

MARKET PROCEDURE: BALANCING FACILITY REQUIREMENTS

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VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	Balancing Market Commencement Day	New Market Procedure for Balancing Facility Requirements resulting from PC_2012_02
2.0	30 November 2015	Changes resulting from the transfer of functions from the IMO to AEMO
3.0	18 April 2017	Changes resulting from the transfer of System Management functions to AEMO
4.0	1 July 2019	Changes resulting from Procedure Change Proposal AEPC_2019_06 related to the Rule Change Proposal RC_2014_06: Removal of Resource Plans and Dispatchable Loads, and minor administrative changes including the transfer of the Procedure to the new AEMO template
5.0	XX May 2020	Changes from Procedure Change Proposal AEPC_2020_01 related to revision of the Balancing Merit Order tie-break methodology

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1. INTRODUCTION

1.1. Purpose and scope

- 1.1.1. This Market Procedure: Balancing Facility Requirements (**Procedure**) has been developed in accordance with AEMO’s functions under clause 2.1A.2(h) of the Wholesale Electricity Market Rules (**WEM Rules**). This Procedure has also been developed under clause 7A.1.6 of the WEM Rules.
- 1.1.2. This Procedure should be read in conjunction with clauses 7A.1.6 through 7A.1.13 of the WEM Rules.
- 1.1.3. The purpose of this Procedure is to describe:
 - (a) the technical and communications criteria that a:
 - (i) Balancing Facility with a rated capacity of 10 MW or more must meet **[clause 7A.1.8]**; and
 - (ii) Balancing Facility with a rated capacity of less than 10 MW may meet **[clause 7A.1.9]**; and
 - (b) where a Facility does not meet the Requirements, the process the Australian Energy Market Operator (AEMO) must follow in considering whether it is appropriate to impose conditions on the manner in which the applicable Facility must participate in the Balancing Market **[clause 7A.1.11]**, the type of conditions that may be imposed and the manner and circumstances in which they may be imposed and lifted.
- 1.1.4. In this Procedure, where obligations are conferred on a Rule Participant, that Rule Participant must comply with the relevant obligations in accordance with clauses 2.9.7, 2.9.7A, 2.9.7B, 2.9.7C and 2.9.8 of the WEM Rules, as applicable.
- 1.1.5. Reference to particular WEM Rules within the Procedure in bold and square brackets **[clause XX]** are included for convenience only, and are not part of this Procedure.

1.2. Definitions and interpretation

1.2.1 Glossary

Terms defined in the WEM Rules have the same meanings in this Procedure unless otherwise specified in this clause.

The words, phrases and abbreviations in the table below have the meanings set out opposite them in the table when used in this Procedure.

Term	Definition
Requirements	The Balancing Facility Requirements, as defined in the WEM Rules, including any technical requirements and communication criteria for a Balancing Facility specified in section 2.1 of this Procedure.

1.2.2 Interpretation

The following principles of interpretation apply to this Procedure unless otherwise expressly indicated:

- a) references to time are references to Australian Western Standard Time;
- b) terms that are capitalised, but not defined in this Procedure, have the meaning given in the WEM Rules;
- c) to the extent that this Procedure is inconsistent with the WEM Rules, the WEM Rules prevail to the extent of the inconsistency;
- d) a reference to the WEM Rules or Market Procedures includes any associated forms required or contemplated by the WEM Rules or Market Procedures; and
- e) words expressed in the singular include the plural and vice versa.

In this Procedure the conventions specified in sections 1.3 to 1.5 of the WEM Rules apply.

1.3. Related documents

The following Market Procedures, Power System Operation Procedures (PSOPs) and market documents (available on the Market Web Site¹) provide background information to this Procedure:

- (a) Market Procedure: Notices and Communications;
- (b) Market Procedure: Facility Registration, De-registration and Transfer;
- (c) PSOP: Communications and Control Systems;
- (d) PSOP: Operational Data Points for Generating Plant; and
- (e) PSOP: Dispatch.

2. TECHNICAL REQUIREMENTS AND COMMUNICATION CRITERIA

2.1. Requirements for Balancing Facilities

- 2.1.1. A Market Participant must ensure that it is capable of receiving electronic or back-up Dispatch Instructions issued by AEMO (in its capacity as System Management), in accordance with the PSOP: Communications and Control Systems, for each of its Balancing Facilities.
- 2.1.2. A Market Participant must ensure that it is capable of confirming to AEMO, in accordance with the requirements specified in the PSOP: Communications and Control Systems and the PSOP: Dispatch, each electronic or backup Dispatch Instruction received from AEMO (in its capacity as System Management) for each of its Balancing Facilities.
- 2.1.3. A Market Participant must ensure that it is capable of implementing each Dispatch Instruction from AEMO (in its capacity as System Management), in accordance with the requirements outlined in the PSOP: Communications and Control Systems and the PSOP: Dispatch, for each of its Balancing Facilities.
- 2.1.4. A Market Participant must ensure that it is capable of responding to an electronic Dispatch Instruction from AEMO (in its capacity as System Management) for each of its Balancing Facilities to ramp upwards or downwards to a target MW level at a rate less than or equal to the Facility's Ramp Rate Limit.

¹ Available at <http://aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Procedures>.

- 2.1.5. A Market Participant may specify in its Balancing Submission a Balancing Price-Quantity Pair at the Minimum STEM Price that identifies the Facility's minimum stable loading level, provided that:
- (a) the Facility is not providing Load Rejection Reserve Service, Spinning Reserve Service, Downwards LFAS Enablement, Backup Downwards LFAS Enablement, Upwards LFAS Enablement or Backup Upwards LFAS Enablement; and
 - (b) the quantity of the Balancing Price-Quantity Pair at the Minimum STEM Price does not exceed the Facility's minimum stable loading level as indicated in Standing Data under Appendix 1(b)(xiii) of the WEM Rules, after taking into account relevant factors, including but not limited to, temperature at the location of the Facility.

2.2. Inability to meet Requirements

- 2.2.1. A Market Participant must advise AEMO (in its capacity as System Management) if one of its Balancing Facilities is unable to respond, or can no longer respond, in accordance with the Requirements in section 2.1 of this Procedure, to an electronic Dispatch Instruction from AEMO (in its capacity as System Management). Market Participants must provide this advice in accordance with the requirements outlined in the PSOP: Communications and Control Systems.

2.3. Reporting non-compliance

- 2.3.1. A Market Participant must ensure that each of its Balancing Facilities with a rated capacity of 10 MW or more meets the Requirements specified in section 2.1 of this Procedure [**clause 7A.1.8**].
- 2.3.2. Where a Balancing Facility does not, or will not, meet one or more of these Requirements, the relevant Market Participant must advise AEMO in writing and include the following details:
- (a) the Balancing Facility concerned;
 - (b) the particular Requirement(s) which the Facility does not meet;
 - (c) the reasons for, and extent of, non-compliance with the Requirement(s); and
 - (d) any measures that the Market Participant will take, and by when, to ensure the Balancing Facility meets the Requirement(s).
- 2.3.3. Notwithstanding the above, AEMO may at any time request a Market Participant to provide, in writing, all information reasonably required to demonstrate that its Balancing Facilities meet the Requirements, including in respect of a Facility with a rated capacity less than 10 MW, which a Market Participant has applied to AEMO, under step 5.1.1 of this Procedure, for the Facility to be considered to meet the Requirements, or as a consequence of that process, is considered to meet the Requirements [**clause 7A.1.10**].

3. AEMO PROCESS FOR ASSESSING CONDITIONS

This section sets out the process AEMO must follow in relation to a Balancing Facility that does not meet one or more of the Requirements specified in section 2.1 of this Procedure.

3.1. Background

- 3.1.1. Where a Balancing Facility does not meet one or more of the Requirements in section 2.1 of this Procedure, AEMO may impose conditions on the manner in which the Market Participant, with

respect to the applicable Balancing Facility, must participate in the Balancing Market [clause 7A.1.11].

- 3.1.2. AEMO may impose conditions on a Market Participant's participation in the Balancing Market, which include specifying the prices which the Market Participant may include in a Balancing Submission and the manner and time in which a Balancing Submission must be submitted for that Balancing Facility [clause 7A.1.11].

3.2. Assessing whether to impose conditions

- 3.2.1. If AEMO becomes aware that a Balancing Facility does not meet one or more of the Requirements specified in section 2.1 of this Procedure then, as soon as practicable, AEMO must:

- (a) notify the relevant Market Participant that it will be undertaking a review;
- (b) request the relevant Market Participant to provide, within a specified timeframe, which must not be less than 10 Business Days, any additional information which AEMO considers relevant to its assessment of the extent to which the Balancing Facility does not meet the Requirements; and
- (c) make an assessment of whether to impose conditions on the Balancing Facility's participation in the Balancing Market.

- 3.2.2. In undertaking its assessment, AEMO may consider the technical implications of a Facility's non-compliance with the Requirements.

- 3.2.3. AEMO must complete its assessment of whether to impose conditions within 20 Business Days of:

- (a) providing a notification under step 3.2.1(a); or
- (b) where applicable, receiving the information it has requested under steps 3.2.1(a) or 3.2.2.

- 3.2.4. Where AEMO determines to impose conditions on a Balancing Facility, AEMO must as soon as reasonably practicable, publish on the Market Web Site details of that decision [clause 7A.1.13]. The details required to be published include:

- (a) the relevant Balancing Facility;
- (b) the conditions to be imposed;
- (c) the reasons for imposing the conditions; and
- (d) the Trading Date and Trading Interval from which the conditions will be imposed.

4. APPLICATION OF CONDITIONS

Subject to the assessment described in section 3.2 of this Procedure, where a Balancing Facility does not meet one or more of the Requirements specified in section 2.1 of this Procedure, AEMO may impose conditions on the relevant Market Participant with respect to the applicable Balancing Facility's participation in the Balancing Market [clause 7A.1.11]. Such conditions may include, but are not limited to, those outlined in this section 4.

4.1. Requirement to submit Balancing Submissions at specified prices

Price Cap conditions for Scheduled Generator submissions

- 4.1.1. Where a Scheduled Generator does not meet one or more of the Requirements in section 2.1 of this Procedure, AEMO may impose conditions on the relevant Market Participant, requiring that Balancing Submissions for the Facility be submitted at the Price Caps.
- 4.1.2. Where AEMO imposes a condition under step 4.1.1, the Market Participant must ensure that its Balancing Submissions for the Facility for each Trading Interval comprise:
- (a) the expected generation at the Minimum STEM Price, subject to any other conditions imposed by AEMO or Outages; and
 - (b) any remaining available generation capacity at the Maximum STEM Price or Alternative Maximum STEM Price.

Price conditions for Non-Scheduled Generator submissions

- 4.1.3. A Non-Scheduled Generator will not be able to meet the Requirements in steps 2.1.3 and 2.1.4 of this Procedure in respect of Dispatch Instructions to increase generation. As such, AEMO must impose a condition on the relevant Market Participant, restricting Balancing Submissions for the applicable Facility, for each Trading Interval, to a single Price-Quantity Pair for dispatch.
- 4.1.4. Where the Non-Scheduled Generator does not meet the Requirements in steps 2.1.1, 2.1.2 or, in respect of Dispatch Instructions to reduce generation, steps 2.1.3 or 2.1.4 of this Procedure, AEMO may impose an additional condition on the relevant Market Participant that Balancing Submissions for the Facility must be at the Minimum STEM Price.

4.2. Manner and time of Balancing Submissions

- 4.2.1. Where a Balancing Facility does not meet the Requirements in steps 2.1.1 or 2.1.2 of this Procedure or cannot respond to Dispatch Instructions in the timeframes required in step 2.1.3 of this Procedure, AEMO may impose conditions on the relevant Market Participant including restricting the times when it may submit or revise Balancing Submissions, or specifying the times when it must submit or revise Balancing Submissions, for the applicable Facility and the manner in which it must make submissions.

4.3. Review and lifting of conditions

- 4.3.1. A Market Participant may request AEMO to review conditions imposed on the participation of a Facility in the Balancing Market, where the extent to which the Facility complies with the Requirements has changed and this change may result in AEMO changing the conditions imposed.
- 4.3.2. A Market Participant must make any request under step 4.3.1 in writing, including the following details:
- (a) the relevant Balancing Facility and conditions concerned;
 - (b) the measures that the Market Participant has taken to ensure the Balancing Facility meets the Requirements; and
 - (c) the extent to which the Balancing Facility now complies with the Requirements.
- 4.3.3. On receiving a request from a Market Participant under step 4.3.1, AEMO may, as soon as reasonably practicable, request the relevant Market Participant to provide, within a specified

- timeframe, which must not be less than 10 Business Days, any additional information that AEMO considers relevant to the review.
- 4.3.4. AEMO must review the conditions that have been imposed on a Balancing Facility's participation in the Balancing Market where:
- (a) AEMO becomes aware that the extent to which the Facility complies with the Requirements has changed and this change may result in AEMO changing the conditions imposed; or
 - (b) a Market Participant has requested AEMO to review the conditions imposed on the participation of a Facility in the Balancing Market under step 4.3.1.
- 4.3.5. Where, under step 4.3.4(a), AEMO becomes aware that it would be appropriate to undertake a review of the conditions placed on a Balancing Facility, then, as soon as reasonably practicable, AEMO must notify the relevant Market Participant that it will be undertaking a review and must include in the notification:
- (a) details of the Facility and conditions under consideration;
 - (b) the reasons for the review;
 - (c) a request for any information that AEMO considers relevant to the review; and
 - (d) details of the timeframe in which the Market Participant must respond to AEMO's request for information and in which the Market Participant may provide any additional information, which it considers relevant to AEMO's review, where this timeframe must not be less than 10 Business Days.
- 4.3.6. In reviewing conditions placed on a Balancing Facility, AEMO must take into account the extent to which the relevant Balancing Facility's non-compliance with the Requirements has been altered or addressed.
- 4.3.7. Where a Market Participant is able to demonstrate to AEMO's satisfaction that the non-compliance, which led to conditions being imposed, has been adequately addressed or no longer exists, AEMO must lift the relevant conditions. Otherwise, AEMO must follow the process in section 3.2 to assess whether to extend the conditions or, if the Facility's non-compliance has been altered, impose modified conditions.
- 4.3.8. AEMO must complete any review it undertakes in accordance with step 4.3.4 within 20 Business Days of the later of:
- (a) receiving a request under step 4.3.1;
 - (b) making a request under step 4.3.3; or
 - (c) where applicable, receiving the information it has requested under steps 4.3.3, or 4.3.5(c).
- 4.3.9. Where AEMO decides to lift or vary any conditions on a Balancing Facility, AEMO must, as soon as reasonably practicable, publish on the Market Web Site details of that decision including:
- (a) the relevant Balancing Facility;
 - (b) the conditions to be lifted or varied;
 - (c) the reasons for lifting or varying the conditions; and
 - (d) the Trading Day and Trading Interval from which the conditions will be lifted or varied.

4.3.10. Where AEMO determines to not lift or vary any conditions on a Balancing Facility, AEMO must, as soon as reasonably practicable, advise the applicable Market Participant of the details of its decision, including any reasons for not lifting or varying the conditions.

5. TREATMENT OF FACILITIES WITH RATED CAPACITY LESS THAN 10 MW

5.1. Facilities with rated capacity less than 10 MW that meet the Requirements

- 5.1.1. A Market Participant with a Facility with a rated capacity less than 10 MW that meets the Requirements may inform AEMO that it meets the Requirements [clause 7A.1.9] and request that the Facility be considered to meet the Requirements without conditions. A Market Participant making such a request must apply in writing, identifying the Facility and providing supporting information to confirm that the Facility meets the Requirements.
- 5.1.2. On receiving an application under step 5.1.1, AEMO may, as soon as reasonably practicable, request the relevant Market Participant to provide within a specified timeframe, which must be not less than 10 Business Days, any additional information that AEMO reasonably considers is required to assess the application.
- 5.1.3. AEMO must complete its assessment of whether a Facility meets the Requirements within 20 Business Days of the later of:
- (a) receiving a request under step 5.1.1; or
 - (b) where applicable, receiving the information it has requested under step 5.1.2.
- 5.1.4. Where AEMO determines that a Facility, with a rated capacity of less than 10 MW, is to be considered to meet the Requirements, AEMO must, as soon as reasonably practicable, publish on the Market Web Site details of that decision including:
- (a) the relevant Balancing Facility;
 - (b) the reasons for approving the application; and
 - (c) the Trading Date and Trading Interval from which the Facility will be treated as meeting the Requirements.
- 5.1.5. Where AEMO determines under step 5.1.3 that a Facility does not meet the Requirements, AEMO must, as soon as reasonably practicable, advise the applicable Market Participant of the details of its decision, including its reasons for considering that the Facility does not meet the Requirements.