in the first stage of consultation, from Energy Queensland. This submission has been published on AEMO's website at: <https://aemo.com.au/en/consultations/current-and-closed-consultations/market-and-system-operation-procedures-methodologies-and-guidelines-wholesale-demand-response>.

3. DISCUSSION OF MATERIAL ISSUE

3.1. Calculation of Benchmark Values for Market Suspension Compensation Methodology

3.1.1. Issue summary and submissions

In its response, Energy Queensland stated:

"... with respect to the Market Suspension Compensation Methodology, Energy Queensland recommends that when calculating the capacity-weighted average of the benchmark costs (as per final rule clause 3.14.5A(h)(2A)), only available Scheduled Generators should be included in the calculation (rather than all Scheduled Generators of that class). That is, generators that are not available, for example due to an outage, should be excluded from the calculation."

Otherwise, Energy Queensland stated its general support for the changes proposed.



3.1.2. AEMO's assessment

The Methodology sets out the classes of Scheduled Generators and the process for calculating benchmark values. The formula and its inputs are included in NER 3.14.5A(e). The inputs, which are sourced from the Integrated System Plan (ISP), are updated annually.

Energy Queensland's recommendation would require AEMO to calculate a benchmark value for each event. This would reduce certainty for generators and increase administrative costs for AEMO, which AEMO considers would not be justified.

Further, AEMO considers that the recommended changes would be beyond the scope of this consultation, which concerns the calculation of benchmark values.

The final rule clause 3.14.5A(h)(2A) requires AEMO to specify, in the Methodology, the approach to be adopted by AEMO in selecting the class of Scheduled Generator to be used when determining the capacity-weighted average of the benchmark costs.

In determining which class of Scheduled Generator would be the most applicable to WDR, AEMO considered the following:

- In the short term, AEMO expects that most WDR is likely to be loads with the ability to reduce demand.
- All benchmark values are for Scheduled Generators which have defined costs for fuel and variable operational expenses, as well as a heat rate (the inputs for the benchmark calculation).
- There are no costs which can be calculated using the current methodology and inputs to replicate a load reducing demand.
- The new rule specifically requires AEMO to use an existing class of Scheduled Generator, as opposed to adding a new class.

3.1.3. AEMO's conclusion

Accordingly, the class of Scheduled Generators which behaves most similarly for WDR purposes is large scale batteries, which operate both on the generator and load side. The benchmark value for large scale batteries is zero.

4. DRAFT DETERMINATION

Therefore, AEMO's draft determination is to amend:

- The Methodology in accordance with NER 3.14.5A(h)(2A) to specify large scale batteries as the appropriate class of Scheduled Generator to provide the benchmark value for WDR.
- The following documents to enable changes which AEMO considers to be mostly minor, or which reflect obligations already described in the NER:
 - Procedures for Issue of Directions and Clause 4.8.9 Instructions.
 - Intervention Pricing Methodology.
 - Constraint Formulation Guidelines.



APPENDIX A. GLOSSARY

Term or acronym	Meaning
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
DRSP	Demand Response Service Provider
ISP	Integrated System Plan
NER	National Electricity Rules
NEM	National Electricity Market
RERT	Reliability and Emergency Reserve Trader
WDR	Wholesale Demand Response
WDRU	Wholesale Demand Response Unit



APPENDIX B. SUMMARY OF SUBMISSIONS AND AEMO RESPONSES

No.	Consulted person	Issue	AEMO response
1.	Energy Queensland	<i>"... with respect to the Market Suspension Compensation Methodology, Energy Queensland recommends that when calculating the capacity-weighted average of the benchmark costs (as per final rule clause 3.14.5A(h)(2A)), only available Scheduled Generators should be included in the calculation (rather than all Scheduled Generators of that class). That is, generators that are not available, for example due to an outage, should be excluded from the calculation."</i>	<p>Energy Queensland's recommendation would require AEMO to calculate a benchmark value for each event. This would reduce certainty for generators and increase administrative costs for AEMO, which AEMO considers would not be justified.</p> <p>Further, AEMO considers that the recommended changes would be beyond the scope of this consultation, which concerns the calculation of benchmark values.</p>