

# POWER SYSTEM OPERATION PROCEDURE: TOLERANCE RANGES

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# **VERSION RELEASE HISTORY**

Ve	ersion	Effective date	Summary of changes
1		21 April 2018	Procedure created resulting from Procedure Change Proposal AEPC_2018_02. This procedure supersedes the information that was previously contained in the Power System Operation 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 Operation 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 27 March 2018. 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 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;
- (d) unless the context requires otherwise, references to AEMO include AEMO in its System Management capacity; and
- (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.

# 2. PURPOSE OF TOLERANCE RANGE AND FACILITY TOLERANCE RANGES

- 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].
- 2.1.2. The Tolerance Range is set having regard to:
  - (a) the degree of compliance with Dispatch Instructions and Operating Instructions that is required to ensure the SWIS operates in a secure and reliable manner;
  - (b) the degree of costs imposed on Market Participants as a result of AEMO's monitoring of compliance with Dispatch Instructions and Operating Instructions; and
  - (c) the degree of operational impost on Market Participants for non-significant deviations.



# 3. REVIEWS OF TOLERANCE RANGE AND FACILITY TOLERANCE RANGES

#### 3.1. General

- 3.1.1. The Tolerance Range and any Facility Tolerance Ranges are available on the Market Web Site.
- 3.1.2. AEMO must review the Tolerance Range and all Facility Tolerance Ranges at least annually **[Clause 2.13.6G]**.
- 3.1.3. Rule Participants may provide submissions regarding the Tolerance Range, and Market Participants may provide submissions regarding any Facility Tolerance Ranges, at any time, and AEMO must consider any issues raised from those submissions.
- 3.1.4. When AEMO receives a submission in step 3.1.3, it will consider if an immediate review of the Tolerance Range or any Facility Tolerance Ranges is required.
- 3.1.5. If AEMO considers that an immediate review of the Tolerance Range or any Facility
  Tolerance Ranges is not required, AEMO will consider the submission in the annual review of
  the Tolerance Range.

# 3.2. Review of Tolerance Range

- 3.2.1. The factors that AEMO will consider in reviewing the Tolerance Range include, but are not limited to:
  - (a) any submissions received from Rule Participants;
  - (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 other circumstances or information that AEMO considers relevant.
- 3.2.2. Where AEMO considers that the current Tolerance Range requires adjustment, AEMO must follow step 4.1.
- 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.

## 3.3. Review of Facility Tolerance Range

- 3.3.1. The factors that AEMO will consider in reviewing whether a Facility Tolerance Range 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;
  - (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
  - (e) any other circumstances that AEMO considers relevant.



- 3.3.2. A Market Participant may request in writing that the Economic Regulation Authority (ERA) reassess the Facility Tolerance Range for that Market Participant's Facility [Clause 2.13.6H].
- 3.3.3. AEMO will vary a Facility Tolerance Range where directed to by the ERA, in accordance with step 3.3.2 [Clause 2.13.6H].
- 3.3.4. Where AEMO considers that a Facility Tolerance Range is required or requires adjustment, or as directed under step 3.3.3. AEMO must follow step 4.2.

# 4. DETERMINATION OF TOLERANCE RANGE AND FACILITY TOLERANCE RANGES

# 4.1. Determination of the Tolerance Range

- 4.1.1. Where AEMO resolves in step 3.2.2 that the Tolerance Range requires adjustment, AEMO must propose a new Tolerance Range.
- 4.1.2. Before 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].
- 4.1.3. After the consultation period, AEMO must determine whether to adopt the proposed Tolerance Range or whether to propose another Tolerance Range.
- 4.1.4. At least 14 Business Days before 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.
- 4.1.5. The Tolerance Range is effective from the date specified by AEMO in step 4.1.4(d) [Clause 2.13.6D].

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

- 4.2.1. Where AEMO resolves in step 3.3.4 that a Facility Tolerance Range is required or requires adjustment, AEMO must propose a new Facility Tolerance Range for that particular Facility.
- 4.2.2. AEMO may consider the following factors 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 impact that Non-Scheduled Generators and Facilities conducting a Commissioning Test that are synchronised 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.



- 4.2.3. Before 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].
- 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.
- 4.2.5. At least 14 Business Days before 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.
- 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].
- 4.2.7. The Facility Tolerance Range is effective from the date specified by AEMO in step 4.2.5(d) [Clause 2.13.6E].