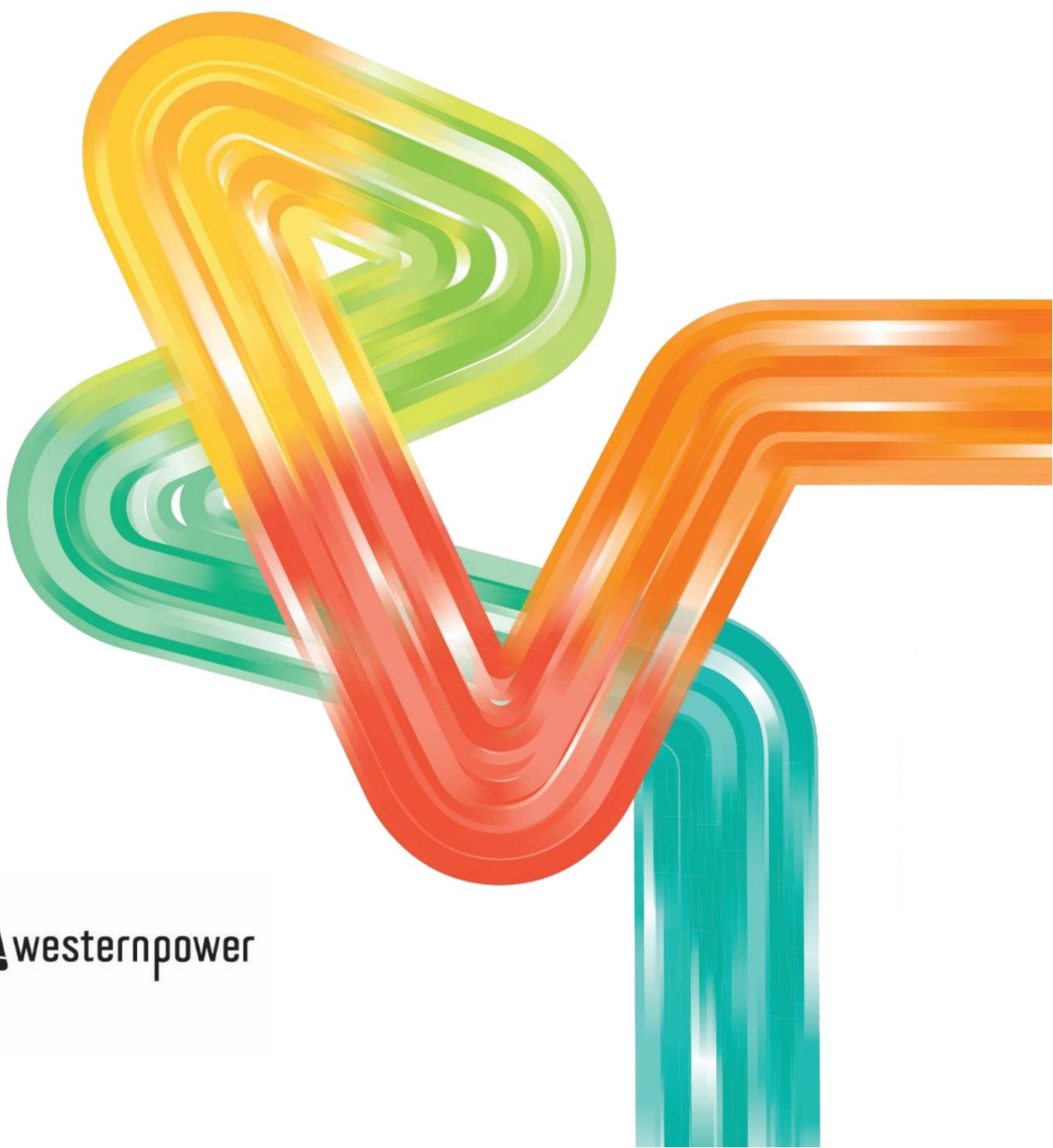


WHOLESALE ELECTRICITY MARKET PROCEDURE

GENERATOR PERFORMANCE STANDARDS FOR EXISTING TRANSMISSION CONNECTED GENERATING SYSTEMS

Version 1.2

1 February 2021



ELECTRICITY INDUSTRY ACT 2004
ELECTRICITY INDUSTRY
(WHOLESALE ELECTRICITY MARKET)
REGULATIONS 2004

WHOLESALE ELECTRICITY MARKET RULES COMMENCEMENT:

This WEM Procedure took effect from 8:00 AM (WST) on 1 February 2021.

Version Release History

| Version | Effective Date | Summary of Changes |
|---------|----------------|---|
| 1.0 | | Initial WEM Procedure: Generator Performance Standards for Existing Transmission Connected Generating Systems. |
| 1.1 | | Updated WEM Procedure: Generator Performance Standards for Existing Transmission Connected Generating Systems, incorporating industry feedback. |
| 1.2 | 01/02/2021 | Document approved for publication |

Contents

| | |
|--|-----------|
| 1. Introduction | 4 |
| 1.1 Relationship with the Wholesale Electricity Market Rules | 4 |
| 1.2 Definitions and interpretation | 5 |
| 1.3 Related documents | 5 |
| 2. Overview of the assessment of Generator Performance Standards for Existing Transmission Connected Generating Systems | 6 |
| 2.1 Overview | 6 |
| 3. General obligations | 8 |
| 3.1 Date by which to register generator performance | 8 |
| 3.2 Extensions of time | 8 |
| 3.3 Provision of information | 9 |
| 4. Determining compliance with existing standards | 11 |
| 4.1 Assessment of compliance with relevant standards | 11 |
| 5. Negotiating a Proposed Alternative Standard [clause 1.40.30(a)] | 13 |
| 5.1 Submission of a Proposed Alternative Standard | 13 |
| 5.2 Assessment of a Proposed Alternative Standard | 15 |
| 5.3 Determining a Proposed Alternative Standard | 17 |
| 6. Testing of performance standards and dispute resolution | 18 |
| 7. Developing and maintaining the Generator Register | 20 |
| Appendix A : Relevant Reference Standards [clause 1.40.30(b)] | 21 |

1. Introduction

1.1 Relationship with the Wholesale Electricity Market Rules

- 1.1.1 This Wholesale Electricity Market (WEM) Procedure: Generator Performance Standards for Existing Generating Systems (Procedure) is made in accordance with clause 1.40.30 of the WEM Rules.
- 1.1.2 The purpose of this Procedure [**clause 1.40.30**] is to document the:
- (a) process to be followed by Market Participants and Western Power to assess the Generator Performance Standards for an Existing Transmission Connected Generating System;
 - (b) process to be followed by a Market Participant to submit a Proposed Alternative Standard for an Existing Transmission Connected Generating System to Western Power;
 - (c) matters Western Power must consider in assessing a Proposed Alternative Standard for an Existing Transmission Connected Generating System; and
 - (d) relevant Reference Standards which may apply to an Existing Transmission Connected Generating System.
- 1.1.3 This Procedure applies to Western Power in its capacity as a Network Operator in the SWIS.
- 1.1.4 This Procedure does not apply to other Network Operators, or Western Power in capacities other than as a Network Operator in the SWIS.
- 1.1.5 This Procedure applies to Market Participants with an Existing Transmission Connected Generating System.
- 1.1.6 This Procedure does not apply to:
- (a) existing generating systems connected to the distribution system; and
 - (b) generating systems for which an Arrangement for Access has been executed after the Tranche 1 Commencement Date of 1 February 2021.
- 1.1.7 In this Procedure, where obligations are conferred on a Rule Participant, that Rule Participant must comply with the relevant obligations in accordance with [**clauses 2.9.7A, 2.9.7B and 2.9.8**] of the WEM Rules, as applicable.
- 1.1.8 References to particular WEM Rules within this 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 The following principles of interpretation apply to this Procedure, unless otherwise expressly indicated:

- (a) terms that are capitalised, but not defined, have the meaning given in the WEM Rules, including defined terms within Appendix 12 of the WEM Rules;
- (b) to the extent that this Procedure is inconsistent with the WEM Rules, the WEM Rules prevail to the extent of the inconsistency;
- (c) a reference to the WEM Rules or WEM Procedures, includes any associated forms required or contemplated by those WEM Rules or WEM Procedures; and
- (d) words expressed in the singular include the plural and vice versa.

1.3 Related documents

1.3.1 The following WEM Procedures are associated with this Procedure and are available on the WEM Website:

- (a) WEM Procedure: Dispute Resolution Mechanism for Existing Transmission Connected Generating Systems;
- (b) WEM Procedure: Generator Monitoring Plans; and
- (c) WEM Procedure: Generation Model System Submission and Maintenance.

1.3.2 The following supporting documents are associated with this Procedure and are available on Western Power's website:

- (a) Generator Performance Standard Template.

1.3.3 The Technical Rules also provide background information to this Procedure and are available on the Economic Regulation Authority's (ERA) website.

2. Overview of the assessment of Generator Performance Standards for Existing Transmission Connected Generating Systems

2.1 Overview

Under the Energy Transformation Strategy¹, the Generator Performance Standards for Market Participants with generating systems connected to Western Power's transmission system in the SWIS has been moved from the Technical Rules to Chapter 3A and Appendix 12 of the WEM Rules.

The standards included in the WEM Rules broadly reflect those that are currently outlined in section 3.3.3 of the Technical Rules, and prior to that, the Technical Code. Several new standards have been introduced, reflecting the need to maintain power system security and reliability in an environment of changing load profile and generation mix in the SWIS.

The new Chapter 3A requires that Western Power establish and maintain a centralised Generator Register containing the registered performance of each transmission connected generating system. This captures the performance standards that each generating unit are required to meet to be connected to Western Power's transmission system and participate in the WEM. Ongoing compliance will be measured with reference to the Generator Register, and information on the register will be made available to AEMO and the ERA to manage their functions.

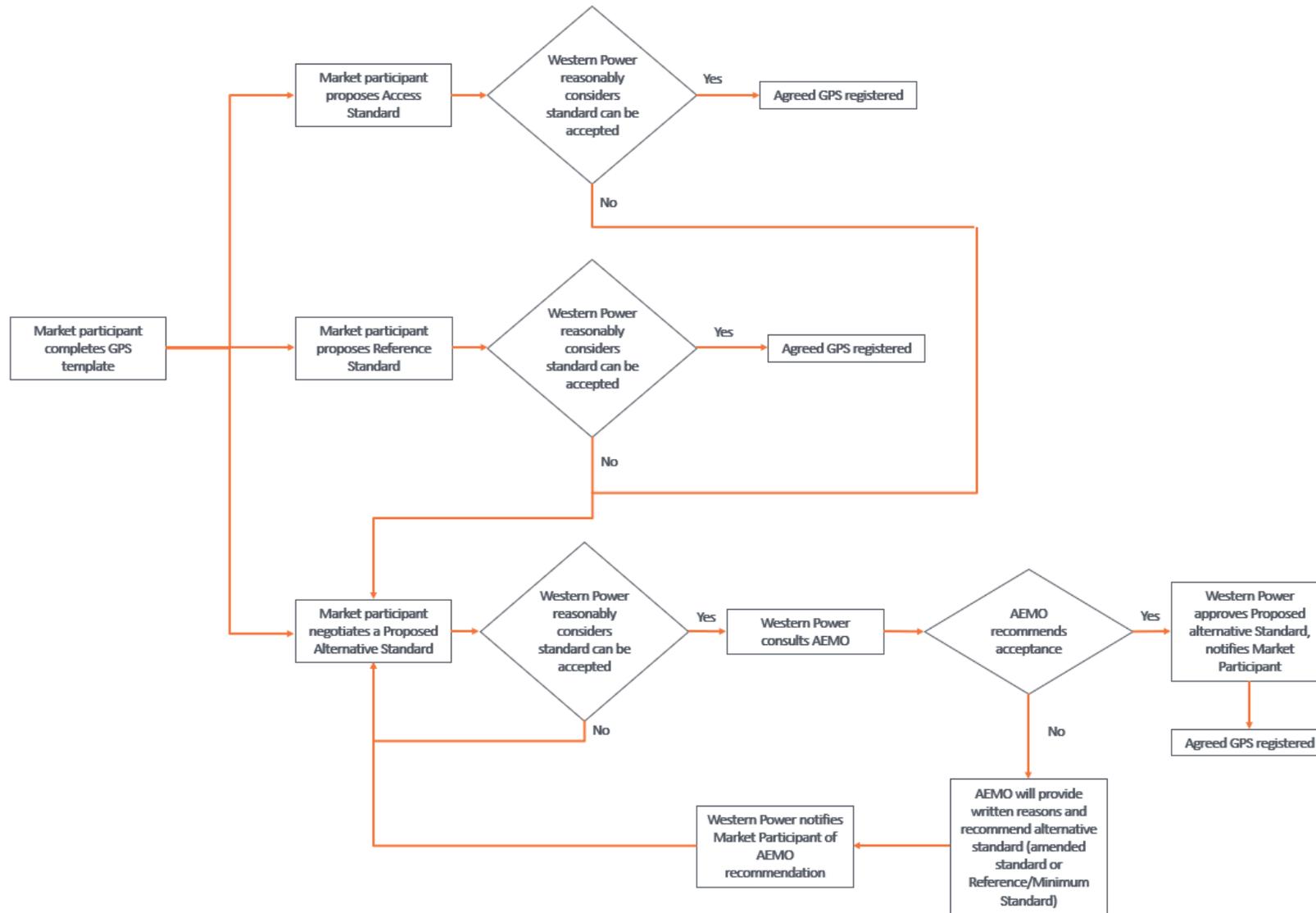
Chapter 3A also sets out the process for the development and implementation of ongoing generator self-monitoring plans to ensure any non-compliance with reported Generator Performance Standards is identified and addressed early.

This document sets out the WEM Procedure for the application of Chapter 3A and Appendix 12 to Existing Transmission Connected Generating Systems – that is for all Market Participants with a Transmission Connected Generating System for which an Arrangement for Access has been executed prior to the Tranche 1 Commencement Date of 1 February 2021.

A high-level overview of the process for establishing Generator Performance Standards for Existing Transmission Connected Generating Systems is shown in Figure 2.1.

¹ The Energy Transformation Strategy is the Government's work program to ensure the delivery of secure, reliable, sustainable and affordable electricity to Western Australians.

Figure 2.1: High-level process for establishing Generator Performance Standards for Existing Transmission Connected Generating Systems²



² Figure 2.1 should be considered to be a guide only; full details of process is outlined in this document.

3. General obligations

3.1 Date by which to register generator performance

3.1.1 If a Market Participant responsible for an Existing Transmission Connected Generating System does not have a Registered Generator Performance Standard for each Technical Requirement by the date and time set out in paragraph 3.2.1 of this Procedure, Western Power must commence the dispute resolution mechanism under section 1.42 of the WEM Rules and the WEM Procedure: Dispute Resolution Mechanism for Existing Transmission Connected Generating Systems **[clause 1.39.3]**.

3.2 Extensions of time

3.2.1 A Market Participant responsible for an Existing Transmission Connected Generating System must have a Registered Generator Performance Standard for each Technical Requirement for the Transmission Connected Generating System by the due date, which is the later of **[clause 1.39.2]**:

- (a) 5:00 PM (AWST), 31 January 2022; and
- (b) any date and time agreed between Western Power and the Market Participant responsible for the Existing Transmission Connected Generating System under section 3.2 of this Procedure.

3.2.2 A Market Participant may request an extension of time within which to register a Generator Performance Standard **[clause 1.39.4]** at any point in the process, by making the request in writing at least 20 Business Days prior to the due date in paragraph 3.2.1 of this Procedure.

3.2.3 The Market Participant may request, and Western Power may extend the due date under this section of the Procedure more than once **[clause 1.39.4]**.

3.2.4 Western Power must agree to extend the due date by a reasonable period where it considers that the Market Participant **[clause 1.39.4]**:

- (a) is making reasonable progress to having Registered Generator Performance Standards in respect of Technical Requirements for one or more of its Existing Transmission Connected Generating Systems; and
- (b) reasonably requires additional time to have all required Registered Generator Performance Standards.

3.2.5 Where a Market Participant requests an extension of time within 20 Business Days of the due date in paragraph 3.2.1 of this Procedure, Western Power may, but is not obliged to, consider the request **[clause 1.39.5]**.

3.2.6 Western Power must notify the Market Participant whether the request made under this section of the Procedure is approved or rejected as soon as practicable, but by no later than 10 Business Days after receipt of the request, or another date agreed between Western Power and the Market Participant responsible for the Existing Transmission Connected Generating System **[clause 1.39.6]**.

3.3 Provision of information

- 3.3.1 In order to facilitate the transition from the existing Technical Requirements to the new framework under Chapter 3A and Appendix 12 of the WEM Rules to become effective on and from the Tranche 1 Commencement Date, Western Power must work with Market Participants to determine the current performance standard of each Existing Transmission Connected Generating System.
- 3.3.2 Western Power must develop and maintain a template which outlines each of the Technical Requirements described in Appendix 12 of the WEM Rules. This template will be referred to as the Generator Performance Standard Template.
- 3.3.3 Western Power must publish and maintain the Generator Performance Standard Template on its website.
- 3.3.4 Western Power must notify AEMO of changes to the Generator Performance Standard Template on the same business day as publishing updates.
- 3.3.5 Each Market Participant with one or more Existing Transmission Connected Generating System must complete a Generator Performance Standard Template for each of its Existing Transmission Connected Generating Systems, providing:
- (a) an initial completed template by 31 March 2021;
 - (b) any additional information as requested by Western Power under paragraph 4.1.4 and 5.1.5 of this Procedure; and
 - (c) full and final details by 31 December 2021, in the form of a revised template after the completion, as applicable, of the processes required to:
 - i. determine compliance with existing standards under section 4 of this Procedure; and
 - ii. negotiate a Proposed Alternative Standard under section 5 of this Procedure.
- 3.3.6 In completing the Generator Performance Standard Template, a Market Participant must provide:

- (a) information of the level of performance of the Existing Transmission Connected Generating Systems against each of the Technical Requirements specified by Western Power in the template; and
- (b) supporting evidence:
 - i. as separate attachments to the template;
 - ii. titled as referenced in the template;
 - iii. in a suitable format; and
 - iv. that is sufficient to support the assessment the proposed Generator Performance Standard.

3.3.7 A Market Participant must use reasonable endeavours to provide any relevant document or information that is in its possession, power or control to Western Power to assist with this assessment process [**clause 1.40.2**].

3.3.8 Western Power must use reasonable endeavours to provide any relevant document or information that is in its possession, power or control to a Market Participant with an Existing Transmission Connected Generating System to assist with this assessment process [**clause 1.40.3**].

3.3.9 A Market Participant may revise its initial Generator Performance Standard Template at any time prior to a Registered Generator Performance Standard being recorded on the Generator Register by providing an updated version of the Generator Performance Standard Template, titling the Generator Performance Standard Template with the relevant version number, and advising Western Power in writing that the revised information must be used to assess the performance of its generating system.

3.3.10 A Market Participant must notify Western Power as soon it becomes aware of any material changes to their Existing Transmission Connected Generating System that may compromise an Agreed Generator Performance Standard by submitting a revised Generator Performance Standard Template to Western Power in accordance with this Procedure.

3.3.11 Upon notification of a material change to an Existing Transmission Connected Generating System under paragraph 3.3.10. of this Procedure, Western Power must, as soon as practicable, assess the performance of that generating system in accordance with sections 4, 5 and 6 of this Procedure as applicable.

3.3.12 Any information provided by a Market Participant to Western Power in support of the Market Participant's submission of the Generator Performance Standard Template as part of the assessment process is deemed to be part of a Market Participant's Generator Performance Standard Template used for assessment, unless otherwise specified.

3.3.13 Market Participants must provide all information under this Procedure including but not limited to an initial or revised Generator Performance Standard Template and any associated attachments and responses to information requests, in writing, by email to Western Power at system.analysis@westernpower.com.au.

- 3.3.14 Western Power must acknowledge receipt of information under this Procedure by return email within two Business Days, and assess the information provided by the Market Participant in accordance with sections 4.1 and 5.1 of this Procedure in the relevant timeframes.
- 3.3.15 Any requirement under this Procedure may be extended by agreement between Western Power and the Market Participant responsible for the Existing Transmission Connected Generating System until the date specified in paragraph 3.2.1 of this Procedure.

4. Determining compliance with existing standards

4.1 Assessment of compliance with relevant standards

- 4.1.1 A Market Participant must provide information in support of the performance in relation to each of the Technical Requirements for an Existing Transmission Connected Generating System by reference to:
- (a) an Access Standard³ [clause 1.40.4]; or
 - (b) where no Access Standard exists, a Reference Standard⁴ (see Appendix A for a list) the Market Participant reasonably considers the generating system can meet [clause 1.40.5].
- 4.1.2 A Market Participant must follow the paragraphs in section 5 of this Procedure to negotiate a Proposed Alternative Standard [clause 1.40.6], where:
- (a) there is no Access Standard or Reference Standard for a Technical Requirement under the WEM Rules; or
 - (b) the Market Participant does not reasonably consider the generating system is able to comply with the Reference Standard for the Technical Requirement.
- 4.1.3 A Market Participant must use reasonable endeavours to aid Western Power's assessment of the information provided, including but not limited to:
- (a) providing a copy of the relevant Access Standard or Reference Standard;
 - (b) cross referencing specific Technical Requirements in the Generator Performance Standard Template to the relevant clauses and/or pages in the relevant Access Standard or Reference Standard, including date and revision number as required; and
 - (c) providing the details of, and evidence supporting, any relevant exemptions to Reference Standards.

³ **Access Standard [clause 1.40.1]:** Means an existing standard or technical level of performance in respect of the same or equivalent matter as a Technical Requirement that is either:

(a) set out in and required by an Arrangement for Access; or

(b) otherwise previously agreed by the Network Operator at the time of connection of the Existing Transmission Connected Generating System to the SWIS, or prior to the Tranche 1 Commencement Date.

⁴ **Reference Standard [clause 1.40.1]:** Means a standard or technical level of performance that applied at the time of connection of the Existing Transmission Connected Generating System to the SWIS or a modification of an Existing Transmission Connected Generating System before the Tranche 1 Commencement Date as set out in the WEM Procedure referred to in clause 1.40.30 in respect of the same matter as a Technical Requirement.

- 4.1.4 Where Western Power considers insufficient information has been provided for it to reasonably undertake an assessment, it may issue an information request by email, seeking further documentation on one or more Technical Requirements.
- 4.1.5 Where a Market Participant receives a request for information under paragraph 4.1.4 of this Procedure, it must respond to the request within 10 Business Days, by:
- (a) requesting an extension of time to provide the requested information, with reasons;
 - (b) providing the requested information; or
 - (c) revising its Generator Performance Standard Template to:
 - i. reference an alternative Access Standard or Reference Standard; or
 - ii. submit a Proposed Alternative Standard (see section 5 of this Procedure), including where the Market Participant disagrees with Western Power in relation to the existence or interpretation of an Access Standard [**clause 1.40.6(c)**].
- 4.1.6 In response to a request for an extension of time under paragraph 4.1.5(a) of this Procedure, Western Power must respond in writing by email within 10 business days:
- (a) accepting the extension unless it considers the proposed timeframe for the extension is unreasonable given the information requested; or
 - (b) rejecting the extension, where Western Power considers the requested timeframe unreasonable. Western Power may suggest an alternative date and time for the Market Participant to provide the requested information after giving reasonable consideration to the information being requested.
- 4.1.7 Western Power must complete its assessment of the Technical Requirements of an Existing Transmission Connected Generating System within 30 Business Days of the later of the receipt of:
- (a) an initial Generator Performance Standard Template;
 - (b) a revised Generator Performance Standard Template; and
 - (c) the latest date of the provision of any further information to Western Power under paragraph 4.1.5 of this Procedure.
- 4.1.8 Where Western Power's assessment under paragraph 4.1.7 of this Procedure finds that additional time is required to complete studies required to make a determination, Western Power must notify the Market Participant in writing within the period specified in paragraph 4.1.7 of this procedure of the revised assessment completion date.
- 4.1.9 Western Power may consult with AEMO in relation to any aspect of its assessment of the use of an Access Standard or Reference Standard for a Technical Requirement

- 4.1.10 Where Western Power’s assessment under paragraph 4.1.7 and 4.1.8 of this Procedure finds sufficient information has been provided to support the use of an Access Standard or Reference Standard, Western Power must deem that Technical Requirement to be met, and:
- (a) accept it as an Agreed Generator Performance Standard [**clauses 1.40.4 and 1.40.5**]; and
 - (b) include it on the Generator Register as the Registered Generator Performance Standard for the Technical Requirement for that Transmission Connected Generating System [**clause 1.40.31**].
- 4.1.11 Where Western Power’s assessment under paragraph 4.1.7 of this Procedure finds insufficient information has been provided to support the use of an Access Standard or Reference Standard, it must notify the Market Participant of the outcomes of the assessment, including reasons why information is insufficient to address a Technical Requirement.
- 4.1.12 Upon receipt of a notification that insufficient information has been provided under paragraph 4.1.11 of this Procedure, a Market Participant must revise its Generator Performance Standard Template to:
- (a) resubmit with additional information to support the use of the Access Standard or Reference Standard; or
 - (b) reference an alternative Access Standard or Reference Standard and provide the necessary supporting information; or
 - (c) submit a Proposed Alternative Standard in accordance with section 5 of this Procedure, including reasons that the Market Participant disagrees with Western Power in relation to the existence or interpretation of an Access Standard [**clause 1.40.6(c)**].

5. Negotiating a Proposed Alternative Standard [clause 1.40.30(a)]

5.1 Submission of a Proposed Alternative Standard

- 5.1.1 Where a Market Participant intends to submit a Proposed Alternative Standard under paragraphs 4.1.2, 4.1.5(c)ii or 4.1.12(c) of this Procedure, it must [**clause 1.40.6**]:
- (a) provide written notification as soon as practicable by email to Western Power of its intention to negotiate an alternative standard; and
 - (b) submit the Proposed Alternative Standard.
- 5.1.2 The Proposed Alternative Standard under paragraph 5.1.1(b) of this procedure must be submitted to Western Power either:
- (a) simultaneously with the notification under paragraph 5.1.1(a) of this Procedure; or
 - (b) in a separate communication within 20 business days of the notification under paragraph 5.1.1(a) of this Procedure.
- 5.1.3 The notification under paragraph 5.1.1(a) of this Procedure must include:

- (a) the title and WEM Rules clause reference of the applicable Technical Requirement(s); and
- (b) a summary of the reason(s) for the alternative standard being sought.

5.1.4 A Market Participant submitting a Proposed Alternative Standard under paragraph 5.1.1(b) of this Procedure must ensure it provides the following information to Western Power:

- (a) the title and WEM Rules clause reference of the applicable Technical Requirement(s) for which an alternative is being sought;
- (b) the Proposed Alternative Standard;
- (c) reasons and supporting evidence justifying the need for an alternative standard;
- (d) reasons and supporting evidence to demonstrate the Proposed Alternative Standard is as consistent as practicable to the relevant Minimum Generator Performance Standard or Reference Standard, having regard to **[clause 1.40.8]**:
 - i. the need to protect the Existing Transmission Connected Generating System from damage;
 - ii. power system conditions at the location of the connection;
 - iii. the commercial and technical feasibility of complying with the Minimum Generator Performance Standard or Reference Standard;
 - iv. the costs associated with complying with the Minimum Generator Performance Standard or Reference Standard over the remaining life of the Existing Transmission Connected Generating System; and
 - v. the capability of the Existing Transmission Connected Generating System in respect of the Technical Requirement; and
- (e) where the Proposed Alternative Standard is less onerous than the relevant Minimum Generator Performance Standard or Reference Standard **[clause 1.40.7]**:
 - i. technical evidence as to why the generating system cannot comply with the relevant Minimum Generator Performance Standard or Reference Standard; and
 - ii. information on the costs associated with meeting the relevant Minimum Generator Performance Standard or Reference Standard.

5.1.5 Where Western Power considers insufficient information has been provided to reasonably determine whether a Proposed Alternative Standard is appropriate, it may request additional information from the Market Participant.

5.1.6 Western Power's request for information in paragraph 5.1.5 of this Procedure must provide sufficient detail for the Market Participant to reasonably respond, be made in writing and be sent by return email to the Market Participant as soon as practicable once the deficiency in information has been determined.

- 5.1.7 Where Western Power requests further information, a Market Participant must respond within 10 Business Days with:
- (a) a request for an extension of time to provide the requested information, with reasons;
 - (b) the requested information; or
 - (c) an amended submission for a Proposed Alternative Standard.
- 5.1.8 In response to a request for an extension of time under paragraph 5.1.7(a) of this Procedure, Western Power must respond in writing within 10 Business Days, by email:
- (a) accepting the extension unless it considers the proposed timeframe for the extension is unreasonable, given the information requested; or
 - (b) rejecting the extension, providing an alternative date and time for the Market Participant to provide the requested information, where Western Power considers the requested timeframe unreasonable, given the information requested.

5.2 Assessment of a Proposed Alternative Standard

- 5.2.1 Western Power must complete its assessment of a Proposed Alternative Standard within 30 Business Days of the later of the receipt of:
- (a) an initial Generator Performance Standard Template;
 - (b) a revised Generator Performance Standard Template; and
 - (c) the latest date of the provision of any further information to Western Power under paragraphs 5.1.7 of this Procedure.
- 5.2.2 Where Western Power's assessment under paragraph 5.2.1 of this Procedure finds that additional time is required to complete studies required to make a determination, Western Power must notify the Market Participant in writing within the period specified in paragraph 5.2.1 of this procedure of a new assessment completion date.
- 5.2.3 Western Power must assess the submission against the requirements outlined in paragraph 5.1.4 of this Procedure.
- 5.2.4 Western Power may consult with AEMO in relation to any aspect of its assessment of a Proposed Alternative Standard.
- 5.2.5 Western Power must consult with AEMO, requesting a recommendation as to whether to accept or reject a Proposed Alternative Standard [**clause 1.40.10**] where a Proposed Alternative Standard is:

- (a) at or above the relevant Minimum Generator Performance Standard or Reference Standard; or
 - (b) in Western Power's discretion, it expects to approve the Proposed Alternative Standard having regard to the matters required to be evidenced in its submission.
- 5.2.6 Where Western Power consults AEMO under paragraph 5.2.4 or 5.2.5 of this Procedure, Western Power must provide all information relevant to the assessment of the Proposed Alternative Standard to AEMO for consideration, requesting a recommendation by a specified due date.
- 5.2.7 Where AEMO receives a request for consultation on a Proposed Alternative Standard, it must acknowledge receipt of the request within two Business days, and respond on or prior to the due date specified by Western Power in paragraph 5.2.6 of this Procedure.
- 5.2.8 Under paragraph 5.2.7 of this Procedure, AEMO must provide Western Power **[clause 1.40.11]** in writing, either:
- (a) a recommendation as to whether a Proposed Alternative Standard should be approved or rejected, with reasons; or
 - (b) where AEMO requires further information and request for further information.
- 5.2.9 Where under paragraph 5.2.8(b) of this Procedure AEMO requires further information, Western Power must provide any additional information it has to AEMO, and/or where applicable use reasonable endeavours to obtain that information from the Market Participant and provide it to AEMO in accordance with the process agreed under clause 3A.1.3 of the WEM Rules **[clause 1.40.12]**.
- 5.2.10 In making a recommendation as to whether a Proposed Alternative Standard should be approved or rejected, AEMO must use all information provided to it by Western Power in paragraphs 5.2.6 or 5.2.9 of this Procedure, and may use any additional information available to it **[clause 1.40.13]**.
- 5.2.11 Subject to paragraph 5.2.12, AEMO must recommend Western Power accepts a Proposed Alternative Standard where **[clause 1.40.14]**:
- (a) it reasonably considers the Proposed Alternative Standard satisfies the considerations in paragraph 5.1.4(d) of this Procedure; or
 - (b) the Proposed Alternative Standard:
 - i. relates to a standard or technical level of performance for which there is no Agreed Generator Performance Standard that is deemed to apply; and
 - ii. is at or above the Minimum Generator Performance Standard.
- 5.2.12 AEMO must recommend Western Power rejects a Proposed Alternative Standard if it reasonably considers that the Proposed Alternative Standard may create an unacceptable risk to Power System Security or Power System Reliability **[clause 1.40.15]**.
- 5.2.13 Where AEMO recommends that Western Power rejects a Proposed Alternative Standard under paragraph 5.2.8, AEMO must **[clause 1.40.16]**:

- (a) provide written reasons to Western Power; and
- (b) recommend that:
 - i. an amended Proposed Alternative Standard is adopted that AEMO considers satisfies the considerations in paragraph 5.1.4(d), which may include a Generator Condition;
 - ii. where a Reference Standard exists, the Reference Standard is adopted; or
 - iii. the Minimum Generator Performance Standard is adopted.

5.3 Determining a Proposed Alternative Standard

5.3.1 After receiving a recommendation on a Proposed Alternative Standard from AEMO under paragraph 5.2.8(a) of this Procedure, Western Power must decide whether to approve or reject the Proposed Alternative Standard **[clause 1.40.17]**.

5.3.2 Western Power must:

- (a) approve the Proposed Alternative Standard where AEMO has recommended Western Power approve it, and:
 - i. accept it as an Agreed Generator Performance Standard **[clause 1.40.18 and 1.40.23]**; and
 - ii. include it on the Generator Register as the Registered Generator Performance Standard for the Technical Requirement for that Transmission Connected Generating System **[clause 1.40.31]**; or
- (b) reject the Proposed Alternative Standard if **[clause 1.40.19]**:
 - i. AEMO has recommended Western Power reject the Proposed Alternative Standard; or
 - ii. Western Power reasonably considers the Proposed Alternative Standard may create an unacceptable risk in relation to Power System Security, Power System Reliability, Power Transfer Capability or the quality of supply of electricity for other users of the Network.

5.3.3 After receiving a recommendation in relation to a Proposed Alternative Standard from AEMO, Western Power must notify the Market Participant of the outcome of the assessment, including where Western Power rejects a submission, providing: **[clause 1.40.20]**:

- (a) written reasons for the decision; and
- (b) an alternative or amended Proposed Alternative Standard that Western Power and AEMO consider acceptable having regard to the considerations in paragraph 5.1.4(d) of this Procedure.

5.3.4 Where the Market Participant agrees with the alternative or amended Proposed Alternative Standard proposed by Western Power under paragraph 5.3.3(b) of this Procedure:

- (a) the alternative or amended Proposed Alternative Standard will be the Agreed Generator Performance Standard for the Technical Requirement **[clause 1.40.21]**; and
- (b) Western Power must include it on the Generator Register as the Registered Generator Performance Standard for the Technical Requirement for that Transmission Connected Generating System **[clause 1.40.31]**.

5.3.5 Where the Market Participant disagrees with the amended Proposed Alternative Standard determined under paragraph 5.3.3(b) of this Procedure **[clause 1.40.22]**:

- (a) the Market Participant and Western Power may agree to a testing regime in accordance with section 6 of this Procedure; or
- (b) the Market Participant must commence the dispute resolution process contained in section 1.42 of the WEM Rules and WEM Procedure: Dispute Resolution Mechanism for Existing Transmission Connected Generating Systems.

6. Testing of performance standards and dispute resolution

6.1.1 A Market Participant may, at any time, request Western Power to agree to a testing regime or the interrogation of data to demonstrate the performance or capability of an Existing Transmission Connected Generating System to assist in determining a Proposed Alternative Standard that is likely to be acceptable to both Western Power and AEMO **[clause 1.40.24]**.

6.1.2 A Market Participant's request issued in paragraph 6.1.1 of this Procedure must include, at a minimum, the following information:

- (a) the Technical Requirement(s) being tested;
- (b) where the request relates to a testing regime:
 - i. the proposed time and date of the test(s); and
 - ii. the proposed schedule of activities to be undertaken by each party;
- (c) where the request relates to the interrogation of data:
 - i. any required Market Participant owned data;
 - ii. specific information in relation to any required non-Market Participant owned data, where available; and
 - iii. the proposed schedule of activities to be undertaken by each party; and
- (d) any other information reasonably required for Western Power to agree to the testing regime or interrogation of data, or the testing or interrogation activities to be undertaken.

6.1.3 After receiving a request under paragraph 6.1.1, Western Power must:

- (a) consult with any parties required to perform activities or provide data in relation to the reasonableness of the proposed timing and scope of activities to be performed; and
- (b) within 10 Business Days, decide whether to:
 - i. agree to the request to undertake a testing regime or the interrogation of data;
 - ii. propose alternative arrangements, in relation to the proposed timing and scope of activities to be performed, with reasons for those alternative arrangements; or
 - iii. reject the request to undertake a testing regime or the interrogation of data.

6.1.4 In making a decision under paragraph 6.1.3(b), Western Power must:

- (a) consider outcomes of the consultation with any other parties required to perform activities as part of the testing regime or interrogation of data;
- (b) where possible, seek to achieve the lowest cost option available, after considering all other relevant information available **[clause 1.40.26]**; and
- (c) agree to the request to undertake a testing regime or the interrogation of data, including any proposed alternative arrangements as applicable, where Western Power considers it reasonable, and consultation with other parties has not identified any impediment to the proposed or alternative arrangements.

6.1.5 Western Power must notify the Market Participant of its decision under paragraph 6.1.3(b) of this Procedure in writing, and where Western Power proposes alternative arrangements under paragraph 6.1.3(b)ii or rejects the request under paragraph 6.1.3(b)iii of this Procedure, provide reasons.

6.1.6 Where Western Power proposes alternative arrangements or rejects a Market Participant's request to undertake a testing regime or the interrogation of data under paragraph 6.1.5 of this Procedure, it must work with the relevant Market Participant and any parties required to perform activities or provide data to agree on alternative arrangements.

6.1.7 Following receipt of the information gathered through the testing regime or interrogation of data agreed to be conducted under this section of the Procedure, the relevant Market Participant and Western Power (with any required input from AEMO) must negotiate in good faith to determine if they can agree a Proposed Alternative Standard, which may include a Generator Condition **[clause 1.40.27]**.

- 6.1.8 If the parties to the negotiation under paragraph 6.1.7 of this Procedure:
- (a) agree, a Proposed Alternative Standard,
 - i. Western Power must accept it as an Agreed Generator Performance Standard **[clause 1.40.28]**; and
 - ii. include it on the Generator Register as the Registered Generator Performance Standard for the Technical Requirement for that Transmission Connected Generating System **[clause 1.40.31]**; or
 - (b) do not agree, the Market Participant must commence the dispute resolution process contained in section 1.42 of the WEM Rules and WEM Procedure: Dispute Resolution Mechanism for Existing Transmission Connected Generating Systems.

7. Developing and maintaining the Generator Register

- 7.1.1 Western Power must develop and maintain the Generator Register to include all Agreed Generator Performance Standards on the Generator Register **[clause 1.40.31]** in accordance with section 3A.7 of the WEM Rules.
- 7.1.2 Western Power must provide AEMO and the ERA any information pertaining to the Generator Register upon request to assist either or both parties in fulfilling their functions and obligations under the WEM Rules.

Appendix A: Relevant Reference Standards [clause 1.40.30(b)]

Reference Standards were published from 31 March 1997 (starting with the introduction of the Technical Code), prior to this date no publicly available reference standards were available.

Table A.1: Historical Reference Standards

| Technical Requirement | WEM Rules | Technical Rules | | | Technical Code | | |
|--|-----------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------|-----------|
| | | 01-Dec-16 | 01-Aug-16 | 01-Dec-11 | 26-Apr-07 | 07-Apr-04 | 31-Mar-97 |
| Active Power Capability | A12.2 | - | - | | - | - | - |
| Reactive Power Capability | A12.3 | 3.3.3.1 | 3.3.3.1 | 3.3.3.1 | 3.3.3.1 | 3.2.4.1 | 3.2.4.1 |
| Voltage and Reactive Power Control | A12.4 | 3.3.4.5 | 3.3.4.5 | 3.3.4.5 | 3.3.4.5 | 3.2.5.4 | 3.2.5.4 |
| Active Power Control | A12.5 | 3.3.3.5 | 3.3.3.5 | 3.3.3.5 | 3.3.3.5 | - | - |
| Inertia and Frequency Control | A12.6 | 3.3.4.4 | 3.3.4.4 | 3.3.4.4 | 3.3.4.4 | 3.2.5.3 | 3.2.5.3 |
| Disturbance Ride Through for a Frequency Disturbance | A12.7 | 3.3.3.3 | 3.3.3.3 | 3.3.3.3 | 3.3.3.3 | 3.2.4.3 | 3.2.4.3 |
| Disturbance Ride Through for a Voltage Disturbance | A12.8 | 3.3.3.3 | 3.3.3.3 | 3.3.3.3 | 3.3.3.3 | 3.2.4.3 | 3.2.4.3 |
| Disturbance Ride Through for Multiple Disturbances | A12.9 | 3.3.3.3 | 3.3.3.3 | 3.3.3.3 | 3.3.3.3 | 3.2.4.3 | 3.2.4.3 |
| Disturbance Ride Through for Partial Load Rejection | A12.10 | 3.3.3.4 | 3.3.3.4 | 3.3.3.4 | 3.3.3.4 | 3.2.4.4 | 3.2.4.4 |
| Disturbance Ride Through for Quality of Supply | A12.11 | 2.2.3 2.2.4 2.2.5 2.3.4 | 2.2.3 2.2.4 2.2.5 2.3.4 | 2.2.3 2.2.4 2.2.5 2.3.4 | 2.2.3 2.2.4 2.2.5 2.3.4 | 3.2.4.3 | 3.2.4.3 |
| Quality of Electricity Generated | A12.12 | 2.2.3 2.2.4 2.2.5 | 2.2.3 2.2.4 2.2.5 | 2.2.3 2.2.4 2.2.5 | 2.2.3 2.2.4 2.2.5 | 3.2.4.2 | 3.2.4.2 |

| Technical Requirement | WEM Rules | Technical Rules | | | | Technical Code | |
|---------------------------------------|-----------|-----------------|----------------|----------------|----------------|----------------|----------------|
| | | 01-Dec-16 | 01-Aug-16 | 01-Dec-11 | 26-Apr-07 | 07-Apr-04 | 31-Mar-97 |
| Generation Protection Systems | A12.13 | 3.3.3.8 | 3.3.3.8 | 3.3.3.8 | 3.3.3.8 | 3.2.4.9 3.4 | 3.2.4.9 3.4 |
| Remote Monitoring Requirements | A12.14 | 3.3.4.1 | 3.3.4.1 | 3.3.4.1 | 3.3.4.1 | 3.2.5.1 | 3.2.5.1 |
| Remote Control Requirements | A12.15 | 3.3.4.2 | 3.3.4.2 | 3.3.4.2 | 3.3.4.2 | 3.2.5.1 | 3.2.5.1 |
| Communications Equipment Requirements | A12.16 | 3.3.4.3 | 3.3.4.3 | 3.3.4.3 | 3.3.4.3 | 3.2.5.2 | 3.2.5.2 |
| Generation System Model | A12.17 | 3.3.9 2.3.7 | 3.3.9 2.3.7 | 3.3.9 2.3.7 | 3.3.9 2.3.7 | - | - |