

# WHOLESALE ELECTRICITY MARKET

## PROCEDURE CHANGE REPORT: AEPC\_2019\_04

POWER SYSTEM OPERATION PROCEDURE:  
DISPATCH

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## EXECUTIVE SUMMARY

### Purpose

The publication of this Procedure Change Report and accompanying Power System Operation Procedure commences the Procedure Change Process conducted by AEMO to consider a proposed revised Power System Operation Procedure: Dispatch (Procedure) under the Wholesale Electricity Market Rules (WEM Rules).

### Proposed amendments

The revised Procedure is required by clauses 3.21B.8, 7.2.5, 7.6.10A, 7.6.13, 7.6A.2, 7.6A.7, 7.7.4A, 7.7.5A, 7.7.5B, 7.7.5C, 7.7.9, 7.9.19, 7.13.1(eD), 7.13.3, 7A.3.7, 7A.3.15, and 7B.1.4 of the WEM Rules.

### Consultation

Draft versions of the Market Procedure were presented at the WEM AEMO Procedure Change Working Group (WEM APCWG) meeting held on 2 May 2019, during which changes were recommended by stakeholders. Details of this forum are available at <http://aemo.com.au/Stakeholder-Consultation/Industry-forums-and-working-groups/WA-Forums/WEM-APCWG>.

AEMO published the Procedure Change Proposal (AEPC\_2019\_04) on the Market Web Site and issued a notice calling for submissions from stakeholders on 8 May 2019.

The submission period closed on 6 June 2019, with no submissions received from stakeholders.

### AEMO's decision

AEMO's decision is to accept the Procedure, as amended, following the consultation period. AEMO considers that the revised Procedure is consistent with the Wholesale Market Objectives, the *Electricity Industry Act*, the *Electricity Industry (Wholesale Electricity Market) Regulations 2004*, and the WEM Rules.

### Next steps

The revised Power System Operation Procedure: Dispatch will commence at 8:00 AM on 1 July 2019.



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## 1. BACKGROUND

### 1.1. Regulatory requirements

Clauses 3.21B.8, 7.2.5, 7.6.10A, 7.6.13, 7.6A.2, 7.6A.7, 7.7.4A, 7.7.5A, 7.7.5B, 7.7.5C, 7.7.9, 7.9.19, 7.13.1(eD), 7.13.3, 7A.3.7, 7A.3.15, and 7B.1.4 of the WEM Rules provide that:

*3.21B.8. System Management must document the procedure it follows to grant permission in accordance with section 3.21B in the Power System Operation Procedure and System Management and Market Participants must follow that documented Market Procedure.*

*7.2.5. Unless otherwise directed by System Management, each Market Generator must by 10 AM each day provide to System Management for each of its Intermittent Generators with capacity exceeding 10 MW its most current forecast of the MWh energy output of the Intermittent Generator for each Trading Interval between noon of the current Scheduling Day and the end of the corresponding Trading Day in a format and by a method specified in the Power System Operation Procedure.*

*7.6.10A. System Management must develop a Power System Operation Procedure documenting the manner and time in which the obligation in clause 7.6.10 is to be complied with, including how consumption is to be measured or estimated.*

*7.6.13. System Management must document in the Power System Operation Procedure the procedure to be followed, and must follow that documented Market Procedure, when scheduling and issuing Operating Instructions to dispatch Registered Facilities covered by any Ancillary Service Contract in a form sufficient for audits and investigations under these Market Rules.*

*7.6A.2. With respect to the scheduling of Stand Alone Facilities for Ancillary Services and the scheduling of Facilities in the Balancing Portfolio generally:*

- (a) at least once every month, Synergy must provide to System Management the following information in regard to the subsequent month:
  - (i) a plant schedule describing the merit order in which the Facilities in the Balancing Portfolio are to be called upon and any restrictions on the operations of such Facilities;*
  - (ii) a plan for which fuels will be used in each Facility in the Balancing Portfolio and guidance as to how that plan might be varied depending on circumstances;*
  - (iii) a description as to how Ancillary Services are to be provided from Facilities in the Balancing Portfolio; and*
  - (iv) a description as to how Ancillary Services are to be provided from the Stand Alone Facilities,**

*where the format and time resolution of this data is to be described in a procedure;*

- (b) System Management must provide to Synergy by 8:30 AM on the Scheduling Day associated with a Trading Day a forecast of total system demand for the Trading Day where the format and time resolution of this data is to be described in a procedure;*
- (c) System Management must provide to Synergy by 4:00 PM on the Scheduling Day associated with a Trading Day:
  - (i) a forecast of the requirements for energy in the Balancing Portfolio, being a forecast of the whole of system energy requirement less:
    - (A) the aggregate energy of all Resource Plans associated with other Market Participants' Scheduled Generators and Dispatchable Loads, including Synergy's Dispatchable Loads; and***



- (B) *the aggregate forecast output of other Market Participants' Non-Scheduled Generators, including the aggregate forecast output of any Non-Scheduled Generators which are Stand Alone Facilities, for the Trading Day;*
  - (ii) *the Dispatch Plan for each Facility for the Trading Day; and*
  - (iii) *a forecast of the detailed Ancillary Services required from each Facility in the Balancing Portfolio and Ancillary Services from each Stand Alone Facility,*
- where the format and time resolution of this data is to be described in a procedure;*
- (d) *System Management must consult with Synergy in developing the information described in clause 7.6A.2(c) and Synergy must provide System Management with any information required by System Management in accordance with a procedure to support the preparation of the information in clause 7.6A.2(c). In the event of any failure by Synergy to provide information required by System Management in a timely fashion then System Management may use its reasonable judgement to substitute its own information;*
  - (e) *System Management must determine by 4:00 PM on the Scheduling Day associated with a Trading Day the aggregate forecast output of all Non-Scheduled Generators for the Trading Day, referred to in clause 7.6A.2(c)(i)(2);*
  - (f) *If after 4:00 PM on the Scheduling Day but prior to the start of a Trading Interval on the corresponding Trading Day, System Management becomes aware of a change in conditions which will require a significant change in the Dispatch Plan it may make such change but must notify Synergy of such change; and*
  - (g) *Synergy must notify System Management as soon as practicable if it becomes aware that it is unable to comply with a Dispatch Plan, providing reasons as to why it cannot comply.*

7.6A.7. *Subject to clause 7.6A.8, System Management must document the procedures System Management and Synergy must follow to comply with this clause 7.6A, including the process to follow in developing the confidential procedure described in clause 7.6A.8, in the Power System Operation Procedure, and System Management and Synergy must follow that documented Market Procedure.*

7.7.4A. *When selecting Non-Balancing Facilities from the Non-Balancing Dispatch Merit Order, and subject to 7.6.1C and 7.6.1E, System Management must select them in accordance with the Power System Operation Procedure. The selection process specified in the Power System Operation Procedure must:*

- (a) *only discriminate between Non-Balancing Facilities based on response time and availability;*
- (b) *permit System Management to not curtail a Demand Side Programme when, due to limitations on the availability of the Demand Side Programme, such curtailment would prevent that Demand Side Programme from being available to System Management at a later time when it would have greater benefit with respect to maintaining Power System Security and Power System Reliability; and*
- (c) *not be inconsistent with section 7.6.*

7.7.5A. *System Management must develop a Power System Operation Procedure specifying:*

- (a) *information that a Market Participant must provide to System Management, for each of the Market Participant's Non-Scheduled Generators, and for each Trading Interval, for the purposes of:*
  - (i) *the estimate referred to in clause 7.7.5A(b);*
  - (ii) *the revised estimate referred to in clause 7.7.5A(c); or*
  - (iii) *step 6 of Appendix 9.*



- (b) *for the purposes of clause 7.7.5B and the Relevant Level Methodology – one or more methods that may be used to estimate the maximum quantity of sent out energy (in MWh) that a Non-Scheduled Generator would have generated in a Trading Interval had a Dispatch Instruction not been issued for that Facility and for that Trading Interval;*
- (c) *for the purposes of the Relevant Level Methodology only – the process for revising an estimate that was made strictly in accordance with one of the methods that, under clause 7.7.5A(b), must be specified in the Power System Operation Procedure; and*
- (d) *for the purposes of clause 7.13.1C(e) – one or more methods that may be used to estimate the decrease in the output (in MWh) of each of Synergy's Non-Scheduled Generators as a result of an instruction from System Management to deviate from the Dispatch Plan or change their commitment or output in accordance with clause 7.6A.3(a).*

*System Management and Market Participants must comply with the Power System Operation Procedure.*

*7.7.5B. The quantity to be used for the purposes of clauses 6.15.2(b)(i) and 7.13.1(eF) is System Management's estimate, determined in accordance with the Power System Operation Procedure, of the maximum amount of sent out energy, in MWh, which each Non-Scheduled Generator, by Trading Interval, would have generated in the Trading Interval had a Dispatch Instruction not been issued.*

*7.7.5C. The information to be provided by a Market Participant in the Power System Operation Procedure developed under clause 7.7.5A may include such modelling for the Market Participant's Non-Scheduled Generators that System Management considers may assist it to determine the estimates under clause 7.7.5A(a) or to meet the Dispatch Criteria.*

*7.7.9. System Management must develop, in a Power System Operation Procedure, the procedure System Management and Market Participants must follow in forming, issuing, recording, receiving, confirming and responding to Dispatch Instructions and Operating Instructions and that System Management must follow in determining the quantities described in clause 7.7.5A(a).*

*7.9.19. System Management must document in the Power System Operation Procedure for Dispatch the processes to be used:*

- (a) *for applications under clause 7.9.13;*
- (b) *by System Management in determining whether or not to grant an exemption under clause 7.9.14;*
- (c) *by System Management in determining whether or not to revoke an exemption under clause 7.9.17;*
- (d) *for notification of any exemptions granted or revoked by System Management; and*
- (e) *publishing and maintaining on System Management's website any information and details with respect to any exemptions.*

*7.13.1(eD). System Management must prepare the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends, by Trading Interval, the Load Rejection Reserve Response Quantity and the Spinning Reserve Response Quantity calculated in accordance with the Power System Operation Procedure.*

*7.13.3 System Management must document in the Power System Operation Procedure the procedure to be followed by Rule Participants in providing settlement and monitoring data to AEMO. Rule Participants must comply with that documented Market Procedure.*



7A.3.7. System Management must, no later than two hours after the end of the Trading Day, prepare an estimate of:

- (a) the SOI Quantity and the EOI Quantity for each Balancing Facility; and
- (b) the Relevant Dispatch Quantity,

for each Trading Interval in the Trading Day, determined in accordance with the Power System Operation Procedure.

7A.3.15. System Management must, for each future Trading Interval in the Balancing Horizon, prepare a forecast of the Relevant Dispatch Quantity, and may prepare a forecast of the EOI Quantity for Non-Scheduled Generators, each determined in accordance with the Power System Operation Procedure. System Management must, each time it has new information on which to determine these quantities, update these forecasts, but is not required to do so more than once per Trading Interval.

7B.1.4. System Management must, by 12:00 PM on the Scheduling Day, prepare a forecast of the LFAS Quantity for each Trading Interval in the next Trading Day, determined in accordance with the Power System Operation Procedure.

## 1.2. Context for this consultation

As part of the amalgamation of System Management and AEMO, the Power System Operation Procedures are being revised and updated. In general, AEMO is revising the Market Procedures to:

- (a) remove any Power System Operation Procedures not required by WEM Rules;
- (b) update all Power System Operation Procedures to current AEMO standards;
- (c) ensure Power System Operation Procedures comply with obligations; and
- (d) ensure content in Market Procedures is included where a WEM Rule requirement exists to include detail or process or AEMO requires an obligation on itself or Participants.

The Power System Operation Procedure will be the ninth version of this Procedure. AEMO proposes to commence the revised Procedure on 1 July 2019.

## 1.3. Procedure Change Process and timetable

On 8 May 2019, AEMO published a Procedure Change Proposal (AEPC\_2019\_04) for the Power System Operation Procedure: Dispatch and issued a call for submissions which are available at [http://www.aemo.com.au/Stakeholder-Consultation/Consultations/AEPC\\_2019\\_04](http://www.aemo.com.au/Stakeholder-Consultation/Consultations/AEPC_2019_04).

The proposal was progressed using the Procedure Change Process specified in clause 2.10 of the WEM Rules, with submissions required by 6 June 2019.

## 2. PROPOSED PROCEDURE CHANGE

This section details the changes that AEMO proposed when the call for submissions was published.

### 2.1. Detail of the proposed procedure change

Among numerous editorial changes, AEMO is proposing:

- (a) editorial clarifications; and
- (b) changes as a result of upcoming Rule Changes, comments from the Market Auditor, or operational matters, as detailed in the table below.



Step(s) or Section(s) Affected	Issue
1.3.1; 7.2.1	In accordance with RC_2015_01, include: <ul style="list-style-type: none"> <li>• specific references to clauses 3.21B.8, 7.6A.7, 7.9.19; and</li> <li>• further detail relating to clauses 7.6A.2 and 7.7.5A.</li> </ul>
3.1.3	Clarify the format and time resolution of information provided by AEMO to Synergy under clause 7.6A.2(c).
4.8.1	Clarify the requirements for Demand Side Programmes to provide real-time data.
5.4.1; 5.7.2; 5.7.3; 5.7.5	Clarify the: <ul style="list-style-type: none"> <li>• methods by which AEMO may issue, and Market Participants may confirm, Operating Instructions;</li> <li>• level Market Participants must respond to for different types of Operating Instructions; and</li> <li>• interaction of Operating Instructions and Dispatch Instructions.</li> </ul> In accordance with RC_2018_07, include requirements to allow for: <ul style="list-style-type: none"> <li>• Operating Instructions to be issued ex-post for Market Generators that are constrained by a Network Outage; and</li> <li>• the receipt of this Operating Instruction to be deemed confirmed.</li> </ul>
7.2.2	Clarify the estimation of constrained-off quantities for Non-Scheduled Generators.
7.5.1	Clarify that the methodology for clause 7A.3.7A uses the same methodology for clause 7A.3.7.
Various	For RC_2014_16, vary steps referring to clauses 7.7.4A and 7.6A.2(c), and remove references to: <ul style="list-style-type: none"> <li>• Resource Plans;</li> <li>• Dispatchable Loads; and</li> <li>• Non-Balancing Facilities.</li> </ul>
4.9; 4.10; 5.1 and Appendix 1	Remove unnecessary detail in sections: <ul style="list-style-type: none"> <li>• 4.9: Dispatch Advisory notices (and as a consequence, Appendix 1);</li> <li>• 4.10: Content and management of Dispatch Advisory notices; and</li> <li>• 5.1: Bona fide changes to the physical status of Facilities.</li> </ul>

## 2.2. Proposed drafting

AEMO published a draft of the proposed Power System Operations Procedure: Dispatch, which is available at [http://www.aemo.com.au/Stakeholder-Consultation/Consultations/AEPC\\_2019\\_04](http://www.aemo.com.au/Stakeholder-Consultation/Consultations/AEPC_2019_04). AEMO also provided a marked-up version of the revised Procedure.

## 3. CONSULTATION PROCESS

### 3.1. Market Advisory Committee or Working Group

The Market Advisory Committee (MAC) has delegated its advisory role with respect to AEMO Procedure Change Proposals to the AEMO Procedure Change Working Group (APCWG), in accordance with clause 2.3.17(a) of the WEM Rules. Accordingly, the MAC did not review the Procedure Change Proposal.

Draft versions of the Market Procedure were presented at the WEM APCWG meeting held on 2 May 2019, during which changes were recommended by stakeholders.

AEMO notified the MAC once the Procedure Change Proposal was published and noted that the Rule Change Panel would convene a meeting of the MAC should two or more members request it in accordance with clause 2.10.9 of the WEM Rules.

### 3.2. Public workshop

No public workshops were held in relation to this Procedure Change Proposal.



### 3.3. Submissions received during consultation period

AEMO published the Procedure Change Proposal (AEPC\_2019\_04) on the Market Web Site and issued a notice calling for submissions from stakeholders on 8 May 2019. The submission period closed on 6 June 2019, with no submissions received from stakeholders.

## 4. AEMO'S ASSESSMENT

### 4.1. Further changes to the Procedure

Other than editorial matters, AEMO has not made any further changes to the Procedure.

### 4.2. Consistency with Electricity Industry Act, WEM Regulations, and WEM Rules

The revised Procedure has been reviewed as a whole by AEMO to ensure compliance with the relevant provisions in the:

- *Electricity Industry Act 2004*.
- *Electricity Industry (Wholesale Electricity Market) Regulations 2004* (WEM Regulations).
- WEM Rules.

### 4.3. Consistency with Wholesale Market Objectives

AEMO considers that the steps are drafted in a way that is consistent with the objectives of the WEM Rules. As a result, AEMO considers that the revised Procedure, as a whole, is consistent with the Wholesale Market Objectives.

### 4.4. Implementation of the Procedure

The Procedure was developed in accordance with clauses 2.35.4 and 2.36A.5 of the WEM Rules.

This Procedure does not require system changes by AEMO.

The Procedure will not require Rule Participants to implement any procedural or system amendments before commencement.

Consequently, AEMO considers that commencement at 8:00 AM on 1 July 2019 will allow Rule Participants sufficient time from the date of publication of this Procedure Change Report to ensure compliance.

### 4.5. AEMO's decision and commencement

AEMO's decision is to accept the Procedure, as amended, following the consultation period. The new Power System Operation Procedure: Dispatch will commence at 8:00 AM on 1 July 2019. AEMO has made this decision on the basis that the new Procedure:

- Is consistent with the Wholesale Market Objectives.
- Is consistent with the Electricity Industry Act, WEM Regulations, and WEM Rules.
- Has the general support of stakeholders, as no submissions were received during the consultation period.

The new Power System Operation Procedure: Dispatch is available at [http://www.aemo.com.au/Stakeholder-Consultation/Consultations/AEPC\\_2019\\_04](http://www.aemo.com.au/Stakeholder-Consultation/Consultations/AEPC_2019_04).