

SUPPLY SCARCITY PROCEDURES CONSULTATION

DRAFT REPORT AND DETERMINATION

Published: 18 March 2021





NOTICE OF SECOND STAGE CONSULTATION – SUPPLY SCARCITY PROCEDURES

National Electricity Rules – Rule 8.9

Date of Notice: 18 March 2021

This notice informs all Registered Participants and interested parties (Consulted Persons) that AEMO is commencing the second stage of its consultation on the Supply Scarcity Procedures.

This consultation is being conducted under clauses 3.8.14A and 11.129.2 of the National Electricity Rules (NER), 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 and Determination (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 ElectricityMarket.Monitoring@aemo.com.au, to reach AEMO by 5.00pm (Melbourne time) on 2 April 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 to finalise the Supply Scarcity Procedures under clause 3.8.14A of the National Electricity Rules (NER). These procedures set out AEMO's approach to determining its choice of supply scarcity mechanism.

A supply scarcity mechanism refers to any of the following:

- Exercising the RERT
- Issuing a direction in accordance with clause 4.8.9 of the NER
- Issuing a clause 4.8.9 instruction

On 22 October 2020 AEMO published an interim version of the supply scarcity procedures, in accordance with clause 11.129.2 of the NER.

As a first step to finalising the supply scarcity procedures AEMO published a consultation notice on 21 January 2021 and sought stakeholder feedback on the methodology and assumptions detailed in the interim procedures. AEMO did not receive any stakeholder submissions. As such, in finalising the procedures AEMO has not proposed any material changes relative to the interim version.¹

AEMO's draft determination is to publish the Supply Scarcity Procedures in the form published with this Draft Report.

¹ AEMO has proposed two administrative changes; removing the direction duration from the calculation since the formula referred to energy instead of power and providing further explanation of practical considerations in establishing the procedure. These changes are marked in red in the attachment.



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1. STAKEHOLDER CONSULTATION PROCESS

As required by clause 3.8.14A of the NER, AEMO is consulting on the Supply Scarcity Procedures in accordance with the Rules consultation procedures in rule 8.9.

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.

Table 1 Indicative timeline for this consultation

Deliverable	Indicative date
Notice of first stage consultation published	21 January 2021
First stage submissions closed	1 March 2021
Draft Report & Notice of second stage consultation published	18 March 2021
Submissions due on Draft Report	2 April 2021
Final Report published	29 April 2021

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

2. BACKGROUND

2.1. NER requirements

This consultation is being conducted under clauses 3.8.14A and 11.129.2 of the National Electricity Rules (NER), in accordance with the Rules consultation requirements detailed in rule 8.9 of the NER.

NER clause 3.8.14A requires AEMO to develop and publish, and allows it to amend, the Supply Scarcity Procedures. The procedures must include details of the methodology AEMO will use, and the assumptions AEMO may make, when choosing a supply scarcity mechanism.

In developing and amending the procedures, NER clause 3.8.14A specifically requires that AEMO

- must have regard to the examples of the types of direct² and indirect costs³ set out in clauses 3.8.14(c) and 3.8.14(d);
- must take into account any applicable guidelines issued by the Reliability Panel.

NER clause 11.129.2 requires AEMO to develop and publish the procedures by 3 May 2021.

2.2. Context for this consultation

On 10 September 2020, the Australian Energy Market Commission (AEMC) made a final rule to replace the hierarchy⁴ of intervention mechanisms embedded in the NER with a principle that AEMO must use reasonable endeavours to select effective mechanisms that address supply scarcity conditions that may arise while also minimising direct and indirect costs.⁵

² Direct costs include: pre-activation and activation costs payable under *reserve contracts* if AEMO *dispatches* or *activates reserves*; and paying compensation to a *Market Customer* that is entitled to compensation under clause 3.12.2, a *Directed Participant* and an *Affected Participant*.

³ Indirect costs include: distortionary effects on the operation of the market; and the implied value of lost load when *load shedding* occurs as a result of a *clause 4.8.9 instruction*.

⁴ The NER formerly prescribed that after dispatching all valid bids and offers, AEMO must use reasonable endeavours to first activate or dispatch the RERT and then, if necessary, issue either directions or instructions.

⁵ For more information on the rule change, refer to the project page <https://www.aemc.gov.au/rule-changes/removal-intervention-hierarchy>



The final rule also required AEMO to develop, publish, review, and update the Supply Scarcity Procedures that set out AEMO's approach to determine the choice of supply scarcity mechanism.

2.3. First stage consultation

AEMO issued a Notice of First Stage Consultation on 21 January 2021. The matter for consultation was the Supply Scarcity Procedures.

AEMO did not receive any written submissions in the first stage of consultation. A copy of the first stage consultation notice is published on AEMO's website at: <https://aemo.com.au/consultations/current-and-closed-consultations/supply-scarcity-procedures>

3. DRAFT DETERMINATION

AEMO's draft determination is to make the Supply Scarcity Procedures in the form of Attachment 1, in accordance with clause 3.8.14A of the NER.

As no stakeholder feedback has been received to date as part of this consultation process, the Supply Scarcity Procedures contained in Attachment 1 are unchanged from the interim version of the procedures (with the exception of two administrative changes⁶).

⁶ AEMO has proposed two administrative changes; removing the direction duration from the calculation since the formula referred to energy instead of power and providing further explanation of practical considerations in establishing the procedure. These changes are marked in red in the attachment.



ATTACHMENT 1 – INTERIM SUPPLY SCARCITY PROCEDURES

This attachment sets out the interim supply scarcity procedures published under clause 11.129.2 of the NER, to describe AEMO's approach to determining its choice of supply scarcity mechanism under clause 3.8.14A of the NER. Following consultation, these procedures will be finalised by 3 May 2021.

Supply scarcity mechanisms

A *supply scarcity* mechanism refers to any of the following:

- a) exercising the *RERT*;
- b) issuing a *direction* in accordance with clause 4.8.9 of the NER; and
- c) issuing a *clause 4.8.9 instruction*.

If, after dispatching all *dispatch bids* and *dispatch offers*, AEMO determines additional actions are required to address conditions of *supply scarcity*⁷, AEMO must decide which *supply scarcity mechanism(s)* to use.

In making that decision, AEMO must use reasonable endeavours to choose the mechanism, or combination of mechanisms, that is effective in addressing the *supply scarcity* conditions while minimising the associated direct and indirect costs.

Supply scarcity mechanisms that are also *AEMO intervention events* (that is, *RERT* and *directions*) are in practice preferred ahead of *clause 4.8.9 instructions* (such as load shedding) as these generally have lower costs and are more effective. Subject to AEMO satisfying its obligations relating to latest times to intervene and where costs are reasonably similar, *RERT* is in practice preferred ahead of *directions*. *RERT* generally has a longer lead time than directing, meaning a decision to direct may preclude later use of *RERT* and reduce options available to AEMO to manage a severe shortfall.

Methodology

This section describes the factors AEMO will take into account in evaluating both the costs and effectiveness of each *supply scarcity mechanism*, in comparison to others, or a combination of mechanisms.

RERT

For *RERT*, the direct costs AEMO will consider include pre-activation and activation costs payable under relevant *reserve contracts*, as well as potential compensation payable to *Affected Participants* or *Market Customers* under rule 3.12 of the NER as a consequence of exercising the *RERT*. AEMO will also have regard to any material distortionary effects due to the use of emergency *reserves*.

In terms of effectiveness, the selection of *RERT* as an appropriate *supply scarcity* mechanism will depend on the availability of *reserve contracts* for *dispatch* or *activation* that are likely to address the prevailing *supply scarcity* conditions, based on factors including:

- size of *reserve* blocks;
- length of *dispatch* or *activation* times;
- *dispatch* or *activation* constraints (for example, maximum number of days or consecutive days per week of *dispatch* or *activation*, maximum and/or minimum periods of *dispatch* or *activation*)
- historical performance of the *reserve*: and
- shutdown periods when the *reserve* blocks are not available.

⁷ Indicating conditions in which the available *supply* may become insufficient to securely meet demand for energy. This is different from the concept of 'supply scarcity' as defined in the *frequency operating standard*.



Directions

With respect to the cost of *directions*, AEMO will consider any cost estimates provided to AEMO by potential *Directed Participants* and account for the amount payable under the formula compensation mechanism in clause 3.15.7 of the NER by considering the minimum **estimated** energy required under the most likely potential *direction(s)* (MWh) ~~x estimated direction duration (hrs)~~ x the price below which are 90% of the *spot prices* in the relevant *region*, for the 12 months preceding the *trading day* in which the *supply scarcity* conditions have occurred. As with the *RERT*, AEMO will also have regard to potential compensation payable to *Affected Participants* or *Market Customers* and any material distortionary effects.

In terms of effectiveness, the selection of directions as an appropriate *supply scarcity* mechanism will depend on the availability for *direction of scheduled plant or market generation* that is likely to address the prevailing *supply scarcity* conditions, based on factors including:

- time taken to synchronise;
- recall times;
- minimum run times;
- network location;
- minimum generation or demand reduction levels;
- delivery risk and uncertainty; and
- fuel availability.

Instructions

For *clause 4.8.9 instructions for load shedding*, the key cost consideration is the implied value of lost load when *load shedding* occurs. For this calculation, AEMO will use the energy-weighted average aggregate value of customer reliability (VCR) values (or equivalent) published by the *AER* for each *region*. AEMO will also have regard to any material distortionary effects.

The effectiveness of *clause 4.8.9 instructions* to address the *supply scarcity* condition will be considered having regard to all relevant factors, including the amount of load available to be shed at key *network* locations, the relative *load shedding* priorities and the application of the relevant *load shedding* procedures.

Assumptions

The key assumptions in the methodology are the three cost metrics above, as some of these values are not easily determined prior to the use of the supply scarcity mechanism.

AEMO will assume all facilities will perform/deliver as anticipated (including in accordance with *performance standards* and *reserve contracts* as applicable).