

OUTCOME OF 2017 ANNUAL REVIEW OF THE TOLERANCE RANGE and REQUEST FOR FACILITY TOLERANCE RANGE

1. Background

In accordance with clauses 2.13.6D and 2.13.6E of the Wholesale Electricity Market Rules (**WEM Rules**), System Management may determine the Tolerance Range and Facility Tolerance Range¹ to apply to Facilities for the purpose of System Management's reporting of alleged breaches of clauses 3.21 and 7.10.1 of the WEM Rules -under clause 2.13.6A of the WEM Rules.

The Tolerance Range was derived from monitoring methodologies used in the National Electricity Market and has been applied in its current form, to Scheduled Generators, since 1 July 2012. For more information regarding the initial setting of the Tolerance Range formula please visit: <https://aemo.com.au/datasource/archives/archive2119>

Clause 2.13.6E of the WEM Rules provides that System Management may determine a Facility Tolerance Range to apply to a specific generation Facility in place of a Tolerance Range determined under clause 2.13.6D of the WEM Rules. Clause 4.3.2 of the Monitoring and Reporting Power System Operation Procedure (**PSOP**) provides that a Market Participant may request a Facility Tolerance Range where the Tolerance Range is not suitable for its particular Facility.

During the 2015 Tolerance Range and Facility Tolerance Range Review, a submission was received from Collgar Wind Farm requesting that a Facility Tolerance Range be applied to its Facility, the INVESTEC_COLLGAR_WF1 Facility, pursuant to clause 2.13.6E of the WEM Rules and clause 4.3.2 of the PSOP. A Facility Tolerance Range of +6MW for INVESTEC_COLLGAR_WF1 was granted as it is consistent with the Tolerance Range applied to Scheduled Generators, in so far as it is equivalent to the minimum tolerance applicable to those Facilities.

2. 2017 Annual Review

Clause 2.13.6G of the WEM Rules requires System Management to review the Tolerance Range and any Facility Tolerance Range at least annually.

The consultation period for the 2017 Tolerance Range and Facility Tolerance Range Review commenced on 2 June 2017 and concluded on 14 July 2017. Invitations for submissions were published on the AEMO website at <http://www.aemo.com.au/Stakeholder-Consultation/Consultations/2017-Tolerance-Range-and-Facility-Tolerance-Range-Review>. One submission was received from Alinta Energy relating to the Tolerance Range proposal. Please refer to the below link to view the full submission from Alinta Energy.
http://www.aemo.com.au/~/-/media/Files/Stakeholder_Consultation/Consultations/WA_WEM_Consultation_Documents/2017/2017-Annual-Review-of-Tolerance-Ranges-Alinta-Energy-Submission-FINAL

Alinta Energy stated in its submission that Non-Scheduled Generators are being dispatched to targets below their maximum capacity and that with the introduction of the Generator Interim Access (**GIA**) solution that this frequency is likely to increase, and that there would be a corresponding increase in the reporting requirements of System Management for each and every variance from a Dispatch Instruction.

Specifically, Alinta Energy recommended that System Management:

- revisit its position, adopted in 2011, that it is not necessary to apply a general tolerance to all Non Scheduled Generators; and

¹ A Facility Tolerance Range applies to an individual Facility in place of any Tolerance Range.

- look to amend the general Tolerance Range to include a general tolerance for both Scheduled Generators and Non-Scheduled Generators.

System Management notes the comments that Alinta Energy makes, and acknowledges that in the future, with the GIA, there may be more frequent occurrences where Non-Scheduled Generators are dispatched below their maximum capacity. With the GIA planned for introduction in late 2018 this timing provides a suitable timeframe to revisit the Tolerance Range in preparation for GIA.

To address this, System Management will review the Tolerance Range with consideration to all Facilities, prior to the introduction of the GIA in 2018. System Management notes that the formula included in the current PSOP is prescriptive and System Management would propose to establish a more agile approach by having a published formula on the Market Website rather than contained within a PSOP. This would provide greater flexibility to review and amend this formula as required, however to enact this, a change to the PSOP will be required.

Until the 2018 Tolerance Range and Facility Tolerance Range Review has been conducted, System Management will maintain the current application of Tolerance Range to Scheduled Generators and maintain the current Facility Tolerance Range of +6MW to the INVESTEC_COLLGAR_WF1 Facility.

System Management would like to note that the above does not preclude any Market Participant to request for a Facility Tolerance Range to apply to its Facility in the meantime.

3. Proposed Facility Tolerance Range for the MWF_MUMBIDA_WF1 Facility

The Tolerance Range and Facility Tolerance Range is intended to minimise the need to report each and every variance from a Dispatch Instruction, given SCADA variations and other factors. In this regard the minimum Tolerance Range that can apply to Scheduled Generators as per the current formula is 6MW to take into account such deviations when reporting dispatch non-compliance to the Economic Regulation Authority. (Note, the requirement under clause 7.10.1 of the WEM Rules for a Market Participant to comply with the most recently issued Dispatch Instruction applies irrespective of whether a Tolerance Range or Facility Tolerance Range has been set for that Market Participant's Facility).

In March 2017, Mumbida Wind Farm submitted a request to AEMO that a Facility Tolerance Range of 2.75MW be applied to its Facility, the MWF_MUMBIDA_WF1 Facility, pursuant to clause 2.13.6E of the WEM Rules and clause 4.3.2 of the PSOP.

Mumbida's request for a Facility Tolerance Range stems from it receiving a high volume of non-compliant notifications for small deviations. Mumbida noted that these notifications are causing distraction from any material non-compliances of clauses 3.21 and 7.10.1 of the WEM Rules that may occur.

System Management proposed to apply a Facility Tolerance Range of +6MW to the MWF_MUMBIDA_WF1 Facility. Such a Facility Tolerance Range is consistent with the Tolerance Range applied to Scheduled Generators, in so far as it is equivalent to the minimum tolerance applicable to those Facilities. The proposed Facility Tolerance Range should ensure that notifications for insignificant Dispatch Instruction deviations are not issued to Mumbida. This is consistent with the regime currently applied to Scheduled Generators and consistent with the previous Facility Tolerance Range applied to the INVESTEC_COLLGAR_WF1 Facility.

The consultation period for the 2017 Tolerance Range and Facility Tolerance Range commenced on 2 June 2017 and concluded on 14 July 2017. Invitations for submissions were published on the AEMO website at <http://www.aemo.com.au/Stakeholder-Consultation/Consultations/2017-Tolerance-Range-and-Facility-Tolerance-Range-Review>.

Given that there was no issues raised by Market Participants through the consultation period relating to the specific application of a Facility Tolerance Range for Mumbida, System Management will implement the proposed Facility Tolerance Range of +6MW for the MWF_MUMBIDA_WF1 Facility.

4. Tolerance Range and Facility Tolerance Ranges to apply from 1 September 2017

The Tolerance Range to apply to Scheduled Generators from 1 September 2017 will continue to be calculated with the following formula:

$$\text{Tolerance Range} = (+/-) \text{MAX} (6, \text{MIN} [5\% \text{NPC}, 4 * \text{ROC}])$$

Where:

NPC: Name plate capacity of the generator, expressed in MW (WEM Rules Appendix 1(b)(ii))

ROC: Rate of Change or Ramp Rate of a Unit per minute (WEM Rules Appendix 1(b)(v))

The +6MW Facility Tolerance Range for the INVESTEC_COLLGAR_WF1 Facility will continue to apply to Collgar Wind Farm from 1 September 2017.

A +6MW Facility Tolerance Range for the MWF_MUMBIDA_WF1 Facility will apply to Mumbida Wind Farm from 1 September 2017.