

Electricity Industry (Wholesale Electricity Market) Regulations 2004

Wholesale Electricity Market Amendment (Tranche 1 Amendments) Rules 2020

Commencement

- The amending rules set out in Schedule A come into operation on the day after the day notice of these amending rules is published by the Minister in the Gazette pursuant to regulation 7(5) of the *Electricity Industry (Wholesale Electricity Market) Regulations 2004*.
- The amending rules set out in Schedule B, Part 1 come into operation immediately after the commencement of the amending rules in the *Wholesale Electricity Market Amendment (Technical Rules Change Management) Rules 2020*, that are to commence at 8:00 AM on 1 January 2021.
- The amending rules set out in Schedule B, Part 2 come into operation at 8:00 AM on 1 February 2021.
- The amending rules set out in Schedule C come into operation immediately after commencement of the amending rules in the *Wholesale Electricity Market Amendment (Reserve Capacity Pricing Reforms) Rules 2019*, that are to commence at 8:00 AM on 1 October 2021.

Schedule A

1. Section 1.36 inserted

1.1 Insert the following new section 1.36:

1.36. Specific Transitional Provisions – WEM Procedures for WEM Reforms Tranche 1 Amending Rules

1.36.1. In this section 1.36:

Pre-Amended Rules: Means the Market Rules as in force immediately before the Tranche 1 Commencement Date.

Post-Amended Rules: Means the Market Rules as in force immediately after the Tranche 1 Commencement Date.

WEM Reforms Tranche 1 Amending Rules: Means the Amending Rules made by the Minister under regulation 7(5) of the WEM Regulations by a notice published in the Government Gazette as part of the program of work for the Wholesale Electricity Market and Constrained Network Access Reform.

1.36.2. Before 8:00 AM on the Tranche 1 Commencement Date, notwithstanding that the Pre-Amended Rules continue to apply, AEMO, each Network Operator and the Coordinator must perform each of their obligations in this section 1.36, as if the Post-Amended Rules were in force.

1.36.3. AEMO must, without limiting clause 1.36.6:

- (a) develop each of the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules prior to the Tranche 1 Commencement Date; and

- (b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules.
- 1.36.4. Each Network Operator must, without limiting clause 1.36.6:
- (a) develop each of the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules prior to the Tranche 1 Commencement Date; and
 - (b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules.
- 1.36.5. The Coordinator must, without limiting clause 1.36.6:
- (a) develop each of the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules prior to the Tranche 1 Commencement Date; and
 - (b) consult with Rule Participants and other relevant stakeholders in developing the procedures it is responsible for in accordance with the WEM Reforms Tranche 1 Amending Rules.
- 1.36.6. Each WEM Procedure that is required to be developed under clauses 1.36.3(a), 1.36.4(a) and 1.36.5(a):
- (a) without limiting clauses 1.36.3(b), 1.36.4(b) and 1.36.5(b), may, but is not required to, be developed in accordance with the Procedure Change Process;
 - (b) is, from the Tranche 1 Commencement Date, deemed to be the relevant WEM Procedure required to be developed under the relevant clause in the WEM Reforms Tranche 1 Amending Rules; and
 - (c) may, with industry consultation, be amended or replaced with a revised WEM Procedure without undertaking the Procedure Change Process by the party responsible for developing the WEM Procedure for a period of six months from the Tranche 1 Commencement Date. To avoid doubt, after the expiry of the 6 month period, any amendment or replacement of the WEM Procedure must be made in accordance with the Procedure Change Process.
- 1.36.7. For the purposes of this section 1.36, 'WEM Procedure' has the same meaning as 'Market Procedure' in these Market Rules.

2. Chapter 11 (Glossary) amended

2.1 Insert the following new definition in Chapter 11 (Glossary):

Tranche 1 Commencement Date: Means the Trading Day commencing at 8:00 AM on 1 February 2021.

Schedule B, Part 1

1. Section 2.1A amended

1.1 Clause 2.1A.2(IC) as inserted by the *Wholesale Electricity Market Amendment (Technical Rules Change Management) Rules 2020* is deleted and replaced with the following:

- (ID) to participate in the Technical Rules Committee and provide advice on Technical Rules Change Proposals as required by the Economic Regulation Authority under the Access Code, to provide submissions as part of the public consultation process in respect of Technical Rules Change Proposals and to develop and submit Technical Rules Change Proposals relating to System Management Functions;

Schedule B, Part 2

1. Heading above section 1.1 amended

- 1.1 The heading 'The Market Rules' appearing immediately above the section 1.1 heading is amended by deleting the words 'Market Rules' and replacing them with the words 'WEM Rules'.

2. Section 1.1 heading amended

- 2.1 The section 1.1 heading 'Authority of Market Rules' is amended by deleting the words 'Market Rules' and replacing them with the words 'WEM Rules'.

3. Section 1.4 amended

- 3.1 Clause 1.4.1(n) is deleted and replaced with the following:

- (n) **(amendments):** if the Rule Change Panel, AEMO, the Economic Regulation Authority, the Coordinator or a Network Operator has the power to make, prescribe, determine, compile, establish or develop a document, instrument, matter or thing, then the Rule Change Panel, AEMO, the Economic Regulation Authority, the Coordinator or a Network Operator, as applicable, also has the power to amend, replace or revoke the whole or part of that document, instrument, matter or thing exercisable in like manner and subject to like conditions (if any);

4. Section 1.5 amended

- 4.1 Clause 1.5.1(b) is deleted and replaced with the following:

- (b) any other document or instrument issued, made or given by the Rule Change Panel, AEMO, the Economic Regulation Authority, a Network Operator or the Coordinator under the WEM Rules.

5. Section 1.7 amended

- 5.1 Insert the following new clause 1.7.5:

- 1.7.5. Where the Coordinator (in respect to any WEM Procedures the Coordinator is required to develop and maintain under these WEM Rules) is required by these WEM Rules to publish or release a document or information, then:

- (a) the Coordinator must make that document or information available online in a place which is generally accessible by members of the class of persons entitled to access that document or information given AEMO's determination of its confidentiality status in accordance with section 10.2; and
- (b) if these WEM Rules require that document or information to be published on the WEM Website:
- i. the Coordinator must promptly notify AEMO when the document or information is made available in accordance with clause 1.7.5(a);

- ii. AEMO must, at a minimum, promptly publish a link on the WEM Website to the document or information; and
- iii. the Coordinator is deemed to have published or released the document or information once the Coordinator has published the document or information online and has notified AEMO.

6. Section 1.8 amended

6.1 The section 1.8 heading 'Staging of the Market Rules' is amended by deleting the words 'Market Rules' and replacing them with the words 'WEM Rules'.

6.2 Clause 1.8.1 is deleted and replaced with the following:

1.8.1. A provision of the WEM Rules commences at the time fixed by the Minister.

7. Section 1.36 amended

7.1 Clause 1.36.7 is deleted.

8. Section 1.37 added

8.1 Insert the following new section 1.37:

1.37. Specific Transitional Provisions for Administrative Amendments

1.37.1. In this section 1.37:

Pre-Amended Rules: Means the WEM Rules as in force immediately before the Administrative Amendments come into effect.

Post-Amended Rules: Means the WEM Rules as in force immediately after the Administrative Amendments come into effect.

Administrative Amendments: Means the Amending Rules that will commence at 8:00 AM on the Administrative Amendments Commencement Day made by the Minister under regulation 7(5) of the WEM Regulations by a notice published in the Government Gazette.

Administrative Amendments Commencement Day: Means a day specified by the Minister under regulation 7(5) of the WEM Regulations by a notice published in the Government Gazette.

1.37.2. Where a WEM Procedure refers to System Management (as that term is defined in the Pre-Amended Rules) then:

- (a) the relevant Rule Participant responsible for the WEM Procedure must, as soon as practicable after the Administrative Amendments Commencement Day, amend the WEM Procedure to refer to AEMO instead of System Management and make any consequential amendments that AEMO considers reasonably necessary to give effect to the Administrative Amendments without undertaking the Procedure Change Process;
- (b) any WEM Procedure which is amended in accordance with clause 1.37.2(a) commences operation on the date and time determined by the relevant Rule Participant responsible for the WEM Procedure and published on the WEM Website; and

- (c) until any WEM Procedure is amended and commenced in accordance with clauses 1.37.2(a) and 1.37.2(b), a reference in a WEM Procedure that should be a reference to AEMO having regard to AEMO's functions, including System Operation Functions, rights and obligations under these WEM Rules and any other WEM Procedure, is deemed to be a reference to AEMO.

1.37.3. On and from the Administrative Amendments Commencement Day, all market information that AEMO has set the class of confidentiality status as System Management Confidential in accordance with clause 10.2.1 or section 10.9 of the Pre-Amended Rules, is to be deemed to be the confidentiality status of System Operation Confidential under the Post-Amended Rules.

9. Section 1.38 added

9.1 Insert the following new section 1.38:

1.38. Specific Transitional Provisions – Application of Chapter 3A to Network Operators

1.38.1. Notwithstanding the requirements of Chapter 3A, a Network Operator, other than Western Power, is exempt from the requirement to comply with Chapter 3A and Appendix 12 until such time as it is notified by AEMO, in writing, that it must comply with Chapter 3A and Appendix 12.

1.38.2. AEMO may issue a notice to a Network Operator that it must comply with Chapter 3A and Appendix 12, where:

- (a) AEMO has consulted with the Network Operator in respect of the Network Operator's ability to comply with Chapter 3A and Appendix 12; and
- (b) AEMO reasonably considers that the Network Operator can comply with Chapter 3A and Appendix 12 on and from the date of the notification.

1.38.3. A notice issued under clause 1.38.2 must specify the time by which the Network Operator is required to comply with Chapter 3A and Appendix 12 which must be no less than six months from the date of the notice.

1.38.4. At the same time AEMO issues a notice to the Network Operator under clause 1.38.2, AEMO must provide a copy of that notice to the Economic Regulation Authority.

10. Section 1.39 added

10.1 Insert the following new section 1.39:

1.39. Application of Chapter 3A to Existing Transmission Connected Generating Systems

1.39.1. A Market Participant responsible for an Existing Transmission Connected Generating System is exempt from all of the requirements of section 3A.1, section 3A.2 and sections 3A.5 to 3A.14 other than as set out in sections 1.39 to 1.42 until the time at which the Existing Transmission Connected Generating System ceases to be an Existing Transmission Connected Generating System as set out in clause 1.39.13.

1.39.2. The date by which the 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 will be the later of:

- (a) 31 January 2022; or
 - (b) any date agreed by the relevant Network Operator and the Market Participant responsible for the Existing Transmission Connected Generating System under clause 1.39.4.
- 1.39.3. If, by the date set out in clause 1.39.2, a Market Participant responsible for an Existing Transmission Connected Generating System does not have a Registered Generator Performance Standard for each Technical Requirement then the relevant Network Operator must commence the dispute resolution mechanism contained in section 1.42.
- 1.39.4. Subject to clause 1.39.5, a Market Participant may request the date referred to in clause 1.39.2 be extended by the Network Operator, who must agree to extend the date by a reasonable period where the Network Operator considers that the Market Participant 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 reasonably requires additional time to have all required Registered Generator Performance Standards. To avoid doubt, the Market Participant may request, and the Network Operator may extend, the date in clause 1.39.2 more than once.
- 1.39.5. A request made under clause 1.39.4 must be made at least 20 Business Days before 31 January 2022, or any extended date agreed under clause 1.39.4. Where a request is made within 20 Business Days of the relevant date the Network Operator may, but is not obliged to, consider the request.
- 1.39.6. A Network Operator must notify the Market Participant responsible for the Existing Transmission Connected Generating System whether the request made under clause 1.39.4 is approved or rejected within 10 Business Days or other date agreed between the parties.
- 1.39.7. The time by which the Market Participant responsible for an Existing Transmission Connected Generating System must have a Generator Monitoring Plan approved by AEMO will be the later of:
 - (a) the date that is 12 months after the date on which the Market Participant submits their proposed Generator Monitoring Plan to AEMO for approval; or
 - (b) any date agreed by AEMO and the Market Participant responsible for the Existing Transmission Connected Generating System under clause 1.39.9.
- 1.39.8. If, by the date set out in clause 1.39.7, a Market Participant responsible for an Existing Transmission Connected Generating System does not have a Generator Monitoring Plan approved by AEMO in accordance with section 1.41 then AEMO must commence the dispute resolution mechanism contained in section 1.42.
- 1.39.9. Subject to clause 1.39.10, a Market Participant may request the date referred to in clause 1.39.7 be extended by AEMO, who must agree to extend the date by a reasonable period where AEMO considers that the Market Participant is making reasonable progress towards having a Generator Monitoring Plan for one or more of its Existing Transmission Connected Generating Systems and reasonably requires additional time to complete the Generator Monitoring Plan or Generator Monitoring Plans. To avoid doubt, the Market Participant may request, and AEMO may extend, the date in clause 1.39.7 more than once.

- 1.39.10. A request made under clause 1.39.9 must be made at least 20 Business Days before the date described in clause 1.39.7(a), or any extended date agreed under clause 1.39.9. Where a request is made within 20 Business Days of the relevant date AEMO may, but is not obliged to, consider the request.
- 1.39.11. AEMO must notify the Market Participant whether the request made under clause 1.39.9 is approved or rejected within 10 Business Days or other date agreed between the parties.
- 1.39.12. A Market Participant responsible for an Existing Transmission Connected Generating System must use reasonable endeavours to provide all data and information reasonably required by a Network Operator or AEMO under sections 1.39 to 1.42 to assess the impact of the Existing Transmission Connected Generating System on the performance and security of the applicable network.
- 1.39.13. An Existing Transmission Connected Generating System will cease to be an Existing Transmission Connected Generating System at the time the Market Participant responsible for the Existing Transmission Connected Generating System has:
- (a) a Registered Generator Performance Standard for each Technical Requirement in accordance with section 1.40; and
 - (b) a Generator Monitoring Plan approved by AEMO in accordance with section 1.41 or determined by an arbitrator in accordance with the dispute resolution mechanism contained in section 1.42.

11. Section 1.40 added

11.1 Insert the following new section 1.40:

1.40. Requirements for Existing Transmission Connected Generating Systems

1.40.1. In this section 1.40:

Access Standard: 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,

and includes any condition or circumstance which is of similar effect as a Generator Condition in respect of an existing standard or technical level of performance for the Existing Transmission Connected Generating System.

Agreed Generator Performance Standard: Means the standard or technical level of performance in respect of a Technical Requirement that is either:

- (a) agreed between a Market Participant responsible for an Existing Transmission Connected Generating System and the relevant Network Operator; or

- (b) deemed to be the applicable standard or technical level of performance in respect of the same matter as a Technical Requirement that applies in respect of an Existing Transmission Connected Generating System,

in accordance with this section 1.40.

Generator Condition: Means one or more circumstances specified in a Proposed Alternative Standard:

- (a) the occurrence of which requires a Market Participant responsible for an Existing Transmission Connected Generating System to undertake required actions to achieve an agreed outcome and or achieve an agreed higher level of performance than set out in the Proposed Alternative Standard in respect of one or more Technical Requirements; and
- (b) that specifies or describes each of the matters in clauses 3A.5.6(a) to 3A.5.6(g), where each reference to 'Trigger Event' in those clauses is to be read as 'Generator Condition'.

Proposed Alternative Standard: Means a standard or technical level of performance in respect of a Technical Requirement proposed to apply to an Existing Transmission Connected Generating System that has been submitted in accordance with clause 1.40.6.

Reference Standard: 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.

- 1.40.2. A Market Participant responsible for an Existing Transmission Connected Generating System must use reasonable endeavours to provide to the relevant Network Operator any relevant document or information that it is able to provide that is in its possession, power or control which relates to an Access Standard in respect of the Existing Transmission Connected Generating System.
- 1.40.3. A Network Operator must use reasonable endeavours to provide to a Market Participant responsible for an Existing Transmission Connected Generating System any relevant document or information that it is able to provide that is in its possession, power or control which relates to an Access Standard in respect of the Existing Transmission Connected Generating System.
- 1.40.4. Subject to clause 1.40.6, an Access Standard in respect of the same or equivalent matter as a Technical Requirement will be deemed to be the Agreed Generator Performance Standard for that Technical Requirement.
- 1.40.5. Subject to clause 1.40.6, where no Access Standard in respect of the same matter as a Technical Requirement exists and there is an applicable Reference Standard, then the Reference Standard will be deemed to be the Agreed Generator Performance Standard for that Technical Requirement.
- 1.40.6. Where:
 - (a) these WEM Rules do not deem a standard of performance for a Technical Requirement to be an Agreed Generator Performance Standard in accordance with clause 1.40.4 or clause 1.40.5;

- (b) a Market Participant responsible for the Existing Transmission Connected Generating System does not reasonably consider that the Existing Transmission Connected Generating System is able to comply with a Reference Standard that is deemed to be an Agreed Generator Performance Standard under clause 1.40.5; or
- (c) the relevant Network Operator and Market Participant responsible for the Existing Transmission Connected Generating System disagree as to the existence or interpretation of an Access Standard,

the Market Participant responsible for the Existing Transmission Connected Generating System must notify the Network Operator as soon as practicable and submit a Proposed Alternative Standard which may include a Generator Condition.

1.40.7. Where clause 1.40.6 applies, the Market Participant responsible for the Existing Transmission Connected Generating System must also submit reasons and supporting evidence as to how the Proposed Alternative Standard meets the applicable criteria listed in clause 1.40.8 and is otherwise appropriate in the circumstances. Where the Proposed Alternative Standard is less onerous than the Minimum Generator Performance Standard or the Reference Standard (as applicable) for that Technical Requirement, the Market Participant must also submit:

- (a) technical evidence as to why the Existing Transmission Connected Generating System cannot comply with the Minimum Generator Performance Standard or the Reference Standard (as applicable); and
- (b) information on the costs the Market Participant is likely to incur in order to meet the Minimum Generator Performance Standard or Reference Standard (as applicable).

1.40.8. A Proposed Alternative Standard submitted under clause 1.40.6 must be as consistent as practicable to the Minimum Generator Performance Standard or Reference Standard for the relevant Technical Requirement (as applicable), having regard to:

- (a) the need to protect the Existing Transmission Connected Generating System from damage;
- (b) power system conditions at the location of the connection;
- (c) the commercial and technical feasibility of complying with the Minimum Generator Performance Standard or Reference Standard (as applicable);
- (d) the costs associated with complying with the Minimum Generator Performance Standard or Reference Standard (as applicable) over the remaining life of the Existing Transmission Connected Generating System; and
- (e) the capability of the Existing Transmission Connected Generating System in respect of the Technical Requirement.

1.40.9. If the relevant Network Operator requires further information that it considers necessary to determine whether a Proposed Alternative Standard is appropriate it must request the information from the Market Participant responsible for the Existing Transmission Connected Generating System who must use reasonable endeavours to provide the further information that is in its possession, power or control. To avoid doubt, a Market Participant is not required to undertake testing to comply with this obligation.

- 1.40.10. If:
- (a) a Proposed Alternative Standard is at or above the Minimum Generator Performance Standard or Reference Standard (as applicable); or
 - (b) the Network Operator reasonably considers it will approve a Proposed Alternative Standard having regard to the matters in clause 1.40.8 and following the receipt of the information and evidence referred to in clause 1.40.7 and any further information requested under clause 1.40.9,
- the Network Operator must:
- (c) provide any information received from the Market Participant responsible for the Existing Transmission Connected Generating System under clause 1.40.7 and clause 1.40.9 to AEMO; and
 - (d) use best endeavours to consult with AEMO within a reasonable timeframe, in accordance with the process agreed under clause 3A.1.3, in relation to each submitted Proposed Alternative Standard.
- 1.40.11. AEMO must use best endeavours to respond in a reasonable timeframe after being consulted in accordance with clause 1.40.10 and provide a recommendation to the Network Operator whether a Proposed Alternative Standard should be approved or rejected, or whether AEMO requires further information to make the recommendation.
- 1.40.12. Where AEMO requires further information under clause 1.40.11, the Network Operator must:
- (a) provide the further information that is in its possession, power or control; or
 - (b) use reasonable endeavours to obtain that information from the Market Participant responsible for the Existing Transmission Connected Generating System and provide that information to AEMO in accordance with the process agreed under clause 3A.1.3.
- 1.40.13. In making a recommendation whether a Proposed Alternative Standard should be approved or rejected in accordance with clause 1.40.11, AEMO is not limited to considering information provided by the Network Operator and may use any other relevant information available to it.
- 1.40.14. Subject to clause 1.40.15, AEMO must recommend that the Network Operator accept a Proposed Alternative Standard if:
- (a) AEMO reasonably considers the Proposed Alternative Standard satisfies clause 1.40.8; or
 - (b) the Proposed Alternative Standard:
 - i. relates to a standard or technical level of performance for a Technical Requirement for which there is no Agreed Generator Performance Standard that is deemed to apply in accordance with clause 1.40.4 or clause 1.40.5; and
 - ii. is at or above the Minimum Generator Performance Standard for the relevant Technical Requirement.

- 1.40.15. AEMO must recommend that the Network Operator reject 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.
- 1.40.16. Where AEMO recommends that the Network Operator reject a Proposed Alternative Standard in respect of a Technical Requirement, AEMO must:
- (a) provide written reasons to the Network Operator; and
 - (b) recommend that either:
 - i. an amended Proposed Alternative Standard is adopted that AEMO considers satisfies clause 1.40.8 which may include a Generator Condition; or
 - ii. otherwise:
 - 1. where a Reference Standard exists, the Reference Standard is adopted; or
 - 2. where no Reference Standard exists, the Minimum Generator Performance Standard is adopted.
- 1.40.17. Subject to clauses 1.40.18, 1.40.19 and clause 1.40.24, after a Network Operator has received the recommendation from AEMO in respect of a Proposed Alternative Standard, the Network Operator must determine whether to approve or reject each Proposed Alternative Standard proposed by the Market Participant responsible for the Existing Transmission Connected Generating System.
- 1.40.18. Subject to clause 1.40.19, a Network Operator must approve a Proposed Alternative Standard and notify the relevant Market Participant where AEMO recommends that the Network Operator accept a Proposed Alternative Standard.
- 1.40.19. A Network Operator must reject a Proposed Alternative Standard where:
- (a) AEMO has recommended that the Network Operator reject the Proposed Alternative Standard; or
 - (b) the Network Operator reasonably considers the Proposed Alternative Standard may create an unacceptable risk in relation to:
 - i. Power System Security;
 - ii. Power System Reliability;
 - iii. Power Transfer Capability; or
 - iv. the quality of supply of electricity for other users of the Network.
- 1.40.20. If the Network Operator rejects a Proposed Alternative Standard, the Network Operator must provide to the Market Participant responsible for the Existing Transmission Connected Generating System:
- (a) written reasons for the decision; and
 - (b) an alternative or amended Proposed Alternative Standard that the Network Operator and AEMO consider is acceptable having regard to each of the matters in clause 1.40.8 which may include a Generator Condition.

- 1.40.21. Where the Market Participant responsible for the Existing Transmission Connected Generating System agrees with the amended Proposed Alternative Standard proposed in accordance with clause 1.40.20(b), the amended Proposed Alternative Standard will be the Agreed Generator Performance Standard for the Technical Requirement.
- 1.40.22. Where the Market Participant responsible for the Existing Transmission Connected Generating System disagrees with the amended Proposed Alternative Standard proposed in accordance with clause 1.40.20(b):
- (a) the Market Participant and Network Operator may agree to a testing regime in accordance with clause 1.40.24; otherwise
 - (b) the Market Participant must commence the dispute resolution mechanism contained in section 1.42.
- 1.40.23. Where the Network Operator approves a Proposed Alternative Standard in accordance with clause 1.40.17, it will be the Agreed Generator Performance Standard for the Technical Requirement.
- 1.40.24. A Market Participant responsible for an Existing Transmission Connected Generating System may, at any time, agree with a Network Operator to a testing regime or interrogation of data under clause 1.40.26 to demonstrate the performance or capability of the Existing Transmission Connected Generating System and assist in determining a Proposed Alternative Standard that is likely to be acceptable to both the relevant Network Operator and AEMO.
- 1.40.25. A Network Operator, must consult with and only agree to a testing regime or interrogation of data under clause 1.40.24 with the agreement of AEMO.
- 1.40.26. A testing regime or interrogation of data contemplated by clause 1.40.24 must include measures which each party will take, at their cost, to demonstrate the performance or capability of the Existing Transmission Connected Generating System. Where possible, the measures agreed should be the lowest cost option available, after considering all other relevant information available. For the avoidance of doubt, the testing regime or interrogation of data may be undertaken by the Existing Transmission Connected Generating System, the Network Operator, or AEMO.
- 1.40.27. Following receipt of the testing results or interrogation of data contemplated by clause 1.40.24, the Market Participant responsible for the Existing Transmission Connected Generating System and the relevant Network Operator must negotiate in good faith to determine if they can agree a Proposed Alternative Standard, which may include a Generator Condition, in respect of the Technical Requirement that the Existing Transmission Connected Generating System can comply with based on the testing results or data. To avoid doubt, the Network Operator may, as part of the negotiations or otherwise, consult with AEMO as to any Proposed Alternative Standard.
- 1.40.28. If the Market Participant responsible for the Existing Transmission Connected Generating System and the relevant Network Operator can agree a Proposed Alternative Standard under clause 1.40.27, the agreed Proposed Alternative Standard will be the Agreed Generator Performance Standard for the Technical Requirement. If the Market Participant and Network Operator cannot agree, the Network Operator must commence the dispute resolution mechanism contained in section 1.42.

- 1.40.29. For the purposes of this section 1.40, where the standard or technical level of performance in respect of a Technical Requirement is determined under the dispute resolution mechanism contained in section 1.42, it will be an Agreed Generator Performance Standard for the Technical Requirement.
- 1.40.30. A Network Operator must develop and maintain a WEM Procedure which includes:
- (a) the process and considerations it will follow in assessing a Proposed Alternative Standard under this section 1.40; and
 - (b) the relevant Reference Standards which may apply to an Existing Transmission Connected Generating System for the purposes of this section 1.40.
- 1.40.31. An Agreed Generator Performance Standard must be recorded by the relevant Network Operator on the Generator Register and it will be the Registered Generator Performance Standard for the Technical Requirement for that Transmission Connected Generating System.
- 1.40.32. Where an Agreed Generator Performance Standard includes a Generator Condition, once the Agreed Generator Performance Standard becomes the Registered Generator Performance Standard under clause 1.40.31, the Generator Condition will be a Trigger Event for the purposes of Chapter 3A.

12. Section 1.41 added

12.1 Insert the following new section 1.41:

1.41. Generator Monitoring Plans for Existing Transmission Connected Generating Systems

1.41.1. In this section 1.41:

Existing Monitoring Plan: Means an existing plan approved or agreed by the relevant Network Operator for monitoring the performance of the Existing Transmission Connected Generating System against a Technical Requirement.

1.41.2. Subject to any extension granted under clause 1.41.3, no later than six months after the Tranche 1 Commencement Date, a Market Participant responsible for an Existing Transmission Connected Generating System must submit a proposed Generator Monitoring Plan to AEMO for approval in accordance with any requirements for submission in the WEM Procedure referred to in clause 1.41.6 that:

- (a) meets the requirements of the Template Generator Monitoring Plan as applicable to the Existing Transmission Connected Generating System; or
- (b) meets the requirements of the Template Generator Monitoring Plan as applicable to the Existing Transmission Connected Generating System other than in respect of variations that the Market Participant reasonably considers are required on the basis that:
 - i. compliance is not possible, or where doing so would impose unreasonable costs on the Market Participant; or
 - ii. an Existing Monitoring Plan includes a monitoring regime or requirements in respect of the relevant Technical Requirement.

- 1.41.3. Subject to clause 1.41.4, a Market Participant may, by written notice, request the date referred to in clause 1.41.2 be extended by AEMO, including detailed reasons as to why an extension is necessary. Where AEMO considers that the Market Participant is making reasonable progress towards having a Generator Monitoring Plan for one or more of its Existing Transmission Connected Generating Systems and reasonably requires additional time to complete it, AEMO must agree to extend the date by a reasonable period. To avoid doubt, the Market Participant may request, and AEMO may extend, the date in clause 1.41.2 more than once.
- 1.41.4. A request made under clause 1.41.3 must be made at least 20 Business Days before the date in clause 1.41.2, or any extended date agreed under clause 1.41.3. Where a request is made within 20 Business Days of the relevant date AEMO may, but is not obliged to, consider the request.
- 1.41.5. AEMO must notify the Market Participant whether the request made under clause 1.41.3 is approved or rejected within 10 Business Days or other date agreed between the parties.
- 1.41.6. AEMO may develop a WEM Procedure which sets out:
- (a) the information required by AEMO to, and the method by which AEMO will, consider a proposed Generator Monitoring Plan submitted under clause 1.41.2; and
 - (b) the information required by AEMO to, and method by which AEMO will, consider and determine requests for an extension made under clause 1.41.3.
- 1.41.7. Subject to clauses 1.41.9 and 1.41.12, AEMO must approve a proposed Generator Monitoring Plan that AEMO reasonably considers satisfies the requirements in clause 1.41.2 and where AEMO considers any variations requested by the Market Participant are justified.
- 1.41.8. Where a Market Participant responsible for an Existing Transmission Connected Generating System proposes a Generator Monitoring Plan that includes required variations on the basis of clause 1.41.2(b)(ii), it must provide a copy of the Existing Monitoring Plan to AEMO including any supporting documentation that AEMO reasonably considers necessary.
- 1.41.9. Subject to clause 1.41.10, if AEMO is satisfied an Existing Monitoring Plan applies in respect of a Technical Requirement, AEMO must approve the method of monitoring as it relates to that Technical Requirement as set out in the Existing Monitoring Plan as part of a Generator Monitoring Plan proposed by a Market Participant.
- 1.41.10. Where AEMO reasonably considers the method of monitoring in an Existing Monitoring Plan in accordance with clause 1.41.9 would create an unacceptable risk to Power System Security or Power System Reliability, AEMO must:
- (a) reject the Existing Monitoring Plan in respect of that Technical Requirement; and
 - (b) in addition to the reasons provided under clause 1.41.14, provide detailed reasons to the Market Participant as to why it considers the Existing Monitoring Plan in respect of that Technical Requirement would create an unacceptable risk to Power System Security or Power System Reliability.
- 1.41.11. Where a Market Participant responsible for an Existing Transmission Connected Generating System proposes a Generator Monitoring Plan, AEMO must use reasonable endeavours to respond in a reasonable timeframe and no later than 12 months after AEMO receives the proposed

Generator Monitoring Plan, determine whether to approve or reject the proposed Generator Monitoring Plan or request further information.

- 1.41.12. When considering whether or not to approve a proposed Generator Monitoring Plan under clause 1.41.2(b)(i), AEMO must consider where relevant:
- (a) the technical feasibility of the Existing Transmission Connected Generating System complying with the Template Generator Monitoring Plan;
 - (b) consistency of alternative testing methods proposed with good electricity industry practice including any contained in an Existing Monitoring Plan (if applicable);
 - (c) the age of the Existing Transmission Connected Generating System, in particular the cost of imposing the standard testing method relative to the benefits gained over the expected remaining life of the Existing Transmission Connected Generating System;
 - (d) the risk that the Existing Transmission Connected Generating System poses to power system security and reliability (considering size, location and technology type of generator);
 - (e) the efficacy of an alternative proposed testing method (incorporating cost, risk and accuracy of alternative proposed testing method);
 - (f) any advice from manufacturers and industry experts;
 - (g) specific factors associated with the technology of the Existing Transmission Connected Generating System, including whether its performance is likely to drift or degrade over a particular timeframe, in which case more stringent monitoring may be required; and
 - (h) whether the testing method or data source proposed by the Market Participant responsible for the Existing Transmission Connected Generating System as a modification to the Template Generator Monitoring Plan was used to establish the compliance standard as part of the process to determine the Registered Generator Performance Standards for that Existing Transmission Connected Generating System.
- 1.41.13. AEMO may, but is not required to, consult the relevant Network Operator in respect of a proposed Generator Monitoring Plan submitted to AEMO for approval under this section 1.41.
- 1.41.14. Where AEMO rejects a proposed Generator Monitoring Plan submitted in accordance with this section 1.41, AEMO:
- (a) must notify the Market Participant;
 - (b) must provide reasons to the Market Participant for the rejection; and
 - (c) may request amendments to the proposed Generator Monitoring Plan that it considers are required to meet the requirements of the Template Generator Monitoring Plan or are otherwise satisfactory to AEMO taking into account the matters referred to in clause 1.41.12 where relevant.
- 1.41.15. Where AEMO requests amendments under clause 1.41.14(c), the Market Participant responsible for the Existing Transmission Connected Generating System may either:

- (a) accept the proposal, in which case the requested amendments will be taken to be made to the proposed Generator Monitoring Plan and it will be deemed to be the approved Generator Monitoring Plan for the Existing Transmission Connected Generating System; or
- (b) reject the proposal, in which case the Market Participant must commence the dispute resolution mechanism contained in section 1.42.

1.41.16. A Generator Monitoring Plan for an Existing Transmission Connected Generating System will commence on the later of:

- (a) the date on which the Market Participant responsible for the Existing Transmission Connected Generating System has;
 - i. a Registered Generator Performance Standard for each Technical Requirement in accordance with section 1.40; and
 - ii. a Generator Monitoring Plan is approved under this section 1.41 or determined to apply by arbitration in accordance with section 1.42; or
- (b) the date agreed by AEMO and the Market Participant.

1.41.17. A Generator Monitoring Plan approved by AEMO under this section 1.41 or determined by arbitration in accordance with section 1.42 must be recorded by the relevant Network Operator on the Generator Register.

13. Section 1.42 added

13.1 Insert the following new section 1.42:

1.42. Dispute Resolution Mechanism for Existing Transmission Connected Generating Systems

1.42.1. In this section 1.42:

Confidential Information: Means in relation to arbitral proceedings conducted under this section 1.42, information that relates to the arbitral proceedings or a decision of the Generator Arbitrator in the arbitral proceedings and includes the following:

- (a) the statement of claim, statement of defence and all other pleadings, submissions, statements or other information supplied to the Generator Arbitrator by a Party;
- (b) any information supplied by a Party to another Party in compliance with a direction of the Generator Arbitrator;
- (c) any evidence (whether documentary or otherwise) supplied to the Generator Arbitrator;
- (d) any notes made by the Generator Arbitrator of oral evidence or submissions given before the Generator Arbitrator;
- (e) any transcript of oral evidence or submissions given before the Generator Arbitrator; and
- (f) any other thing declared by the Generator Arbitrator (whether upon submissions by a Party or otherwise) to be Confidential Information.

Dispute: Means a dispute to which the WEM Rules provide that this section 1.42 will apply.

Generator Arbitration Commencement Date: Has the meaning given in clause 1.42.11.

Generator Arbitration Decision: Has the meaning given in clause 1.42.18.

Generator Arbitrator: Means the arbitrator to which the Dispute has been referred by the Coordinator under clause 1.42.5.

Party: Means a party to the Dispute.

Primary Generator Arbitrator: Has the meaning given in clause 1.42.2(a).

Secondary Generator Arbitrator: Has the meaning given in clause 1.42.2(b).

Technical Panel of Experts: Has the meaning given in clause 1.42.2(c).

1.42.2. The Coordinator must, not later than 1 April 2021, in accordance with the process referred to in clause 1.42.28, appoint:

- (a) one primary arbitrator ("**Primary Generator Arbitrator**");
- (b) at least two secondary arbitrators ("**Secondary Generator Arbitrator**"); and
- (c) an independent panel of not less than three experts for the purpose of performing the function described in 1.42.14 ("**Technical Panel of Experts**").

The Coordinator may, in accordance with the process referred to in clause 1.42.28, appoint a further Primary Generator Arbitrator, Secondary Generator Arbitrator or person to the Technical Panel of Experts.

1.42.3. The Coordinator must, in respect of each appointment made under clause 1.42.2 publish:

- (a) the names and relevant details of each appointment;
- (b) respective tenures of each appointment; and
- (c) the remuneration and expense provisions,

within five Business Days of each appointment.

1.42.4. Before a Dispute may be resolved in accordance with the arbitral proceedings set out in this section 1.42, a Party must comply with any relevant processes set out in the WEM Procedure referred to in clause 1.42.10 and deliver a written notification for that Dispute to be referred to arbitration to:

- (a) the Coordinator; and
- (b) each other Party to the Dispute.

1.42.5. On satisfying itself that clause 1.42.4 has been complied with, the Coordinator must, subject to clauses 1.42.6 to 1.42.9, refer the Dispute for resolution to a Generator Arbitrator in accordance with this section 1.42.

1.42.6. The Generator Arbitrator to which a Dispute is referred under clause 1.42.5 must be the Primary Generator Arbitrator unless, subject to the WEM Procedure referred to in clause 1.42.10, in the reasonable opinion of the Coordinator:

- (a) the Primary Generator Arbitrator has an actual, potential or perceived conflict of interest with the subject matter of the Dispute;

- (b) the Primary Generator Arbitrator has insufficient time to adequately perform their functions under this section 1.42 due to one or more contemporaneous arbitral proceedings being conducted under this section 1.42;
- (c) the Primary Generator Arbitrator is in ill health such that they are unable to adequately perform their functions under this section 1.42; or
- (d) the Coordinator otherwise declares for a reason as set out in the WEM Procedure referred to in clause 1.42.10,

in which case, the Primary Generator Arbitrator must be a Secondary Generator Arbitrator (and any references under this section 1.42 to the Primary Generator Arbitrator will be to the Secondary Generator Arbitrator).

1.42.7. For the purpose of clause 1.42.6, where the Generator Arbitrator is a Secondary Generator Arbitrator, the Coordinator must select which Secondary Generator Arbitrator is to be the Generator Arbitrator, subject to the WEM Procedure referred to in clause 1.42.10 and subject to clause 1.42.6 (which in such case are to apply as if the Secondary Generator Arbitrator is the Primary Generator Arbitrator).

1.42.8. For the purpose of clause 1.42.6, a Party must:

- (a) declare if in their reasonable belief the Primary Generator Arbitrator or a Secondary Generator Arbitrator, as relevant, has an actual, potential or perceived conflict of interest with the subject matter of or parties to the Dispute; and
- (b) provide written reasons to the Coordinator as to why the Generator Arbitrator should not be the Primary Generator Arbitrator or a Secondary Generator Arbitrator, as relevant.

1.42.9. Should the Primary Generator Arbitrator and each Secondary Generator Arbitrator be excluded from being the Generator Arbitrator, the Coordinator and each Party to the Dispute shall decide upon an alternative independent arbitrator to be the Generator Arbitrator by majority vote. The Coordinator will have the deciding vote in the event of a tied vote.

1.42.10. The Coordinator must develop a WEM Procedure which sets out:

- (a) any administrative support the Coordinator will provide to the Primary Generator Arbitrator, Secondary Generator Arbitrators and Technical Panel of Experts;
- (b) the particulars of how the Coordinator will assess the matters detailed in clauses 1.42.6(a) to 1.42.6(c);
- (c) any reasons under clause 1.42.6(d) where the Coordinator will declare the Generator Arbitrator to be a Secondary Generator Arbitrator;
- (d) the process which a Party must follow in order to refer a Dispute for arbitration under this section 1.42;
- (e) the manner in which the Dispute is to be resolved by the Generator Arbitrator, including, but not limited to, the manner in which evidence is to be presented;
- (f) the awarding of costs pursuant to clause 1.42.20; and

- (g) any other particulars in relation to the referral of a Dispute to a Generator Arbitrator.
- 1.42.11. Unless otherwise agreed by the Parties, the arbitral proceedings contemplated by this section 1.42 in respect of a particular Dispute commence on the date the Dispute is referred to the Generator Arbitrator in accordance with clause 1.42.5 ("**Generator Arbitration Commencement Date**").
- 1.42.12. Unless otherwise agreed by the Parties and the Generator Arbitrator, the Dispute will be resolved in accordance with the WEM Procedure referred to in clause 1.42.10.
- 1.42.13. The Generator Arbitrator:
- (a) must use best endeavours to resolve a Dispute within six months from the Generator Arbitration Commencement Date; and
 - (b) if the Generator Arbitrator reasonably considers that the Dispute will not be resolved within six months from the Generator Arbitration Commencement Date, the Generator Arbitrator:
 - i. must notify the Parties in writing of the reasons for the belief and the estimated date by which the Generator Arbitrator reasonably believes that the Dispute will be resolved; and
 - ii. must update the Parties should the Generator Arbitrator's reasonable belief contemplated in 1.42.13(b)(i) materially change.
- 1.42.14. Subject to clause 1.42.15, the Generator Arbitrator may:
- (a) appoint one or more experts from the Technical Panel of Experts to report to it on specific issues to be determined by the Generator Arbitrator; and
 - (b) may require a Party to give any expert appointed in accordance with clause 1.42.14(a) any relevant information or to produce, or to provide access to, any relevant documents, goods or other property for inspection by the expert,
- and unless otherwise agreed by the Parties, if a Party so requests or if the Generator Arbitrator considers it necessary, any expert appointed in accordance with clause 1.42.14(a) must, after delivery of a written or oral report from the expert, participate in a hearing where the Parties have the opportunity to put questions to the expert.
- 1.42.15. Prior to appointing an expert from the Technical Panel of Experts, the Generator Arbitrator must advise each Party that it intends to appoint an expert from the Technical Panel of Experts, and provide the Parties:
- (a) the identification of the particular expert;
 - (b) the nature of the advice being sought;
 - (c) the approximate cost of appointing the expert; and
 - (d) an opportunity for each Party to make submissions to the Generator Arbitrator as to whether the particular expert has an actual, potential or perceived conflict of interest in respect of the matter or the advice being sought.
- 1.42.16. If the Generator Arbitrator reasonably considers a request for arbitration to be frivolous, vexatious, trivial or lacking in substance, the Generator Arbitrator may:

- (a) require that the Parties undertake negotiations on terms the Generator Arbitrator reasonably considers appropriate; or
 - (b) make a Generator Arbitration Decision in accordance with clause 1.42.18 without conducting arbitral proceedings.
- 1.42.17. If, during the arbitral proceedings, the Parties settle the Dispute:
- (a) the Generator Arbitrator must terminate the proceedings in accordance with clause 1.42.21 and, if requested by the Parties and not objected to by the Generator Arbitrator, record the settlement in the form contemplated in clause 1.42.18; and
 - (b) such settlement will have the same status and effect as a Generator Arbitration Decision.
- 1.42.18. Subject to clause 1.42.17(a), on determination of the Dispute, the Generator Arbitrator must:
- (a) record the decision in writing; and
 - (b) state the reasons upon which the decision is based, unless the Parties have agreed that no reasons are to be given or the award is an award on agreed terms,
- and such determination is final and binding (the "Generator Arbitration Decision").
- 1.42.19. In relation to the costs associated with arbitral proceedings conducted under this section 1.42, unless otherwise determined by the Generator Arbitrator in accordance with clause 1.42.20:
- (a) all administrative costs will be borne equally by the Parties; and
 - (b) all legal and other costs will be borne by the Party that incurred such cost.
- 1.42.20. Notwithstanding clause 1.42.19, a Generator Arbitrator may assign any costs associated with the arbitral proceedings as they reasonably consider and in doing so must consider the following factors:
- (a) the final Generator Arbitration Decision;
 - (b) the conduct of the Parties during the arbitral proceedings;
 - (c) any prior settlement offers or positions of the Parties;
 - (d) any material public interest considerations; and
 - (e) any information or requirements in the WEM Procedure referred to in clause 1.42.10.

To avoid doubt, a Generator Arbitrator may assign costs associated with the arbitral proceedings at any stage during the arbitral proceedings and may make payment of those costs a condition to continuing proceedings.

- 1.42.21. If:
- (a) the Party requesting arbitration withdraws their request, unless another Party objects and the Generator Arbitrator recognises a legitimate interest in obtaining a final settlement of the Dispute;
 - (b) the Parties agree on the termination of the proceedings;

- (c) the Generator Arbitrator finds that the continuation of the proceedings has for any other reason become unnecessary or impossible;
- (d) the Parties fail to comply with any requirements set out by the Generator Arbitrator as a condition to continue proceedings;
- (e) the Dispute is settled as contemplated in clause 1.42.17; or
- (f) the Generator Arbitrator makes a Generator Arbitration Decision,

the arbitral proceedings terminate and the Generator Arbitrator must notify the Parties of the termination.

1.42.22. The Generator Arbitrator must publish:

- (a) the Generator Arbitration Decision;
- (b) any reasons for the Generator Arbitration Decision; and
- (c) any cost orders made in accordance with clause 1.42.20,

provided that any commercially sensitive information is redacted and the Generator Arbitrator does not publish any Confidential Information unless the disclosure is permitted under clause 1.42.24.

1.42.23. The Parties, the Generator Arbitrator, or any member of the Technical Panel of Experts must not disclose Confidential Information in relation to the Parties, the Dispute or any arbitral proceedings unless the disclosure is permitted under clause 1.42.24.

1.42.24. Confidential Information may be disclosed in the following circumstances:

- (a) where written consent has been obtained from each Party;
- (b) the disclosure is to a professional or other adviser of a Party for the purpose of the arbitral proceedings conducted under this section 1.42;
- (c) the disclosure is necessary to ensure that a Party has a reasonable opportunity to present the Party's case and the disclosure is no more than reasonable for that purpose;
- (d) the disclosure is necessary for the establishment or protection of a Party's legal rights in relation to a third party and the disclosure is no more than reasonable for that purpose;
- (e) the disclosure is for the purpose of enforcing a Generator Arbitration Decision or an associated cost order and the disclosure is no more than reasonable for that purpose;
- (f) the disclosure is in accordance with an order made or a subpoena issued by a Court; or
- (g) the disclosure or publication is authorised or required by these WEM Rules, any applicable law or required by a competent regulatory body, and the person making the disclosure gives written details of the disclosure (including an explanation of the reasons for the disclosure) to:
 - i. if the person is a Party, the other Parties and the Generator Arbitrator; and
 - ii. if the Generator Arbitrator is making the disclosure, all the Parties.

1.42.25. A Generator Arbitrator is not liable for anything done or omitted to be done in good faith in their capacity as the arbitrator of a Dispute under these WEM Rules.

- 1.42.26. Where the Coordinator appoints, fails to appoint or refuses to appoint a person as a Generator Arbitrator in respect of a Dispute under these WEM Rules, the Coordinator will not be liable in relation to the appointment, failure or refusal if done in good faith.
- 1.42.27. A Generator Arbitrator in respect of a Dispute under these WEM Rules may procure any support and services reasonably required in respect of arbitral proceedings conducted under this section 1.42 and may recover any associated costs as administrative costs associated with the arbitral proceedings.
- 1.42.28. The Coordinator must publish the process the Coordinator will follow in appointing a Primary Generator Arbitrator, Secondary Generator Arbitrators and members of the Technical Panel of Experts in the event a new Primary Generator Arbitrator, Secondary Generator Arbitrator or new appointments to the Technical Panel of Experts are considered by the Coordinator to be required after the Tranche 1 Commencement Date.

14. Section 2.1A amended

14.1 Insert the following new clause 2.1A.1A:

2.1A.1A. The function of ensuring that the SWIS operates in a secure and reliable manner for the purposes of the WEM Regulations is conferred on AEMO.

14.2 Insert the following new clause 2.1A.2(cA):

(cA) to procure adequate Ancillary Services where Synergy cannot meet the Ancillary Service Requirements;

14.3 Insert the following new clause 2.1A.2(iA):

(iA) to monitor Rule Participants' compliance with WEM Rules relating to dispatch and Power System Security and Power System Reliability;

14.4 Insert the following new clause 2.1A.2(IE):

(IE) to support each Network Operator in relation to the standard or technical level of performance in respect of a Technical Requirement applicable to Transmission Connected Generating Systems and perform the associated functions set out in Chapter 3A of these WEM Rules;

14.5 Insert the following new clause 2.1A.2(IF):

(IF) to advise and consult with each Network Operator in respect of AEMO's System Operation Functions as contemplated under the Technical Rules applicable to the Network; and

14.6 Clause 2.1A.3 is deleted and replaced with the following:

2.1A.3. AEMO may delegate any of its functions under the WEM Rules (other than the power to do the things indicated as not able to be delegated in the WEM Regulations) to a Delegate. A function performed by a Delegate is to be taken to be performed by AEMO. A Delegate performing a function under this clause 2.1A.3 is to be taken to do so in accordance with the terms of the delegation unless the contrary is shown. Nothing in this clause 2.1A.3 limits the ability of AEMO to perform a function through an officer, employee or agent.

14.7 Insert the following new clause 2.1A.4:

2.1A.4. Where AEMO appoints a Delegate, AEMO must publish on the WEM Website information as to:

- (a) the appointment of the Delegate;
- (b) the identity of the Delegate; and
- (c) the scope of the delegation, including, without limitation, the activities in relation to which the delegation applies.

14.8 Insert the following new clause 2.1A.5:

2.1A.5. Where AEMO appoints a Delegate:

- (a) AEMO may notify a Market Participant of the scope of the delegation and require that the communications from the Market Participant to AEMO are made through the Delegate; and
- (b) a Market Participant must ensure that any communications from the Market Participant to AEMO under these WEM Rules within the scope of the delegation are made through the Delegate to the extent notified to the Market Participant by AEMO.

14.9 Insert the following new clause 2.1A.6:

2.1A.6. A Delegate must carry out the relevant function, and other rights and obligations, in respect of which it has been appointed by AEMO, in accordance with the provisions of these WEM Rules, the WEM Procedures, and the instrument of delegation.

14.10 Insert the following new clause 2.1A.7:

2.1A.7. A Delegate is a "market governance participant" for the purposes of section 126 of the Electricity Industry Act to the extent that it performs a function conferred on it under clause 2.1A.3.

14.11 Insert the following new clause 2.1A.8:

2.1A.8. Notwithstanding that AEMO may have appointed a Delegate, AEMO remains liable under these WEM Rules for the performance of any function conferred on the Delegate under clause 2.1A.3.

15. **Section 2.2B amended**

15.1 Clause 2.2B.2 is deleted and replaced with the following:

2.2B.2. The WEM Regulations also provide for the WEM Rules to confer functions on the Rule Change Panel. The functions conferred on the Rule Change Panel are to:

- (a) administer these WEM Rules;
- (b) develop amendments to these WEM Rules and replacements for them;
- (c) develop WEM Procedures, and amendments and replacements for them, where required by these WEM Rules;
- (d) do anything that the Rule Change Panel determines to be conducive or incidental to the performance of the functions set out in this clause 2.2B.2; and
- (e) carry out any other functions conferred, and perform any obligations imposed, on it under these WEM Rules.

15.2 Clause 2.2B.3 is deleted.

16. Section 2.2C amended

16.1 Insert the following new clause 2.2C.1(cA):

- (cA) perform the functions in relation to the standard or technical level of performance in respect of a Technical Requirement applicable to Transmission Connected Generating Systems electrically connected to the Network that the Network Operator operates as set out in Chapter 3A and Appendix 12 of these WEM Rules;

17. Section 2.2D added

17.1 Insert the following new section 2.2D:

2.2D. Coordinator of Energy

2.2D.1. The WEM Regulations provide for the WEM Rules to confer functions on the Coordinator. The functions conferred on the Coordinator are to:

- (a) carry out the tasks necessary to establish the dispute resolution mechanism contained in section 1.42 including but not limited to the appointment of arbitrators and establishment of any expert panels;
- (b) provide any administrative services deemed necessary by the Coordinator to facilitate the referral of disputes to an arbitrator in accordance with section 1.42;
- (c) develop WEM Procedures, and amendments to and replacements for them, as required by these WEM Rules;
- (d) do anything that the Coordinator determines to be conducive or incidental to the performance of the functions set out in this clause 2.2D.1; and
- (e) carry out any other functions conferred, and perform any other obligations imposed, on the Coordinator under these WEM Rules.

18. Section 2.3 amended

18.1 Clause 2.3.5(g) is amended by deleting the words 'one member' and replacing them with the words 'two members'.

19. Section 2.4 amended

19.1 The section 2.4 heading 'Market Rules made by the Rule Change Panel' is amended by deleting the words 'Market Rules' and replacing them with the words 'WEM Rules'.

19.2 Clause 2.4.1A is deleted.

20. Section 2.4A amended

20.1 The section 2.4A heading 'Market Rules made by the Minister' is amended by deleting the words 'Market Rules' and replacing them with the words 'WEM Rules'.

21. Section 2.9 amended

21.1 The section 2.9 heading 'Market Procedures' is deleted and replaced with the words 'WEM Procedures'.

21.2 Insert the following new clause 2.9.2CB:

2.9.2CB. The Coordinator must manage the development, amendment and replacement of any WEM Procedures which these WEM Rules require be developed and maintained by the Coordinator.

21.3 Clause 2.9.3 is amended by deleting the words 'Market Procedures' and replacing them with the words 'WEM Procedures':.

22. Section 2.10 amended

22.1 Insert the following new clause 2.10.5E:

2.10.5E. The Coordinator must publish Procedure Change Proposals that the Coordinator develops.

22.2 Clause 2.10.9(aA) is amended by deleting the word 'or' at the end of the clause.

22.3 Insert the following new clause 2.10.9(aB):

(aB) the Coordinator considers that advice on the Procedure Change Proposal prepared by the Coordinator is required from the Market Advisory Committee; or

22.4 Insert the following new clause 2.10.12E:

2.10.12E. The Coordinator must publish Procedure Change Reports that the Coordinator prepares.

22.5 Clause 2.10.13(h) is amended by deleting the word 'and' at the end of the clause.

22.6 Clause 2.10.13(i) is amended by deleting the full stop at the end of the clause and replacing it with '; and'.

22.7 Insert the following new clause 2.10.13(j):

(j) in the case of a Procedure Change Proposal developed by the Coordinator, a proposed date and time for the WEM Procedure or amendment or replacement to commence, which must, in the Coordinator's opinion, allow sufficient time after the date of publication of the Procedure Change Report for Rule Participants to implement changes required by it.

22.8 Clause 2.10.17(a) is amended by deleting the word 'or' at the end of the clause.

23. Section 2.11 amended

23.1 Clause 2.11.2 is amended by inserting the words ', the Coordinator's decision' immediately after the words 'the Economic Regulation Authority's decision'.

23.2 Clause 2.11.3 is deleted and replaced with the following:

2.11.3. Subject to clauses 2.11.2 and 2.11.4, a WEM Procedure or an amendment of or replacement for a WEM Procedure commences at the time and date specified under clauses 2.10.13(f), 2.10.13(g), 2.10.13(h), 2.10.13(i) or 2.10.13(j) (as applicable).

24. Section 2.13 amended

24.1 The section 2.13 heading 'Market Rule Compliance Monitoring and Enforcement' is amended by deleting the words 'Market Rule' and replacing them with the words 'WEM Rule'.

24.2 Clause 2.13.2 is amended by deleting the words 'and System Management's'.

24.3 Clause 2.13.6A is amended by deleting the words 'Power System Operation Procedures' and replacing them with the words 'WEM Procedures developed by AEMO in respect to system operation'.

24.4 Clause 2.13.9C is deleted and replaced with the following:

2.13.9C. If AEMO becomes aware of an alleged breach of the WEM Rules (other than a provision of the WEM Rules referred to in clause 2.13.9) or the WEM Procedures developed by AEMO then, subject to clauses 3A.10.6, 3A.11.21(a), 3A.11.21(b), 3A.11.21(c) and 3A.12.2, it must notify the Economic Regulation Authority in accordance with the WEM Procedure specified in clause 2.15.6A developed by AEMO.

24.5 Clause 2.13.10 is amended by inserting the words ', subject to section 3A.12' immediately after the word 'then'.

25. Section 2.15 amended

25.1 Clause 2.15.3(f) is amended by deleting the words 'Category B or C' and replacing them with the words 'Category B or Category C'.

26. Section 2.18 amended

26.1 Clause 2.18.1(d) is amended by deleting the word 'or' at the end of the clause.

26.2 Clause 2.18.1(e) is amended by deleting the full stop at the end of the clause and replacing with '':

26.3 Insert the following new clause 2.18.1(f):

- (f) a dispute that arises in relation to:
 - i. a decision to exempt or not to exempt a Transmission Connected Generating System under section 3A.3;
 - ii. a decision by the Network Operator to refuse to renegotiate a Registered Generator Performance Standard under clause 3A.8.8;
 - iii. a decision in respect of a Rectification Plan under section 3A.11; or
 - iv. a decision to declare a Potential Relevant Generation Modification to be a Relevant Generation Modification under section 3A.13;

26.4 Insert the following new clause 2.18.1(g):

- (g) a dispute in respect of a decision by a Network Operator to grant or refuse an extension of time for a Market Participant responsible for an Existing Transmission Connected Generating System to have a Registered Generator Performance Standard for each Technical Requirement for the Existing Transmission Connected Generating System;

26.5 Insert the following new clause 2.18.1(h):

- (h) a dispute in respect of a decision by AEMO to grant or refuse an extension of time for a Market Participant responsible for an Existing Transmission Connected Generating System to:
 - i. submit a proposed Generator Monitoring Plan; or
 - ii. have a Generator Monitoring Plan approved by AEMO; or

26.6 Insert the following new clause 2.18.1(i):

- (i) a dispute which is being dealt with under the dispute resolution mechanism for Existing Transmission Connected Generating Systems contained in section 1.42.

27. Section 2.21 amended

- 27.1 Insert the following new clause 2.21.11:
- 2.21.11. The Coordinator must consult on such matters with such persons and over such timeframes as are specified in these WEM Rules.
- 27.2 Insert the following new clause 2.21.12:
- 2.21.12. The Coordinator must:
- (a) conduct its consultation processes in good faith; and
 - (b) ensure that these consultation processes allow a reasonable opportunity for relevant stakeholders to present their views.
- 28. Section 2.22A amended**
- 28.1 The section 2.22A heading 'Determination of AEMO's budget' is amended by adding a full stop immediately after the section number so that it reads '2.22A.'.
- 28.2 Clause 2.22A.1 is amended by deleting the words 'For the purposes of this section 2.22A, the services provided by AEMO are' and replacing them with the words 'For the purposes of this section 2.22A, the services provided by AEMO in performing its functions under these WEM Rules include'.
- 28.3 Clause 2.22A.1(d) is deleted and replaced with the following:
- (d) system operation services, being AEMO's performance of System Operation Functions, including its functions in respect to support for each Network Operator in relation to the standard or technical level of performance in respect of a Technical Requirement applicable to Transmission Connected Generating Systems and performance of the associated functions set out in Chapter 3A of these WEM Rules, to advise and consult with each Network Operator in respect of AEMO's System Operation Functions as contemplated under the Technical Rules for each Network and the development and submission of Technical Rules Change Proposals relating to System Operation Functions; and
- 28.4 Clause 2.22A.2 is deleted and replaced with the following:
- 2.22A.2. For the Review Period, AEMO must seek the approval of its Allowable Revenue and Forecast Capital Expenditure from the Economic Regulation Authority for the services provided by AEMO in performing its functions, including for each of the services described in clause 2.22A.1, in accordance with the following:
- (a) by 30 November of the year prior to the start of the Review Period, AEMO must submit a proposal for its Allowable Revenue and Forecast Capital Expenditure over the Review Period;
 - (b) the Economic Regulation Authority must undertake a public consultation process in approving AEMO's Allowable Revenue and Forecast Capital Expenditure for a Review Period, which must include publishing an issues paper and issuing an invitation for public submissions; and
 - (c) by 31 March of the year in which the Review Period commences, the Economic Regulation Authority must determine AEMO's Allowable Revenue and approve the Forecast Capital Expenditure of AEMO for the Review Period for the services provided by AEMO in performing its functions, including for each of the services described in clause 2.22A.1.
- 28.5 Clause 2.22A.2A is deleted and replaced with the following:

2.22A.2A. If AEMO appoints a Delegate, then its proposal for its Allowable Revenue and Forecast Capital Expenditure must separately itemise the amount payable to the Delegate.

28.6 Clause 2.22A.4 is deleted and replaced with the following:

2.22A.4. By 30 June each year, AEMO must publish on the WEM Website a budget for the services provided by AEMO in performing its functions, including for each of the services described in clause 2.22A.1, for the coming Financial Year (including, without limitation, the amount to be paid to a Delegate).

28.7 Clause 2.22A.5 is deleted and replaced with the following:

2.22A.5. By 31 October each year, AEMO must publish on the WEM Website a financial report showing AEMO's actual financial performance against its budget for the previous Financial Year (including, without limitation, the actual amount paid to a Delegate compared to the budgeted amount).

28.8 Clause 2.22A.7 is amended by:

- (a) inserting the words 'the services provided by AEMO in performing its functions, including for' immediately after the words 'Where the revenue earned for'; and
- (b) inserting a comma immediately after 'clause 2.22A.1'.

28.9 Clause 2.22A.11(b) is deleted and replaced with the following:

- (b) the Allowable Revenue and Forecast Capital Expenditure must include only costs which would be incurred by a prudent provider of the services provided by AEMO in performing its functions, including the services described in clause 2.22A.1, acting efficiently, seeking to achieve the lowest practicably sustainable cost of delivering the services provided by AEMO in performing its functions, including the services described in clause 2.22A.1, in accordance with these WEM Rules, while effectively promoting the Wholesale Market Objectives;

28.10 Clause 2.22A.11(c) is amended by inserting the words 'provided by AEMO in performing its functions' immediately after the words 'costs of providing similar services'.

28.11 Clause 2.22A.12 is deleted and replaced with the following:

2.22A.12. Subject to clauses 2.22A.13 and 2.22A.14, AEMO may declare a project to be a Declared Market Project if:

- (a) the project involves:
 - i. a major change to the function of AEMO under these WEM Rules; or
 - ii. a major change to any of the computer software or systems that AEMO uses in the performance of any of its functions under these WEM Rules; and
- (b) AEMO estimates that the sum of:
 - i. the recurring expenditure associated with the change; and
 - ii. the capital expenditure required to implement the change,would be greater than the sum of Allowable Revenue determined and Forecast Capital Expenditure approved by the Economic Regulation Authority for the current Review Period by more than 10%.

28.12 Clause 2.22A.14 is amended by:

- (a) inserting the words 'the services provided by AEMO in performing its functions, including' immediately after the words 'the Economic Regulation Authority for'; and
- (b) inserting a comma immediately after 'clause 2.22A.1'.

29. Section 2.24 amended

29.1 Clause 2.24.3(b) is amended by deleting the words 'system management services' and replacing them with the words 'system operation services'.

30. Section 2.25 amended

30.1 Clause 2.25.4 is amended by deleting the words ', AEMO (in its capacity as System Management)'.

31. Section 2.28 amended

31.1 Clause 2.28.1(cA) is amended by inserting the word 'and' at the end of the clause.

31.2 Clause 2.28.1(dA) is deleted.

31.3 Clause 2.28.14A is deleted.

32. Section 2.30C amended

32.1 Clause 2.30C.2 is deleted.

32.2 Clause 2.30C.3 is deleted.

32.3 Clause 2.30C.4 is deleted.

33. Section 2.36 amended

33.1 Clause 2.36.5 is deleted and replaced with the following:

2.36.5. AEMO must document the data and IT interface requirements, including security standards in respect of systems required for Market Participants to operate in the Wholesale Electricity Market in a WEM Procedure.

34. Section 2.36A amended

34.1 Clause 2.36A.3 is deleted and replaced with the following:

2.36A.3. Where reasonably necessary for AEMO to discharge its System Operation Functions, AEMO may direct a Network Operator to:

- (a) install communications or control systems (including to provide access to the Network Operator's SCADA system) which, in AEMO's reasonable opinion, is adequate to enable it to remotely monitor the performance of a Network (including its dynamic performance); and
- (b) upgrade, modify or replace any communications or control systems already installed in a Facility providing the existing communications or control systems are, in the reasonable opinion of AEMO, no longer fit for the intended purpose.

34.2 Clause 2.36A.4 is deleted and replaced with the following:

2.36A.4. If AEMO issues a direction under clause 2.36A.3 the Network Operator must comply with the direction within the period reasonably specified by AEMO.

35. Section 3.4 amended

35.1 Clause 3.4.1(l) is deleted and replaced with the following:

- (l) any other circumstance which would, in AEMO's reasonable opinion, threaten Power System Security or Power System Reliability.

36. Section 3.5 amended

36.1 Clause 3.5.1(h) is deleted and replaced with the following:

- (h) any other circumstance which would, in AEMO's reasonable opinion, significantly threaten Power System Security or Power System Reliability.

37. Section 3.8A added

37.1 Insert the following new section 3.8A:

3.8A. Contingency Events

3.8A.1. A Contingency Event is an event affecting the SWIS which AEMO expects would be likely to involve:

- (a) the failure or removal from operational service of one or more energy producing units, Facilities and/or Network elements; or
- (b) an unplanned change in load, Intermittent Generation or other elements of the SWIS not controlled by AEMO.

3.8A.2. A Credible Contingency Event means one or more Contingency Events, the occurrence of which AEMO considers in accordance with the WEM Procedure referred to in clause 3.8A.4 to be reasonably possible in the prevailing circumstances, taking into account the Technical Envelope. Without limitation, examples of Credible Contingency Events include:

- (a) the unexpected automatic or manual disconnection of, or the unplanned change in output of, one or more operating energy producing units or Facilities;
- (b) the unexpected disconnection of one or more major items of Network equipment; or
- (c) Non-credible Contingency Events reclassified as Credible Contingency Events in accordance with the WEM Procedure referred to in clause 3.8A.4.

3.8A.3. A Non-credible Contingency Event means a Contingency Event other than a Credible Contingency Event. Without limitation, examples of Non-credible Contingency Events include simultaneous disruptive events such as:

- (a) multiple Facility failures; or
- (b) failure of multiple items of Network equipment.

3.8A.4. AEMO must develop and maintain a WEM Procedure which sets out:

- (a) the process for determination and classification of Credible Contingency Events;
- (b) the Contingency Reclassification Conditions;

- (c) the factors that AEMO may take into account in reclassifying a Contingency Event in accordance with this section 3.8A;
- (d) the process for reclassifying a Non-credible Contingency Event as a Credible Contingency Event;
- (e) the procedures for notifying affected Rule Participants under clause 3.8A.7, including the time by which a notification must be given; and
- (f) a description of the Contingency Events that are generally considered as Credible Contingency Events, taking into consideration relevant requirements in the Technical Rules of the relevant Network Operator.

3.8A.5. AEMO must:

- (a) determine a Credible Contingency Event; and
- (b) reclassify a Non-credible Contingency Event as a Credible Contingency Event, in accordance with the WEM Procedure referred to in clause 3.8A.4.

3.8A.6. Where AEMO determines a new Credible Contingency Event, or reclassifies a Non-credible Contingency Event as a Credible Contingency Event, AEMO must:

- (a) publish the determination or reclassification on the WEM Website; and
- (b) notify affected Rule Participants in accordance with the WEM Procedure referred to in clause 3.8A.4 of all relevant information, including but not limited to:
 - i. the name of the new Credible Contingency Event;
 - ii. a description of the new Credible Contingency Event;
 - iii. any relevant timeframes in respect of the new Credible Contingency Event; and
 - iv. if applicable, the Contingency Reclassification Conditions that gave rise to the reclassification of a Non-credible Contingency Event as a Credible Contingency Event.

3.8A.7. If any of the information provided to Rule Participants in accordance with clause 3.8A.6 changes in any material respect, AEMO must publish the changes on the WEM Website and notify the affected Rule Participants in accordance with the WEM Procedure referred to in clause 3.8A.4.

38. Section 3.13 amended

38.1 Clause 3.13.3 is deleted and replaced with the following:

3.13.3. The parameters Margin_Peak and Margin_Off-Peak to be used in the settlement calculation described in clause 9.9.2 are determined by the Economic Regulation Authority in accordance with clause 3.13.3A.

39. Chapter 3A added

39.1 Insert the following new Chapter 3A:

3A. Requirements for Transmission Connected Generating Systems

3A.1. General

- 3A.1.1. A Market Participant must comply with each Registered Generator Performance Standard for a Transmission Connected Generating System from the time that they:
- (a) are issued an Approval to Generate Notification; or
 - (b) cease to be an Existing Transmission Connected Generating System as detailed in clause 1.39.13.
- 3A.1.2. If there is any inconsistency between the provisions of these WEM Rules (including Appendix 12) and the Technical Rules of the relevant Network Operator, the provisions of these WEM Rules prevail to the extent of the inconsistency.
- 3A.1.3. A Network Operator and AEMO must document a process by which they will provide each other with information, consult with each other, or reach agreement in respect of the matters in this Chapter 3A and Appendix 12 including:
- (a) the requirements for, and manner in which, they will consult with each other;
 - (b) the format, form and manner in which any information must be provided; and
 - (c) where these WEM Rules do not provide a timeframe for the provision of the information, the time by which such information must be provided.

3A.2. General Requirements to Provide Relevant Information

- 3A.2.1. A Market Participant responsible for a Transmission Connected Generating System must provide all data and information reasonably required by a Network Operator or AEMO under this Chapter 3A and relevant provisions under Appendix 12 to assess the impact of a Transmission Connected Generating System on the performance and security of the transmission system and distribution system.
- 3A.2.2. A Market Participant responsible for a Transmission Connected Generating System must ensure that the generation system model referred to in Appendix 12 complies with the requirements specified in the WEM Procedure of the relevant Network Operator referred to in clause 3A.4.2.
- 3A.2.3. Where the requirements for the generation system model are amended in the WEM Procedure referred to in clause 3A.4.2, a Market Participant responsible for a Transmission Connected Generating System must ensure that the generation system model used by the Market Participant complies with the amended requirements within the timeframes specified in the WEM Procedure for compliance with the amended requirements.

3A.3. Exempt Transmission Connected Generating Systems

- 3A.3.1. A Network Operator may, by written notice, exempt a Market Participant responsible for a Transmission Connected Generating System from all of the requirements of section 3A.1, section 3A.2, sections 3A.5 to 3A.12 and Appendix 12 in respect of a Transmission Connected Generating

System (**Exempt Transmission Connected Generating System**) where the Network Operator and AEMO agree that the cost incurred by the Market Participant responsible for the Transmission Connected Generating System to comply with Chapter 3A and Appendix 12 is reasonably likely to outweigh the benefit of requiring the Market Participant to comply having regard to:

- (a) the potential of the Transmission Connected Generating System to adversely affect Power System Security or Power System Reliability; and
- (b) the effect the proposed exemption will, if granted, have on other Market Participants.

3A.3.2. An exemption notice issued under clause 3A.3.1 must be provided to the Market Participant responsible for a Transmission Connected Generating System and the relevant Network Operator must keep a record of each exemption notice issued.

3A.3.3. A Network Operator may revoke an exemption notice issued under clause 3A.3.1 by written notice to a Market Participant responsible for the Exempt Transmission Connected Generating System where a Relevant Generator Modification is proposed to be undertaken in respect of the Exempt Transmission Connected Generating System.

3A.3.4. Where an exemption notice issued under clause 3A.3.1 is revoked under clause 3A.3.3, section 3A.14 applies.

3A.3.5. A Network Operator must notify the Economic Regulation Authority when it issues an exemption notice under clause 3A.3.1 or revokes an exemption notice under clause 3A.3.3.

3A.3.6. The Economic Regulation Authority must publish a list of Exempt Transmission Connected Generating Systems and update that list when it is notified by a Network Operator under clause 3A.3.5.

3A.4. General Obligations of a Network Operator

3A.4.1. A Network Operator must ensure its connection process as it relates to Transmission Connected Generating Systems for which a Market Participant is responsible is consistent with this Chapter 3A.

3A.4.2. A Network Operator must develop and maintain a WEM Procedure that addresses the requirements of the generation system model referred to section 17 of Appendix 12.

3A.4.3. The WEM Procedure referred to in clause 3A.4.2, must specify the timeframes by which the Market Participant must ensure that the generation system model referred to in section 17 of Appendix 12, complies with each amended requirement of the generation system model as specified in the WEM Procedure.

3A.4.4. A Network Operator may publish guidelines and provide further information to Market Participants as to how the standard or technical level of performance in respect of each Technical Requirement will be assessed for each type of generating unit.

3A.5. Generator Performance Standards for Transmission Connected Generating Systems

3A.5.1. Where a Market Participant responsible for generating works intends to connect those generating works to a transmission system, the Market Participant must submit to the relevant Network

Operator, Proposed Generator Performance Standards for the generating works as if the generating works were a Transmission Connected Generating System addressing each Technical Requirement.

- 3A.5.2. Each Proposed Generator Performance Standard submitted under clause 3A.5.1 or clause 3A.14.1(a) must meet the Common Requirements and:
- (a) be equal to or better than the Ideal Generator Performance Standard; or
 - (b) if a Proposed Negotiated Generator Performance Standard is submitted:
 - i. be no less onerous than the Minimum Performance Standard;
 - ii. demonstrate any applicable Negotiation Criteria have been met;
 - iii. meet the requirements of clause 3A.5.5; and
 - iv. if applicable, meet the requirements of clause 3A.5.6.
- 3A.5.3. The Network Operator must not approve a Proposed Generator Performance Standard that does not meet or demonstrate the applicable criteria listed in clause 3A.5.2.
- 3A.5.4. The Network Operator is not required to consult AEMO and must approve a Proposed Generator Performance Standard that is equal to or better than the Ideal Generator Performance Standard for a Technical Requirement.
- 3A.5.5. A Proposed Negotiated Generator Performance Standard must be as consistent as practicable with the corresponding Ideal Generator Performance Standard for that Technical Requirement, having regard to:
- (a) the need to protect the Transmission Connected Generating System from damage;
 - (b) power system conditions at the location of the connection or proposed connection; and
 - (c) the commercial and technical feasibility of complying with the Ideal Generator Performance Standard.
- 3A.5.6. A Proposed Negotiated Generator Performance Standard may include a Trigger Event which must address:
- (a) the conditions for determining whether the Trigger Event has occurred;
 - (b) the party responsible for determining whether the Trigger Event has occurred;
 - (c) the actions required to be taken and any revised standard or technical level of performance in respect of a Technical Requirement which must be achieved if the Trigger Event occurs;
 - (d) the maximum timeframe for compliance with any action required to be taken and each revised standard or technical level of performance in respect of a Technical Requirement following the Trigger Event;
 - (e) any requirements to provide information and supporting evidence required by the Network Operator or AEMO to demonstrate that, if the Trigger Event occurs, the actions required will occur and will deliver the agreed outcome and level of performance required by any revised standard or technical level of performance in respect of a Technical Requirement;

- (f) any testing requirements to verify compliance with each revised standard or technical level of performance in respect of a Technical Requirement; and
 - (g) any requirements necessary to verify that the actions required to be taken have occurred if the Trigger Event occurs.
- 3A.5.7. If a Registered Generator Performance Standard includes a Trigger Event and the Trigger Event subsequently occurs, the Market Participant responsible for the Transmission Connected Generating System must comply with the requirements of the Trigger Event.
- 3A.5.8. A Trigger Event contained in a Registered Generator Performance Standard may be modified by written agreement between the Market Participant responsible for the Transmission Connected Generating System, AEMO and the relevant Network Operator. For the avoidance of doubt, the process that applies to a Proposed Negotiated Generator Performance Standard in this section 3A.5 does not apply to the modification of a Trigger Event contained in a Registered Generator Performance Standard under this clause 3A.5.8.
- 3A.5.9. If a Market Participant responsible for a Transmission Connected Generating System submits to the Network Operator a Proposed Negotiated Generator Performance Standard under clause 3A.5.1 or clause 3A.14.1(a), the Market Participant responsible for the Transmission Connected Generating System must provide to the relevant Network Operator:
 - (a) the reasons and supporting evidence why the Market Participant responsible for the Transmission Connected Generating System cannot meet the Ideal Generator Performance Standard; and
 - (b) any information and supporting evidence required by the Network Operator setting out the reasons why the Proposed Negotiated Generator Performance Standard is appropriate, including:
 - i. how the Proposed Negotiated Generator Performance Standard meets the applicable criteria listed in clause 3A.5.2; and
 - ii. how the Market Participant responsible for the Transmission Connected Generating System has taken into account each of the matters listed in clause 3A.5.5.
- 3A.5.10. If, following the receipt of a Proposed Negotiated Generator Performance Standard and the information and evidence referred to in clause 3A.5.9, the Network Operator reasonably considers it will approve the Proposed Negotiated Generator Performance Standard, the Network Operator, in accordance with the process agreed under clause 3A.1.3, must:
 - (a) provide the information received from the Market Participant responsible for the Transmission Connected Generating System under clause 3A.5.9 to AEMO; and
 - (b) use best endeavours to consult with AEMO within a reasonable timeframe in relation to each Proposed Negotiated Generator Performance Standard.
- 3A.5.11. AEMO must use best endeavours to respond in a reasonable timeframe after being consulted in accordance with clause 3A.5.10 and provide a recommendation to the Network Operator whether a Proposed Negotiated Generator Performance Standard should be approved or rejected by the

Network Operator, or whether AEMO requires further information to make the recommendation in accordance with the process agreed under clause 3A.1.3.

3A.5.12. Where AEMO requires further information that it considers necessary to make the recommendation in clause 3A.5.11, the Network Operator, in accordance with the process agreed under clause 3A.1.3, must:

- (a) provide the further information that is in its possession, power or control; or
- (b) use reasonable endeavours to obtain that information from the Market Participant responsible for the Transmission Connected Generating System and provide that information to AEMO.

3A.5.13. In making a recommendation whether a Proposed Negotiated Generator Performance Standard should be approved or rejected in accordance with clause 3A.5.11, AEMO is not limited to considering information provided by the Network Operator and may use any other relevant information available to it.

3A.5.14. AEMO must recommend that the Network Operator reject a Proposed Negotiated Generator Performance Standard in accordance with clause 3A.5.11 if it reasonably considers that the Proposed Negotiated Generator Performance Standard may adversely affect Power System Security or Power System Reliability.

3A.5.15. Where AEMO recommends that the Network Operator reject a Proposed Negotiated Generator Performance Standard in accordance with clause 3A.5.11, AEMO must:

- (a) provide written reasons to the Network Operator; and
- (b) in respect of the relevant Technical Requirement, recommend that either:
 - i. if applicable, an alternative Proposed Negotiated Generator Performance Standard that AEMO considers meets the requirements of clause 3A.5.2(b), which may include a Trigger Event, is adopted; or
 - ii. otherwise, the Ideal Generator Performance Standard is adopted.

3A.5.16. Subject to clause 3A.5.17, after a Network Operator has received the recommendation from AEMO under clause 3A.5.11, the Network Operator must determine whether to approve or reject each Proposed Negotiated Generator Performance Standard proposed by the Market Participant responsible for the Transmission Connected Generating System.

3A.5.17. A Network Operator must reject a Proposed Negotiated Generator Performance Standard in accordance with clause 3A.5.16 where:

- (a) in the Network Operator's reasonable opinion:
 - i. one or more of the requirements in clause 3A.5.2(b); or
 - ii. in the case of a Relevant Generator Modification, one or more of the requirements in clause 3A.14.1,
- are not met;

- (b) AEMO has recommended in accordance with clause 3A.5.11 that the Network Operator reject the Proposed Negotiated Generator Performance Standard; or
- (c) in the Network Operator's reasonable opinion, the Proposed Negotiated Generator Performance Standard will adversely affect:
 - i. Power System Security;
 - ii. Power System Reliability;
 - iii. Power Transfer Capability; or
 - iv. the quality of supply of electricity for other users of the Network.

3A.5.18. If a Network Operator rejects a Proposed Negotiated Generator Performance Standard in accordance with clause 3A.5.16, the Network Operator must provide to the Market Participant responsible for the Transmission Connected Generating System:

- (a) written reasons for the rejection; and
- (b) if applicable, an alternative Proposed Negotiated Generator Performance Standard that the Network Operator and AEMO consider meets the requirements of clause 3A.5.2(b), which may include a Trigger Event.

3A.5.19. The Market Participant responsible for the Transmission Connected Generating System may, in relation to an alternative Proposed Negotiated Generator Performance Standard provided by the Network Operator in accordance with clause 3A.5.18(b), either:

- (a) accept the alternative Proposed Negotiated Generator Performance Standard; or
- (b) reject the alternative Proposed Negotiated Generator Performance Standard; and
 - i. propose a different alternative Proposed Negotiated Generator Performance Standard consistent with the requirements of clause 3A.5.2(b), which may include a Trigger Event, in which case the process for consideration and approval of Proposed Generator Performance Standards in this section 3A.5 applies; or
 - ii. elect to adopt the Ideal Generator Performance Standard for the relevant Technical Requirement.

3A.5.20. When a Proposed Generator Performance Standard is approved in accordance with clause 3A.5.4, clause 3A.5.16, or accepted by the Market Participant under clause 3A.5.19(a), it must be recorded by the relevant Network Operator on the Generator Register and it will be a Registered Generator Performance Standard for that Transmission Connected Generating System.

3A.6. Generator Monitoring Plans

3A.6.1. A Market Participant responsible for a Transmission Connected Generating System must:

- (a) monitor its compliance with the Registered Generator Performance Standards for the Transmission Connected Generation System;
- (b) once issued an Approval to Generate Notification, have a Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System at all times; and

- (c) comply with the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System on and from the date specified in the Generator Monitoring Plan approved by AEMO.

3A.6.2. AEMO must develop and maintain a WEM Procedure which includes:

- (a) a Template Generator Monitoring Plan which details:
 - i. how a Market Participant responsible for a Transmission Connected Generating System must monitor performance against the applicable Registered Generator Performance Standards including any testing and verification requirements;
 - ii. the record keeping obligations relating to monitoring compliance with Registered Generator Performance Standards; and
 - iii. the information and data provision obligations a Market Participant responsible for a Transmission Connected Generating System must comply with when requested by AEMO, the Network Operator or the Economic Regulation Authority, including the form by which that information and data must be provided;
- (b) the assessment and approval process to be followed by AEMO for a proposed Generator Monitoring Plan submitted by a Market Participant responsible for a Transmission Connected Generating System;
- (c) the process by which a Market Participant responsible for a Transmission Connected Generating System must report any alleged non-compliance or suspected non-compliance with the applicable Registered Generator Performance Standards and the applicable Generator Monitoring Plan approved by AEMO;
- (d) the process by which a Market Participant responsible for a Transmission Connected Generating System must report that it has not met or complied with, or may not be able to meet or comply with an approved Rectification Plan in accordance with clause 3A.11.9; and
- (e) the process by which a Market Participant responsible for a Transmission Connected Generating System must submit proposed updates and amendments to a Generator Monitoring Plan approved by AEMO and the assessment process to be followed by AEMO for such updates and amendments.

3A.6.3. AEMO must classify Generator Monitoring Plans and information relating to Generator Monitoring Plans including outcomes, reporting data and supporting evidence relating to a Generator Monitoring Plan as Rule Participant Network Restricted information.

3A.6.4. A Market Participant responsible for a Transmission Connected Generating System must submit a proposed Generator Monitoring Plan to AEMO for approval in accordance with any requirements for submission in the WEM Procedure referred to in clause 3A.6.2 for each Transmission Connected Generating System that either:

- (a) meets the requirements of the Template Generator Monitoring Plan set out in the WEM Procedure referred to in clause 3A.6.2 as applicable to the Transmission Connected Generating System; or

- (b) meets the requirements of the Template Generator Monitoring Plan as applicable to the Transmission Connected Generating System, other than in respect of variations that the Market Participant reasonably considers are required on the basis that compliance is not possible, or where doing so would impose unreasonable costs on the Market Participant.
- 3A.6.5. AEMO must approve a proposed Generator Monitoring Plan if:
 - (a) it meets the requirements of the Template Generator Monitoring Plan set out in the WEM Procedure referred to in clause 3A.6.2 as applicable to the Transmission Connected Generating System; or
 - (b) AEMO considers any variations from the Template Generator Monitoring Plan as applicable to the Transmission Connected Generating System are:
 - i. required on the basis that compliance is not possible, or where doing so would impose unreasonable costs on the Market Participant; and
 - ii. not likely to endanger the safety of any person, damage equipment or breach any applicable law, or pose a threat to Power System Security or Power System Reliability.
- 3A.6.6. AEMO may reject a proposed Generator Monitoring Plan if AEMO reasonably considers that:
 - (a) the proposed Generator Monitoring Plan does not meet the requirements of clause 3A.6.5(a);
 - (b) the proposed Generator Monitoring Plan is likely to pose a safety risk or threat to Power System Security or Power System Reliability; or
 - (c) any proposed variations from the Template Generator Monitoring Plan as applicable to the Transmission Connected Generating System do not meet the requirements of clause 3A.6.5(b).
- 3A.6.7. AEMO may, but is not required to, consult the relevant Network Operator in respect of a proposed Generator Monitoring Plan submitted to AEMO for approval under clause 3A.6.4 or clause 3A.14.1(b).
- 3A.6.8. Where AEMO rejects a proposed Generator Monitoring Plan in accordance with clause 3A.6.6, AEMO:
 - (a) must provide to the Market Participant responsible for the Transmission Connected Generating System written reasons for the rejection; and
 - (b) may request amendments to the proposed Generator Monitoring Plan that it considers are required to meet the requirements of clause 3A.6.5(a) or clause 3A.6.5(b) as the case may be.
- 3A.6.9. If the Template Generator Monitoring Plan as applicable to a Transmission Connected Generating System is amended, the Market Participant responsible for the Transmission Connected Generating System must submit an amended proposed Generator Monitoring Plan to AEMO for approval in accordance with clause 3A.6.4 within six months of the amendment to the Template Generator Monitoring Plan taking effect.

- 3A.6.10. A Market Participant responsible for a Transmission Connected Generating System may submit an amended proposed Generator Monitoring Plan to AEMO for approval at any time in accordance with the WEM Procedure referred to in clause 3A.6.2.
- 3A.6.11. Where a Market Participant responsible for a Transmission Connected Generating System submits an amended proposed Generator Monitoring Plan to AEMO for approval in accordance with clause 3A.6.9 or clause 3A.6.10, then clauses 3A.6.5 to 3A.6.8 apply.
- 3A.6.12. Where AEMO approves a Generator Monitoring Plan, AEMO must provide:
- (a) notification of its approval of a Generator Monitoring Plan to the Market Participant responsible for the Transmission Connected Generating System; and
 - (b) each Generator Monitoring Plan approved by AEMO to the relevant Network Operator, and the Network Operator must update the Generator Register to include the most recent Generator Monitoring Plan approved by AEMO.
- 3A.6.13. Subject to clause 3A.6.14 and clause 3A.6.15, the Economic Regulation Authority, AEMO or the relevant Network Operator may request that a Market Participant responsible for a Transmission Connected Generating System provide the outcomes, reporting data and supporting evidence in respect of a Generator Monitoring Plan that has been approved by AEMO.
- 3A.6.14. AEMO may only request the information described in clause 3A.6.13 from a Market Participant if AEMO reasonably considers that the information will assist it to meet any of its functions or discharge any of its obligations under these WEM Rules.
- 3A.6.15. A Network Operator may only request the information described in clause 3A.6.13 from a Market Participant if the Network Operator reasonably considers that the information will assist it to meet any of its functions or discharge any of its obligations under these WEM Rules.
- 3A.6.16. A Market Participant responsible for a Transmission Connected Generating System must provide the outcomes, reporting data and supporting evidence relating to a Generator Monitoring Plan within five Business Days, or longer period if agreed, of a request by the Economic Regulation Authority, AEMO or the Network Operator made in accordance with clause 3A.6.13.
- 3A.6.17. Nothing in this Chapter 3A prevents AEMO, the Economic Regulation Authority or the relevant Network Operator from undertaking monitoring activities in respect of compliance with the Registered Generator Performance Standards for a Transmission Connected Generating System.

3A.7. Generator Register

- 3A.7.1. A Network Operator must establish and maintain a register of each Registered Generator Performance Standard for each Transmission Connected Generating System connected to its Network (Generator Register).
- 3A.7.2. A Market Participant must provide the relevant Network Operator any information requested and reasonably required by the Network Operator to establish and maintain a Generator Register in accordance with this section 3A.7.

- 3A.7.3. A Generator Register may include any information considered relevant by the Network Operator and must record, at a minimum, for each Transmission Connected Generating System other than an Exempt Transmission Connected Generating System:
- (a) the status of connection of the generating works to the relevant Network;
 - (b) details of the Facility and the Market Participant responsible for the Transmission Connected Generating System including the registered name of the Facility and the Market Participant's registered name;
 - (c) full details of each Registered Generator Performance Standard for each generating unit or component of the generating works forming part of the Transmission Connected Generating System, including Trigger Events;
 - (d) the generation system model used and provided by the Market Participant responsible for the Transmission Connected Generating System and referred to in clause 3A.2.2; and
 - (e) each Generator Monitoring Plan approved by AEMO.
- 3A.7.4. A Network Operator must update the Generator Register:
- (a) in respect of a proposed Transmission Connected Generating System after the Arrangement for Access has been executed by all relevant parties and prior to an Interim Approval to Generate Notification being issued for the proposed Transmission Connected Generating System; and
 - (b) as required from time to time when the information referred to in clause 3A.7.2 is updated or otherwise to ensure it remains accurate and up to date.
- 3A.7.5. A Market Participant responsible for a Transmission Connected Generating System must notify the relevant Network Operator as soon as reasonably practicable of:
- (a) any changes in respect of the:
 - i. generating works;
 - ii. Registered Generator Performance Standards;
 - iii. generation system model;
 - iv. Market Participant responsible for the Transmission Connected Generating System; or
 - (b) any other information in respect of the Transmission Connected Generating System, that would render the information (other than the Generator Monitoring Plan approved by AEMO), recorded in the Generator Register being inaccurate or out of date.
- 3A.7.6. AEMO must classify a Generator Register as Rule Participant Network Restricted information.
- 3A.7.7. A Network Operator must make the Generator Register available to:
- (a) AEMO in accordance with the process agreed pursuant to clause 3A.1.3;
 - (b) a Market Participant, but only in respect of the information that relates to a Transmission Connected Generating System the Market Participant is responsible for; and

(c) the Economic Regulation Authority.

3A.8. Commissioning, Interim Approval to Generate Notification and Approval to Generate Notification

- 3A.8.1. A Market Participant responsible for a Transmission Connected Generating System must not generate electricity without an approved Commissioning Test Plan unless it has a valid Interim Approval to Generate Notification (with or without conditions) or an Approval to Generate Notification.
- 3A.8.2. A Network Operator may only issue an Interim Approval to Generate Notification without conditions to a Market Participant responsible for a Transmission Connected Generating System, where the Network Operator and AEMO consider the Transmission Connected Generating System has not demonstrated non-compliance based on observed performance with the applicable Registered Generator Performance Standards and there are no observed risks to Power System Security or Power System Reliability.
- 3A.8.3. Subject to clause 3A.8.4, a Network Operator may, in its discretion and with the approval of AEMO:
- (a) issue an Interim Approval to Generate Notification with conditions to a Market Participant responsible for a Transmission Connected Generating System; or
 - (b) place conditions on an Interim Approval to Generate Notification issued under clause 3A.8.2.
- 3A.8.4. A Network Operator may only issue and place conditions on an Interim Approval to Generate Notification under clause 3A.8.3 where AEMO and the Network Operator:
- (a) either:
 - i. do not consider the Transmission Connected Generating System is demonstrating compliance based on observed performance with the applicable Registered Generator Performance Standards; or
 - ii. consider that conditions are required to mitigate any observed risks to Power System Security or Power System Reliability; and
 - (b) consider the Transmission Connected Generating System is reasonably likely to resolve any performance issues and be compliant with the applicable Registered Generator Performance Standards in the future.
- 3A.8.5. Prior to being issued an Approval to Generate Notification, if a Market Participant responsible for a Transmission Connected Generating System is not meeting the applicable Registered Generator Performance Standards or complying with the applicable conditions, the Market Participant responsible for the Transmission Connected Generating System must:
- (a) immediately notify AEMO and provide details of the non-compliance; and
 - (b) either:
 - i. make any modification required to comply with the conditions and meet the applicable Registered Generator Performance Standards within the timeframe

- specified by the Network Operator or, if a Rectification Plan is required under clause 3A.8.7, within the timeframe specified in the approved Rectification Plan; or
- ii. as soon as practicable request to renegotiate any applicable Registered Generator Performance Standards it is unable to meet in which case clause 3A.8.8 applies.
- 3A.8.6. Where AEMO is notified under clause 3A.8.5(a), AEMO must advise the relevant Network Operator as soon as reasonably practicable.
- 3A.8.7. Where a Network Operator is notified under clause 3A.8.6, the Network Operator may, with the approval of AEMO, require a Market Participant responsible for the Transmission Connected Generating System to submit a Rectification Plan for approval in accordance with section 3A.11.
- 3A.8.8. A Network Operator may, in its discretion and with the approval of AEMO, agree to a request made under clause 3A.8.5(b)(ii) to renegotiate a Registered Generator Performance Standard for a Transmission Connected Generating System where the Network Operator and AEMO agree the Market Participant responsible for the Transmission Connected Generating System will be able to meet and comply with an alternative standard or technical level of performance in respect of the Technical Requirement that meets the applicable criteria listed in clause 3A.5.2, in which case the process for consideration and approval of Proposed Generator Performance Standards in section 3A.5 applies.
- 3A.8.9. If a Network Operator refuses a request made under clause 3A.8.5(b)(ii) to renegotiate a Registered Generator Performance Standard for a Transmission Connected Generating System or an alternative standard or technical level of performance in respect of the Technical Requirement cannot be agreed between the Network Operator, AEMO and the Market Participant responsible for the Transmission Connected Generating System, the Market Participant must comply with the applicable Registered Generator Performance Standards previously approved as recorded in the Generator Register within the timeframe specified by the Network Operator.
- 3A.8.10. A Network Operator may, with AEMO's approval, revoke an Interim Approval to Generate Notification issued under clause 3A.8.2 or clause 3A.8.3 where the Network Operator reasonably considers that:
- (a) the performance of the Transmission Connected Generating System differs from the applicable Registered Generator Performance Standards; or
 - (b) the conditions placed on an Interim Approval to Generate Notification have not been met or complied with,
- and the Market Participant responsible for the Transmission Connected Generating System has not complied with the requirements in clause 3A.8.5(b).
- 3A.8.11. A Network Operator must issue an Approval to Generate Notification to a Market Participant responsible for a Transmission Connected Generating System where:
- (a) a Generator Monitoring Plan for the Transmission Connected Generating System has been approved by AEMO under clause 3A.6.5 and the Network Operator has included it in the Generator Register;

- (b) the operational performance of the Transmission Connected Generating System is considered satisfactory to both the Network Operator and AEMO; and
- (c) AEMO and the Network Operator consider the Market Participant responsible for the Transmission Connected Generating System has met the requirements of, and indicated compliance with, the applicable Registered Generator Performance Standards in accordance with the WEM Procedure referred to in clause 3A.9.1.

3A.9. Testing and Compliance

- 3A.9.1. AEMO must develop and maintain a WEM Procedure which sets out the testing requirements and how compliance with:
- (a) Registered Generator Performance Standards will be verified, including tests required before an Interim Approval to Generate Notification and an Approval to Generate Notification is issued; and
 - (b) a Generator Monitoring Plan is measured and verified.
- 3A.9.2. Where AEMO reasonably considers a Market Participant responsible for a Transmission Connected Generating System may not be compliant with the applicable Registered Generator Performance Standards, it must notify the Market Participant and request an explanation from the Market Participant.
- 3A.9.3. The Market Participant must submit the explanation requested under clause 3A.9.2 within five Business Days of receiving the request unless a longer period is agreed by AEMO.
- 3A.9.4. AEMO must consider the explanation and, if it is not satisfied with the explanation, AEMO may require the Market Participant to undertake testing in accordance with the WEM Procedure referred to in clause 3A.9.1 to determine whether the Transmission Connected Generating System is compliant with the applicable Registered Generator Performance Standard.
- 3A.9.5. Where AEMO requires a Market Participant responsible for a Transmission Connected Generating System to undertake testing under clause 3A.9.4, the Market Participant must use best endeavours to agree an appropriate timeframe with AEMO for the testing to occur in accordance with the WEM Procedure referred to in clause 3A.9.1.
- 3A.9.6. A Market Participant responsible for a Transmission Connected Generating System must provide any information and data requested by AEMO to enable compliance monitoring and testing to be undertaken in respect of the applicable Registered Generator Performance Standards, the Generator Monitoring Plan approved by AEMO or any approved Rectification Plan for the Transmission Connected Generating System in the format and by the time reasonably required by AEMO.
- 3A.9.7. Notwithstanding that a Market Participant responsible for a Transmission Connected Generating System may propose a Rectification Plan in accordance with section 3A.11, a Market Participant must seek to rectify any non-compliance with the Registered Generator Performance Standards or the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System as soon as possible.

3A.10. Self-Reporting Regime

- 3A.10.1. A Market Participant responsible for a Transmission Connected Generating System, other than if the Transmission Connected Generating System is operating under an Interim Approval to Generate Notification must, acting in good faith, notify AEMO:
- (a) immediately after becoming aware of a non-compliance or suspected non-compliance with:
 - i. an applicable Registered Generator Performance Standard; or
 - ii. the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System; and
 - (b) as soon as practicable whether or not it intends to propose a Rectification Plan in accordance with clause 3A.11.1 in respect of a non-compliance or suspected non-compliance with:
 - i. an applicable Registered Generator Performance Standard; or
 - ii. the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System.
- 3A.10.2. A Market Participant responsible for a Transmission Connected Generating System must, acting in good faith, notify AEMO as soon as practicable:
- (a) where it is aware that the Transmission Connected Generating System will be unable to respond or provide the full range of response in accordance with its Registered Generator Performance Standards; or
 - (b) where it is aware that it is likely to become non-compliant with the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System.
- 3A.10.3. If a Network Operator reasonably considers a Market Participant responsible for a Transmission Connected Generating System may not have been, or may not be, compliant with any applicable Registered Generator Performance Standard it must notify AEMO, who must consider whether the Market Participant responsible for the Transmission Connected Generating System may not have been, or may not be, compliant with the applicable Registered Generator Performance Standard.
- 3A.10.4. Other than where AEMO is notified in accordance with clause 3A.10.1, where AEMO reasonably considers that a Market Participant responsible for a Transmission Connected Generating System may not have been, or may not be, compliant with the applicable Registered Generator Performance Standards or Generator Monitoring Plan, AEMO must notify the Market Participant before notifying any other party in accordance with clause 3A.10.6.
- 3A.10.5. Where a Market Participant responsible for a Transmission Connected Generating System is notified by AEMO under clause 3A.10.4, it must, as soon as practicable, notify AEMO whether it intends to propose a Rectification Plan in respect of the non-compliance or suspected non-compliance.
- 3A.10.6. Subject to clause 3A.10.4, AEMO must, other than if the Transmission Connected Generating System is operating under an Interim Approval to Generate Notification, as soon as practicable, notify the Economic Regulation Authority and the relevant Network Operator of:

- (a) any instances where AEMO reasonably considers that a Market Participant responsible for a Transmission Connected Generating System, may not have been, or may not be, compliant with the Registered Generator Performance Standards or Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System; and
- (b) whether the Market Participant responsible for the Transmission Connected Generating System has indicated an intention to propose a Rectification Plan in respect of the non-compliance or suspected non-compliance in accordance with clause 3A.10.5 or clause 3A.11.1.

To avoid doubt, AEMO may notify the Economic Regulation Authority and the relevant Network Operator of each of the matters in this clause 3A.10.6 separately.

3A.11. Rectification Plans

3A.11.1. A Market Participant responsible for a Transmission Connected Generating System, may submit a proposed Rectification Plan for consideration by AEMO within 10 Business Days, unless a longer period is otherwise agreed between the parties, after becoming aware of a non-compliance or suspected non-compliance with the Registered Generator Performance Standards or the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System.

3A.11.2. A proposed Rectification Plan must at a minimum include:

- (a) the nature of the non-compliance or suspected non-compliance to be addressed by the proposed Rectification Plan;
- (b) the time by which the Market Participant responsible for the Transmission Connected Generating System expects to become compliant with the applicable Registered Generator Performance Standards or the Generator Monitoring Plan approved by AEMO, as applicable;
- (c) the actions that the Market Participant responsible for the Transmission Connected Generating System must take to become compliant with the applicable Registered Generator Performance Standards or the Generator Monitoring Plan approved by AEMO, as applicable; and
- (d) what testing will be undertaken to establish compliance with the applicable Registered Generator Performance Standards or alternative means of monitoring that may be undertaken to address the non-compliance or suspected non-compliance with the Generator Monitoring Plan approved by AEMO, as applicable.

3A.11.3. AEMO must use best endeavours to respond to a Market Participant within 10 Business Days in respect of a proposed Rectification Plan submitted under clause 3A.11.1:

- (a) approving the proposed Rectification Plan;
- (b) rejecting the proposed Rectification Plan and providing the reason for rejection, including, if applicable, any reasons provided by the relevant Network Operator in accordance with clause 3A.11.7;

- (c) seeking further information necessary for AEMO to assess the suitability of the proposed Rectification Plan; or
 - (d) proposing an alternative Rectification Plan if AEMO and the Network Operator consider an alternative Rectification Plan would be acceptable.
- 3A.11.4. A Rectification Plan will only be binding on a Market Participant responsible for the Transmission Connected Generating System where AEMO has approved the proposed Rectification Plan or, in the case of an alternative Rectification Plan proposed by AEMO, that Rectification Plan has been accepted by the Market Participant.
- 3A.11.5. Before AEMO may approve a proposed Rectification Plan that relates to a non-compliance or suspected non-compliance with the applicable Registered Generator Performance Standards, AEMO must consult with the relevant Network Operator on the proposed Rectification Plan.
- 3A.11.6. A Network Operator must use best endeavours to respond to AEMO, when consulted in accordance with clause 3A.11.5, within five Business Days recommending whether to approve or reject the proposed Rectification Plan.
- 3A.11.7. If a Network Operator recommends the proposed Rectification Plan is rejected under clause 3A.11.6, the Network Operator must provide reasons to AEMO for the rejection and AEMO must reject the proposed Rectification Plan in accordance with clause 3A.11.3.
- 3A.11.8. AEMO must notify and provide the Economic Regulation Authority with a copy of any Rectification Plan approved by AEMO, other than where a Rectification Plan is required under clause 3A.8.7, as soon as practicable after the Rectification Plan is approved.
- 3A.11.9. If a Market Participant responsible for a Transmission Connected Generating System has not complied, or reasonably considers that it is unable to meet or comply with the requirements of an approved Rectification Plan it must notify AEMO as soon as reasonably practicable and may propose an amendment to the approved Rectification Plan.
- 3A.11.10. Where a Market Participant responsible for a Transmission Connected Generating System considers that compliance with an approved Rectification Plan will endanger the safety of any person, damage equipment or breach any applicable law or threaten Power System Security or Power System Reliability, it must immediately notify AEMO and provide:
 - (a) details of the actions required by the Rectification Plan that pose the safety risk or threat to Power System Security or Power System Reliability; and
 - (b) propose amendments to the Rectification Plan to address the safety risk or threat to Power System Security or Power System Reliability.
- 3A.11.11. If a Market Participant responsible for a Transmission Connected Generating System proposes an amendment to an approved Rectification Plan, AEMO may:
 - (a) subject to clause 3A.11.13, approve the proposed amendment to the Rectification Plan; or
 - (b) reject the proposed amendment to the Rectification Plan and, at AEMO's discretion, propose an alternative amendment to the Rectification Plan if it considers a suitable

alternative is available, which must be accepted or rejected by the Market Participant within five Business Days or such longer period agreed by AEMO, and

notify the Market Participant as soon as practicable of its decision under this clause 3A.11.11.

- 3A.11.12. If a proposed amendment to an approved Rectification Plan is rejected by AEMO and an alternative amendment to the Rectification Plan is proposed by AEMO in accordance with clause 3A.11.11(b), it will be deemed to be rejected by the Market Participant if the Market Participant does not notify AEMO that it accepts or rejects the alternative amendment proposed by AEMO within the required timeframe.
- 3A.11.13. Before AEMO may approve a proposed amendment to an approved Rectification Plan that relates to a non-compliance or suspected non-compliance with the applicable Registered Generator Performance Standards under clause 3A.11.11(a), AEMO must use best endeavours to consult with, and obtain approval from, the relevant Network Operator regarding the proposed amendment within 10 Business Days.
- 3A.11.14. A Network Operator must use best endeavours to respond to AEMO, when consulted in accordance with clause 3A.11.13, within five Business Days recommending the proposed amendment to the Rectification Plan is either approved or rejected.
- 3A.11.15. Where a Market Participant responsible for a Transmission Connected Generating System proposes an amendment to an approved Rectification Plan under clause 3A.11.9, the Market Participant must continue to comply with the requirements of the approved Rectification Plan until such time as any amendment is approved by AEMO, the Rectification Plan has been completed or AEMO advises that the Market Participant can suspend compliance while the proposed amendment is considered.
- 3A.11.16. Where a Market Participant responsible for a Transmission Connected Generating System proposes an amendment to an approved Rectification Plan under clause 3A.11.10(b), the Market Participant is only required to comply with the requirements of the approved Rectification Plan that do not pose a safety risk or threat to Power System Security or Power System Reliability unless AEMO advises that the Market Participant can suspend compliance while the proposed amendment is considered.
- 3A.11.17. Other than where a Rectification Plan is required under clause 3A.8.7, AEMO must notify and provide the Economic Regulation Authority with the detail of any approved amendment to a Rectification Plan as soon as practicable after the amendment is approved.
- 3A.11.18. A Market Participant responsible for a Transmission Connected Generating System must comply with an approved Rectification Plan. For the avoidance of doubt, references to an approved Rectification Plan are taken to include any amendments approved by AEMO to the Rectification Plan.
- 3A.11.19. Subject to clause 3A.11.20, if AEMO reasonably considers a Market Participant responsible for a Transmission Connected Generating System has not complied, or is not complying, with the requirements of an approved Rectification Plan, AEMO may cancel the Rectification Plan by written notice to that Market Participant.

- 3A.11.20. Before AEMO may cancel an approved Rectification Plan that relates to a non-compliance or suspected non-compliance with the applicable Registered Generator Performance Standards in accordance with clause 3A.11.19, AEMO must consult with, and obtain approval from, the relevant Network Operator.
- 3A.11.21. AEMO must, other than where a Rectification Plan is required under clause 3A.8.7, notify the Economic Regulation Authority as soon as practicable if:
- (a) a Market Participant responsible for a Transmission Connected Generating System does not propose a Rectification Plan within the timeframe in clause 3A.11.1;
 - (b) AEMO rejects a proposed Rectification Plan in accordance with clause 3A.11.3(b) and does not consider an alternative Rectification Plan would be acceptable or such alternative Rectification Plan has not been accepted by the Market Participant responsible for the Transmission Connected Generating System;
 - (c) AEMO cancels a Rectification Plan in accordance with clause 3A.11.19; or
 - (d) AEMO considers a Market Participant responsible for a Transmission Connected Generating System has complied with, and completed, an approved Rectification Plan and is compliant with:
 - i. the applicable Registered Generator Performance Standards, where the Rectification Plan relates to the applicable Registered Generator Performance Standards; or
 - ii. the Generator Monitoring Plan approved by AEMO, where the Rectification Plan relates to a Generator Monitoring Plan.

3A.12. Effect of a Rectification Plan

- 3A.12.1. Notwithstanding the requirements of this Chapter 3A and Appendix 12, and subject to clause 3A.12.3, a Market Participant responsible for a Transmission Connected Generating System will not breach these WEM Rules in respect of a non-compliance or suspected non-compliance with the Registered Generator Performance Standards or a Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System where a Rectification Plan in respect of the non-compliance or suspected non-compliance:
- (a) has been submitted and approved by AEMO in accordance with section 3A.11 and the Market Participant is complying with the requirements of the approved Rectification Plan;
 - (b) has been submitted and approved by AEMO in accordance with section 3A.11 and the Market Participant has complied with, and completed, the approved Rectification Plan and is compliant with:
 - i. the applicable Registered Generator Performance Standards, where the Rectification Plan relates to the applicable Registered Generator Performance Standards; or
 - ii. the Generator Monitoring Plan approved by AEMO, where the Rectification Plan relates to a Generator Monitoring Plan;

- (c) is being developed by the Market Participant in accordance with clause 3A.11.1 and the Market Participant has advised AEMO that it intends to submit a Rectification Plan; or
- (d) has been submitted by the Market Participant in accordance with clause 3A.11.1 and is being considered by AEMO in accordance with section 3A.11.

3A.12.2. AEMO must notify the Economic Regulation Authority of an alleged non-compliance or suspected non-compliance with a Registered Generator Performance Standard or Generator Monitoring Plan approved by AEMO for which a Rectification Plan has been submitted, other than where a Rectification Plan is required under clause 3A.8.7, as soon as practicable if AEMO considers the alleged non-compliance or suspected non-compliance threatens Power System Security or Power System Reliability.

3A.12.3. The immunity in clause 3A.12.1 will not apply and the Economic Regulation Authority must investigate an alleged non-compliance or suspected non-compliance of the Registered Generation Performance Standards or the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System as a breach of clause 3A.1.1 or clause 3A.6.1 in accordance with clause 2.13.10 where:

- (a) the Economic Regulation Authority has been notified by AEMO in accordance with clause 3A.12.2;
- (b) the Market Participant has repeatedly failed to comply with the same Registered Generator Performance Standard or another applicable Registered Generator Performance Standard; or
- (c) the Market Participant has repeatedly failed to comply with the Generator Monitoring Plan approved by AEMO for the Transmission Connected Generating System.

3A.13. Potential Relevant Generator Modifications

3A.13.1. Potential Relevant Generator Modification means for the purposes of Chapter 3A, a modification to a generating unit or generating works that are part of a Transmission Connected Generating System or Exempt Transmission Connected Generating System that:

- (a) has the potential to materially impact or change any of the characteristics, performance or capacity of the generating unit or generating works in respect of a Technical Requirement;
- (b) has the potential to alter the capacity of the Transmission Connected Generating System or Exempt Transmission Connected Generating System in respect of any Technical Requirement for which the Ideal Generator Performance Standard has been amended since the applicable Registered Generator Performance Standard was approved;
- (c) is reasonably considered to require an amendment to the Arrangement for Access for the Transmission Connected Generating System or Exempt Transmission Connected Generating System; or
- (d) requires submission of a connection application in accordance with a Network Operator's policy for access to its Network,

but does not include the replacement of equipment where the capacity of the Transmission Connected Generating System to meet the Registered Generator Performance Standard remains unchanged as a result of the replacement of equipment.

- 3A.13.2. A Network Operator, in consultation with AEMO, must develop, maintain and publish guidelines to inform Market Participants and provide examples of:
- (a) Potential Relevant Generator Modifications; and
 - (b) circumstances and situations in which a Potential Relevant Generator Modification may be declared a Relevant Generator Modification,
- for the purposes of Chapter 3A and Appendix 12.
- 3A.13.3. A Market Participant responsible for a Transmission Connected Generating System or an Exempt Transmission Connected Generating System must notify the relevant Network Operator prior to undertaking a Potential Relevant Generator Modification.
- 3A.13.4. Subject to clause 3A.13.5 and clause 3A.13.6, a Network Operator may declare a Potential Relevant Generator Modification to be a Relevant Generator Modification.
- 3A.13.5. Where a Network Operator is notified of a Potential Relevant Generator Modification in accordance with clause 3A.13.3, it must:
- (a) consult with AEMO before making a decision whether or not to declare the Potential Relevant Generator Modification a Relevant Generator Modification under clause 3A.13.4; and
 - (b) make the decision whether or not to declare the Potential Relevant Generator Modification a Relevant Generator Modification as soon as practicable.
- 3A.13.6. A Network Operator must declare a Potential Relevant Generator Modification to be a Relevant Generator Modification where AEMO advises the Network Operator under clause 3A.13.5 that the Potential Relevant Generator Modification should be declared a Relevant Generator Modification.
- 3A.13.7. If a Network Operator declares a Potential Relevant Generator Modification to be a Relevant Generator Modification in accordance with clause 3A.13.4, the Network Operator must notify the Market Participant responsible for the Transmission Connected Generating System or Exempt Transmission Connected Generating System.
- 3A.13.8. If, following consultation with AEMO in accordance with clause 3A.13.5, a Network Operator does not intend to declare the Potential Relevant Generator Modification to be a Relevant Generator Modification:
- (a) the Network Operator must notify the Market Participant responsible for the Transmission Connected Generating System or Exempt Transmission Connected Generating System; and
 - (b) the Market Participant may undertake the Potential Relevant Generator Modification as notified by the Network Operator subject to any other requirements or obligations that apply to the Market Participant under its Arrangement for Access, the Access Code, the Technical Rules applicable to the Network or any applicable law.

3A.14. Relevant Generator Modifications

3A.14.1. If a Network Operator declares a Potential Relevant Generator Modification to be a Relevant Generator Modification in accordance with clause 3A.13.4 the Market Participant responsible for the Transmission Connected Generating System or Exempt Transmission Connected Generating System must submit:

- (a) Proposed Generator Performance Standards, or revised Proposed Generator Performance Standards, addressing each Technical Requirement affected by the Relevant Generator Modification in accordance with clause 3A.5.2 prior to undertaking the Relevant Generator Modification; and
- (b) a proposed Generator Monitoring Plan, or revised proposed Generator Monitoring Plan, to AEMO for approval by the timeframe notified by the Network Operator that meets the requirements in clause 3A.6.4,

for the Transmission Connected Generating System or Exempt Transmission Connected Generating System.

3A.14.2. Where a Market Participant submits Proposed Generator Performance Standards or revised Proposed Generator Performance Standards under clause 3A.14.1(a), the process for consideration and approval of Proposed Generator Performance Standards in section 3A.5 applies.

3A.14.3. Where a Market Participant submits a proposed Generator Monitoring Plan or a revised Generator Monitoring Plan in accordance with clause 3A.14.1(b), the process for consideration and approval of a proposed Generator Monitoring Plan in section 3A.6 applies.

3A.14.4. Where the Network Operator has declared a Relevant Generator Modification, the Network Operator may:

- (a) on and from the date that works in respect of the Relevant Generator Modification are scheduled to be undertaken or commence, revoke the Transmission Connected Generating System's Approval to Generate Notification; or
- (b) require the Transmission Connected Generating System to conduct Commissioning Tests and, if the Network Operator is not satisfied with the results of the Commissioning Tests, revoke the Transmission Connected Generating System's Approval to Generate Notification,

and require the Market Participant to obtain an Interim Approval to Generate Notification (with or without conditions) or an Approval to Generate Notification, and the process in section 3A.8, as relevant, applies.

40. Chapter 3B added

40.1 Insert the following new Chapter 3B:

3B. Frequency Operating Standards

3B.1. Frequency Operating Standard responsibility

3B.1.1. Notwithstanding section 3B.3, AEMO must use reasonable endeavours to:

- (a) ensure the SWIS is operated with a SWIS Frequency of 50 Hz except under Controlled Circumstances; and
- (b) achieve the Frequency Operating Standards set out in this Chapter 3B.

3B.1.2. The Frequency Operating Standards set out in this Chapter 3B only apply to Embedded Systems and Disconnected Microgrids when they are connected to the SWIS.

3B.2. Frequency Bands

3B.2.1. The Normal Operating Frequency Band is the normal frequency operating range set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.2.2. The Normal Operating Frequency Excursion Band is an allowable frequency operating range where no action or response is required by AEMO for infrequent or momentary excursions outside of the Normal Operating Frequency Band. The frequency operating range and duration are set out in Table 1, Appendix 13 for the SWIS.

3B.2.3. The Credible Contingency Event Frequency Band is the allowable frequency operating range where there has been a Credible Contingency Event on the SWIS. The frequency operating range and duration are set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.2.4. The Island Separation Frequency Band is the allowable frequency operating range immediately following a Separation Event on the SWIS which creates one or more Islands. The frequency operating range and duration are set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.2.5. The Extreme Frequency Tolerance Band represents the frequency operating range that applies to the SWIS Frequency in respect of clause 3B.3.9. The frequency operating range and target timeframes to Stabilise and Recover are set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.3. Required SWIS Frequency outcomes

3B.3.1. Other than for an Island, while in an Emergency Operating State or during a system restart, the Accumulated Time Error must be less than 10 seconds for 99% of the time over any rolling 30-day period in the SWIS.

3B.3.2. Subject to clause 3B.3.3, the SWIS Frequency must not exceed the Normal Operating Frequency Band in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

3B.3.3. The SWIS Frequency may exceed the relevant Normal Operating Frequency Band following the occurrence of a Contingency Event.

3B.3.4. Subject to clause 3B.3.8, the SWIS Frequency must not exceed the Normal Operating Frequency Excursion Band, and must Stabilise, in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.

- 3B.3.5. Subject to clause 3B.3.6, for any Credible Contingency Event, the SWIS Frequency must not exceed the relevant rate of change requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.
- 3B.3.6. Clause 3B.3.5 does not apply to the initial formation of an Island following a Separation Event.
- 3B.3.7. Subject to clause 3B.3.8, the SWIS Frequency must not exceed the Credible Contingency Event Frequency Band, and must Stabilise and Recover, in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.
- 3B.3.8. For the avoidance of doubt, the requirements in clause 3B.3.4 and clause 3B.3.7 do not apply where a Multiple Contingency Event occurs.
- 3B.3.9. Following a Separation Event, an Island is permitted to be temporarily de-energised with frequency subsequently required to be restored to the relevant requirements set out in Table 2, Appendix 13 for an Island as soon as practicable.
- 3B.3.10. Subject to clause 3B.3.9, if there is a Separation Event, SWIS Frequency must not exceed the Island Separation Frequency Band, and must Stabilise and Recover, in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island.
- 3B.3.11. For a Non-Credible Contingency Event or Multiple Contingency Event, reasonable endeavours must be taken to maintain the SWIS Frequency in accordance with the Extreme Frequency Tolerance Band, and to Stabilise and Recover the SWIS Frequency in accordance with the relevant requirements set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island. For the avoidance of doubt, the use of load shedding is acceptable in order to meet the requirements of this clause 3B.3.11.
- 3B.3.12. Based on the readings recorded in AEMO's SCADA system, a Contingency Event, including a Credible Contingency Event, Separation Event, commences at the time SWIS Frequency exceeds the frequencies in the Normal Operating Frequency Excursion Band set out in Table 1, Appendix 13 for the SWIS and Table 2, Appendix 13 for an Island, and ends at the time at which SWIS Frequency Recovers.
- 3B.3.13. For the avoidance of doubt, reasonable endeavours in this section 3B.3 includes allowance for avoiding pre-contingent load shedding, or to prioritise restoration of load, over meeting the Frequency Operating Standards in an Island.

41. Section 4.11 amended

41.1 Clause 4.11.1B(c) is deleted and replaced with the following:

- (c) consult with any person AEMO considers suitably qualified to provide an opinion or information on issues relevant to the exercise of AEMO's discretion.

42. Section 4.26 amended

42.1 Clause 4.26.2 is amended by deleting the following input:

BSPO(f,t) is the total MW quantity of Planned Outage associated with Facility f before the STEM Auction for Trading Interval t, as provided to the AEMO by System Management in accordance with clause 7.3.4;

and replacing it with the following:

BSPO(f,t) is the total MW quantity of Planned Outage associated with Facility f before the STEM Auction for Trading Interval t, as determined by AEMO in accordance with clause 7.3.4;

43. Section 4.27 amended

43.1 Clause 4.27.3A is amended by deleting the last sentence 'AEMO may consult System Management in deciding whether or not to require a report.'

44. Section 7.8 amended

44.1 The section 7.8 heading 'Dispatch Instructions and Operating Instructions implemented by System Management' is amended by deleting the words 'System Management' and replacing them with the word 'AEMO'.

45. Section 7B.3 amended

45.1 Clause 7B.3.1(d)(i) is deleted and replaced with the following:

- i. the most recent Forecast LFAS Quantities determined by AEMO under clauses 7B.1.4 or 7B.1.5;

46. Clause 7.13.1F amended

46.1 Add a full stop at the end of clause 7.13.1F.

47. Section 9.13 amended

47.1 Clause 9.13.1 is amended by deleting the words 'system management services' and replacing them with the words 'system operation services'.

48. Section 9.15 amended

48.1 Clause 9.15.1 is amended by deleting the words ', AEMO (in its capacity as System Management),'.

49. Section 10.2 amended

49.1 Clause 10.2.2(d)(iiA) is deleted and replaced with the following:

- iiA. a Delegate (but only to the extent necessary for it to carry out the delegated functions);

49.2 Clause 10.2.2(e) is amended by deleting the words 'System Management Confidential' and replacing them with the words 'System Operation Confidential'.

49.3 Clause 10.2.2(e)(iA) is deleted and replaced with the following:

- iA. a Delegate (but only to the extent necessary for it to carry out the delegated functions);

49.4 Clause 10.2.2(g)(iiiA) is deleted and replaced with the following:

- iiiA. a Delegate (but only to the extent necessary for it to carry out the delegated functions);

49.5 Clause 10.2.3(f) is deleted and replaced with the following:

- (f) AEMO may declare incomplete working documents relating to system operation to be AEMO Confidential or System Operation Confidential;

50. Section 10.3 heading amended

- 50.1 The section 10.3 heading 'The Market Web Site' is amended by deleting the words 'Market Web Site' and replacing them with the words 'WEM Website'.

51. Heading above section 10.5 amended

- 51.1 The heading 'Information to be Released via the Market Web Site' appearing immediately above the section 10.5 heading is amended by deleting the words 'Market Web Site' and replacing them with the words 'WEM Website'.

52. Section 10.9 amended

- 52.1 The section 10.9 heading 'System Management Confidential Information' is amended by deleting the words 'System Management' and replacing them with the words 'System Operation'.
- 52.2 Clause 10.9.1 is amended by deleting the words 'System Management Confidential' and replacing them with the words 'System Operation Confidential'.

53. Chapter 11 (Glossary) amended

- 53.1 The definition for 'Allowable Revenue' in Chapter 11 (Glossary) is deleted and replaced with the following:

Allowable Revenue: Means the allowable revenue for AEMO in performing its functions, including providing the services set out in clause 2.22A.1, as approved by the Economic Regulation Authority in accordance with clause 2.22A.14.

- 53.2 The definition for 'Bilateral Contract' in Chapter 11 (Glossary) is deleted and replaced with the following:

Bilateral Contract: A contract formed between any two persons for the sale of electricity by one of those persons to the other.

- 53.3 The definition for 'Chief Executive Officer' in Chapter 11 (Glossary) is deleted and replaced with the following:

Chief Executive Officer: In respect of a Rule Participant, the chief executive officer of the relevant Rule Participant, or if that Rule Participant has no chief executive officer, then the individual nominated by the Rule Participant and holding a similar position to that of chief executive officer of the Rule Participant.

- 53.4 The definition for 'Downwards LFAS Enablement Schedule' in Chapter 11 (Glossary) is deleted and replaced with the following:

Downwards LFAS Enablement Schedule: Means, for a Trading Interval, the Forecast Downwards LFAS Enablement Schedule for that Trading Interval most recently determined by AEMO under clause 7B.3.1(a) between LFAS Gate Closure for that Trading Interval and the point in time 15 minutes after LFAS Gate Closure for that Trading Interval.

- 53.5 The definition for 'Rule Participant' in Chapter 11 (Glossary) is deleted and replaced with the following:

Rule Participant: Any person registered as a Rule Participant in accordance with Chapter 2 and AEMO.

- 53.6 The definition for 'Technical Envelope' in Chapter 11 (Glossary) is deleted and replaced with the following:

Technical Envelope: The limits for the operation of the SWIS in each SWIS Operating State as established and modified by AEMO in accordance with clause 3.2.6.

- 53.7 The definition for 'Upwards LFAS Enablement Schedule' in Chapter 11 (Glossary) is deleted and replaced with the following:

Upwards LFAS Enablement Schedule: Means, for a Trading Interval, the Forecast Upwards LFAS Enablement Schedule for that Trading Interval most recently determined by AEMO under clause 7B.3.1(a) between LFAS Gate Closure for that Trading Interval and the point in time 15 minutes after LFAS Gate Closure for that Trading Interval.

- 53.8 Each of the definitions in Chapter 11 (Glossary) listed in the following Table is deleted.

Table
Appointed Day
Market Procedure
Market Rules
Market Web Site
Power System Operation Procedure
System Management
System Management Confidential
System Management Fees
System Management Function
System Management Transition Date
System Operator

- 53.9 Insert each of the following new definitions in Chapter 11 (Glossary) in the appropriate alphabetical order:

Accumulated Time Error: Means in respect of a frequency measurement of the SWIS, the integral over time of the difference between 20 milliseconds and the inverse of that frequency measurement, starting from a time determined by AEMO, and recorded by AEMO in its SCADA system.

Approval to Generate Notification: Means the notification issued by the Network Operator to a Market Participant in accordance with clause 3A.8.11 granting final approval to a Transmission Connected Generating System to generate electricity.

Common Requirements: In respect of each Technical Requirement, means each requirement as specified in Appendix 12 that is common to both the Ideal Generator Performance Standard and Minimum Generator Performance Standard.

Contingency Event: Has the meaning given in clause 3.8A.1.

Contingency Reclassification Conditions: Means the conditions that AEMO determines give rise to the need to reclassify a Non-Credible Contingency Event as a Credible Contingency Event.

Controlled Circumstances: Circumstances where AEMO expects or requires SWIS Frequency to vary as a result of a test or the process of dispatch.

Coordinator: Means the Coordinator of Energy referred to in section 4 of the Energy Coordination Act 1994 (WA).

Credible Contingency Event: Has the meaning given in clause 3.8A.2.

Credible Contingency Event Frequency Band: Has the meaning given in clause 3B.2.3.

Delegate: Means a person appointed by AEMO under clause 2.1A.3 to perform a function on its behalf that is, in AEMO's opinion, competent to exercise the relevant function.

Disconnected Microgrid: Means a part of the SWIS that is not an Embedded System, that is designed to be disconnected from the remainder of the SWIS, and that has disconnected from the remainder of the SWIS, and is being operated independently from the SWIS by a Network Operator.

Embedded System: Means a Network connected at a connection point on the SWIS which is owned, controlled or operated by a person who is not a Network Operator or AEMO.

Exempt Transmission Connected Generating System: Has the meaning given in clause 3A.3.1.

Existing Transmission Connected Generating System: Means a Transmission Connected Generating System for which an Arrangement for Access has been executed prior to the Tranche 1 Commencement Date other than an Exempt Transmission Connected Generating System.

Extreme Frequency Tolerance Band: Has the meaning given in clause 3B.2.5.

Frequency Band: Means the Credible Contingency Event Frequency Band, Extreme Frequency Tolerance Band, Island Separation Frequency Band, Normal Operating Frequency Band or Normal Operating Frequency Excursion Band.

Frequency Operating Standards: Means the SWIS Frequency outcomes set out in Chapter 3B and Appendix 13.

Generator Monitoring Plan: Means a monitoring plan for a Transmission Connected Generating System in respect of the Registered Generator Performance Standards that apply to the Transmission Connected Generating System.

Generator Register: Means a register required to be established and maintained by a Network Operator in accordance with clause 3A.7.1.

Ideal Generator Performance Standard: Means the ideal generator performance standard in respect of a Technical Requirement as specified in Appendix 12.

Inertia: The kinetic energy (at nominal frequency) that is extracted from the rotating mass of a machine coupled to the power system to compensate an imbalance in the system frequency.

Interim Approval to Generate Notification: Means the notification issued by the Network Operator to a Market Participant in accordance with section 3A.8, which may or may not be subject to and contain conditions, granting interim approval to a Transmission Connected Generating System to generate electricity.

Island: Means a part of the SWIS that includes interconnected energy producing systems (or other energy sources and loads), for which all of the connection points with the SWIS have been disconnected, provided that the part:

- (a) is smaller than the remainder of the SWIS that it has disconnected from; and
- (b) contains energy producing systems (or other energy sources) capable of supplying the Load in accordance with the Frequency Operating Standards within the part of the SWIS that has been disconnected,

but does not include an Embedded System or Disconnected Microgrid.

Island Separation Frequency Band: has the meaning given in clause 3B.2.4.

Minimum Generator Performance Standard: Means the minimum generator performance standard in respect of a Technical Requirement as specified in Appendix 12.

Multiple Contingency Event: Means, in relation to the SWIS Frequency Operating Standards, when an additional Contingency Event occurs before the SWIS Frequency has been able to Recover from the previous Contingency Event.

Negotiated Generator Performance Standard: Means a standard or technical level of performance in respect of a Technical Requirement that represents a variation from the Ideal Generator Performance Standard but is no less than the Minimum Generator Performance Standard that has been approved and registered in accordance with the process in Chapter 3A.

Negotiation Criteria: Means the criteria that must be met in respect of each Technical Requirement as specified in Appendix 12 if a Market Participant submits a Proposed Negotiated Generator Performance Standard.

Non-Credible Contingency Event: Has the meaning given in clause 3.8A.3.

Normal Operating Frequency Band: Has the meaning given in in clause 3B.2.1.

Normal Operating Frequency Excursion Band: Has the meaning given in clause 3B.2.2.

Potential Relevant Generator Modification: Has the meaning given in clause 3A.13.1.

Power Transfer Capability: Means the maximum permitted power transfer through a transmission system or distribution system or part thereof.

Proposed Generator Performance Standard: Means a standard or technical level of performance in respect of a Technical Requirement proposed to apply to a Transmission Connected Generating System that has not been approved and registered in accordance with the process in Chapter 3A.

Proposed Negotiated Generator Performance Standard: Means a Proposed Generator Performance Standard that is not an Ideal Generator Performance Standard but is no less than the Minimum Generator Performance Standard.

Recover: Means, in relation to SWIS Frequency Operating Standards, the time at which the SWIS Frequency returns to the applicable Normal Operating Frequency Band, provided it does not go outside that range at any time over the following 1 minute.

Rectification Plan: Means a plan submitted by a Market Participant responsible for a Transmission Connected Generating System in respect of a Transmission Connected Generating System, an alternative Rectification Plan proposed by AEMO or amended Rectification Plan under section 3A.11.

Registered Generator Performance Standard: Means:

- (a) in respect of a Transmission Connected Generating System other than an Existing Transmission Connected Generating System, an Ideal Generator Performance Standard or a Negotiated Generator Performance Standard that has been approved and registered in accordance with the process in Chapter 3A; and

- (b) in respect of an Existing Transmission Connected Generating System, the standard or technical level of performance in respect of a Technical Requirement that is an Agreed Generator Performance Standard under section 1.40 and deemed to be a Registered Generator Performance Standard under clause 1.40.31.

Relevant Generator Modification: Means a Potential Relevant Generator Modification that the Network Operator declares to be a Relevant Generator Modification under clause 3A.13.4.

RoCoF Limit: Means a limit on the average frequency rate of change over a particular time period.

RoCoF Ride Through Capability: Is the highest RoCoF Limit at which the Facility can operate safely and reliably, expressed over the same timeframe specified in the RoCoF Safe Limit.

RoCoF Safe Limit: Means the RoCoF Limit referred to in Appendix 13.

Separation Event: Means a Credible Contingency Event that results in the formation of an Island.

Stable: Means when the SWIS will return to an acceptable steady-state operating condition following a disturbance.

Stabilise: Means, in relation to SWIS Frequency Operating Standards, when the SWIS Frequency has remained above or below the required level for at least 20 seconds.

SWIS Frequency: Means the frequency of the SWIS, or an Island (as applicable).

SWIS Frequency Operating Standards: Means the standards set out in Table 1, Appendix 13.

System Inertia: The total Inertia provided by Registered Facilities, Network equipment and other equipment connected to the SWIS.

System Operation Confidential: An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(e).

System Operation Fees: The fees determined by AEMO in accordance with section 2.24, and payable by Market Participants to AEMO for performing System Operation Functions in accordance with these WEM Rules.

System Operation Function: The functions referred to in clauses 2.1A.1A, 2.1A.2(cA) and 2.1A.2(iA), together with any function conferred on AEMO under these WEM Rules in respect of system operation.

System Strength: Is a measure of how resilient the voltage waveform is to disturbances such as those caused by a sudden change in Load or an energy producing system, the switching of a network element, tapping of transformers and other types of faults.

Technical Requirement: Means each Technical Requirement for a Transmission Connected Generating System specified in Appendix 12.

Template Generator Monitoring Plan: Means the template Generator Monitoring Plan set out in the WEM Procedure referred to in clause 3A.6.2 as amended from time to time.

Transmission Connected Generating System: Means generating works connected to a transmission system in the SWIS.

Trigger Event: Means one or more circumstances specified in a Negotiated Generator Performance Standard, the occurrence of which requires a Market Participant responsible for a Transmission Connected

Generating System to undertake required actions to achieve an agreed outcome and or achieve an agreed higher level of performance than the existing Registered Generator Performance Standard applicable in respect of one or more Technical Requirements.

WEM Procedure: The procedures developed by the Rule Change Panel, AEMO, the Economic Regulation Authority, the Coordinator and a Network Operator, as applicable, in accordance with section 2.9 as amended in accordance with the Procedure Change Process.

WEM Rules: These rules relating to the Wholesale Electricity Market and to the operation of the SWIS.

WEM Website: Has the meaning given in the Regulations, and includes any website operated by AEMO to carry out its functions under these WEM Rules.

54. Appendix 1 amended

54.1 Appendix 1 is amended by deleting the words 'by System Management' in the first place where they occur.

55. Appendix 9 amended

55.1 Step 3(c) is deleted and replaced with the following:

(c) was affected by a Consequential Outage as recorded by AEMO under clause 7.13.1A; or

56. Appendix 12 added

56.1 Insert the following new Appendix 12:

Appendix 12: Transmission Connected Generating System Generator Performance Standards

This Appendix lists each of the Technical Requirements for Transmission Connected Generating Systems and sets out the Ideal Generator Performance Standard, Minimum Generator Performance Standard and any applicable Common Requirements for each Technical Requirement.

Each Technical Requirement may specify Negotiation Criteria which must be met if a Market Participant responsible for a Transmission Connected Generating System submits a Proposed Negotiated Generator Performance Standard.

If a Technical Requirement specifies Common Requirements, these apply whether an Ideal Generator Performance Standard or Negotiated Generator Performance Standard is intended to apply to a Transmission Connected Generating System in respect of a Technical Requirement.

Use of defined terms in this Appendix 12

Terms defined in Part A12.1 of this Appendix 12 are defined for the purposes of this Appendix alone and must not be used to infer the meaning of those words, or other words, in these WEM Rules. Terms which are defined in these WEM Rules will apply to this Appendix unless defined in this Appendix or the context otherwise requires.

Where the terms Scheduled Generator and Non-Scheduled Generator are used in this Appendix, in relation to generating works that are proposed to be connected to a transmission system and is yet to be registered under these WEM Rules as a Facility or a Facility that is undergoing an upgrade that may impact its Facility Class, these terms are to be used as they will ultimately apply to the relevant Facility.

When producing electric power, Electricity Storage which is part of a Generating System will be considered as Generation and must meet the Technical Requirements of Appendix 12.

Where the term 'Technical Rules' is used in this Appendix then the reference to the Technical Rules is to the Technical Rules of Western Power for the SWIS.

Where terms defined in Technical Rules are used in this Appendix, then any references to 'power system' in those definitions should be read as the SWIS.

For ease of reference, a list of the Technical Requirements that apply to Transmission Connected Generating Systems contained in this Appendix is set out below.

Appendix 12 Part	Technical Requirement
A12.2.	Active Power Capability
A12.3.	Reactive Power Capability
A12.4.	Voltage and Reactive Power Control
A12.5.	Active Power Control
A12.6.	Inertia and Frequency Control
A12.7.	Disturbance Ride Through for a Frequency Disturbance
A12.8.	Disturbance Ride Through for a Voltage Disturbance
A12.9.	Disturbance Ride Through for Multiple Disturbances
A12.10.	Disturbance Ride Through for Partial Load Rejection
A12.11.	Disturbance Ride Through for Quality of Supply
A12.12.	Quality of Electricity Generated
A12.13.	Generation Protection Systems
A12.14.	Remote Monitoring Requirements
A12.15.	Remote Control Requirements
A12.16.	Communications Equipment Requirements
A12.17.	Generation System Model

A12.1. Definitions

In this Appendix 12, the following terms are defined:

Active Power: As described in the Technical Rules.

Adequately Damped: As described in the Technical Rules.

Apparent Power: As described in the Technical Rules.

Asynchronous Generating System: Means a Generating System comprised of Asynchronous Generating Units.

Asynchronous Generating Unit: Means a Generating Unit that is not a Synchronous Generating Unit.

Communication Standard: Means the requirements for the provision of information to be provided between Network Operators and AEMO as described in the WEM Procedure referred to in clause 2.36A.1 and as contemplated under section 2.36A.

Connection Point: Means the point on the Network Operator's Network where the Network Operator's Primary Equipment (excluding metering assets) is connected to the Primary Equipment of the Transmission Connected Generating System.

Continuous Uninterrupted Operation: In respect of a Generating System or operating Generating Unit within a Transmission Connected Generating System that is operating immediately prior to a power system disturbance, means:

- (a) not disconnecting from the SWIS except in accordance with its Registered Generator Performance Standard;
- (b) during the disturbance, contributing active and reactive current as required by its Registered Generator Performance Standard;
- (c) after clearance of any electrical fault that caused the disturbance, only substantially varying its Active Power and Reactive Power as required or permitted by its Registered Generator Performance Standard; and
- (d) not exacerbating or prolonging the disturbance or causing a subsequent disturbance for other connected Equipment, except as required or permitted by its Registered Generator Performance Standard,

with all essential auxiliary and reactive Equipment remaining in service.

Control Centre: Means the facilities used to direct and control the operation of a Generating System.

Control System: As described in the Technical Rules.

Credible Contingency Event: As described in the Technical Rules.

Critical Fault Clearance Time: As described in the Technical Rules.

Dispatch: Means the process of dispatch as described in these WEM Rules.

Dispatch Systems Requirements: Means the requirements described in section 2.35.

Electricity Storage: Means equipment consisting of Storage Works but does not include non-controllable energy storage equipment compensator or flywheel.

Equipment: As described in the Technical Rules.

Excitation Control System: As described in the Technical Rules.

Generating System: As described in the Technical Rules.

Generating Unit: As described in the Technical Rules.

Generation: As described in the Technical Rules.

Generator Capability Chart: Means a chart defining the capability of a Generating System or Generating Unit to produce Active Power while producing or consuming Reactive Power. The capability is provided for specified ambient conditions and voltage levels at the Connection Point based on a template provided by the

Network Operator. The chart shows the Reactive Power capability achievable for any level of Active Power output while not exceeding limits necessary to prevent damage to Equipment or ensure stable operation.

Generator Performance Standard: Means either the Ideal Generator Performance Standard or Negotiated Generator Performance Standard in respect of a Technical Requirement.

Maximum Continuous Current: Means the maximum current injected at the Connection Point when the Generating System is delivering Rated Maximum Apparent Power and the Connection Point voltage is within the normal range.

Nameplate Rating: As described in the Technical Rules.

Nomenclature Standards: As described in the Technical Rules.

Power Factor: As described in the Technical Rules.

Power Station: As described in the Technical Rules.

Primary Equipment: As described in the Technical Rules.

Protection Scheme: As described in the Technical Rules.

Protection System: As described in the Technical Rules.

Rated Maximum Active Power: Means:

- (a) in relation to a Generating Unit, subject to the energy source availability, the maximum amount of Active Power that the Generating Unit can continuously deliver at the Connection Point when operating at its Nameplate Rating (adjusted for temperatures up to and including the maximum required ambient temperature as specified by the Network Operator); and
- (b) in relation to a Generating System, subject to the energy source availability, the combined maximum amount of Active Power that its Generating Units can deliver at the Connection Point, when its Generating Units are operating at their respective Nameplate Ratings (adjusted for temperatures up to and including the maximum required ambient temperature as specified by the Network Operator).

Rated Maximum Apparent Power: Means

- (a) in relation to a Generating Unit, subject to the energy source availability, the maximum amount of Apparent Power that the Generating Unit can continuously deliver at the Connection Point when operating at its Nameplate Rating; and
- (b) in relation to a Generating System, subject to the energy source availability, the combined maximum amount of Apparent Power that its Generating Units can deliver at the Connection Point, when its Generating Units are operating at their respective Nameplate Ratings.

Rated Minimum Active Power: Means

- (a) in relation to a Generating Unit, the minimum amount of Active Power that the Generating Unit can continuously deliver while maintaining stable operation at the Connection Point or another specified location in the SWIS (including within the Generating System); and

- (b) in relation to a Generating System, the combined minimum amount of Active Power that its in-service Generating Units can deliver at the Connection Point while maintaining stable operation.

Reactive Power: As described in the Technical Rules.

Reactive Power Capability: Means the required level of Reactive Power performance as specified in Part A12.3 of this Appendix 12.

Remote Control Equipment or RCE: As described in the Technical Rules.

Remote Monitoring Equipment or RME: As described in the Technical Rules.

Rise Time: In relation to a control system, means the time taken for an output quantity to rise from 10% to 90% of the maximum change induced in that quantity by a step change of an input quantity.

RoCoF: Means the rate of change of frequency, expressed in Hertz per second.

Settling Time: In relation to a control system, means the time measured from initiation of a step change in an input quantity to the time when the magnitude of error between the output quantity and its final settling value remains less than 10% of:

- (a) if the sustained change in the quantity is less than half of the maximum change in that output quantity, the maximum change induced in that output quantity; or
- (b) the sustained change induced in that output quantity.

Static Excitation System: As described in the Technical Rules.

Synchronism: As described in the Technical Rules.

Synchronous Generating System: Means a Generating System comprised of Synchronous Generating Units.

Synchronous Generating Unit: As described in the Technical Rules.

Tap-Changing Transformer: As described in the Technical Rules.

Temperature Dependency Data: Means a set of data defining the maximum achievable Active Power of a Generating System or Generating Unit at a particular temperature. The data will be provided based on a template provided by the Network Operator. The data shows the Active Power capability achievable for any temperature while not exceeding limits necessary to prevent damage to plant or ensure stable operation.

Total Fault Clearance Time: As described in the Technical Rules.

Transformer: As described in the Technical Rules.

Transmission System: As described in the Technical Rules.

Turbine Control System: As described in the Technical Rules.

A12.2. Technical Requirement: Active Power Capability

A12.2.1. Common Requirements

A12.2.1.1. As the Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Active Power capability, there are no additional Common Requirements for this Technical Requirement.

A12.2.2. Ideal Generator Performance Standard

A12.2.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Active Power capability.

A12.2.3. Minimum Generator Performance Standard

A12.2.3.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified.

A12.2.3.2. The Generator Performance Standard for Active Power capability must include Temperature Dependency Data up to and including the maximum ambient temperature specified by the Network Operator:

- (a) for the Generating System measured at the Connection Point; and
- (b) for each Synchronous Generating Unit measured at the Generating Unit terminal.

A12.2.3.3. The maximum ambient temperature specified by the Network Operator will be based on an assessment of where the Generating Units are physically located.

A12.2.3.4. Subject to clause A12.2.3.5, the Generating System must be capable of achieving Rated Maximum Active Power output level for all operating conditions, unless otherwise directed by AEMO or the Network Operator, and capable of maintaining its Rated Maximum Active Power output level, subject to energy source availability.

A12.2.3.5. Clause A12.2.3.4 does not apply to the extent that a temporary reduction in Active Power has been agreed to by the Network Operator in order to achieve the required Reactive Power Capability under maximum ambient temperature conditions as set out in Part A12.3 of this Appendix 12.

A12.2.4. Negotiation Criteria

A12.2.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.3. Technical Requirement: Reactive Power Capability

A12.3.1. Common Requirements

- A12.3.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified.
- A12.3.1.2. The Generator Performance Standard must include a Generator Capability Chart, including data for the maximum ambient temperature specified by the Network Operator.
- A12.3.1.3. There must be no control system limitation, protection system or other limiting device in operation that would prevent the Generating System from providing the Reactive Power output within the area defined in the Generator Capability Chart.
- A12.3.1.4. The maximum ambient temperature specified by the Network Operator will be based on an assessment of where the Generating Units are physically located.
- A12.3.1.5. Each Generating System's Connection Point must be capable of permitting the Dispatch of the full Active Power and Reactive Power Capability of the Generating System.

A12.3.2. Ideal Generator Performance Standard

- A12.3.2.1. For all operating conditions, each Generating Unit within the Generating System must be capable of supplying or absorbing Reactive Power continuously of at least the amount equal to the product of the Rated Maximum Active Power output of the Generating Unit at nominal voltage and 0.484 while operating at any level of Active Power output between its maximum Active Power output level and its minimum Active Power output level as agreed by the Network Operator and AEMO as part of the Generator Performance Standard.

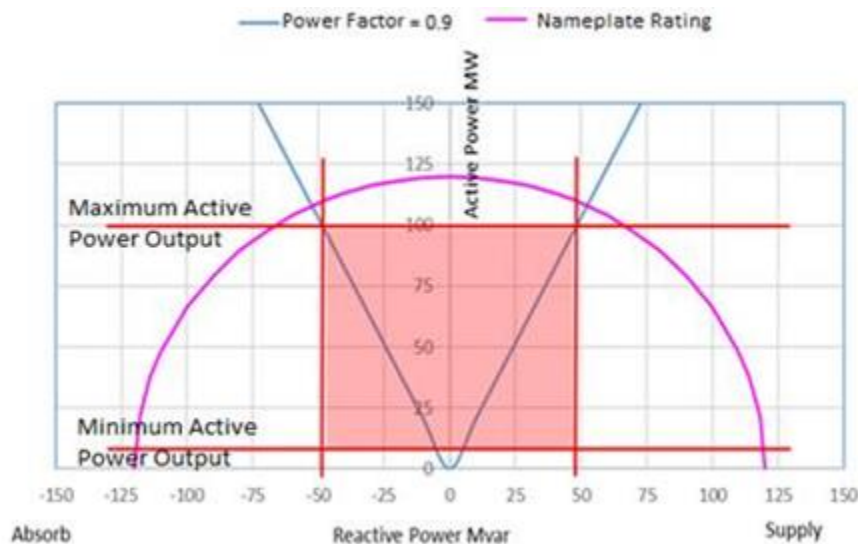


Figure A12.3.2.1: Example Reactive Power Capability required to meet Ideal Generator Performance Standard

A12.3.2.2. The required levels of Reactive Power Capability must be able to be delivered continuously for voltages at the Connection Point within the allowable steady state voltage ranges as specified in the Technical Rules.

A12.3.3. Minimum Generator Performance Standard

A12.3.3.1. Subject to clause A12.3.3.3, for all operating conditions, the Generating System must be capable of supplying or absorbing Reactive Power continuously of at least the amount equal to the product of the Rated Maximum Active Power output of the Generating System and 0.329 while operating at any level of Active Power output level between its maximum Active Power output level and minimum Active Power output level as agreed by the Network Operator and AEMO as part of the Generator Performance Standard.

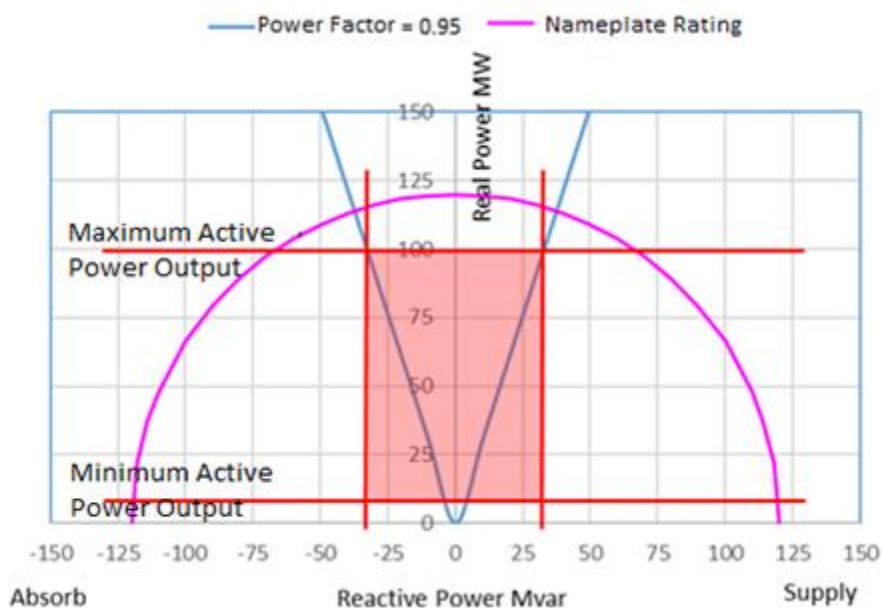


Figure A12.3.3.1: Example Reactive Power Capability required to meet the Minimum Generator Performance Standard

A12.3.3.2. The Reactive Power Capability may be varied as shown in Figure A12.3.3.2 when the voltage at the Connection Point varies between 0.9 per unit and 1.1 per unit, where the Generating System must be capable of absorbing or supplying Reactive Power continuously when operating anywhere inside the curve specified in Figure A12.3.3.2.

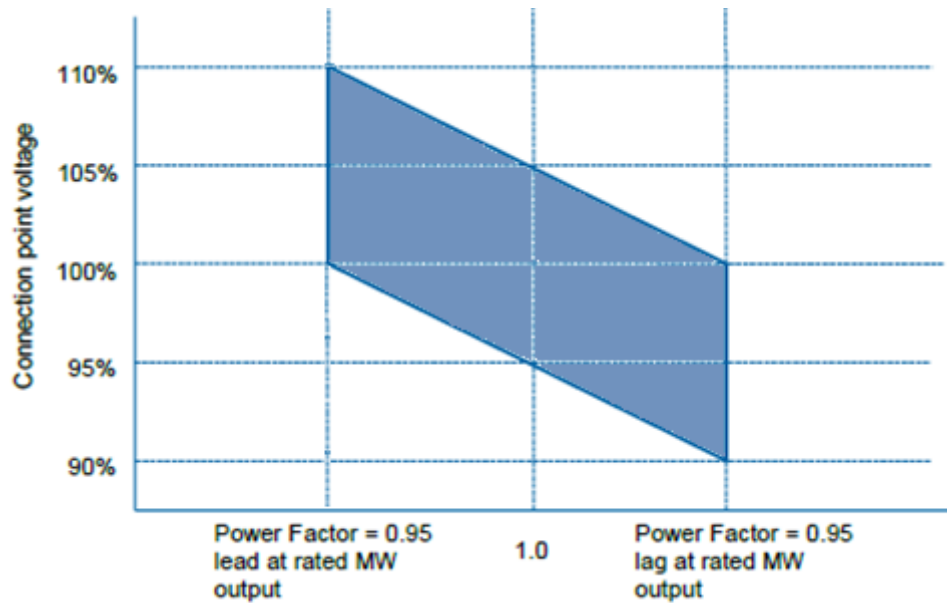


Figure A12.3.3.2: Relaxation of Reactive Power requirement with Connection Point voltage

A12.3.3.3. Non-Scheduled Generators may, with the Network Operator’s agreement, achieve the Reactive Power Capability specified in clause A12.3.3.1 by reducing Active Power output when the ambient temperature exceeds 25 degrees Celsius in their location, with the conditions forming part of the Generator Performance Standard.

A12.3.4. Negotiation Criteria

A12.3.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.4. Technical Requirement: Voltage And Reactive Power Control

A12.4.1. Common Requirements

A12.4.1.1. There are no Common Requirements for this Technical Requirement.

A12.4.2. Ideal Generator Performance Standard

A12.4.2.1. The Ideal Generator Performance Standard, as it applies to different Generating Systems, is specified in Table A12.4.2.1

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.4.2.2 to clause A12.4.2.9 and clause A12.4.2.10 to clause A12.4.2.12.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.4.2.2 to clause A12.4.2.9 and clause A12.4.2.13 to clause A12.4.2.16.
Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.4.2.2 to clause A12.4.2.9 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.4.2.10 to clause A12.4.2.12; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.4.2.13 to clause A12.4.2.16.

Table A12.4.2.1: Voltage and Reactive Power Control Ideal Generator Performance Standard

All Generating Systems

A12.4.2.2. The Generating System must have Equipment capabilities and Control Systems, including, if necessary, a power system stabiliser, sufficient to ensure that:

- (a) power system oscillations, for the frequencies of oscillation of the Generating System against any other Generating System or device, are Adequately Damped;
- (b) operation of the Generating System does not degrade the damping of any critical mode of oscillation of the power system; and
- (c) operation of the Generating System does not cause instability (including hunting of Tap-Changing Transformer Control Systems) that would adversely impact other Equipment connected to the SWIS.

A12.4.2.3. Control Systems on Generating Systems that control voltage and Reactive Power must include permanently installed and operational, monitoring and recording equipment for key variables including each input and output, and equipment for testing the Control Systems sufficient to establish their dynamic operational characteristics.

A12.4.2.4. A Generating System must have Control Systems capable of regulating voltage, Reactive Power and Power Factor, with the ability to:

- (a) operate in all control modes; and
- (b) switch between control modes, as demonstrated to the reasonable satisfaction of the Network Operator and AEMO. Where a Generating System has been commissioned with more than one control mode, a procedure for switching between control modes must be agreed with AEMO and the Network Operator as part of the Generator Performance Standard.

A12.4.2.5. A Generating System must have a voltage Control System that:

- (a) regulates voltage at the Connection Point or another agreed location in the SWIS (including within the Generating System) to within 0.5% of the setpoint, where that setpoint may be adjusted to incorporate any voltage droop or reactive current compensation agreed with AEMO and the Network Operator;
- (b) regulates voltage in a manner that helps to support network voltages during faults and does not prevent the requirements for voltage performance and stability in the Technical Rules from being achieved;
- (c) allows the voltage to be continuously controllable in the range of at least 95% to 105% of the target voltage (as determined by the Network Operator) at the Connection Point or another location on the SWIS, as specified by the Network Operator, without reliance on a Tap-Changing Transformer and subject to the Generator Performance Standards for Reactive Power Capability with the voltage control location agreed with AEMO and the Network Operator; and
- (d) has limiting devices to ensure that a voltage disturbance does not cause a Generating Unit to trip at the limits of its operating capability. The Generating System must be capable of stable operation for indefinite periods while under the control of any limiter. Limiters must not detract from the performance of any stabilising circuits and must have settings applied which are coordinated with all Protection Systems.

A12.4.2.6. Where installed, a power system stabiliser must have:

- (a) two washout filters for each input, with ability to bypass one of them if necessary;
- (b) sufficient (and not less than two) lead-lag transfer function blocks (or equivalent number of complex poles and zeros) with adjustable gain and time-constants, to compensate fully for the phase lags due to the Generating Unit;
- (c) monitoring and recording equipment for key variables including inputs, output and the inputs to the lead-lag transfer function blocks; and
- (d) equipment to permit testing of the power system stabiliser in isolation from the power system by injection of test signals, sufficient to establish the transfer function of the power system stabiliser.

A12.4.2.7. A Reactive Power, including a Power Factor, Control System must:

- (a) regulate Reactive Power or Power Factor (as applicable) at the Connection Point or another location in the SWIS (including within the Generating System), as specified by the Network Operator, to within:
 - (i) for a Generating System operating in Reactive Power mode, 2% of the Nameplate Rating (in MVA) of the Generating System (expressed in MVar); or

(ii) for a Generating System operating in Power Factor mode, a Power Factor equivalent to 2% of the Nameplate Rating (in MVA) of the Generating System (expressed in MVar); and

(b) allow the Reactive Power or Power Factor setpoint to be continuously controllable across the Reactive Power Capability range specified in the relevant Generator Performance Standard.

A12.4.2.8. The structure and parameter settings of all components of the Control System, including the voltage regulator, Reactive Power regulator, power system stabiliser, power amplifiers and all associated limiters, must be approved by the Network Operator and AEMO as part of the Generator Performance Standard.

A12.4.2.9. Each Control System must be Adequately Damped.

Synchronous Generating Systems

A12.4.2.10. Each Synchronous Generating Unit must have an Excitation Control System that:

(a) is capable of operating the stator continuously at 105% of nominal voltage with Rated Maximum Active Power output;

(b) has an excitation ceiling voltage of at least:

(i) for a Static Excitation System, 2.3 times; or

(ii) for other Excitation Control Systems, 1.5 times,

the excitation required to achieve generation at the Nameplate Rating for rated Power Factor, rated speed and nominal voltage;

(c) has a power system stabiliser with sufficient flexibility to enable damping performance to be maximised, with the stabilising circuit responsive and adjustable over a frequency range from 0.1 Hz to 2.5 Hz; and

(d) achieves a minimum equivalent gain of 200.¹

A12.4.2.11. The performance characteristics required for AC exciter, rotating rectifier and Static Excitation Systems are specified in Table A12.4.2.11.

¹ Refer IEEE Standard 115-1983 - Test Procedures for Synchronous Machines.

Performance Item	Units	Static Excitation	AC exciter or rotating rectifier
Generating Unit Field voltage Rise Time: Time for field voltage to rise from rated voltage to excitation ceiling voltage following the application of a short duration impulse to the voltage reference.	Second	0.05 maximum	0.5 maximum
Settling Time with the Generating Unit unsynchronised following a disturbance equivalent to a 5% step change in the sensed Generating Unit terminal voltage.	Second	1.5 maximum	2.5 maximum
Settling Time with the Generating Unit synchronised following a disturbance equivalent to a 5% step change in the sensed Generating Unit terminal voltage. It must be met at all operating points within the Generating Unit capability.	Second	2.5 maximum	5 maximum
Settling Time following any disturbance which causes an excitation limiter to operate.	Second	5 maximum	5 maximum

Table A12.4.2.11: Synchronous Generating Unit Excitation Control System performance requirements

- A12.4.2.12. Where provided, a power system stabiliser must have:
- (a) measurements of rotor speed and Active Power output of the Generating Unit as inputs; and
 - (b) an output limiter, which is continually adjustable over the range of –10% to +10% of stator voltage.

Asynchronous Generating Systems

- A12.4.2.13. A Generating System, comprised of Asynchronous Generating Units, must have a voltage and Reactive Power Control System that has a power oscillation damping capability with sufficient flexibility to enable damping performance to be maximised, with the stabilising circuit responsive and adjustable over a frequency range from 0.1 Hz to 2.5 Hz. Any power system stabiliser must have measurements of power system frequency and Active Power output of the Generating Unit as inputs.
- A12.4.2.14. A Generating System, comprised of Asynchronous Generating Units, must have a control system capable of achieving a minimum equivalent gain of 200.
- A12.4.2.15. The performance characteristics required for the voltage and Reactive Power Control Systems of all Asynchronous Generating Systems are specified in Table A12.4.2.15.

Performance Item	Units	Limiting Value	Notes
Rise Time: Time for the controlled parameter (voltage or Reactive Power output) to rise from the initial value to 90% of the change between the initial value and the final value following the application of a 5% step change to the Control System reference.	Second	1.5 maximum	1 and 3
Settling Time of the controlled parameter with the Generating System connected to the Transmission System following a step change in the Control System reference such that it is not large enough to cause saturation of the controlled output parameter. It must be met at all operating points within the Generating Unit's capability.	Second	2.5 maximum	1, 2 and 3
Settling Time of the controlled parameter with the Generating System connected to the Transmission System following any disturbance that is large enough to cause the maximum value of the controlled output parameter to be just exceeded.	Second	5 maximum	2 and 3
Notes: 1. The step change is 5%, or a lesser value specified by the Network Operator such that it is the largest step change that results in the required Settling Time at the Connection Point. 2. The step change is specified by the Network Operator such that it is the largest step change that results in the required Settling Time at the Connection Point. 3. The step change is to be recorded for future assessment.			

Table A12.4.2.15: Asynchronous Generating System Control System performance requirements

A12.4.2.16. The controlled parameters used to meet the requirements specified in Table A12.4.2.15. and measurement of the parameters must be agreed with the Network Operator and AEMO as part of the Generator Performance Standard.

A12.4.3. Minimum Generator Performance Standard

A12.4.3.1. The Minimum Generator Performance Standard for Voltage and Reactive Power Control as it applies to different Generating Systems, is specified in Table A12.4.3.1:

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.4.3.2 to clause A12.4.3.6.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.4.3.2 to clause A12.4.3.5 and clause A12.4.3.7.
Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.4.3.2 to clause A12.4.3.5 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.4.3.6; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.4.3.7.

Table A12.4.3.1: Voltage and Reactive Power Control Minimum Generator Performance Standard

All Generating Systems

- A12.4.3.2. A Generating System must have Equipment capabilities and Control Systems, including, if necessary, a power system stabiliser, sufficient to ensure that:
- (a) power system oscillations, for the frequencies of oscillation of the Generating System against any other Generating System or device, are Adequately Damped;
 - (b) operation of the Generating System is Adequately Damped; and
 - (c) Control Systems can be sufficiently tested to establish their dynamic operational characteristics.
- A12.4.3.3. A Generating System must have a Control System to regulate:
- (a) voltage; or
 - (b) either of Reactive Power or Power Factor, with the agreement of AEMO and the Network Operator.
- A12.4.3.4. A voltage Control System for a Generating System must:
- (a) regulate voltage at the Connection Point or another location in the SWIS (including within the Generating System), as specified by the Network Operator, to within 2% of the setpoint, where that setpoint may be adjusted to incorporate any voltage droop or reactive current compensation agreed with AEMO and the Network Operator; and
 - (b) allow the voltage setpoint to be controllable in the range of at least 98% to 102% of the target voltage (as determined by the Network Operator) at the Connection Point or an alternative location, as specified by the Network Operator, subject to the Reactive Power Capability agreed with AEMO and the Network Operator under Part A12.3 of this Appendix 12.
- A12.4.3.5. A Generating System's Reactive Power or Power Factor Control System must:
- (a) regulate Reactive Power or Power Factor (as applicable) at the Connection Point or another location in the SWIS (including within the Generating System), as specified by the Network Operator, to within:
 - (i) for a Generating System operating in Reactive Power mode, 5% of the Nameplate Rating (in MVA) of the Generating System (expressed in MVA_r); or
 - (ii) for a Generating System operating in Power Factor mode, a Power Factor equivalent to 5% of the Nameplate Rating (in MVA) of the Generating System (expressed in MVA_r);
 - (b) allow the Reactive Power or Power Factor setpoint to be continuously controllable across the Reactive Power Capability defined in the relevant Generator Performance Standard; and
 - (c) have limiting devices to ensure that a voltage disturbance does not cause a Generating Unit to trip at the limits of its operating capability. The Generating System must be capable of stable operation for indefinite periods while under the control of any limiter. Limiters must not detract from the performance of any stabilising circuits and must have settings applied, which are coordinated with all Protection Systems, and must be included as part of the Generator Performance Standard.

Synchronous Generating Systems

- A12.4.3.6. Each Synchronous Generating Unit within the Generating System, with an Excitation Control System required to regulate voltage must:
- (a) have excitation ceiling voltage of at least 1.5 times the excitation required to achieve generation at the Nameplate Rating for rated Power Factor, rated speed and nominal voltage; and
 - (b) subject to the ceiling voltage requirement, have a Settling Time of less than 7.5 seconds for a 5% voltage disturbance with the Generating Unit synchronised, subject to the Generating Unit being electrically connected to the SWIS and operating at a point where such a voltage disturbance would not cause any limiting device to operate.

Asynchronous Generating Systems

- A12.4.3.7. A Generating System, comprised of Asynchronous Generating Units, with a voltage Control System must have a Settling Time of less than 7.5 seconds for a 5% voltage disturbance subject to the Generating Unit being electrically connected to the SWIS and operating at a point where such a voltage disturbance would not cause any limiting device to operate.

A12.4.4. Negotiation Criteria

- A12.4.4.1. A Proposed Negotiated Generator Performance Standard must be the highest level that the Generating System can reasonably achieve, including by installation of additional dynamic Reactive Power Equipment, and through optimising its Control Systems.

A12.5. Technical Requirement: Active Power Control

A12.5.1. Common Requirements

- A12.5.1.1. All Generating Systems must be capable of meeting the Dispatch Systems Requirements.
- A12.5.1.2. Any arrangements put in place as part of the Arrangement for Access to limit Active Power output in order to manage constraints on the Network must be included as part of the Generator Performance Standard.
- A12.5.1.3. Each Control System must be Adequately Damped.
- A12.5.1.4. Any relevant disconnection settings must be included as part of the Generator Performance Standard.
- A12.5.1.5. Subject to energy source availability and any other agreement by the Network Operator, a Generating System must be capable of maintaining its Active Power output consistent with its last received dispatch level in the event RME, RCE or Communications are unavailable.

A12.5.2. Ideal Generator Performance Standard

- A12.5.2.1. For a Scheduled Generator, a Generating System must have an Active Power Control System capable of:
 - (a) maintaining and changing its Active Power output in accordance with its Dispatch Instructions;
 - (b) ramping its Active Power output linearly from one level of Dispatch to another; and
 - (c) in a thermally stable state, changing Active Power generation in response to a Dispatch Instruction at a rate not less than 5% of the Generating Unit's or Generating System's Rated Active Power per minute.
- A12.5.2.2. For a Non-Scheduled Generator, subject to energy source availability, a Generating System must not change its Active Power generation at a rate greater than 10 MW per minute or 15% of the Power Station's aggregate Nameplate Rating per minute, whichever is the lower or as agreed with the Network Operator and AEMO.

A12.5.3. Minimum Generator Performance Standard

- A12.5.3.1. For a Scheduled Generator, a Generating System must have an Active Power Control System capable of maintaining and changing its Active Power output in accordance with its Dispatch Instructions.
- A12.5.3.2. For a Non-Scheduled Generator, subject to energy source availability, a Generating System must ensure that the change of Active Power output in a 5 minute period does not exceed a value agreed with AEMO and the Network Operator.

A12.5.4. Negotiation Criteria

- A12.5.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.6. Technical Requirement: Inertia and Frequency Control

A12.6.1. Common Requirements

- A12.6.1.1. All Control Systems must be Adequately Damped.
- A12.6.1.2. The recorded maximum ramp rate for the Generating System must be expressed as the change in Active Power (measured in MW) achievable across 6 seconds.
- A12.6.1.3. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.
- A12.6.1.4. Control Systems on Generating Systems that control Active Power must include permanently installed and operational monitoring and recording equipment for key variables including each input and output, and equipment for testing the Control System sufficient to establish its dynamic operational characteristics.
- A12.6.1.5. After having met the relevant requirements for altering and holding Active Power output to arrest and correct changes in power system frequency, the Generating System, or Generating Units where relevant, must adhere to relevant requirements of A12.5 when returning to regular Active Power output.

A12.6.2. Ideal Generator Performance Standard

- A12.6.2.1. The Ideal Generator Performance Standard requires that:
 - (a) a Generating System must have an automatic variable Active Power control characteristic, where Generating Units with Turbine Control Systems must include equipment for both speed and Active Power control;
 - (b) all Generating Units, or the Generating System as applicable, capable of operating in a mode in which it will automatically alter its Active Power output to arrest and correct to changes in power system frequency, with all Generating Units operating in this mode unless instructed otherwise by AEMO;
 - (c) a dead band on each Generating Unit, or the Generating System as applicable, (the sum of increase and decrease in power system frequency before a measurable change in the Generating Unit's Active Power output occurs) which is less than +/- 0.025 Hz symmetrical around 50.0 Hz; and
 - (d) control ranges and response times, subject to energy source availability, for Generating Units, or the Generating System as applicable, such that:
 - (i) the overall response of each Generating Unit, or the Generating System as applicable, for power system frequency excursions must be settable and be capable of achieving an increase in the Generating Unit's Active Power output of not less than 5% for a 0.1 Hz reduction in power system frequency (4% droop) for any initial output up to the Rated Maximum Active Power output;

- (ii) the overall response of each Generating Unit, or the Generating System as applicable, must also be capable of achieving a reduction in the Generating Unit's Active Power output of not less than 5% for a 0.1 Hz increase in power system frequency provided this does not require operation below its Rated Minimum Active Power;
- (iii) the Generating System must be able to sustain Active Power output changes of at least 10% for a frequency decrease and 30% for a frequency increase, and for not less than 10 seconds, if changes occur within the above limits of output;
- (iv) for Scheduled Generators, the Generating System achieves a rate of response for any frequency disturbance, taking into account the specified maximum ramp rate, of at least 90% of the maximum response expected according to the droop characteristic within 6 seconds and the new output must be sustained for not less than a further 10 seconds; and
- (v) for Non-Scheduled Generators, the Generating System achieves a rate of response for any frequency disturbance, of at least 90% of the maximum response expected within 2 seconds taking into account the specified maximum ramp rate, and the new output must be sustained for not less than a further 10 seconds.

A12.6.3. Minimum Generator Performance Standard

A12.6.3.1. Subject to energy source availability, a Generating System must have:

- (a) an automatic variable Active Power control characteristic, where Generating Units, or Generating Systems as applicable, with Turbine Control Systems must also include equipment for both speed and Active Power control;
- (b) all Generating Units, or Generating Systems as applicable, capable of operation in a mode in which they will automatically alter their Active Power output to arrest and correct to changes in power system frequency, with all Generating Units operating in this mode unless instructed otherwise by AEMO; and
- (c) a dead band on each Generating System (the sum of increase and decrease in power system frequency before a measurable change in the Generating Unit's Active Power output occurs) which is less than +/-0.025 Hz symmetrical around 50.0 Hz.

A12.6.3.2. Subject to energy source availability, a Generating System is required to have control ranges and response times for each Generating Unit, or Generating Systems as applicable, such that:

- (a) the overall response of each Generating Unit, or Generating Systems as applicable, for power system frequency excursions must be settable and be capable of achieving an increase in the Generating Unit's, or Generating System's as applicable, Active Power output of not less than 5% for a 0.1 Hz reduction in power system frequency (4% droop) for any initial output up to 85% of Rated Maximum Active Power output;
- (b) each Generating Unit, or Generating Systems as applicable, must be capable of achieving a reduction in the Generating Unit's, or Generating System's as applicable,

Active Power output of not less than 5% for a 0.1 Hz increase in power system frequency provided this does not require operation below its Rated Minimum Active Power;

- (c) for initial outputs above 85% of Rated Maximum Active Power output, each Generating Unit's or Generating System's, as applicable, response capability must be included as part of the relevant Generator Performance Standard;
- (d) the Generating System must be able to sustain Active Power output changes of at least 10% for a frequency decrease and 30% for a frequency increase, and for not less than 10 seconds, if changes occur within the above limits of output;
- (e) for Scheduled Generators, the Generating System achieves a rate of response for any frequency disturbance, taking into account the specified maximum ramp rate, of at least 90% of the maximum response expected according to the droop characteristic within 6 seconds and the new output must be sustained for not less than a further 10 seconds; and
- (f) for Non-Scheduled Generators, the Generating System achieves a rate of response for any frequency disturbance, of at least 90% of the maximum response expected within 2 seconds taking into account the specified maximum ramp rate, and the new output must be sustained for not less than a further 10 seconds.

A12.6.4. Negotiation Criteria

A12.6.4.1. A Negotiated Generator Performance Standard must require that there is no requirement for a Generating System to operate with an Active Power output:

- (a) below its Rated Minimum Active Power in response to a rise in the frequency of the SWIS as measured at the Connection Point;
- (b) above its Rated Maximum Active Power output in response to a fall in the frequency of the SWIS as measured at the Connection Point; or
- (c) to deliver a rate of change in output exceeding the specified maximum ramp rate.

A12.6.4.2. An additional source of Inertia or frequency control may be included within the Generating System. The Control System for the additional source of Inertia or frequency control must be coordinated with the remainder of the Generating System and, together, must meet the performance requirements of the relevant Technical Requirements.

A12.7. Technical Requirement: Disturbance Ride Through for a Frequency Disturbance

A12.7.1. Common Requirements

A12.7.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified.

A12.7.1.2. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.

A12.7.2. Ideal Generator Performance Standard

A12.7.2.1. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the frequency to:

- (a) reach 52.5 Hz for a period of up to 6 seconds;
- (b) reach 52 Hz for a period of up to 2 minutes;
- (c) reach 51.5 Hz for a period of up to 5 minutes;
- (d) operate between 49.0 Hz to 51.0 Hz continuously;
- (e) reach 47.5 Hz for a period of up to 15 minutes; or
- (f) reach 47.0 Hz for a period of up to 2 minutes,

as shown in Figure A12.7.2.1.

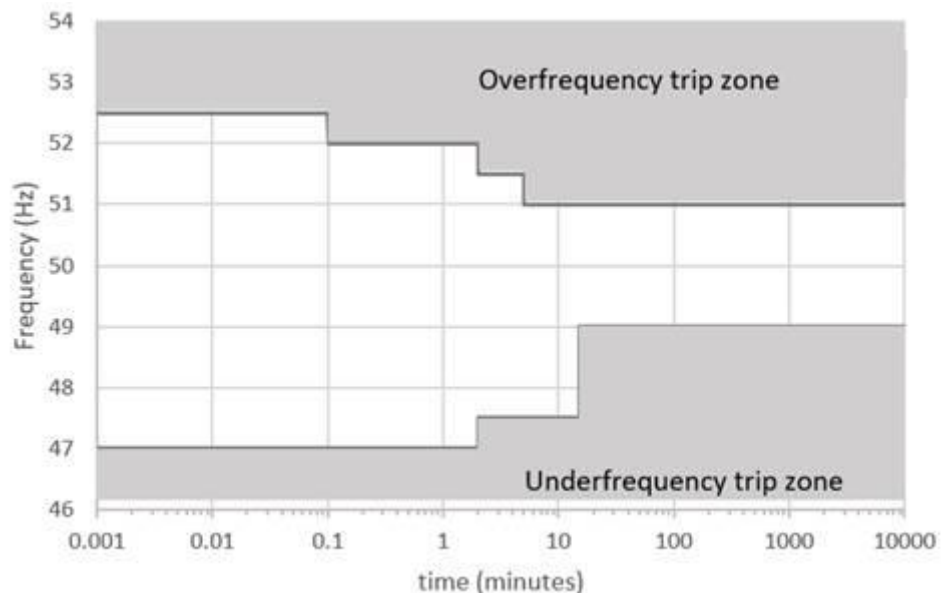


Figure A12.7.2.1 Frequency variations that a Generating System must ride through to meet the Ideal Generator Performance Standard

A12.7.2.2. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the RoCoF to:

- (a) reach 4 Hz/s over 250 milliseconds during the disturbance; or
- (b) reach 3 Hz/s over 1 second during the disturbance.

A12.7.3. Minimum Generator Performance Standard

A12.7.3.1. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the frequency to:

- (a) reach 52.0 Hz for a period of up to 2 minutes;
- (b) operate between 49.0 Hz to 51.0 Hz continuously;
- (c) reach 48.0 Hz for a period of at least 15 minutes;
- (d) reach 47.5 Hz for a period of at least 5 minutes; or
- (e) reach 47.0 Hz for a period of at least 10 seconds,

as shown in Figure A12.7.3.1.

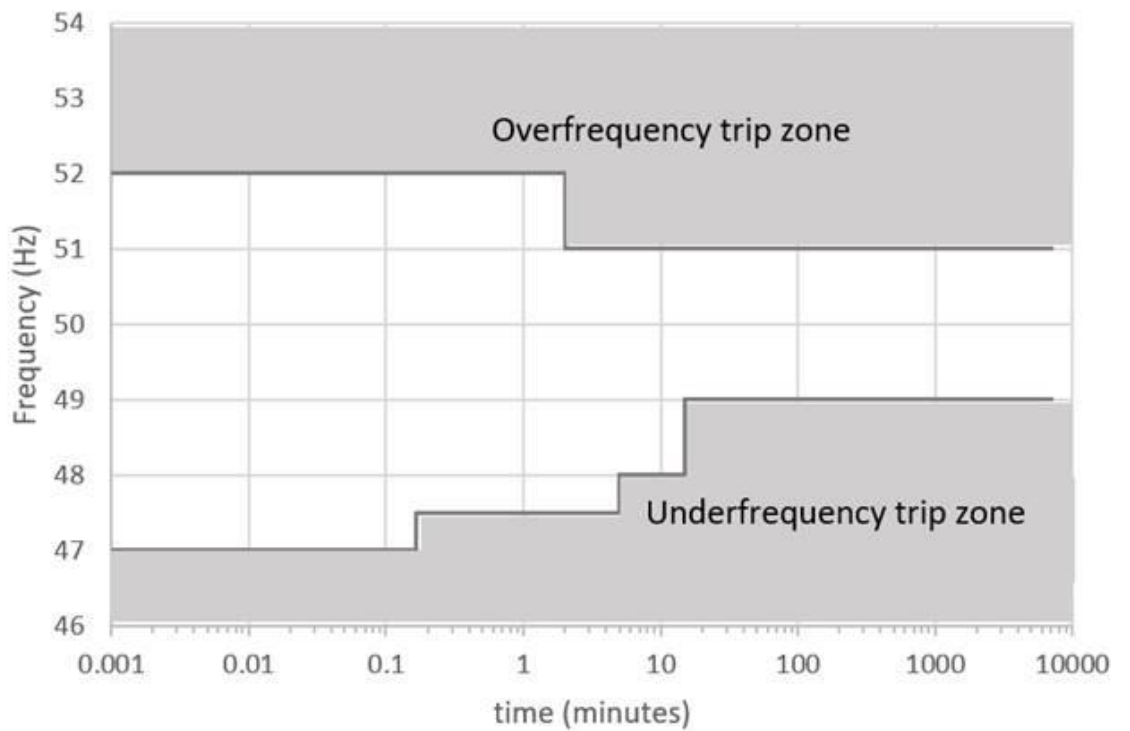


Figure A12.7.3.1: Frequency variations that a Generating System must ride through to meet the Minimum Generator Performance Standard

A12.7.3.2. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the RoCoF to:

- (a) reach 2 Hz/s over 250 milliseconds during the disturbance; or
- (b) reach 1 Hz/s over 1 second during the disturbance.

A12.7.4. Negotiation Criteria

- A12.7.4.1. A Proposed Negotiated Generator Performance Standard for disturbance ride through for a frequency disturbance may be accepted provided the Network Operator and AEMO agree that the frequency would be unlikely to fall below the lower bound of the single contingency event band specified in the Frequency Operating Standard.

A12.8. Technical Requirement: Disturbance Ride Through for a Voltage Disturbance

A12.8.1. Common Requirements

- A12.8.1.1. In relation to the application of this Technical Requirement, the requirements apply at the Connection Point unless otherwise specified.
- A12.8.1.2. The Generating System and each of its operating Generating Units is required to remain in Continuous Uninterrupted Operation while the Connection Point voltage remains within 90% to 110% of nominal voltage.
- A12.8.1.3. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.

A12.8.2. Ideal Generator Performance Standard

- A12.8.2.1. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the voltage to vary within the following ranges:
- (a) voltage exceeds 130% of nominal voltage for not more than 0.02 seconds after T(ov);
 - (b) voltage does not exceed 120% of nominal voltage for more than 2.0 seconds after T(ov);
 - (c) voltage does not exceed 115% of nominal voltage for more than 20.0 seconds after T(ov);
 - (d) voltage does not exceed 110% of nominal voltage for more than 20.0 minutes after T(ov);
 - (e) voltage remains at 0% of nominal voltage for no more than 450 milliseconds after T(uv);
 - (f) voltage does not stay below 70% of nominal voltage for more than 450 milliseconds after T(uv);
 - (g) voltage does not stay below 80% of nominal voltage for more than 2.0 seconds after T(uv); and
 - (h) voltage does not stay below 90% of nominal voltage for more than 10.0 seconds after T(uv).

Where:

T(ov) means a point in time when the voltage first varied above 110% of nominal voltage before returning to between 90% and 110% of nominal voltage; and

T(uv) means a point in time when the voltage first varied below 90% of nominal voltage before returning to between 90% and 110% of nominal voltage.

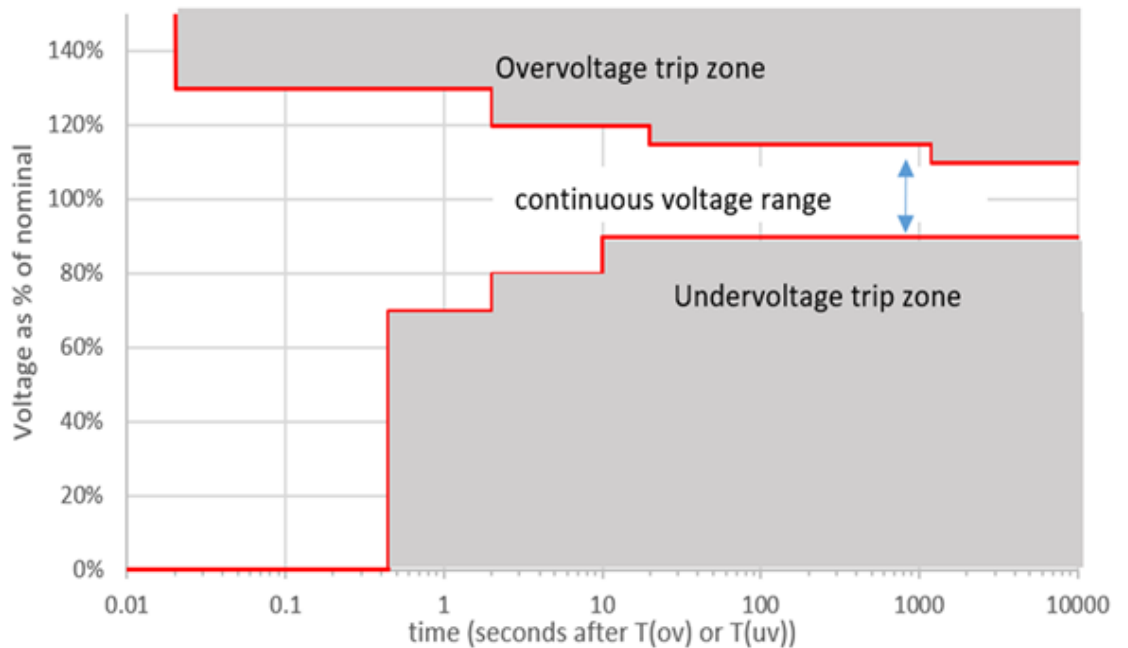


Figure A12.8.2.1: Voltage variations that a Generating System must ride through to meet the Ideal Generator Performance Standard

A12.8.3. Minimum Generator Performance Standard

A12.8.3.1. A Generating System must maintain Continuous Uninterrupted Operation where a power system disturbance causes the voltage to vary within the following ranges:

- (a) voltage does not exceed 120% of nominal voltage after T(ov);
- (b) voltage does not exceed 115% of nominal voltage for more than 0.1 seconds after T(ov);
- (c) voltage does not exceed 110% of nominal voltage for more than 0.9 seconds after T(ov);
- (d) voltage remains at 0% of nominal voltage for no more than 450 milliseconds after T(uv) subject to clause A12.8.3.2;
- (e) voltage does not stay below 70% of nominal voltage for more than 450 milliseconds after T(uv);
- (f) voltage does not stay below 80% of nominal voltage for more than 2.0 seconds after T(uv); and
- (g) voltage does not stay below 90% of nominal voltage for more than 5.0 seconds after T(uv).

Where:

T(ov) means a point in time when the voltage first varied above 110% of nominal voltage before returning to between 90% and 110% of nominal voltage; and

T(uv) means a point in time when the voltage first varied below 90% of nominal voltage before returning to between 90% and 110% of nominal voltage.

- A12.8.3.2. The duration of the zero percent voltage level may be relaxed through agreement with the Network Operator and AEMO, but shall not be lower than the maximum Total Fault Clearance Time with no circuit breaker fail as specified in the Technical Rules.
- A12.8.3.3. Any operational arrangements necessary to ensure the Generating System and each of its operating Generating Units will meet its Generator Performance Standard must be provided as part of the Generator Performance Standard.

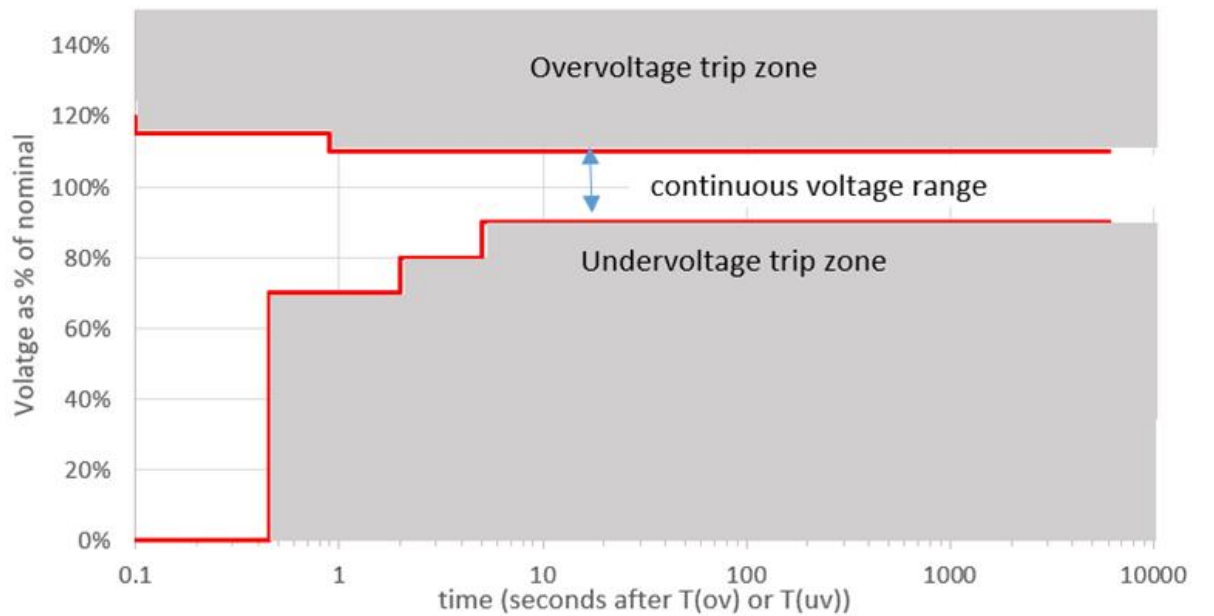


Figure A12.8.3.3: Voltage variations that a Generating System must ride through to meet the Minimum Generator Performance Standard

A12.8.4. Negotiation Criteria

- A12.8.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.9. Technical Requirement: Disturbance Ride Through for Multiple Disturbances

[Note: This Technical Requirement uses the term 'fault' to include a fault of the relevant type having a metallic conducting path.]

A12.9.1. Common Requirements

A12.9.1.1. The Common Requirements for disturbance ride through for multiple disturbances as they apply to different Generating Systems, is specified in Table A12.9.1.1:

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.9.1.3, clause A12.9.1.4 and clause A12.9.1.5.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.9.1.3, clause A12.9.1.4 and clause A12.9.1.6.
Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.9.1.3 and clause A12.9.1.4 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.9.1.5; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.9.1.6.

Table A12.9.1.1: Common Requirements for Disturbance Ride through for Multiple Disturbances

A12.9.1.2. Any relevant disconnection settings must be provided as part of the Generator Performance Standard.

All Generating Systems

A12.9.1.3. The Generator Performance Standard must include any operational arrangements to ensure the Generating System, including all operating Generating Units, will meet their agreed performance levels under abnormal Network or Generating System conditions.

A12.9.1.4. When assessing multiple disturbances, a fault that is re-established following operation of automatic reclose Protection Scheme shall be counted as a separate disturbance.

Synchronous Generating Systems and units

A12.9.1.5. For a Generating System comprised solely of Synchronous Generating Units, the reactive current contribution as measured at the Connection Point or another location in the SWIS (including within the Generating System), as specified by the Network Operator, must equal or exceed 250% of the Maximum Continuous Current of the Generating System. For a Synchronous Generating Unit in any other Generating System, the reactive current contribution must equal or exceed 250% of the Maximum Continuous Current of that Synchronous Generating Unit.

Asynchronous Generating Systems

A12.9.1.6. For a Generating System comprised of Asynchronous Generating Units:

- (a) the reactive current contribution as measured at the Connection Point must equal or exceed the Maximum Continuous Current of the Generating System, including all operating Asynchronous Generating Units;
- (b) the reactive current contribution and voltage deviation may be measured at a location other than the Connection Point (including within the relevant Generating System) where agreed with AEMO and the Network Operator, in which case the reactive current contribution and voltage deviation will be assessed at that agreed location;
- (c) the reactive current contribution required may be calculated using phase to phase, phase to ground or sequence components of voltages. The ratio of the negative sequence to positive sequence components of the reactive current contribution must be agreed with AEMO and the Network Operator for the types of disturbances specified in this Technical Requirement; and
- (d) the Generator Performance Standard must record all conditions (which may include temperature) considered relevant by AEMO and the Network Operator under which the reactive current response is required.

A12.9.2. Ideal Generator Performance Standard

A12.9.2.1. The Ideal Generator Performance Standard as it applies to different Generating Systems, is specified in Table A12.9.2.1:

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.9.2.2, clause A12.9.2.3 and clause A12.9.2.4.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.9.2.2, clause A12.9.2.3 and clause A12.9.2.5 to clause A12.9.2.8.
Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.9.2.2 and clause A12.9.2.3 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.9.2.4; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.9.2.5 to clause A12.9.2.8.

Table A12.9.2.1: Disturbance Ride through for Multiple Disturbances Ideal Generator Performance Standard

All Generating Systems

A12.9.2.2. A Generating System and each of its operating Generating Units must remain in Continuous Uninterrupted Operation for any disturbances caused by:

- (a) a Credible Contingency Event;
- (b) a three phase fault in a Transmission System cleared by all relevant primary Protection Systems; and
- (c) a two phase to ground, phase to phase or phase to ground fault in a transmission or distribution system or a three phase fault in a distribution system cleared in:

- (i) the longest time expected to be taken for a relevant breaker fail Protection System to clear the fault; or
- (ii) if a Protection System referred to in clause A12.9.2.2.(c)(i) is not installed, the greater of 450 milliseconds and the longest time expected to be taken for all relevant primary Protection Systems to clear the fault,

provided that the event is not one that would disconnect the Generating Unit from the SWIS by removing Network elements from service or as a result of the operation of an existing inter-trip, Protection Scheme or runback scheme approved by the Network Operator and AEMO.

A12.9.2.3. A Generating System and each of its operating Generating Units must remain in Continuous Uninterrupted Operation for a series of up to 15 disturbances within any 5 minute period.

Synchronous Generating Systems

A12.9.2.4. Subject to any changed power system conditions or energy source availability beyond the operator of the Generating System's reasonable control, a Generating System comprised of Synchronous Generating Units, in respect of the faults referred to in clause A12.9.2.2, must supply to, or absorb from, the Network:

- (a) to assist the maintenance of power system voltages during the fault, capacitive reactive current of at least the greater of its pre-disturbance reactive current and 4% of the Maximum Continuous Current of the Generating System including all operating Synchronous Generating Units (in the absence of a disturbance) for each 1% reduction (from the level existing just prior to the fault) of Connection Point voltage or another agreed location in the SWIS (including within the Generating System) during the fault;
- (b) after clearance of the fault, Reactive Power sufficient to ensure that the Connection Point voltage or another agreed location in the SWIS (including within the Generating System) is within the range for Continuous Uninterrupted Operation; and
- (c) from 100 milliseconds after clearance of the fault, Active Power of at least 95% of the level existing just prior to the fault.

Asynchronous Generating Systems

A12.9.2.5. Subject to any changed power system conditions or energy source availability beyond the operator of the Generation System's reasonable control, a Generating System comprised of Asynchronous Generating Units, for the faults referred to in clause A12.9.2.2, must have equipment capable of supplying to, or absorbing from, the Network:

- (a) to assist the maintenance of power system voltages during the fault:
 - (i) capacitive reactive current in addition to its pre-disturbance level of at least 4% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% reduction of voltage at the Connection Point below the under-voltage range of 85% to 90% of nominal voltage, except where a

Generating System is directly connected to the SWIS with no step-up or connection Transformer and voltage at the Connection Point is 5% or lower of nominal voltage; and

- (ii) inductive reactive current in addition to its pre-disturbance level of at least 6% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% increase of voltage at the Connection Point the over-voltage range of 110% to 115% of nominal voltage,

during the disturbance and maintained until Connection Point voltage recovers to between 90% and 110% of nominal voltage, or such other range agreed with the Network Operator and AEMO; and

- (b) from 100 milliseconds after clearance of the fault, Active Power of at least 95% of the level existing just prior to the fault.

A12.9.2.6. The under-voltage and over-voltage range referred to in clause A12.9.2.5(a)(i) and clause A12.9.2.5(a)(ii) may be varied with the agreement of the Network Operator and AEMO (provided the magnitude of the range between the upper and lower bounds remains at 5%).

A12.9.2.7. The reactive current response referred to in clause A12.9.2.5(a)(i) and clause A12.9.2.5(a)(ii) must have a Rise Time of no greater than 40 milliseconds and a Settling Time of no greater than 70 milliseconds and must be Adequately Damped.

A12.9.2.8. Subject to a Generating System's thermal limitations and energy source availability, a Generating System must make available at all times:

- (a) sufficient current to maintain Rated Maximum Apparent Power of the Generating System including all operating Generating Units (in the absence of a disturbance), for all Connection Point voltages above 115% (or otherwise, above the agreed over-voltage range); and
- (b) the Maximum Continuous Current of the Generating System including all operating Generating Units (in the absence of a disturbance) for all Connection Point voltages below 85% (or otherwise, below the agreed under-voltage range),

despite the amount of reactive current injected or absorbed during voltage disturbances, except that AEMO and the Network Operator may agree limits on active current injection where required to maintain Power System Security and/or the Quality of Supply to other Equipment connected to the SWIS.

A12.9.3. Minimum Generator Performance Standard

A12.9.3.1. The Minimum Generator Performance Standard as it applies to different Generating Systems, is specified in Table A12.9.3.1:

Type of Generating System	Relevant requirement
Generating System comprised solely of Synchronous Generating Units.	Clause A12.9.3.2, clause A12.9.3.3 clause A12.9.3.4.
Generating System comprised solely of Asynchronous Generating Units.	Clause A12.9.3.2, clause A12.9.3.3 and clause A12.9.3.5 to clause A12.9.3.8.

Generating System comprised of Synchronous Generating Units and Asynchronous Generating Units.	Clause A12.9.3.2 and clause A12.9.3.3 and: (a) for that part of the Generating System comprised of Synchronous Generating Units, clause A12.9.3.4; (b) for that part of the Generating System comprised of Asynchronous Generating Units, clause A12.9.3.5 to clause A12.9.3.8.
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Table A12.9.3.1: Disturbance Ride through for Multiple Disturbances Minimum Generator Performance Standard

All Generating Systems

A12.9.3.2. A Generating System and each of its operating Generating Units must remain in Continuous Uninterrupted Operation for any disturbance caused by:

- (a) a Credible Contingency Event; or
- (b) a single phase to ground, phase to phase or two phase to ground fault or three phase fault in a transmission or distribution system cleared in the longest time expected to be taken for all relevant primary Protection Systems to clear the fault,

provided that the event is not one that would disconnect the Generating Unit from the SWIS by removing Network elements from service or as a result of the operation of an inter-trip, Protection Scheme or runback scheme approved by the Network Operator and AEMO.

A12.9.3.3. A Generating System and each of its operating Generating Units must remain in Continuous Uninterrupted Operation for a series of up to 6 disturbances within any 5 minute period.

Synchronous Generating Systems

A12.9.3.4. After clearance of a fault, a Generating System comprised of Synchronous Generating Units, in respect of the faults referred to in clause A12.9.3.2 must:

- (a) deliver Active Power to the Network, and supply or absorb leading or lagging Reactive Power, sufficient to ensure that the Connection Point voltage or another location in the SWIS (including within the Generating System), as specified by the Network Operator, is within the range for Continuous Uninterrupted Operation agreed under the relevant Generator Performance Standard; and
- (b) return to at least 95% of the pre-fault Active Power output within a period of time agreed by AEMO and the Network Operator.

Asynchronous Generating Systems

A12.9.3.5. Subject to any changed power system conditions or energy source availability beyond the operator of the Generating System's reasonable control, a Generating System comprised of Asynchronous Generating Units, for the faults referred to in clause A12.9.3.2, must have equipment capable of supplying to, or absorbing from, the Network:

- (a) to assist the maintenance of power system voltages during the fault:
 - (i) capacitive reactive current in addition to its pre-disturbance level of at least 2% of the Maximum Continuous Current of the Generating System including

all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% reduction of voltage at the Connection Point below the under-voltage range of 80% to 90% of nominal voltage, except where:

1. voltage at the Connection Point is 15% or lower of nominal voltage; or
2. where the Generating System is directly connected to the SWIS with no step-up or connection Transformer and voltage at the Connection Point is 20% or lower of nominal voltage; and

- (ii) inductive reactive current in addition to its pre-disturbance level of at least 2% of the Maximum Continuous Current of the Generating System including all operating Asynchronous Generating Units (in the absence of a disturbance) for each 1% increase of voltage at the Connection Point above the over-voltage range of 110% to 120% of nominal voltage,

during the disturbance and maintained until the Connection Point voltage recovers to between 90% and 110% of nominal voltage, or such other range agreed with the Network Operator and AEMO; and

- (b) returning to at least 95% of the pre-fault Active Power output, after clearance of the fault, within a period of time agreed by the operator, AEMO and the Network Operator.

A12.9.3.6. The under-voltage and over-voltage range referred to in clause A12.9.3.5(a)(i) and clause A12.9.3.5(a)(ii) may be varied with the agreement of the Network Operator and AEMO (provided the magnitude of the range between the upper and lower bounds remains at 10%).

A12.9.3.7. Where AEMO and the Network Operator require the Generating System to sustain a response duration of 2 seconds or less, the reactive current response referred to in clause A12.9.3.5(a)(i) and clause A12.9.3.5(a)(ii) must have a Rise Time of no greater than 40.0 milliseconds and a Settling Time of no greater than 70.0 milliseconds and must be Adequately Damped.

A12.9.3.8. Where AEMO and the Network Operator require the Generating System to sustain a response duration of greater than 2 seconds, the reactive current Rise Time and Settling Time must be as soon as practicable and must be Adequately Damped. The Rise Time and Settling Time must be provided as part of the Generator Performance Standard.

A12.9.4. Negotiation Criteria

A12.9.4.1. A Proposed Negotiated Generator Performance Standard may be accepted if the connection of the Generating System at the proposed performance level would not cause other Generating Systems or Loads to trip as a result of an event, when they would otherwise not have tripped for the same event.

A12.10. Technical Requirement: Disturbance Ride Through for Partial Load Rejection

A12.10.1. Common Requirements

A12.10.1.1. There are no Common Requirements for this Technical Requirement.

A12.10.2. Ideal Generator Performance Standard

A12.10.2.1. A Generating System and each of its operating Generating Units must be capable of Continuous Uninterrupted Operation during and following a sudden reduction in required Active Power generation imposed from the power system, provided that the reduction is less than 30% of the Generating System's Rated Maximum Active Power and the required Active Power generation remains above the Generating System's Rated Minimum Active Power output level.

A12.10.3. Minimum Generator Performance Standard

A12.10.3.1. A Generating System must be capable of Continuous Uninterrupted Operation during and following a sudden reduction in required Active Power generation imposed from the power system, provided that the reduction is less than 5% of the Generating System's Rated Maximum Active Power and the required Active Power generation remains above the Generating System's Rated Minimum Active Power output level.

A12.10.4. Negotiation Criteria

A12.10.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.11. Technical Requirement: Disturbance Ride Through for Quality of Supply

A12.11.1. Common Requirements

A12.11.1.1. There are no Common Requirements for this Technical Requirement.

A12.11.2. Ideal Generator Performance Standard

A12.11.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Disturbance Ride Through for Quality of Supply.

A12.11.3. Minimum Generator Performance Standard

A12.11.3.1. A Generating System including each of its operating Generating Units and reactive Equipment, must not disconnect from the SWIS as a result of voltage fluctuation, harmonic voltage distortion and voltage unbalance conditions at the Connection Point within the levels specified for flicker, harmonics and negative phase sequence voltage in the Technical Rules.

A12.11.4. Negotiation Criteria

A12.11.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.12. Technical Requirement: Quality of Electricity Generated

A12.12.1. Common Requirements

A12.12.1.1. A Generating System, when generating and when not generating, must not produce, at any of its Connection Points for generation, voltage imbalance greater than the limits determined by the Network Operator as necessary to achieve the requirements specified for negative phase sequence voltage at the Connection Point in the Technical Rules.

A12.12.2. Ideal Generator Performance Standard

A12.12.2.1. A Generating System, when generating and when not generating, must not produce at any of its Connection Points for generation:

- (a) voltage fluctuation greater than the limits allocated by the Network Operator that are no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.7:2001; and
- (b) harmonic voltage distortion greater than the emission limits specified in AS 1359.101 and IEC 60034-1 or emission limits allocated by the Network Operator that are no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.6:2001.

A12.12.3. Minimum Generator Performance Standard

A12.12.3.1. A Generating System, when generating and when not generating, must not produce at any of its Connection Points for generation:

- (a) voltage fluctuations greater than limits determined by the Network Operator through the negotiation using the stage 3 evaluation procedure defined in AS/NZS 61000.3.7:2001, with the Market Participant responsible for the Transmission Connected Generating System agreeing to fund any works necessary to mitigate adverse effects from accepting this emission level; and
- (b) Harmonic voltage distortion greater than the emission limits specified in AS 1359.101 and IEC 60034-1 or emission limits determined by the Network Operator through the negotiation using the Stage 3 evaluation procedure defined in AS/NZS 61000.3.6:2001 with the Market Participant responsible for the Transmission Connected Generating System agreeing to fund any works necessary to mitigate adverse effects from accepting this emission level.

A12.12.4. Negotiation Criteria

A12.12.4.1. A Proposed Negotiated Generator Performance Standard must not prevent the Network Operator meeting each SWIS Operating Standard or contractual obligations to existing holders of Arrangements for Access.

A12.13. Technical Requirement: Generation Protection Systems

A12.13.1. Common Requirements

A12.13.1.1. There are no Common Requirements for this Technical Requirement.

A12.13.2. Ideal Generator Performance Standard

A12.13.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Generation Protection Systems.

A12.13.3. Minimum Generator Performance Standard

A12.13.3.1. A Generating System must meet the protection requirements specified in the Technical Rules for both Generating Systems and the Transmission System (where relevant), including the requirement for faults to be cleared within maximum Total Fault Clearance Times specified in the Technical Rules or, where specified, a Critical Fault Clearance Time developed by the Network Operator.

A12.13.3.2. All Protection Schemes must have the relevant level of redundancy as specified in the Technical Rules and must operate to clear faults within the prescribed times.

A12.13.3.3. Anti-islanding protection must be installed and made available to ensure the Generating System is prevented from supplying an isolated portion of the SWIS when it is not secure to do so. The details regarding the performance requirements for anti-islanding systems for Transmission Connected Generating Systems are documented in accordance with the guidelines produced by the Network Operator under clause 3A.4.4.

A12.13.3.4. All Protection Schemes necessary to disconnect the Generating System during abnormal conditions in the power system that would threaten the stability of the Generating System, or risk damage to the Generating System, must be installed and available. The settings of these Protection Schemes must deliver the required performance for disturbance ride through specified in Part A12.7, Part A12.8 and Part A12.9 of this Appendix 12 and form part of the Generator Performance Standard.

A12.13.3.5. All Protection Scheme settings referred to in this Appendix must be made available to the Network Operator and AEMO.

A12.13.4. Negotiation Criteria

A12.13.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.14. Technical Requirement: Remote Monitoring Requirements

A12.14.1. Common Requirements

A12.14.1.1. There are no Common Requirements for this Technical Requirement.

A12.14.2. Ideal Generator Performance Standard

A12.14.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Remote Monitoring Requirements.

A12.14.3. Minimum Generator Performance Standard

A12.14.3.1. The Network Operator or AEMO may require Remote Monitoring Equipment to be installed in order to enable the Network Operator or AEMO to monitor the performance of a Generating Unit (including its dynamic performance) remotely, where this is necessary in real time for control, planning or Power System Security.

A12.14.3.2. All Remote Monitoring Equipment installed, upgraded, modified or replaced (as applicable) under clause A12.14.3.1, must conform to the Communication Standard as it applies Remote Monitoring Equipment and must be compatible with the Network Operator's and AEMO's SCADA system, including the requirements of the Nomenclature Standards.

A12.14.3.3. The Remote Monitoring Equipment must provide for the signals specified in the WEM Procedure described in clause 2.35.4 and such other information required by the Network Operator or AEMO.

A12.14.3.4. The Remote Monitoring Equipment must be kept available at all times, subject to Outages as agreed by AEMO.

A12.14.4. Negotiation Criteria

A12.14.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.15. Technical Requirement: Remote Control Requirements

A12.15.1. Common Requirements

A12.15.1.1. There are no Common Requirements for this Technical Requirement.

A12.15.2. Ideal Generator Performance Standard

A12.15.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Remote Control Requirements.

A12.15.3. Minimum Generator Performance Standard

A12.15.3.1. The Network Operator or AEMO may, for any Generating Unit which may be unattended when connected to the Transmission System, require Remote Control Equipment to be installed in order to enable the Network Operator or AEMO to disconnect a Generating Unit from the Transmission System.

A12.15.3.2. All Remote Control Equipment installed, upgraded, modified or replaced (as applicable) under clause A12.15.3.1 must conform to the Communication Standard and must be compatible with the Network Operator's SCADA system, including the requirements of Nomenclature Standards.

A12.15.3.3. The Remote Control Equipment must be kept available at all times, subject to Outages as agreed by AEMO.

A12.15.4. Negotiation Criteria

A12.15.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.16. Technical Requirement: Communications Equipment Requirements

A12.16.1. Common Requirements

A12.16.1.1. There are no Common Requirements for this Technical Requirement.

A12.16.2. Ideal Generator Performance Standard

A12.16.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Communications Equipment Requirements.

A12.16.3. Minimum Generator Performance Standard

A12.16.3.1. Communications paths must be provided and maintained (with redundancy consistent with the standard developed by AEMO to meet the Communication Standard) between the Remote Monitoring Equipment and Remote Communication Equipment installed at any of its Generating Units to a communications interface at the relevant Power Station and in a location acceptable to the Network Operator. Communications systems between this communications interface and the Network Operator's Control Centre are the responsibility of the Network Operator, unless otherwise agreed.

A12.16.3.2. A Market Participant responsible for the Transmission Connected Generating System must provide and maintain a speech communication channel (Primary Speech Communication Channel) by means of which routine and emergency control telephone calls may be established between the operator of the Generation System and AEMO or the Network Operator, whichever is applicable.

A12.16.3.3. The Primary Speech Communication Channel must meet any requirements specified in the Communication Standard.

A12.16.3.4. Where the public switched telephone network is to be used as the Primary Speech Communication Channel, a sole-purpose connection must be provided, which must be used only for operational communications.

A12.16.3.5. The communications paths to any applicable Remote Monitoring Equipment or Remote Communication Equipment must be kept available at all times, subject to Outages as agreed by AEMO.

A12.16.3.6. The Primary Speech Communication Channel must be maintained in good working order.

A12.16.4. Negotiation Criteria

A12.16.4.1. There are no Negotiation Criteria for this Technical Requirement.

A12.17. Technical Requirement: Generation System Model

A12.17.1. Common Requirements

A12.17.1.1. There are no Common Requirements for this Technical Requirement.

A12.17.2. Ideal Generator Performance Standard

A12.17.2.1. The Ideal Generator Performance Standard is the same as the Minimum Generator Performance Standard for Generation System Model.

A12.17.3. Minimum Generator Performance Standard

A12.17.3.1. All modelling data described in the WEM Procedure referred to in clause 3A.4.2 must be provided to the Network Operator within the timeframes specified in the WEM Procedure, as updated from time to time.

A12.17.3.2. The modelling data provided must be sufficient to enable the Network Operator or AEMO to predict the output of the Generation System under all power system conditions.

A12.17.3.3. The observed performance of the Generation System must match the predicted performance of the Generation System using the Generation System Model, as assessed by the Network Operator or AEMO.

A12.17.3.4. The relevant Market Participant must provide updates to the Generation System Model in order to meet the requirements of this Technical Requirement in accordance with the timeframes specified in the WEM Procedure referred to in clause 3A.4.2, as updated from time to time.

A12.17.4. Negotiation Criteria

A12.17.4.1. There are no Negotiation Criteria for this Technical Requirement.

57. Appendix 13 added

57.1 Insert the following new Appendix 13:

Appendix 13: Frequency Operating Standards System Frequency Outcomes

TABLE 1 – SUMMARY OF SYSTEM FREQUENCY OUTCOMES FOR THE SOUTH WEST INTERCONNECTED SYSTEM

Condition	Contain Band (Hz)	Stabilise (Hz)	Recover (Hz)
Normal Operating Frequency Band	49.8 to 50.2 Hz (99% of the time over any rolling 30-day period)	N/A	N/A
Normal Operating Frequency Excursion Band	49.7 to 50.3 Hz	49.8 to 50.2 Hz within 5 minutes	N/A
Credible Contingency Event Frequency Band	48.75 to 51 Hz	For over-frequency events: below 50.5 Hz within 2 minutes	49.8 to 50.2 Hz within 15 minutes
Island Separation Frequency Band	48.75 to 51 Hz	For over-frequency events: below 50.5 Hz within 2 minutes	49.8 to 50.2 Hz within 15 minutes
Extreme Frequency Tolerance Band	47 to 52 Hz (reasonable endeavours)	48.0 to 50.5 Hz within 5 minutes (reasonable endeavours) and: For under-frequency events: above 47.5 Hz within 10 seconds (reasonable endeavours). For over-frequency events: below 51.5 Hz within 1 minute; and below 51 Hz within 2 minutes (reasonable endeavours)	49.8 to 50.2 Hz within 15 minutes (reasonable endeavours)
Rate of Change of Frequency Safe Limit	0.25 Hz over any 500 millisecond period	N/A	N/A

TABLE 2 – SUMMARY OF SYSTEM FREQUENCY OUTCOMES FOR ISLANDS WITHIN THE SOUTH WEST INTERCONNECTED SYSTEM

Condition	Contain (Hz)	Recover (Hz)
Normal Operating Frequency Band	49.5 to 50.5 Hz (reasonable endeavours)	N/A
Credible Contingency Event Frequency Band	48.75 to 51 Hz (reasonable endeavours)	49.5 to 50.5 Hz (as soon as practicable)
Island Separation Frequency Band	48.75 to 51 Hz (reasonable endeavours)	49.5 to 50.5 Hz (as soon as practicable)

Extreme Frequency Tolerance Band	47 to 52 Hz (reasonable endeavours)	49.5 to 50.5 Hz (as soon as practicable)
Rate of Change of Frequency Safe Limit	0.25 Hz over any 500 millisecond period (reasonable endeavours)	N/A

58. Various references to System Management amended

58.1 In each place in the Market Rules listed in the Table, delete the words 'System Management' and replace them with the word 'AEMO'.

Table
Clause 2.13.6
Clause 2.13.6A
Clause 2.13.6B
Clause 2.13.6C(a)
Clause 2.13.6C(b)
Clause 2.13.6C(c)
Clause 2.13.6D (in each place where it occurs)
Clause 2.13.6E (in each place where it occurs)
Clause 2.13.6F
Clause 2.13.6G (in each place where it occurs)
Clause 2.13.6H(a)
Clause 2.13.6H(b) (in the first place where it occurs)
Clause 2.13.6H(b)(i)
Clause 2.13.6H(b)(ii)
Clause 2.13.6H(d)
Clause 2.13.6K
Clause 2.13.7
Clause 2.13.8
Clause 2.13.9
Clause 2.16.7(b) (in each place where it occurs)
Clause 2.16.9(a) (in each place where it occurs)
Clause 2.16.9(b)(iv)
Clause 2.16.10(d)
Clause 2.28.3(a)
Clause 2.28.3A (in the first place where it occurs)
Clause 2.28.3A(a)
Clause 2.28.3A(b)
Clause 2.28.3A(d)
Clause 2.28.3C (in the second place where it occurs)
Clause 2.28.3C(d)
Clause 2.28.11A
Clause 2.28.11B
Clause 2.28.16B(c)
Clause 2.29.6
Clause 2.29.7
Clause 2.30.5(e)
Clause 2.30B.3(b)(ii)(2)
Clause 2.31.8 (in each place where it occurs)
Clause 2.31.22
Clause 2.35.1 (in each place where it occurs)
Clause 2.35.2
Clause 2.35.4
Clause 2.36A.1
Clause 2.36A.2 (in the first place where it occurs)
Clause 2.36A.2(a)
Clause 2.36A.2(b)
Clause 2.36A.2(c)

Clause 2.36A.2(d)
Clause 2.36A.2(e)
Clause 2.36A.4 (in each place where it occurs)
Clause 3.2.2
Clause 3.2.4 (in each place where it occurs)
Clause 3.2.5
Clause 3.2.6
Clause 3.2.7 (in the first place where it occurs)
Clause 3.2.7(a)
Clause 3.2.7(b)
Clause 3.2.7(c)
Clause 3.2.7(d)
Clause 3.2.8
Clause 3.3.1
Clause 3.3.2 (in the first place where it occurs)
Clause 3.3.2(d)
Clause 3.3.3
Clause 3.4.1 (in the first and second places where it occurs)
Clause 3.4.1(h)
Clause 3.4.2
Clause 3.4.3
Clause 3.4.4
Clause 3.4.5
Clause 3.4.6(a)
Clause 3.4.6(b)
Clause 3.4.7
Clause 3.4.8 (in each place where it occurs)
Clause 3.4.9
Clause 3.5.1 (in the first and second places where it occurs)
Clause 3.5.1(d)
Clause 3.5.1(f)
Clause 3.5.3
Clause 3.5.4
Clause 3.5.5
Clause 3.5.6
Clause 3.5.7
Clause 3.5.8(a)
Clause 3.5.8(b)
Clause 3.5.9
Clause 3.5.10 (in each place where it occurs)
Clause 3.5.11
Clause 3.6.1
Clause 3.6.2
Clause 3.6.4
Clause 3.6.5(c) (in each place where it occurs)
Clause 3.6.6
Clause 3.6.6A
Clause 3.6.6B
Clause 3.7.1
Clause 3.7.2
Clause 3.7.3
Clause 3.7.5 (in each place where it occurs)
Clause 3.7.6 (in each place where it occurs)
Clause 3.10.2(c)
Clause 3.10.4(b)
Clause 3.10.5(b) (in each place where it occurs)
Clause 3.11.1
Clause 3.11.2
Clause 3.11.3
Clause 3.11.4
Clause 3.11.6 (in each place where it occurs)

Clause 3.11.7
Clause 3.11.7A (in each place where it occurs)
Clause 3.11.8
Clause 3.11.8A
Clause 3.11.8B
Clause 3.11.8E
Clause 3.11.9 (in the first place where it occurs)
Clause 3.11.9(b)
Clause 3.11.10 (in each place where it occurs)
Clause 3.11.11
Clause 3.11.12
Clause 3.11.13
Clause 3.11.14
Clause 3.11.15
Clause 3.12.1
Clause 3.13.3A(a)(i)(2)
Clause 3.13.3A(a)(ii)(2)
Clause 3.13B(a)
Clause 3.13.3C (in the first place where it occurs)
Clause 3.13.3C(a)
Clause 3.16.1
Clause 3.16.3
Clause 3.16.4 (in each place where it occurs)
Clause 3.16.5 (in each place where it occurs)
Clause 3.16.6 (in each place where it occurs)
Clause 3.16.7
Clause 3.16.8
Clause 3.16.8A
Clause 3.16.9 (in the first place where it occurs)
Clause 3.16.9(f)
Clause 3.16.9(h)
Clause 3.16.9(i)
Clause 3.16.10
Clause 3.17.1
Clause 3.17.4
Clause 3.17.5 (in the first and second places where it occurs)
Clause 3.17.5(c)
Clause 3.17.6
Clause 3.17.7 (in each place where it occurs)
Clause 3.17.8 (in each place where it occurs)
Clause 3.17.9 (in the first place where it occurs)
Clause 3.17.9(f)
Clause 3.17.9(i)
Clause 3.17.10
Clause 3.18.1B (in the first place where it occurs)
Clause 3.18.1B(b)
Clause 3.18.2(a)
Clause 3.18.2(b)
Clause 3.18.2(c)(i) (in each place where it occurs)
Clause 3.18.2(c)(vi)
Clause 3.18.2(d)
Clause 3.18.2A(b)
Clause 3.18.2A(e) (in each place where it occurs)
Clause 3.18.2A(f)
Clause 3.18.2A(g) (in each place where it occurs)
Clause 3.18.2A(h)
Clause 3.18.2A(i)
Clause 3.18.3(b)
Clause 3.18.3(c) (in the first place where it occurs)
Clause 3.18.3(c)(i)
Clause 3.18.3(d) (in each place where it occurs)

Clause 3.18.4 (in the first place where it occurs)
Clause 3.18.4(a)
Clause 3.18.4(b)
Clause 3.18.4A (in each place where it occurs)
Clause 3.18.5(a)
Clause 3.18.5(b)
Clause 3.18.5A (in the first place where it occurs)
Clause 3.18.5A(a)
Clause 3.18.5A(b)
Clause 3.18.5A(c)
Clause 3.18.5B
Clause 3.18.5C
Clause 3.18.5D (in each place where it occurs)
Clause 3.18.5E(d)
Clause 3.18.7A (in each place where it occurs)
Clause 3.18.8
Clause 3.18.9 (in each place where it occurs)
Clause 3.18.9A
Clause 3.18.9B (in the first place where it occurs)
Clause 3.18.9B(a)
Clause 3.18.9B(b)(i)
Clause 3.18.9B(b)(ii)
Clause 3.18.10
Clause 3.18.10A
Clause 3.18.10B (in the first and fourth places where it occurs)
Clause 3.18.10B(a)
Clause 3.18.10B(b)
Clause 3.18.10B(e)
Clause 3.18.10C(a)
Clause 3.18.11 (in the first place where it occurs)
Clause 3.18.11(d)
Clause 3.18.11(e)
Clause 3.18.11A(c) (in the first place where it occurs)
Clause 3.18.11A(c)(i)
Clause 3.18.11A(c)(ii)
Clause 3.18.12
Clause 3.18.13 (in the first place where it occurs)
Clause 3.18.13(a) (in each place where it occurs)
Clause 3.18.13(b)
Clause 3.18.13(c) (in each place where it occurs)
Clause 3.18.13(d) (in the first and second places where it occurs)
Clause 3.18.13(d)(i)
Clause 3.18.13(d)(ii)
Clause 3.18.13(e)
Clause 3.18.14 (in the first place where it occurs)
Clause 3.18.14(a)
Clause 3.18.14(b)
Clause 3.18.14(c)
Clause 3.18.14(d)
Clause 3.18.15 (in the first place where it occurs)
Clause 3.18.15(a)
Clause 3.18.15(b)
Clause 3.18.15(c)
Clause 3.18.15(d)
Clause 3.18.15(e)
Clause 3.18.15(f) (in the first place where it occurs)
Clause 3.18.15(f)(i)
Clause 3.18.15(g) (in each place where it occurs)
Clause 3.18.16 (in each place where it occurs)
Clause 3.18.17
Clause 3.18.18

Clause 3.18.21
Clause 3.19.1
Clause 3.19.2
Clause 3.19.2A
Clause 3.19.2B
Clause 3.19.2C
Clause 3.19.2D (in each place where it occurs)
Clause 3.19.2F (in the first place where it occurs)
Clause 3.19.2F(a)
Clause 3.19.2F(b)(i)
Clause 3.19.2F(b)(ii)
Clause 3.19.2G(a)
Clause 3.19.2G(b)
Clause 3.19.2H(c)
Clause 3.19.2H(d)
Clause 3.19.3 (in each place where it occurs)
Clause 3.19.3A
Clause 3.19.3B
Clause 3.19.3C (in the third place where it occurs)
Clause 3.19.3C(a)
Clause 3.19.3C(b)
Clause 3.19.3C(e)
Clause 3.19.4
Clause 3.19.4A
Clause 3.19.5 (in each place where it occurs)
Clause 3.19.6 (in the first place where it occurs)
Clause 3.19.6(c)
Clause 3.19.6(d)
Clause 3.19.6(e)
Clause 3.19.7 (in each place where it occurs)
Clause 3.19.9
Clause 3.19.10
Clause 3.19.11(a)
Clause 3.19.11(b)
Clause 3.19.12(a)
Clause 3.19.12(aA)
Clause 3.19.13
Clause 3.19.14
Clause 3.20.1
Clause 3.20.2
Clause 3.20.3 (in each place where it occurs)
Clause 3.21.1(a)
Clause 3.21.1(aB)
Clause 3.21.1(c)
Clause 3.21.2 (in each place where it occurs)
Clause 3.21.3
Clause 3.21.4 (in each place where it occurs)
Clause 3.21.5 (in each place where it occurs)
Clause 3.21.6(a)
Clause 3.21.6(b)
Clause 3.21.6(c) (in the first place where it occurs)
Clause 3.21.6(c)(ii)(2)
Clause 3.21.6(d) (in the first place where it occurs)
Clause 3.21.6(d)(ii)(2)
Clause 3.21.7 (in each place where it occurs)
Clause 3.21.8
Clause 3.21.9 (in each place where it occurs)
Clause 3.21.10 (in each place where it occurs)
Clause 3.21.11
Clause 3.21.12
Clause 3.21A.2

Clause 3.21A.3
Clause 3.21A.4 (in the first place where it occurs)
Clause 3.21A.4(d)
Clause 3.21A.6
Clause 3.21A.7
Clause 3.21A.8
Clause 3.21A.9
Clause 3.21A.10 (in the first place where it occurs)
Clause 3.21A.10(a)(i)
Clause 3.21A.10(a)(ii)
Clause 3.21A.10(a)(iii) (in each place where it occurs)
Clause 3.21A.11
Clause 3.21A.12
Clause 3.21A.13 (in the first place where it occurs)
Clause 3.21A.13(a)
Clause 3.21A.15
Clause 3.21A.17
Clause 3.21B.1
Clause 3.21B.2
Clause 3.21B.3 (in each place where it occurs)
Clause 3.21B.4
Clause 3.21B.5 (in the first place where it occurs)
Clause 3.21B.5(b)
Clause 3.21B.6 (in each place where it occurs)
Clause 3.21B.7 (in each place where it occurs)
Clause 3.21B.8
Clause 3.23.1 (in the first and third places where it occurs)
Clause 3.23.1(b)
Clause 4.10.1(e)(iv)(2)
Clause 4.12.1(c)
Clause 4.12.6(b)
Clause 4.12.6(c)
Clause 4.24.13 (in the first place where it occurs)
Clause 4.24.13(h)(viii)
Clause 4.24.13(h)(xiii)
Clause 4.25.3A(b)
Clause 4.25.3B
Clause 4.25.5
Clause 4.25.6 (in each place where it occurs)
Clause 4.25.9
Clause 4.26.1C
Clause 4.26.2CB(a)(ii)(1)
Clause 4.26.2D(a) (in each place where it occurs)
Clause 4.26.2D(b)
Clause 5.3A.3 (in each place where it occurs)
Clause 5.3A.4 (in each place where it occurs)
Clause 5.7.2
Clause 5.7.4
Clause 5.9.3(b)
Clause 6.3A.2(a)(ii)
Clause 6.3A.2(e)(i)
Clause 6.3A.2(e)(ii)
Clause 6.3A.3(b)
Clause 6.12.1(a)(i)
Clause 6.12.1(a)(ii)
Clause 6.13.1
Clause 6.16A.1(b)(iii)(1)
Clause 6.16A.2(b)(iii)(1)
Clause 6.16A.2(b)(iv)
Clause 6.16B.1(b)(ii)(1)
Clause 6.16B.1(b)(ii)(2)

Clause 6.16B.2(b)(ii)(1)
Clause 6.16B.2(b)(ii)(2)
Clause 6.17.3(e)
Clause 6.17.4(e)
Clause 6.17.5(e)
Clause 6.17.5A(e)
Clause 6.17.9(a) (in each place where it occurs)
Clause 6.17.9(b)
Clause 7.1.1
Clause 7.1.2 (in each place where it occurs)
Clause 7.1.3
Clause 7.2.1
Clause 7.2.3A (in the first place where it occurs)
Clause 7.2.3A(a)
Clause 7.2.4
Clause 7.2.5 (in each place where it occurs)
Clause 7.2.6
Clause 7.3.4 (in each place where it occurs)
Clause 7.6.1
Clause 7.6.1A (in each place where it occurs)
Clause 7.6.1B
Clause 7.6.1C (in the first place where it occurs)
Clause 7.6.1C(b)
Clause 7.6.1C(c)
Clause 7.6.1C(e)
Clause 7.6.1D (in each place where it occurs)
Clause 7.6.1E
Clause 7.6.1F
Clause 7.6.1H (in the third place where it occurs)
Clause 7.6.1H(a)
Clause 7.6.1H(b)
Clause 7.6.2A (in each place where it occurs)
Clause 7.6.10
Clause 7.6.10A
Clause 7.6.12
Clause 7.6.13
Clause 7.6A.1
Clause 7.6A.2(a)
Clause 7.6A.2(b)
Clause 7.6A.2(c)
Clause 7.6A.2(d) (in each place where it occurs)
Clause 7.6A.2(f)
Clause 7.6A.2(g)
Clause 7.6A.3(a)
Clause 7.6A.3(b)
Clause 7.6A.3(c)
Clause 7.6A.4(a)
Clause 7.6A.4(b)
Clause 7.6A.4(c) (in each place where it occurs)
Clause 7.6A.4(d) (in each place where it occurs)
Clause 7.6A.5(a) (in each place where it occurs)
Clause 7.6A.5(c)
Clause 7.6A.5(d)
Clause 7.6A.5(e)
Clause 7.6A.6
Clause 7.6A.7 (in each place where it occurs)
Clause 7.6A.8
Clause 7.7.1
Clause 7.7.2(a)
Clause 7.7.4A (in the first place where it occurs)
Clause 7.7.4A(b) (in each place where it occurs)

Clause 7.7.5
Clause 7.7.5A (in the first place where it occurs)
Clause 7.7.5A(a)
Clause 7.7.5A(d)
Clause 7.7.5C
Clause 7.7.5D
Clause 7.7.6(a) (in each place where it occurs)
Clause 7.7.6A (in the first place where it occurs)
Clause 7.7.6A(a)
Clause 7.7.6B (in each place where it occurs)
Clause 7.7.6C
Clause 7.7.7 (in each place where it occurs)
Clause 7.7.7A
Clause 7.7.7B
Clause 7.7.8
Clause 7.7.9 (in each place where it occurs)
Clause 7.7.10 (in each place where it occurs)
Clause 7.7.11 (in each place where it occurs)
Clause 7.8.1
Clause 7.8.2 (in each place where it occurs)
Clause 7.8.3
Clause 7.9.1
Clause 7.9.1A(a)
Clause 7.9.2
Clause 7.9.3 (in each place where it occurs)
Clause 7.9.4 (in the first place where it occurs)
Clause 7.9.4(b)
Clause 7.9.4(c)
Clause 7.9.5(a)
Clause 7.9.6
Clause 7.9.6A
Clause 7.9.7 (in each place where it occurs)
Clause 7.9.8 (in the first place where it occurs)
Clause 7.9.8(b)
Clause 7.9.9
Clause 7.9.10
Clause 7.9.12 (in the first place where it occurs)
Clause 7.9.12(a)
Clause 7.9.12(b) (in each place where it occurs)
Clause 7.9.13
Clause 7.9.14 (in each place where it occurs)
Clause 7.9.15
Clause 7.9.16
Clause 7.9.17 (in the first place where it occurs)
Clause 7.9.17(a)
Clause 7.9.18
Clause 7.9.19 (in the first place where it occurs)
Clause 7.9.19(b)
Clause 7.9.19(c)
Clause 7.9.19(d)
Clause 7.10.2(c)(i)
Clause 7.10.2(d)
Clause 7.10.3
Clause 7.10.3A (in the first place where it occurs)
Clause 7.10.3A(a)
Clause 7.10.4
Clause 7.10.5 (in each place where it occurs)
Clause 7.10.6A (in the first place where it occurs)
Clause 7.10.6A(a)
Clause 7.10.7 (in the first and second places where it occurs)
Clause 7.10.7(a) (in the first place where it occurs)

Clause 7.10.7(a)(iii)
Clause 7.11.2
Clause 7.11.3 (in each place where it occurs)
Clause 7.11.3A (in each place where it occurs)
Clause 7.11.4
Clause 7.11.5 (in the first place where it occurs)
Clause 7.11.5(g)
Clause 7.11.5(h)
Clause 7.11.5(j)
Clause 7.11.5(k)
Clause 7.11.6(dA)
Clause 7.11.6(dB)
Clause 7.11.6(dC)
Clause 7.11.6(e)
Clause 7.11.6A (in the first place where it occurs)
Clause 7.11.6A(b)
Clause 7.11.6B (in each place where it occurs)
Clause 7.11.7
Clause 7.11.9 (in each place where it occurs)
Clause 7.12.1 (in the first place where it occurs)
Clause 7.12.1(d)(ii)
Clause 7.13.1 (in the first place where it occurs)
Clause 7.13.1(a)
Clause 7.13.1(c)
Clause 7.13.1(cC)
Clause 7.13.1(dA)
Clause 7.13.1(eA)
Clause 7.13.1(eB)
Clause 7.13.1(eH)
Clause 7.13.1(f)
Clause 7.13.1A
Clause 7.13.1B (in each place where it occurs)
Clause 7.13.1C (in the first place where it occurs)
Clause 7.13.1C(a)
Clause 7.13.1C(e)
Clause 7.13.1D (in the first place where it occurs)
Clause 7.13.1D(a)
Clause 7.13.1D(b)
Clause 7.13.1E (in the first place where it occurs)
Clause 7.13.1E(c)(i)
Clause 7.13.1F (in the first place where it occurs)
Clause 7.13.1F(a)
Clause 7.13.1F(b)
Clause 7.13.1G (in the first place where it occurs)
Clause 7.13.1G(c)(i)
Clause 7.13.1G(c)(ii)
Clause 7.13.1G(c)(iii)
Clause 7.13.2
Clause 7.13.3
Clause 7.13.4
Clause 7.13.5
Clause 7A.2.9(g)(i)(2)
Clause 7A.2.9(g)(iii)(2)
Clause 7A.2.9B
Clause 7A.2.9C
Clause 7A.2A.1
Clause 7A.2A.2
Clause 7A.2A.3(b)
Clause 7A.2A.4(b)
Clause 7A.3.1(b)
Clause 7A.3.3(a)

Clause 7A.3.7
Clause 7A.3.7A
Clause 7A.3.8 (in the first place where it occurs)
Clause 7A.3.8(a)
Clause 7A.3.9
Clause 7A.3.15 (in each place where it occurs)
Clause 7B.1.2
Clause 7B.1.4
Clause 7B.1.5 (in each place where it occurs)
Clause 7B.2.18 (in each place where it occurs)
Clause 7B.2.19 (in each place where it occurs)
Clause 7B.3.6
Clause 7B.3.7
Clause 7B.3.8 (in each place where it occurs)
Clause 7B.4.1 (in each place where it occurs)
Clause 7B.4.2 (in each place where it occurs)
Clause 9.3.4
Clause 9.9.2
Clause 10.5.1(jB)
Clause 10.5.1(vA)
Clause 10.5.1(zA)
Clause 10.5.1(zB) (in each place where it occurs)
Clause 10.5.1(zl)
Appendix 1 (in each place where it occurs)
Appendix 5A (in each place where it occurs)
Appendix 9 (in each place where it occurs)

58.2 In each place in the Market Rules listed in the Table, delete the words 'System Management's' and replace them with the word 'AEMO's'.

Table
Clause 2.13.6D
Clause 2.13.6E(b)(i)
Clause 2.16.7(b)
Clause 2.28.3A(c)
Clause 2.28.3C(b)
Clause 2.28.3C(c)
Clause 2.30.5(a)
Clause 2.36A.2
Clause 3.4.1(j)
Clause 3.6.5 (in the first place where it occurs)
Clause 3.6.5(a)
Clause 3.6.5(c)
Clause 3.6.6A
Clause 3.10.6
Clause 3.11.6
Clause 3.11.12
Clause 3.16.9 (in the first place where it occurs)
Clause 3.16.9(c)
Clause 3.16.9(d)(iii)
Clause 3.16.9(i)
Clause 3.17.9(c)
Clause 3.17.9(d)(iii)
Clause 3.17.9(i)
Clause 3.18.11(aA)
Clause 3.18.13(b)
Clause 3.18.13(d) (in the first place where it occurs)
Clause 3.18.13(d)(ii)(1)
Clause 3.18.13(d)(ii)(2)
Clause 3.18.14(b)
Clause 3.18.15 (in the first place where it occurs)

Clause 3.18.15(b) (in the first place where it occurs)
Clause 3.18.15(b)(i)
Clause 3.18.15(c)
Clause 3.18.15(d)
Clause 3.18.15(f)
Clause 3.18.15(g)
Clause 3.19.6(a)
Clause 3.19.6(d)(i)
Clause 3.19.6(d)(ii)
Clause 3.19.6(d)(iii)
Clause 3.19.6(d)(iv)
Clause 3.19.8
Clause 3.19.12(a)
Clause 3.19.12(d)
Clause 3.21.1
Clause 3.21.6(a) (in each place where it occurs)
Clause 3.21A.13(b)
Clause 3.23.1(a)
Clause 6.15.2(b)(i)
Clause 7.6A.1
Clause 7.6A.3(a)
Clause 7.7.5B
Clause 7.9.19(e)
Clause 7.10.4A
Clause 7.13.1(cA) (in each place where it occurs)
Clause 7.13.1D(a)
Clause 7.13.1D(b)
Clause 7.13.1F(b)
Clause 7A.2.9C
Appendix 9

- 58.3 In each place in the Market Rules listed in the Table, delete the words 'Power System Operation Procedures developed by System Management' and replace them with the words 'WEM Procedures developed by AEMO in respect to system operation'.

Table

Clause 2.13.6
Clause 2.13.6C(a)

- 58.4 In each of the definitions in Chapter 11 (Glossary) listed in the Table, delete the words 'System Management' and replace them with the word 'AEMO'.

Table

Ancillary Service Contract (in each place where it occurs)
Backup Downwards LFAS Enablement
Backup Upwards LFAS Enablement:
Balancing Merit Order (in each place where it occurs)
Commissioning Test Plan
Commissioning Test Period
Dispatch Advisory (in each place where it occurs)
Dispatch Order
Dispatch Plan
Equipment List
Facility Tolerance Range
Forecast Downwards LFAS Quantity (in each place where it occurs)
Forecast Upwards LFAS Quantity (in each place where it occurs)
Load Rejection Reserve Event

Load Rejection Reserve Response Quantity
Local Black Start Procedures
Medium Term PASA
Minimum LFAS Quantity
Non-Scheduled Generator
Operating Instruction
Operational System Load Estimate
Projected Assessment of System Adequacy (PASA)
Scheduled Generator:
Spinning Reserve Event
Spinning Reserve Response Quantity
Tolerance Range

58.5 In each of the definitions in Chapter 11 (Glossary) listed in the Table, delete the words 'System Management's' and replace them with the word 'AEMO's'.

Table
Dispatch Plan
Forecast Downwards LFAS Quantity
Forecast Upwards LFAS Quantity
Operational System Load Estimate
Scheduled Outage

59. Various references to System Management deleted

59.1 In each place in the Market Rules listed in the Table, delete the words ', System Management'.

Table
Clause 2.10.1
Clause 2.10.2
Clause 2.10.2A
Clause 2.10.3 (in each place where it occurs)
Clause 2.10.10
Clause 2.10.13(c)
Clause 2.11.1 (in each place where it occurs)
Clause 2.11.2 (in each place where it occurs)
Clause 2.17.1
Clause 2.17.2

59.2 In each place in the Market Rules listed in the Table, delete the words '(including in AEMO's role as System Management)'.

Table
Clause 1.28.1(a)
Clause 2.13.3A

59.3 In each place in the Market Rules listed in the Table, delete the words '(including in its capacity as System Management)'.

Table
Clause 2.3.1(b)
Clause 2.9.2D
Clause 2.10.5A
Clause 2.10.12A
Clause 2.10.13(g)
Clause 2.14.3

Clause 1.8.5
 Section 1.12
 Section 1.13
 Section 1.14
 Section 1.15
 Section 1.16
 Section 1.17
 Section 1.18
 Section 1.19
 Section 1.25
 Section 2.2
 Clause 2.3.5(f)
 Clause 2.9.2
 Clause 2.9.7
 Clause 2.21.3
 Clause 2.21.4
 Clause 2.28.1(d)
 Clause 2.28.14
 Clause 7B.3.1(b)
 Clause 10.5.1(r)(ii)

61. Various references to the Coordinator added

61.1 In each place in the Market Rules listed in the Table, insert the words ', the Coordinator' immediately after the words 'the Economic Regulation Authority'.

Table

Clause 2.3.1(b)
 Clause 2.10.1
 Clause 2.10.2
 Clause 2.10.2A
 Clause 2.10.3 (in each place where it occurs)
 Clause 2.10.7 (in each place where it occurs)
 Clause 2.10.17 (in each place where it occurs)
 Clause 2.10.18
 Clause 2.11.1 (in each place where it occurs)
 Clause 2.11.2 (in each place where it occurs)
 Clause 2.11.4 (in each place where it occurs)
 Clause 2.17.1
 Clause 2.17.2

62. Various references to Market Procedure amended

62.1 In each place in the Market Rules listed in the Table, delete the words 'Market Procedure' and replace them with the words 'WEM Procedure'.

Table

Clause 1.6.1
 Clause 1.6.2
 Clause 1.29.2
 Clause 1.33.2(b)
 Clause 1.34.1(a)
 Clause 2.9.2D (in the first place where it occurs)
 Clause 2.9.2D(a)

Clause 2.9.2D(b)
Clause 2.9.2D(c)(ii) (in each place where it occurs)
Clause 2.9.5
Clause 2.10.2
Clause 2.10.2A(a)
Clause 2.10.2A(b)
Clause 2.10.6(a) (in each place where it occurs)
Clause 2.10.6(b) (in each place where it occurs)
Clause 2.10.13(a) (in each place where it occurs)
Clause 2.10.13(b) (in each place where it occurs)
Clause 2.10.13(f)
Clause 2.10.13(g)
Clause 2.10.13(h)
Clause 2.10.13(i)
Clause 2.11.1
Clause 2.11.2 (in each place where it occurs)
Clause 2.11.4 (in each place where it occurs)
Clause 2.13.2
Clause 2.13.3
Clause 2.13.4
Clause 2.13.6A
Clause 2.15.1
Clause 2.15.2
Clause 2.15.3
Clause 2.15.4
Clause 2.15.6A (in each place where it occurs)
Clause 2.15.6B
Clause 2.15.6C
Clause 2.26.3(f)
Clause 2.27.6
Clause 2.27.10(a)
Clause 2.27.15(a)
Clause 2.27.15(b)
Clause 2.27.17
Clause 2.27A.2(c)
Clause 2.27A.3
Clause 2.27A.6(c)
Clause 2.27A.7(a)
Clause 2.27A.7(b)
Clause 2.27A.10
Clause 2.27A.11
Clause 2.27B.3(e)
Clause 2.27B.4(b)
Clause 2.27B.6(d)
Clause 2.27B.8
Clause 2.30.11
Clause 2.30A.6
Clause 2.31.23 (in the first place where it occurs)
Clause 2.31.23(a)
Clause 2.31.23(b)
Clause 2.36A.1
Clause 2.36A.2(a) (in each place where it occurs)
Clause 2.36A.2(c)

Clause 2.36A.2(e)
Clause 2.37.4(c)
Clause 2.37.7
Clause 2.37.8
Clause 2.38.3
Clause 2.40.1(c)
Clause 2.41.5
Clause 2.42.4
Clause 2.43.1
Clause 3.8.5
Clause 3.18.19(c)
Clause 3.24.1
Clause 3.24.3
Clause 3.24.5
Clause 3.24.8
Clause 3.24.9
Clause 3.24.10 (in each place where it occurs)
Clause 3.24.11
Clause 3.24.12
Clause 3.24.14
Clause 4.5.14
Clause 4.5.14B
Clause 4.5.14C
Clause 4.5.14D
Clause 4.5.14E
Clause 4.5.14F
Clause 4.5.15
Clause 4.5.16
Clause 4.5.17
Clause 4.5.20(b)
Clause 4.9.3(a)
Clause 4.9.10
Clause 4.13.4
Clause 4.13.8
Clause 4.13.10C
Clause 4.13A.12
Clause 4.13A.23
Clause 4.14.11
Clause 4.16.3 (in the first place where it occurs)
Clause 4.16.3(a) (in each place where it occurs)
Clause 4.16.3(b)
Clause 4.16.5
Clause 4.16.9
Clause 4.17.9
Clause 4.24.18
Clause 4.25.14
Clause 4.25A.1
Clause 4.26.2CB(a)
Clause 4.26.2CD(b)
Clause 4.26.2CE
Clause 4.27.5(a)
Clause 4.27.5(b)
Clause 4.27.12 (in each place where it occurs)

Clause 4.28.9A
Clause 4.28.9C(b)
Clause 4.28.9D
Clause 4.28.9E
Clause 4.28.12
Clause 4.28A.3
Clause 4.28B.9
Clause 4.28C.15
Clause 6.17.6B
Clause 6.17.6E
Clause 6.17.6F
Clause 6.19.6(f)
Clause 6.19.10(a)
Clause 6.19.10(b)
Clause 7.10.4
Clause 7A.1.6
Clause 7A.1.15
Clause 7A.3.1(d)
Clause 7A.3.2(c)
Clause 7A.3.3
Clause 7A.3.4
Clause 7B.3.2(c)
Clause 8.6.2 (in each place where it occurs)
Clause 9.2.1
Clause 9.4.17(a)
Clause 9.4.18
Clause 9.20.1
Clause 9.20.4
Clause 10.2.7
Clause 10.5.1(a)
Clause 10.5.1(a)(vii) (in each place where it occurs)

62.2 In each of the definitions in Chapter 11 (Glossary) listed in the Table, delete the words 'Market Procedure' and replace them with the words 'WEM Procedure'.

Table
Balancing Facility Requirements
Balancing Forecast
Constraints Library
LFAS Facility Requirements
Procedure Amendment
Procedure Change Process
Transitional Procedure

63. Various references to Market Procedures amended

63.1 In each place in the Market Rules listed in the Table, delete the words 'Market Procedures' and replace them with the words 'WEM Procedures'.

Table
Clause 1.5.1(a)
Clause 1.5.2(d)
Clause 1.7.4

Clause 2.1A.2(h)
Clause 2.1A.2(i)
Clause 2.2C.1(c)
Clause 2.9.2A
Clause 2.9.2B
Clause 2.9.2C
Clause 2.9.2CA
Clause 2.9.2D
Clause 2.9.5
Clause 2.9.7A
Clause 2.9.7B
Clause 2.9.7C
Clause 2.9.8
Clause 2.10.3 (in each place where it occurs)
Clause 2.13.2
Clause 2.13.3
Clause 2.13.3A (in each place where it occurs)
Clause 2.13.9A
Clause 2.13.9D
Clause 2.13.10 (in the first place where it occurs)
Clause 2.13.10(d) (in the first place where it occurs)
Clause 2.13.10(d)(i)
Clause 2.13.11
Clause 2.13.12
Clause 2.13.13
Clause 2.14.3(b)
Clause 2.14.5A
Clause 2.14.5B (in the first place where it occurs)
Clause 2.14.5B(b)
Clause 2.15.2
Clause 2.15.3(a)
Clause 2.15.3(c)
Clause 2.15.3(d)
Clause 2.15.3(e)
Clause 2.15.6B
Clause 2.15.6C(a)
Clause 2.16.9(b)
Clause 2.16.10(c)
Clause 2.16.10(d)
Clause 2.27A.4
Clause 2.27A.7(d)
Clause 2.27C.2(c)
Clause 3.8.3(b)
Clause 3.8.5A (in each place where it occurs)
Clause 3.24.7
Clause 6.19.10
Clause 10.2.1 (in each place where it occurs)
Clause 10.3.2
Clause 10.5.1(a)(vi)
Clause 10.5.1(a)(vii)

64. Various references to Power System Operation Procedure amended

64.1 In each place in the Market Rules listed in the Table, delete the words 'Power System Operation Procedure' and replace them with the words 'WEM Procedure'.

Table
Clause 2.13.6K
Clause 2.28.3A
Clause 2.35.4
Clause 3.2.2
Clause 3.2.4 (in each place where it occurs)
Clause 3.2.6
Clause 3.2.7
Clause 3.2.8
Clause 3.3.3
Clause 3.4.9
Clause 3.5.11
Clause 3.11.14
Clause 3.11.15
Clause 3.16.4
Clause 3.16.7
Clause 3.16.8A
Clause 3.16.10
Clause 3.17.10
Clause 3.18.1B(b)
Clause 3.18.3(c)(i)
Clause 3.18.3(c)(ii)
Clause 3.18.15(a)
Clause 3.18.15(f)(i)
Clause 3.18.15(f)(ii)
Clause 3.18.21
Clause 3.19.10
Clause 3.19.14
Clause 3.21.12
Clause 3.21A.15
Clause 3.21B.5(a)
Clause 3.21B.8
Clause 4.11.1(h)
Clause 7.2.5
Clause 7.6.10 (in each place where it occurs)
Clause 7.6.10A
Clause 7.6.13
Clause 7.6A.7
Clause 7.6A.8
Clause 7.6A.10
Clause 7.7.4A (in each place where it occurs)
Clause 7.7.5A (in the first place where it occurs)
Clause 7.7.5A(c)
Clause 7.7.5B
Clause 7.7.5C
Clause 7.7.6(a) (in each place where it occurs)
Clause 7.7.6(b)
Clause 7.7.9
Clause 7.9.19
Clause 7.13.1(eD)

Clause 7.13.1C(a)

Clause 7.13.3

Clause 7.13.5(b)

Clause 7A.3.7

Clause 7A.3.7A

Clause 7A.3.15

Clause 7B.1.2

Clause 7B.1.4

Appendix 9 (in each place where it occurs)

- 64.2 In each of the definitions in Chapter 11 (Glossary) listed in the Table, delete the words 'Power System Operation Procedure' and replace them with the words 'WEM Procedure'.

Table

Equivalent Planned Outage Hours

65. Various references to System Management Functions and System Management Fees amended

- 65.1 In each place in the Market Rules listed in the Table, delete the words 'System Management' and replace them with the words 'System Operation'.

Table

Clause 2.1A.2(ID)

Clause 2.24.1(a)

Clause 2.24.2

Clause 2.24.2A

Clause 2.24.2B (in each place where it occurs)

Clause 2.24.3 (in the first place where it occurs)

Clause 2.24.3(b) (in the first place where it occurs)

Clause 2.24.4

Clause 2.25.1

Clause 2.25.2

Clause 2.25.4(a)

Clause 2.25.4(b)

Clause 7A.4.2(a)

Clause 7A.4.7(a)(i)

Clause 9.1.2(g)(ii)

Clause 9.13.1 (in the first and second places where it occurs)

Clause 9.16.3(d)

Clause 9.19.1(a)(v)

Clause 10.5.1(v)(ii)

66. Various references to Power System Operation Procedures amended

- 66.1 In each place in the Market Rules listed in the Table, delete the words 'Power System Operation Procedures' and replace them with the words 'WEM Procedures'.

Table

Clause 2.13.6C(c)

Clause 2.13.6H(b)(i)

Clause 2.13.8 (in the first place where it occurs)

Clause 2.13.8(a)

67. Various references to Power System Operation Procedure and Power System Operation Procedures deleted

67.1 In each place in the Market Rules listed in the Table, delete the words 'and Power System Operation Procedure'.

Table

Clause 2.9.2D

67.2 In each place in the Market Rules listed in the Table, delete the words 'and Power System Operation Procedures'.

Table

Clause 2.9.2D

67.3 In each place in the Market Rules listed in the Table, delete the words '(including the Power System Operation Procedures)'.

Table

Clause 2.15.6B

67.4 In each place in the Market Rules listed in the Table, delete the words 'or Power System Operation Procedure'.

Clause 2.9.2D(b)

Clause 2.9.2D(c)(i)

Clause 2.9.2D(c)(ii) (in each place where it occurs)

68. Various references to Market Rule amended

68.1 In each place in the Market Rules listed in the Table, delete the words 'Market Rule' and replace them with the words 'WEM Rule'.

Table

Clause 2.13.15

Clause 2.13.18(a)

Clause 2.15.3(f)

Clause 2.16.10(a)

Clause 2.16.12(b)(vii)

Clause 3.18.19(c)

Clause 10.5.1(a)

69. Various references to Market Rules amended

69.1 In each place in the Market Rules listed in the Table, delete the words 'Market Rules' and replace them with the words 'WEM Rules'.

Table

Clause 1.1.2

Clause 1.3.1

Clause 1.4.1 (in the first place where it occurs)

Clause 1.4.1(f)

Clause 1.4.1(i)

Clause 1.4.1(k)

Clause 1.4.1(m)

Clause 1.4.1(c)(in each place where it occurs)

Clause 1.4.2

Clause 1.4.3

Clause 1.5.1 (in the first place where it occurs)

Clause 1.5.2 (in the first place where it occurs)

Clause 1.5.2(c)

Clause 1.5.2(dA)

Clause 1.5.2(dB)

Clause 1.5.2(dC)

Clause 1.6.1

Clause 1.6.2

Clause 1.7.1

Clause 1.7.3 (in the first place where it occurs)

Clause 1.7.3(b)

Clause 1.7.4 (in the first and second places where it occurs)

Clause 1.7.4(b)

Clause 1.8.3

Clause 1.8.6

Clause 1.20.1

Clause 1.20.2(b)

Section 1.21

Section 1.22

Clause 1.24.1 (in each place where it occurs)

Clause 1.26.1 (in each place where it occurs)

Clause 1.27.1

Clause 1.28.3

Clause 1.30.1 (in each place where it occurs)

Clause 1.36.1 (in each place where it occurs)

Clause 2.1A.2 (in the first place where it occurs)

Clause 2.1A.2(b)

Clause 2.1A.2(f)

Clause 2.1A.2(g)

Clause 2.1A.2(h)

Clause 2.1A.2(j)(i)

Clause 2.1A.2(j)(ii)

Clause 2.1A.2(j)(iii)

Clause 2.1A.2(IA)(iii)

Clause 2.1A.2(IA)(iv)

Clause 2.1A.2(m)

Clause 2.2A.1 (in the first place where it occurs)

Clause 2.2A.1(a) (in each place where it occurs)

Clause 2.2A.1(c)

Clause 2.2C.1 (in the first place where it occurs)

Clause 2.2C.1(c)

Clause 2.2C.1(e)

Clause 2.3.1(d)

Clause 2.3.3

Clause 2.3.15(a)

Clause 2.3.15(aA)

Clause 2.3.15(c) (in each place where it occurs)

Clause 2.3.17(a)

Clause 2.3.17(b)

Clause 2.4.1(a)

Clause 2.4.1(b)
Clause 2.4.2
Clause 2.4.4(b)(v)
Clause 2.4A.2
Clause 2.5.4 (in the first place where it occurs)
Clause 2.5.4(a)
Clause 2.5.7(c)
Clause 2.5.7(d)
Clause 2.8.4
Clause 2.8.5(c)
Clause 2.8.13(h)
Clause 2.9.2A
Clause 2.9.2B
Clause 2.9.2C
Clause 2.9.2CA
Clause 2.9.2D (in the first place where it occurs)
Clause 2.9.2D(c)(i)
Clause 2.9.2D(c)(ii)
Clause 2.9.3(a)(i)
Clause 2.9.3(a)(iii)
Clause 2.13.2
Clause 2.13.3
Clause 2.13.3A (in each place where it occurs)
Clause 2.13.4
Clause 2.13.6
Clause 2.13.6A
Clause 2.13.6B
Clause 2.13.6C(a)
Clause 2.13.6C(c) (in each place where it occurs)
Clause 2.13.6H(b)(i)
Clause 2.13.8 (in the first place where it occurs)
Clause 2.13.8(a)
Clause 2.13.9A
Clause 2.13.9D
Clause 2.13.10 (in the first place where it occurs)
Clause 2.13.10(d) (in the first place where it occurs)
Clause 2.13.10(d)(i)
Clause 2.13.11
Clause 2.13.12
Clause 2.13.13
Clause 2.13.15
Clause 2.13.16(b)(i)
Clause 2.13.18(b)
Clause 2.13.23
Clause 2.14.3(a)
Clause 2.14.3(b)
Clause 2.14.5A
Clause 2.14.5B (in the first place where it occurs)
Clause 2.14.5B(b)
Clause 2.15.2 (in each place where it occurs)
Clause 2.15.3(a)
Clause 2.15.3(c)
Clause 2.15.3(d)

Clause 2.15.3(e)
Clause 2.15.4(b)
Clause 2.15.6B (in each place where it occurs)
Clause 2.15.6C(a)
Clause 2.16.7(b)
Clause 2.16.9(b)
Clause 2.16.10(b)
Clause 2.16.10(c)
Clause 2.16.10(d)
Clause 2.16.14 (in each place where it occurs)
Clause 2.18.1(a)
Clause 2.18.1(b)
Clause 2.18.1(c)
Clause 2.18.2
Clause 2.18.4
Clause 2.21.1
Clause 2.21.5
Clause 2.21.7
Clause 2.21.9
Clause 2.22A.1(c) (in each place where it occurs)
Clause 2.22A.11(a)
Clause 2.22A.11(d) (in the first place where it occurs)
Clause 2.22A.11(d)(ii)
Clause 2.24.3(c)(ii)
Clause 2.24.5 (in each place where it occurs)
Clause 2.24.5B (in each place where it occurs)
Clause 2.27.14
Clause 2.27A.10(a)(ii)(2)
Clause 2.27A.10(d)
Clause 2.28.13
Clause 2.28.16A(b)(ii)
Clause 2.28.16A(b)(iii)
Clause 2.28.16A(b)(iv)
Clause 2.28.16A(b)(v)
Clause 2.28.16A(b)(vi)
Clause 2.28.16A(b)(vii)
Clause 2.28.16A(c)
Clause 2.28.16A(e)
Clause 2.28.17
Clause 2.28.19(c)
Clause 2.29.1
Clause 2.29.10
Clause 2.30.7
Clause 2.30.10(a)
Clause 2.30B.10(a)(ii)
Clause 2.30C.1
Clause 2.31.6(a)
Clause 2.31.7
Clause 2.31.9
Clause 2.31.13(l)
Clause 2.31.17
Clause 2.32.8
Clause 2.33.1(i)

Clause 2.33.1(n)
Clause 2.34.2
Clause 2.34.2A (in each place where it occurs)
Clause 2.34.7(a)(i)
Clause 2.35.4
Clause 2.36.1(d)
Clause 2.36A.1 (in the first place where it occurs)
Clause 2.36A.1(b)
Clause 2.36A.2 (in the first place where it occurs)
Clause 2.36A.2(a)
Clause 2.36A.2(c)
Clause 2.36A.2(e)
Clause 2.38.4(a)(iv)
Clause 2.40.1(a)
Clause 2.40.1(b)
Clause 2.44.1
Clause 3.5.2
Clause 3.8.3(a)
Clause 3.8.3(b)
Clause 3.8.4
Clause 3.8.5
Clause 3.11.7A
Clause 3.11.15
Clause 3.18.3(c)(i)
Clause 3.18.3(c)(ii)
Clause 3.18.15(a)
Clause 3.18.15(f)(i)
Clause 3.18.15(f)(ii)
Clause 3.19.10 (in each place where it occurs)
Clause 3.21.2A (in each place where it occurs)
Clause 3.21A.17
Clause 3.24.2(b)
Clause 3.24.6
Clause 3.24.15(b)
Clause 4.1.1C
Clause 4.1.34(b)
Clause 4.1.36
Clause 4.1.37(f)
Clause 4.3.1(h)
Clause 4.5.7
Clause 4.5.20(b)
Clause 4.10A.6(a)
Clause 4.12.6(a)
Clause 4.13.5(a)(iv)
Clause 4.13.9
Clause 4.13.10A
Clause 4.13A.6(a)(iv)
Clause 4.13A.14
Clause 4.13A.25
Clause 4.14.2
Clause 4.14.8
Clause 4.17.4(a)
Clause 4.20.3

Clause 4.20.7
Clause 4.24.19
Clause 4.25.4CA
Clause 4.25.9(b)
Clause 5.2A.3(a)
Clause 5.2A.3(b)
Clause 6.17.6D(b)(iii)
Clause 6.19.5(a)
Clause 6.19.5(b) (in each place where it occurs)
Clause 6.20.24
Clause 7.6.1B(c)
Clause 7.6.13
Clause 7.6A.10
Clause 7.8.3
Clause 7.11.6A(b)(ii)
Clause 7.12.2
Clause 7A.1.11
Clause 7A.1.12
Clause 7B.2.19
Clause 8.7.1(f)
Clause 8.8.1
Clause 9.1.2(a)
Clause 9.1.2(c)
Clause 9.1.2(d)
Clause 9.1.2(e)
Clause 9.1.2(g)(ii)
Clause 9.1.3
Clause 9.4.5(a)
Clause 9.4.10(b)
Clause 9.4.15
Clause 9.7.2
Clause 9.13.1
Clause 9.16.2
Clause 9.16.3(cA)
Clause 9.16.3(g)
Clause 9.16.3A(a)(iii)
Clause 9.16.3A(a)(v)
Clause 9.16.3A(b)(iii)
Clause 9.16.3A(b)(viii)
Clause 9.19.1(a)(vii)
Clause 9.19.1(a)(viii)
Clause 9.20.5(c)(ii)
Clause 9.20.6(a)
Clause 9.22.4(a)
Clause 9.22.5
Clause 9.22.9
Clause 9.22.11
Clause 9.23.1 (in the first place where it occurs)
Clause 9.23.1(a)
Clause 9.23.1(d)
Clause 9.23.4(b)
Clause 9.24.1
Clause 9.24.2

Clause 9.24.3 (in each place where it occurs)

Clause 10.2.1 (in each place where it occurs)

Clause 10.2.3(a)

Clause 10.2.3(c)

Clause 10.2.3(ca)

Clause 10.2.3(cb)

Clause 10.2.3(d)

Clause 10.2.3A

Clause 10.2.3B

Clause 10.3.2

Clause 10.4.2(b)

Clause 10.5.1(a)(iii)

Clause 10.5.1(a)(iv)

Appendix 11

- 69.2 In each of the definitions in Chapter 11 (Glossary) listed in the Table, delete the words 'Market Rules' and replace them with the words 'WEM Rules'.

Table

Capacity Credit

Category A (in each place where it occurs)

Category B (in each place where it occurs)

Category C (in each place where it occurs)

Certified Reserve Capacity

Facility Tolerance Range

Invoice

Maximum Facility Refund

Maximum Participant Generation Refund

Operating Instruction

Payment Default

Protected Provision

Regulator Fees

Reserve Capacity Mechanism

Reserve Capacity Obligation Quantity

Reserve Capacity Performance Improvement Report

Reserve Capacity Performance Report

Spinning Reserve

Tolerance Range

Transitional Procedure (in each place where it occurs)

Wholesale Electricity Market and Constrained Network Access Reform

Working Group

70. Various references to Market Web Site amended

- 70.1 In each place in the Market Rules listed in the Table, delete the words 'Market Web Site' and replace them with the words 'WEM Website'.

Table

Clause 1.7.1

Clause 1.7.3(b) (in the first place where it occurs)

Clause 1.7.3(b)(ii)

Clause 1.7.4(b) (in the first place where it occurs)

Clause 1.7.4(b)(ii)

Clause 2.4.4
Clause 2.5.7
Clause 2.8.7
Clause 2.9.2D
Clause 2.9.4
Clause 2.10.2A(b)
Clause 2.10.7
Clause 2.13.6D(b)
Clause 2.13.6E(b)
Clause 2.13.6H(d)
Clause 2.16.9D
Clause 2.16.9FA
Clause 2.27B.2(b)
Clause 2.31.1
Clause 2.38.7
Clause 3.18.2(a)
Clause 3.18.2(b)
Clause 3.18.3(d)
Clause 3.23.1
Clause 3.24.7
Clause 3.24.12
Clause 3.24.16
Clause 4.1.1C
Clause 4.1.10
Clause 4.4A.2
Clause 4.4A.4
Clause 4.4A.7
Clause 4.7.2
Clause 4.7.3(c)
Clause 4.11.1A
Clause 4.11.6(a)
Clause 4.16.6
Clause 4.16.7
Clause 4.16.8
Clause 4.17.1
Clause 4.20.13
Clause 4.24.6 (in the first place where it occurs)
Clause 4.24.6(h)
Clause 4.24.6(i)
Clause 6.20.2
Clause 6.20.9
Clause 6.20.9A
Clause 6.20.11(b)
Clause 7.13.2
Clause 7A.1.16
Clause 7A.3.1(d)
Clause 7A.3.8(c)
Clause 7B.3.1(d)
Clause 9.1.1
Clause 9.22.4(b)
Clause 10.3.1
Clause 10.3.2
Clause 10.5.1 (in the first place where it occurs)

Clause 10.5.1(y)

Clause 10.5.1(z)

Clause 10.5.3

Clause 10.7.1

Appendix 9 (in each place where it occurs)

- 70.2 In each of the definitions in Chapter 11 (Glossary) listed in the Table, delete the words 'Market Web Site' and replace them with the words 'WEM Website'.

Table

Minimum LFAS Quantity

71. Various punctuation references amended

- 71.1 In each place in the Market Rules listed in the Table, delete the long dash (—) and replace it with a colon (:).

Table

Clause 1.7.3 (in the first place where it occurs)

Clause 1.7.3(b)

Clause 1.20.1

Clause 1.20.2

Clause 1.20.5

Section 1.21

Section 1.22

Clause 2.1A.2(j)

Clause 2.2A.1

Clause 2.5.4

Clause 2.14.5B

Clause 2.14.5C

Clause 2.22A.11 (in the first place where it occurs)

Clause 2.22A.11(a)

Clause 2.22A.11(d)

Clause 2.22A.14

Clause 2.24.3 (in the first place where it occurs)

Clause 2.24.3(a) (in the first place where it occurs)

Clause 2.24.3(a)(ii)

Clause 2.24.3(c)

Clause 2.24.6

Clause 2.28.3A (in the first place where it occurs)

Clause 2.28.3A(a)

Clause 2.28.3B (in the first place where it occurs)

Clause 2.28.3B(e)

Clause 2.28.3C (in each place where is occurs)

Clause 3.17.1

Clause 3.23.1 (in the first and third places where it occurs)

Clause 3.23.1(a)

Clause 4.1.34

Clause 4.1.37

Clause 4.5.14C

Clause 4.5.14D

Clause 4.5.14E (in the first place where it occurs)

Clause 4.5.14E(b)

Clause 4.10A.6

Clause 4.11.1(bA)

Clause 7.6.2A
Clause 7.6A.6 (in each place where it occurs)
Clause 7.8.3 (in the first and second places where it occurs)
Clause 7.9.6A
Clause 7.10.5(d)
Clause 7.10.6A(b)
Clause 7.13.1(d)
Clause 9.1.3

72.2 In each place in the Market Rules listed in the Table, delete the word 'clauses' and replace it with the word 'sections'.

Table

Clause 2.18.1
Clause 2.28.16A(b)(viii)
Clause 3.8.4

72.3 In each place in the Market Rules listed in the Table, delete the word 'section' and replace it with the word 'clause'.

Table

Clause 4.16.3(b)

72.4 In each of the definitions in Chapter 11 (Glossary) listed in the Table, delete the word 'clause' and replace it with the word 'section'.

Table

Capacity Credit (in the first, second and third places where it occurs)
Certified Reserve Capacity (in the second place where it occurs)
Dispatch Order
Market Fees (in the first place where it occurs)
Medium Term PASA
Regulator Fees

72.5 In each of the definitions in Chapter 11 (Glossary) listed in the Table, delete the word 'clauses' and replace it with the word 'sections'.

Table

Procedure Change Process
Reserve Capacity Obligation Quantity (in the second place where it occurs)

Schedule C

1. Reference to System Management deleted

1.1 In clause 4.25.2(b)(ii) delete the words '(in its capacity as System Management)'.

2. Reference to Market Procedure amended

2.1 In each place in the Market Rules listed in the Table, delete the words 'Market Procedure' and replace them with the words 'WEM Procedure'.

Table

Clause 9.4.17(a)

3. Various references to Market Rules amended

3.1 In each place in the Market Rules listed in the Table, delete the words 'Market Rules' and replace them with the word 'WEM Rules'.

Table

Clause 2.31.13(l)

Clause 4.25.4CA

Clause 9.4.10(b)(ii)

Clause 9.4.15
