

# POWER SYSTEM OPERATINGOPERATION PROCEDURE: TOLERANCE RANGES

 PREPARED BY:
 System Management (WA)

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#### Approved for distribution and use by:

 APPROVED BY:
 Cameron Parrotte

 TITLE:
 Executive General Manager, Strategy and Innovation – WA

Australian Energy Market Operator Ltd ABN 94 072 010 327

www.aemo.com.au info@aemo.com.au

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# VERSION RELEASE HISTORY

Version	Effective date	Summary of changes
1	<del>xx mmmm<u>19</u> May21 April</del> 2018	Procedure created resulting from Procedure Change Proposal AEPC_2018_02. This procedure supersedes the information that was previously contained in the Power System OperatingOperation Procedure: Monitoring and Reporting with respect to Tolerance Ranges.



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# 1. **PROCEDURE OVERVIEW**

# 1.1. Relationship with the Wholesale Electricity Market Rules

- 1.1.1. This Power System OperatingOperation Procedure: Tolerance Ranges (Procedure) has been developed in accordance with clause 2.13.6K of the Wholesale Electricity Market Rules (WEM Rules).
- 1.1.2. References to particular WEM Rules within the Procedure in bold and square brackets [Clause X.X.X] are current as at <u>13 October 2017.27 March 2018.</u> These references are included for convenience only and are not part of this Procedure.

# 1.2. Interpretation

- 1.2.1. In this Procedure:
  - (a) terms that are capitalised but not defined in this Procedure have the meaning given in the WEM Rules;
  - (b) to the extent that this Procedure is <u>contrary or</u> inconsistent with the WEM Rules, the WEM Rules shall prevail to the extent of the inconsistency;
  - (c) a reference to the WEM Rules or Market Procedures includes any associated forms required or contemplated by the WEM Rules or Market Procedures; and

(c)(d) unless the context requires otherwise, references to AEMO include AEMO in its System Management capacity; and

(d)(e) words expressed in the singular include the plural or vice versa.

# **1.3.** Purpose and Application of this Procedure

- 1.3.1. The purpose of this Procedure is to describe the processes that AEMO must follow when reviewing and determining the Tolerance Range and any Facility Tolerance Ranges.
- 1.3.2. This Procedure applies to:
  - (a) AEMO in reviewing and determining the Tolerance Range and any Facility Tolerance Ranges; and
  - (b) Market Participants in giving AEMO information that will be used for reviewing and determining the Tolerance Range and any Facility Tolerance Ranges; and.
  - () Market Participants in complying with the Tolerance Range and any Facility Tolerance Ranges that apply to them.

# 3.2. PURPOSE OF TOLERANCE RANGE AND FACILITY TOLERANCE RANGES

3.1.1.2.1.1. The Tolerance Range is used for the purposes of AEMO's reporting of alleged breaches of clauses 7.10.1 and 3.21 of the WEM Rules to the Economic Regulation Authority [Clause 2.13.6D].

#### <u>3.1.2.2.1.2.</u> The Tolerance Range is set having regard to:

- (a) Thethe degree of compliance with Dispatch Instructions and Operating Instructions that is required to ensure the SWIS operates in a secure and reliable manner;
- (b) <u>Thethe</u> degree of costs imposed on Market Participants as a result of AEMO's monitoring of compliance with Dispatch Instructions and Operating Instructions-are minimised; and



(c) <u>Thethe</u> degree of operational impost on Market Participants for <u>deviations that are not</u> <u>non-significant deviations</u>.

# 4.3. REVIEWS OF TOLERANCE RANGE AND FACILITY TOLERANCE RANGES

# 4.1.<u>3.1.</u> General

- 4.1.1.3.1.1. The Tolerance Range and any Facility Tolerance Ranges are available on the Market Web Site.
- 4.1.2.3.1.2. AEMO must review the Tolerance Range and all Facility Tolerance Ranges at least annually [Clause 2.13.6G].
- 4.1.3.3.1.3. <u>AEMO will receive and consider Rule Participants may provide submissions from</u> <u>Market Participants regarding the Tolerance Ranges or Range, and Market Participants may</u> <u>provide submissions regarding</u> any Facility Tolerance Ranges, at any time, and AEMO must consider any issues raised from those submissions.
- 4.1.4.3.1.4. When AEMO receives a submission in step 3.1.33.1.3, it will consider if an immediate review of the Tolerance Range or any Facility Tolerance Ranges is required.
- 4.1.5.3.1.5. If AEMO considers that an immediate review of the Tolerance Range or any Facility <u>Tolerance Ranges</u> is not required, AEMO will consider the submission in the annual review of the Tolerance Range.

# 4.2.3.2. Review of Tolerance Range

- 4.2.1.3.2.1. In reviewing the Tolerance Range, the The factors that AEMO will consider in reviewing the Tolerance Range include, but are not limited to:
  - (a) any submissions received from MarketRule Participants or stakeholders;
  - (b) the number and extent of historical deviations from Dispatch Instructions;
  - (c) the likely impacts of deviations from Dispatch Instructions on the standard for Load Following Service; and

(d) any directions received from the ERA under clause 2.13.6H of the WEM Rules; and

(e)(d) any other circumstances or information that AEMO considers relevant.

- 4.2.2.3.2.2. Where AEMO considers that the current Tolerance Range requires adjustment, AEMO must follow step 4.1<u>4.1</u>.
- 4.2.3.3.2.3. Where AEMO does not consider the Tolerance Range requires adjustment, AEMO must publish the outcomes of the review on the Market Web Site, including any submissions received from Rule Participants in step 3.1.3.

# 4.3.3.3. Review of Facility Tolerance Range

- 4.3.1.3.3.1. The circumstances in which factors that AEMO may determine will consider in reviewing whether a Facility Tolerance Range applicable should apply to a specific Facility include, but are not limited to, one or more of the following:
  - (a) AEMO has revised the Tolerance Range and a Market Participant provides evidence that it would be inappropriate to apply the Tolerance Range to one of its Registered Facilities; or
  - (b) any submissions received from Market Participants;



(c) the number and extent of historical deviations from Dispatch Instructions;

(d) the likely impacts of deviations from Dispatch Instructions on the standard for Load Following Service [Clause 3.10.1]; and

(b)(e)\_any other circumstances that AEMO considers relevant.

4.3.2.3.3.2. A Market Participant may request in writing that the Economic Regulation Authority (ERA) determine a Facility Tolerance Range or reassess the Facility Tolerance Range for that Market Participant's Facility. In its request, the Market Participant must state the reasons why the Tolerance Range (in the case of a determination request) or a Facility Tolerance Range (in the case of a reassessment request) is not appropriate for the Facility concerned [Clause 2.13.6H].

4.3.3.3.3. AEMO will vary a Facility Tolerance Range <u>aswhere</u> directed <u>to</u> by the ERA, in <u>accordance with step 3.3.2</u> [Clause 2.13.6H].

4.3.4.<u>3.3.4.</u> Where AEMO considers that a Facility Tolerance Range is required or requires adjustment, or <u>AEMO isas</u> directed by the ERA to vary a Facility Tolerance Range, under step <u>3.3.3.</u> AEMO must follow step <u>4.24.2</u>.

# 5.4. DETERMINATION OF TOLERANCE RANGE AND FACILITY TOLERANCE RANGES

# 5.1.4.1. Determination of the Tolerance Range

- 5.1.1.4.1.1. Where AEMO resolves in step 3.2.23.2.2 that the Tolerance Range applying to all Facilities requires adjustment, AEMO must propose a new Tolerance Range.
- 5.1.2.4.1.2. Prior toBefore determining the Tolerance Range, AEMO must publish the proposed Tolerance Range on the Market Web Site and consult with Rule Participants [Clause 2.13.6D].

5.1.3.4.1.3. After the consultation period, AEMO must determine whether to adopt the proposed Tolerance Range or whether to propose another Tolerance Range.

- 5.1.4.4.1.4. At least 14 Business Days prior tobefore the date from which the Tolerance Range becomes effective, AEMO must publish on the Market Web Site [Clause 2.13.6D]:
  - (a) the outcome of AEMO's review of the Tolerance Range;
  - (b) all submissions received from Rule Participants;
  - (c) the Tolerance Range; and
  - (d) an effective date for the commencement of the Tolerance Range.



5.1.5.4.1.5. The Tolerance Range is effective from the date specified by AEMO in step 4.1.4<u>4.1.4</u>(d) [Clause 2.13.6D].

# 5.2.4.2. Determination of a Facility Tolerance Range for a specific Facility

- 5.2.1.4.2.1. Where AEMO resolves in step 3.3.43.3.4 that a Facility Tolerance Range is required or requires adjustment, AEMO must propose a new Facility Tolerance Range for that particular Facility.
- 5.2.2.4.2.2. AEMO may consider the following <u>factors</u> in determining the applicable Facility Tolerance Range:
  - (a) the variability of the overall system generation/load movement on the SWIS at any point in time;
  - (b) individual Facility ramping behaviour;
  - (c) the proportion of impact that Non-Scheduled <u>Generators</u> and <u>Facilities conducting a</u> Commissioning <u>Facilities</u> <u>Test that are</u> synchronised on the system during an average Trading Day have on the power system;
  - (d) Standing Data and any operating constraints on the Market Participant's Facility of which AEMO is aware; and
  - (e) any other factors that may influence the real-time operation of the SWIS.
- 5.2.3.4.2.3. Prior toBefore determining the Facility Tolerance Range, AEMO must publish the proposed Facility Tolerance Range on the Market Web Site and consult with Market Participants [Clause 2.13.6E].
- 5.2.4.4.2.4. After the consultation period, AEMO must determine whether to adopt the proposed Facility Tolerance Range or whether to propose another Facility Tolerance Range.
- 5.2.5.4.2.5. At least 14 Business Days prior tobefore the date from which the Facility Tolerance Range becomes effective, AEMO must publish on the Market Web Site [Clause 2.13.6E]:
  - (a) AEMO's review of the applicable Facility Tolerance Range;
  - (b) all submissions received from Market Participants;
  - (c) the applicable Facility Tolerance Range; and
  - (d) an effective date for the commencement of the applicable Facility Tolerance Range.
- 5.2.6.4.2.6. Where a Facility Tolerance Range is determined, this will apply for a particular Facility in place of the Tolerance Range [Clause 2.13.6E].
- 5.2.7.4.2.7. The Facility Tolerance Range is effective from the date specified by AEMO in step 4.2.4<u>4.2.5</u>(d) [Clause 2.13.6E].