AGENDA – WEM AEMO PROCEDURE CHANGE WORKING GROUP

MEETING: 1

DATE: Tuesday, 18 July 2017

TIME: 3.30 PM – 4.30 PM AWST

CONTACT: wem.apcwg@aemo.com.au

ITEM	TOPIC	PAPERS	ACTION
1.	Welcome		Note
2.	Power System Operating Procedure: Dispatch	Attachment 1	Note / Discussion
3.	Market Procedure for Notices and Communications	Attachment 2	Note / Discussion
4.	Future agenda items and next meeting		Discussion

Note: This meeting will be recorded to assist with minute production.

POWER SYSTEM OPERATION PROCEDURE: DISPATCH

PREPARED BY:	System Management (WA)
DOCUMENT REF:	SO_OP_WA_3803
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Approved for distribution and use by:

APPROVED BY:	Cameron Parrotte
TITLE:	Executive General Manager, Strategy and Innovation

VERSION RELEASE HISTORY

Version	Effective date	Summary of changes
1	21 September 2006	Power System Operation Procedure (Market Procedure) for Dispatch
2	30 September 2009	AEMO proposed amendments to this procedure resulting in publication of Procedure Change Report PPCL 0013
3	5 January 2010	AEMO proposed amendments to this procedure resulting in publication of Procedure Change Report PPCL 0014
4	4 March 2010	AEMO proposed amendments to this procedure resulting in publication of Procedure Change Report PPCL 0015
5	28 June 2010	AEMO proposed amendments to this procedure resulting in publication of Procedure Change Report PPCL 0018
6	Balancing Market Commencement Day	Replacement of the Procedure resulting from Procedure Change Proposal PPCL0021
7	5 March 2014	AEMO proposed amendments to this procedure as a result of Procedure Change Proposal PPCL0027
8.0	1 October 2017	Update to Procedure resulting from Procedure Change Proposal AEPC_2017_10

CONTENTS

1. PROCEDURE OVERVIEW

1.1. Relationship with the Wholesale Electricity Market Rules

1.1.1. This Power System Operation Procedure (PSOP): Dispatch (Procedure) has been developed in accordance with the Wholesale Electricity Market Rules (**WEM Rules**) as described in step 1.3 below.

1.1.2. References to particular WEM Rules within the Procedure in bold and square brackets **[Clause XX]** are current as at 1 October 2017. These references are included for convenience only and are not part of this Procedure.

1.1.3. References to WEM Rules in text boxes are included for convenience only and are not part of this Procedure..

1.2. Interpretation

1.2.1. In this Procedure:

(a) terms that are capitalised but not defined in this Procedure have the meaning given in the WEM Rules;

(b) to the extent that this Procedure is contrary or inconsistent with the WEM Rules, the WEM Rules shall prevail to the extent of the inconsistency;

(c) a reference to the WEM Rules or Market Procedures includes any associated forms required or contemplated by the WEM Rules or Market Procedures; and

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

1.3. Purpose and application of this Procedure

1.3.1. The purpose of this Procedure is to describe:

(a) the format and method by which each Market Generator must provide to AEMO for each of its Intermittent Generators with capacity exceeding 10MW, its most current forecast of the MWh energy output of the Intermittent Generator **[Clause 7.2.5]**;

(b) the procedure to be followed when scheduling and issuing Operating Instructions to dispatch Registered Facilities covered by any Ancillary Services Contract **[Clause 7.6.13]**;

(c) the format and time resolution for the provision of data by Synergy to AEMO with respect to the scheduling of Stand Alone Facilities for Ancillary Services and the scheduling of Facilities in the Synergy Balancing Portfolio **[Clause 7.6A.2]**;

(d) the process for selecting Non-Balancing Facilities from the Non-Balancing Dispatch Merit Order **[Clause 7.7.4A]**;

(e) the information that must be provided by a Market Participant to AEMO for each of its Non-Scheduled Generators to enable an estimation of the Facility's output by either the IMO or AEMO, as applicable **[Clause 7.7.5A & 7.7.5C]**;

(f) the procedure for AEMO to estimate the maximum amount of sent out energy, in MWh, which each Non-Scheduled Generator, by Trading Interval, would

have supplied in the Trading Interval had a Dispatch Instruction not been issued **[Clause 7.7.5B]**;

(g) the procedure to be followed by AEMO and Market Participants in forming, issuing, recording, receiving, confirming and responding to Dispatch Instructions and Operating Instructions **[Clause 7.7.9]**;

(h) the procedure to be followed by AEMO in determining the quantities described under clause 7.7.5A(a) **[Clause 7.7.9]**;

(i) the procedure for calculating the Load Rejection Reserve Response Quantity and the Spinning Reserve Response Quantity **[Clause 7.13.1(eD)]**;

(j) the procedure to be followed in providing settlement and monitoring data **[Clause 7.13.3]**;

(k) the procedure for determining an estimate for each Trading Interval in the Trading Day and for each Balancing Facility of the:

(i) SOI Quantity;

(ii) EOI Quantity; and

(l) Relevant Dispatch Quantity at the end of a Trading Interval **[Clause 7A.3.7]**;

(m) the procedure for determining forecasts of the Relevant Dispatch Quantity and EOI Quantity for Non-Scheduled Generators for each future Trading Interval in the Balancing Horizon **[Clause 7A.3.15]**; and

(n) the procedure for determining the forecast LFAS Quantity for each Trading Interval in the next Trading Day **[Clause 7B.1.4]**.

(o) the procedure for Market Participants who have been assigned DSM Capacity Credits to provide AEMO with their consumption information **[Clause7.6.10A].**

1.3.2. This Procedure applies to:

(a) AEMO in its general dispatch obligations and those relating to scheduling the Synergy Balancing Portfolio as a service provided to Synergy; and

(b) Rule Participants in complying with the provision of information required for Dispatch as described in step 1.1.1.

2. MANAGEMENT OF DISPATCH INFORMATION AND DISPATCH CRITERIA

2.1. Management of Dispatch Information

2.1.1. AEMO must store, and maintain from time to time, all necessary data needed to carry out the following processes:

(a) preparing the information on the Scheduling Day; and

(b) planning for dispatch; and

(c) issuing Dispatch Advisories; and

(d) issuing Dispatch Instructions, Operating Instructions and Dispatch Orders; and

(e) preparing the ex-post settlement and monitoring data.

2.1.2. AEMO must provide all new and updated data in the Standing Data relating to a Trading Day as soon as practicable for updating of its Information Technology Systems in accordance with the WEM Rules **[Clause** 2.34.1(b)].

2.2. Dispatch Criteria

2.2.1. When scheduling and dispatching Market Participant's Facilities, AEMO must at all times seek to meet the criteria described in the WEM Rules [**Clause** 7.6.1].

2.2.2. The criteria are, in order of priority:

(a) to enable operation of the SWIS within the Technical Envelope Parameters appropriate for the applicable SWIS Operating State;

(b) to minimise involuntary load shedding on the SWIS; and

(c) to maintain Ancillary Services to meet the Ancillary Services standards appropriate for the applicable SWIS Operating State

2.2.3. For the avoidance of doubt, satisfying the Dispatch Criteria will always take precedence over other dispatch rules such as adherence to the Balancing Merit Order

3. SCHEDULING AND DISPATCH OF THE SYNERGY BALANCING PORTFOLIO

3.1.1. AEMO's and Synergy's obligations for scheduling and dispatching the Facilities of the Synergy Balancing Portfolio are set out in the WEM Rules **[Clause 7.6A]**.

3.1.2. Synergy must provide AEMO with a set of dispatch guidelines for its Facilities comprising the Synergy Balancing Portfolio in a form agreed between Synergy and AEMO.

3.1.3. AEMO must prepare a Synergy Dispatch Plan daily for the Synergy Balancing Portfolio in a form agreed between Synergy and AEMO.

3.1.4. Synergy may update its Balancing Portfolio dispatch guidelines from time to time and advise AEMO of the date and time from which the updated guidelines are to take effect.

3.1.5. Communication of the Synergy Balancing Portfolio dispatch guidelines must be made in a form agreed by Synergy and AEMO.

3.1.6. Communication of, and consultation in relation to, the information referred to in the WEM Rules **[Clause 7.6A.2 (c)]** must normally be by means of an electronic interface. Synergy and AEMO may communicate by other means where necessary provided that all communications create, or are subsequently verified by, an electronic record.

4. PRE GATE CLOSURE

4.1. Pre-dispatch plan

4.1.1. AEMO must produce, and update as required, a pre-Dispatch Plan covering all periods in the Balancing Horizon.

4.1.2. The pre-Dispatch Plan referred to in step 4.1.1 must, where practicable, be produced using a mathematical program based on the same formulation used to create Dispatch Instructions (refer step 5.3 below).

4.1.3. Upon receiving a Forecast BMO, AEMO must formulate any constraints necessary to maintain Power System Security and use those constraints when producing the pre-Dispatch Plan referred to in step 4.1.1.

4.1.4. AEMO must report any pre-dispatch constraints binding, and any pre-dispatch constraints violated, via Dispatch Advisory notices as described in section 5.9of this Procedure. In addition if it is expected that a Dispatch Instruction will be issued to a Non-Balancing Facility or a Demand Side Program within the next 24 hours, a Dispatch Advisory must be issued **[Clause 7.11.5 (j) and (k)]**.

4.1.5. AEMO may communicate warnings to individual Market Participants if it detects significant discrepancies between Standing Data equipment limits and the pre-Dispatch Plan[1].

4.2. Constraints used in the pre-Dispatch Plan

4.2.1. The constraints referred to in step 4.1.3 may include, as appropriate, constraints to ensure any one or more of the following:

(a) maintenance of Ancillary Services standards;

(b) appropriate use of contracted services, including Dispatch Support Services and Network Control Services;

(c) maintenance of the Ready Reserve Standard;

(d) adherence to Equipment Limits, but only to the extent that those limits are not inconsistent with the dispatch of Balancing Facilities that, but for the Equipment Limits, would be dispatched under clause 7.6.1C of the WEM Rules;

(e) maintenance of overall system security; and

(f) appropriate management of fuel, if and to the extent that AEMO is required to manage such constraints during a fuel supply emergency.

[1] Note: The warnings referred to in step 4.1.5 are for information only. It remains the Market Participants responsibility to ensure their Balancing Submissions reflect the physical capabilities of their Facilities at all times.

4.3. Load forecasts

4.3.1. AEMO must, by 8:30 AM on the Scheduling Day associated with a Trading Day, determine and provide Synergy with a forecast of total system demand for the Trading Day **[Clause 7.6A.2(b)]**.

4.3.2. Forecasts of total system demand in relation to step 4.1.3 must separately itemise, for each Trading Interval in the Trading Day, the following quantities, Loss Factor adjusted to the Reference Node:

(a) Forecast SWIS system load, in MW, at the end of the Trading Interval; and

(b) Forecast total energy output, in MWh, over the Trading Interval.

4.3.3. The SWIS system load must be calculated as the combined energy (or power) exported from all generating facilities connected to each Network Operator's networks, as measured at the generating facility's connection points, Loss Factor adjusted to the Reference Node[2].

4.3.4. Forecasts of total system demand must be provided to Synergy through AEMO's market system or any other medium agreed between AEMO and Synergy.

4.3.5. AEMO must, by 7:30 AM on the Scheduling Day associated with a Trading Day, determine and provide a Load Forecast for the Trading Day **[Clause 7.2.1]**.

4.3.6. Load Forecasts must be provided electronically in accordance with the Market Procedure: IMS Interface.

4.3.7. When determining forecast quantities in step 4.3.1 or step 4.3.5, AEMO must, where practicable, utilise the most recent information available to it at the time the forecast is produced.

4.3.8. AEMO must, for each future Trading Interval in the Balancing Horizon, determine and provide a forecast of the Relevant Dispatch Quantity. AEMO must, each time it has new information on which to determine these quantities, update these forecasts and provide the update, but is not required to do so more than once per Trading Interval **[Clause 7A.3.15]**.

4.3.9. Forecasts of Relevant Dispatch Quantities must be provided electronically in accordance with the Market Procedure: IMS Interface.

4.3.10. AEMO must, by 12:00 PM on the Scheduling Day, provide a forecast of the LFAS Quantity for each Trading Interval in the next Trading Day.

4.3.11. The LFAS Quantity will be forecast by adjusting the Load Following Service Requirement specified in the Ancillary Service Report to account for forecast conditions of Load and Non Scheduled Generation available to AEMO on the Scheduling Day.

4.3.12. The LFAS Quantity may be further adjusted to account for Commissioning that has been approved by AEMO to take place on the Trading Day.

[2] Load forecasts are considered to be for system demand in the absence of any curtailment by Non-Balancing Facilities (i.e. Demand Side Management). Forecast curtailment will be communicated to the market via a Dispatch Advisory notice.

4.4. [blank][3]

4.5. Forecasts of non-scheduled generation

4.5.1. Unless specifically excused by AEMO, each Market Generator must provide, for each of its Intermittent Generators with a maximum output capacity exceeding 10 MW, the data specified in the WEM Rules **[Clause 7.2.5]**.

4.5.2. A Market Generator must provide the forecast information referred to in step 4.5.1 via the interface to AEMO's market system unless an alternative medium is agreed between AEMO and the Market Generator.

4.5.3. Where so required by AEMO, if applicable, each Market Generator must provide, for each of its Non-Scheduled Generators, modelling data sufficient to allow AEMO to forecast the output of that Non-Scheduled Generator **[Clause 7.7.5A, Clause 7.7.5C]**.

4.5.4. The modelling data provided in step 4.5.3 must include, but is not necessarily limited to, identification of the main independent variables affecting output and the function relating those variables to output. All modelling data shall be provided on, or be sufficient to allow conversion to, a sent-out basis.

4.5.5. Where AEMO is required to determine a forecast of the output of a Non-Scheduled Generator:

(a) AEMO may utilise a forecast of sent-out energy for the Non-Scheduled Generator provided by the Market Generator in a Resource Plan or Balancing Submission; or

(b) Where AEMO considers that a forecast of sent-out energy received for a Non-Scheduled Generator is not reflective of the level of output actually occurring or likely to occur, AEMO may estimate the expected Non-Scheduled Generator output using the information provided under step 4.5.3 and may substitute this data for part or all of the data provided for that Non-Scheduled Generator; or

(c) AEMO may utilise other forecast data where required, if Non-Scheduled Generator forecast data is received late or if sections of data are missing. This may be output data derived from recordings of injection levels from past Trading Intervals, or a separate forecast derived for that purpose.

4.5.6. Non-Scheduled Generation forecasts **[Clause 7.6A.2(e), Clause 7A.3.15]** must be provided electronically in accordance with the Market Procedure: IMS Interface.

[3] This section intended to cover treatment of significant discrete loads, is blank at this time. AEMO is considering whether it is necessary to model significant discrete loads (suggested definition is a load at a single connection point on the SWIS with a non-Loss Factor adjusted peak greater than or equal to 20MW or a set of related loads with more than one connection point sharing coincident load profiles with the sum of the non-Loss Factor adjusted peaks being greater than or equal to 20 MW).

4.6. Forecasts of Ancillary Services demand

4.6.1. AEMO must determine the estimated Ancillary Service requirements for each Market Participant that is a provider of Ancillary Services in accordance with the WEM Rules **[Clause 7.2.3A]**.

4.6.2. AEMO must submit the Ancillary Service forecast data calculated pursuant to the WEM Rules **[Clause 7.2.3A]** in accordance with the Market Procedure: IMS Interface.

4.7. Updating the Synergy Dispatch Plan[4]

4.7.1. AEMO is required to notify Synergy of significant changes to the Synergy Dispatch Plan **[Clause 7.6A.2(f)]**.

4.7.2. The changes referred to in step 4.7.1 must be deemed to be significant when they indicate:

(a) previously uncommitted generating Facilities are expected to be committed, or previously committed generating Facilities are expected to be de-committed; or

(a) fuel required is forecast to be outside the limits set by Synergy; or

(b) AEMO expects to need to dispatch Facilities in the Synergy Balancing Portfolio outside the Synergy Balancing Portfolio dispatch guidelines described in step 3.1.2.

4.7.3. AEMO must transmit the revised Synergy Dispatch Plan to Synergy as soon as practicable through the interface to AEMO's market system.

4.7.4. Synergy may request changes to the Synergy Dispatch Plan, which AEMO must use reasonable endeavours to accommodate.

4.8. Demand Side Programmes

[4] AEMO has an obligation to consult with Synergy in preparing the Synergy Dispatch Plan **[Clause 7.6A.2(d)]**

4.8.1. AEMO may request a Market Participant to provide a relevant recent consumption history **[Clause 7.6.10A]** in a manner agreed to between the parties when it is anticipated that the dispatch of the Non Balancing Facility may be required. This will include for each Trading Interval for which the information is requested, the consumption of each Associated Load of the Demand Side Program as well as the total of the Demand Side Program.

4.8.2. If AEMO issues a Dispatch Instruction to a Demand Side Program it must use best endeavours to ensure that the resulting Non-Balancing Facility Dispatch Instruction Payments across all DSP are zero in preference to any having to make any Tranche 2 or Tranche 3 payments. The NBDMO will initially indicate the available demand reduction in each tranche based on the Dispatch Instruction. As metering data becomes available to validate the actual reduction, this will be used to update the information on which the NBDMO is based.

4.8.3. AEMO is required to issue a Dispatch Advisory if it expects to issue a Dispatch Instruction to a Non-balancing Facility or a Demand Side Program within the next 24 hours **[Clause 7.11.5]**. A Dispatch Advisory must be issued at least two hours before the Dispatch Instruction is to come into effect.

4.9. Dispatch Advisory notices

4.9.1. The requirements for the issue and release of Dispatch Advisory notices to Market Participants, Network Operators and the IMO are specified in the WEM Rules **[Clause 7.11]**.

4.9.2. Dispatch Advisories may arise as a result of one or more of:

(a) Conditions detected in the pre-Dispatch Plan; or

(b) Conditions detected in the Dispatch Plan; or

(c) Real-time monitoring thresholds being reached; or

(d) Conditions detected or forecast manually by AEMO Controllers.

4.9.3. Types of Dispatch Advisory notices are listed in Appendix 1.

4.9.4. AEMO must transmit automatically generated Dispatch Advisory notices as soon as practicable after the completion of each Trading Interval, and at other times if required. Manually generated Dispatch Advisory notices must be transmitted as soon as practicable.

4.9.5. Where there is a communication failure or insufficient time to issue such a notice, AEMO may convey the content of the notice via telephone or such other means as are practicable at the time, but must provide confirmation in the form of a formal Dispatch Advisory notice as soon as practicable.

4.9.6. AEMO has an obligation under the WEM Rules [**Clause** 7.11.6A] to ensure that confidential information is not disclosed in Dispatch Advisory notices.

4.10. Content and management of Dispatch Advisory notices

4.10.1. Each occurrence of a condition triggering a Dispatch Advisory notice must result in a separate Dispatch Advisory notice being produced.

4.10.2. Each Dispatch Advisory notice must contain:

(a) the information required under the WEM Rules **[Clause 7.11.6]**; and

(b) a Dispatch Advisory Type field, as defined in Appendix 1 of this Procedure.

4.10.3. Dispatch Advisory notices remain in force until withdrawn.

4.10.4. Withdrawal of Dispatch Advisory notices must occur as follows:

(a) Dispatch Advisory notices issued pursuant to the pre-Dispatch Plan or Dispatch Plan cover one Trading Interval and are deemed to have been withdrawn at the end of that Trading Interval; or

(b) Dispatch Advisory notices issued retrospectively in response to events that have already occurred are deemed to have been withdrawn at the later of the time of issue and the ending time. Such Dispatch Advisories may also be withdrawn by issuing a withdrawal notification; or

(c) Dispatch Advisory notices issued in circumstances not covered above are issued when required and expire automatically at the ending time unless withdrawn earlier.

4.11. Pre-issuing of Dispatch Instructions

4.11.1. Where AEMO determines that a specific Facility is required to operate in a particular way in a future period for the maintenance of Power System Security, AEMO may issue Dispatch Instructions to the required Facility prior to the normal issuance time.

4.11.2. Where the Facility referred to in step 4.11.1would be required to be dispatched under clause 7.6.1C(c) of the WEM Rules, AEMO must:

(a) observe the Facility's Standing Data minimum response time when issuing Dispatch Instructions to that Facility; and

(b) if Dispatch Instructions for the Facility are issued via AEMO's portal, also provide the Dispatch Instruction using voice communication; and

(c) AEMO must specify in its Dispatch Instruction that the Dispatch Instruction is being issued under clause 7.6.1C(c) of the WEM Rules.

4.11.3. Where AEMO determines that a Non-Balancing Facility is required to operate in a future period for the maintenance of Power System Security, AEMO must issue Dispatch Instructions to the required Facility in accordance with that Facility's notice period. A Dispatch Advisory must be issued at least two hours before the Dispatch Instruction comes into effect.

4.11.4. AEMO may issue new Dispatch Instructions to replace Dispatch Instructions issued pursuant to step 4.11.1or step 4.11.3 if required.

5. POST GATE CLOSURE

5.1. Bona fide changes to physical status of Facilities

5.1.1. The WEM Rules **[Clause 7A.2.10]** require a Market Participant, except Synergy in respect of the Synergy Balancing Portfolio, to update its Balancing Submission if after Balancing Gate Closure it becomes aware that the Balancing Submission does not reflect the physical capabilities of its Facilities.

5.1.2. If the circumstances described in step 5.1.1occur, and reflect a reduction or expected reduction in the capability of the Market Participant's Facility or Facilities, the affected Market Participant must also advise AEMO of the nature and extent of that reduction as soon as practicable. This notification must initially be by telephone or other voice communication but then followed as soon as practicable on AEMO's market system.

5.1.3. When advised in accordance with step 5.1.2, AEMO must for any Trading Intervals for which it expects to receive no further updates to the Balancing Merit Order:

(a) assess power system security in accordance with the PSOP: Power System Security and take any required actions resulting from that assessment; and

(b) immediately issue a Dispatch Advisory notice specifying the extent of the reduction in capacity and whether the affected Facility is marginal, above or below the balancing point; and

(c) if required to issue a Dispatch Instruction to the affected Facility take the notification in step 5.1.2 to be an advice given under step 5.6.6.

5.1.4. If a Market Participant receives a Dispatch Instruction in accordance with the Non Balancing Dispatch Merit Order (NBDMO) and becomes aware that its forecasted consumption profile is no longer a reasonable forecast of its consumption profile for the relevant trading interval, then it must notify AEMO telephonically or as agreed between the parties of the revised forecast **[Clause 7.7.6C]**.

5.2. Commitment and de-commitment of generating Facilities

5.2.1. The obligations of AEMO and Market Participants in respect of commitment and de-commitment of generating Facilities are set out in the WEM Rules [**Clause** 3.21B & **Clause** 7.9].

5.2.2. A Market Participant, except Synergy with respect to the Synergy Balancing Portfolio, must communicate confirmation of expected time of synchronisation and de-synchronisation under the WEM Rules via telephone or other voice communication **[Clause 7.9.1]**, unless it is exempt from doing so in accordance with the WEM Rules **[Clause 7.9.14]**.

5.2.3. The WEM Rules set out the circumstances where a Market Participant intending on putting a Scheduled Generator holding Capacity Credits into a state where it will take more than four hours to re-synchronise, is not required to seek permission from AEMO **[Clause 3.21B.1]**. Where these exceptions do not apply, the Market Participant must seek approval and the request must be communicated via telephone or other voice communication, and include the information required by the WEM Rules **[Clause 3.21B.2]**.

*A Market Participant is required by the WEM Rules **[Clause 3.21B.2]** to include in the request for permission the following information:*

"(a) the identity of the Scheduled Generator;

(b) the time at which the Market Participant wants to have the Scheduled Generator enter a state where it will take more than four hours to re-synchronise; and

(c) the first time after that in (b) at which the Scheduled Generator will be able to be resynchronised with four hours notice."

5.2.4. AEMO will assess the request made under step 5.2.3to determine if permission should be withheld in accordance with the WEM Rules **[Clause 3.21B.5]**.

*The WEM Rules **[Clause 3.21B.5]** provide that System Management may only withhold permission if:*

*"(**a**) the request for that permission is not in accordance with clause 3.21B.2 or the Power System Operation Procedure; or*

(b) granting permission would mean that System Management would be incapable of maintaining the Ready Reserve Standard".

5.2.5. Where AEMO approves or rejects the request for permission, AEMO must inform the Market Participant of its decision as soon as practicable by telephone or other voice communication in accordance with the WEM Rules **[Clause 3.21B.4]**.

5.2.6. Where AEMO has notified the Market Participant of its decision to reject the request for permission in accordance with step 6.2.5, AEMO and the Market Participant must use best endeavours to find an alternative time for the Scheduled Generator to be put into a state where it will take more than four hours to re-synchronise in accordance with the WEM Rules **[Clause 3.21B.6]**.

5.2.7. AEMO must log the reasons when permission to synchronise or de-synchronise is refused.

5.3. Creation of Dispatch Instructions and Dispatch Orders

5.3.1. AEMO must create Dispatch Instructions and Dispatch Orders in such a way as to ensure the Dispatch Criteria in the WEM Rules [**Clause** 7.6.1] are met at all times.

5.3.2. AEMO must, wherever practicable, create Dispatch Instructions and Dispatch Orders using a mathematical program.

5.3.3. The WEM Rules [**Clauses** 7.6.1A, 7.6.1B**,** 7.6.1C**, 7.6.1D** and 7.6.**1E**] stipulate the priority rules that AEMO must follow in formulating Dispatch Instructions.

5.3.4. AEMO must **[Clause 7.6.1A]** give priority to the dispatch of a Registered Facility under a Network Control Service (NCS) Contract if doing so would assist AEMO to meet the Dispatch Criteria. AEMO must consider that an NCS Contract would assist it to meet the Dispatch Criteria if AEMO considers that:

(a) the dispatch of the power system without calling upon the NCS Contract would adversely affect Power System Security; and

(b) dispatching the Facilities covered by the NCS Contract according to the terms of the contract would prevent the circumstances described in step 5.3.4(a)from arising or alleviate them if they have already arisen.

5.3.5. AEMO may **[Clause 7.6.1B]** give priority to the issuing of Operating Instructions that call on Ancillary Services, NCS or Supplementary Capacity Contracts, or enable a Test. AEMO must, as far as possible without breaching its obligations in relation to maintaining Power System Security, apply its discretion in the following manner:

(a) NCS Contracts must be called upon in accordance with step 5.3.4 or as agreed with the applicable Network Operator; or

(b) Ancillary Services Contracts must be called upon in accordance with the terms of the contract; in accordance with AEMO's approved Ancillary Services Plan; and in a way that at all times meets the Ancillary Services Standards; or

(c) Supplementary Capacity Contracts must be called upon in accordance with the terms of the contract; or

(d) Tests must be scheduled in accordance with the PSOP: Commissioning and Testing.

5.3.6. AEMO must **[Clause 7.6.1C]** take into account Ramp Rate Limits when formulating Dispatch Instructions in accordance with the Balancing Merit Order. For the avoidance of doubt:

(a) a Facility that is below the balancing point in the BMO and is not dispatched for its full offered quantity, but that is dispatched for the maximum quantity its Ramp Rate Limit implies it is capable of achieving in the Trading Interval, must be considered to have been dispatched "in merit"; or

(b) a Facility that is above the balancing point in the BMO and is dispatched for a non-zero quantity, being the minimum quantity its Ramp Rate Limit implies it is capable of achieving, must be considered to have been dispatched "in merit".

AEMO will not consider Standing Data minimum generation constraints when formulating Dispatch Instructions in accordance with the BMO. Market Participants must prepare their Balancing Submissions in such a way as to achieve either dispatch above minimum generation, or de-commitment. When AEMO issues Dispatch Instructions out of merit in accordance with Market Rule 7.6.1C(b), it will however observe minimum generation constraints.

5.3.7. Where AEMO determines in accordance with the WEM Rules **[Clause 7.7.4A]** that dispatch of a Non-Balancing Facility is required, AEMO must apply the following process to select the Non-Balancing Facility or Facilities from the Dispatch Merit Order while acting in according with the WEM Rules **[Clause 7.6.1C]**:

(a) exclude from selection any Non-Balancing Facility that could not offer the required response inside its specified Minimum Response Time or for any other Standing Data limitation;

(b) exclude from selection any Non-Balancing Facility that AEMO reasonably believes, on the basis of the Pre-Dispatch Plan described in Section 4.1, will be required to be dispatched at some later time within the Balancing Horizon; that its dispatch at that later time would provide a larger benefit in terms of system security that its dispatch to meet immediate system needs; and that the Standing Data limitations under which the Facility may be dispatched preclude it from being dispatched on both occasions;

(c) exclude from selection any Non-Balancing Facility that AEMO reasonably believes will be required to be dispatched at some later time (or times) outside of the Balancing Horizon; that its dispatch at that later time (or times) would provide a larger benefit in terms of system security than its dispatch to meet immediate system needs; and that the Standing Data limitations under which the Facility may be dispatched may preclude it from being dispatched on all occasions;

(d) as in the Pre-Gate Closure actions (step 4.8.2), Dispatch Non Balancing Facilities according to the Non Balancing Dispatch Merit Order using best endeavours to maximise the extent to which the resulting Non-Balancing Facility Dispatch Instruction Payments are zero **[Clause 6.17.6C]** in preference to causing any Tranche 2 or Tranche 3 DSM Dispatch Payments to be payable; and

(e) AEMO may request the Market Participant to provide the relevant recent consumption **[Clause 7.6.10A]** in a manner agreed to between the parties of

each Associated Load of the Demand Side Program as well as the total load of the Demand Side Program.

5.4. Creation of Operating Instructions

5.4.1. AEMO must issue Operating Instructions to:

(a) Call on services provided by Facilities (other than Facilities in the Synergy Balancing Portfolio) under an NCS Contract, an Ancillary Service Contract, or a Supplementary Capacity Contract; or

(b) call on Stand Alone Facilities to provide Ancillary Services other than LFAS but including LFAS Backup Enablement; or

(c) in connection with a Test.

5.4.2. Where AEMO identifies, based on the BMO or Forecast BMO, that a Facility's Balancing Submission is inconsistent with an Operating Instruction to that Facility, AEMO may send a warning to the Market Participant[5].

The obligation to ensure dispatch consistent with Operating Instructions remains with the Market Participant. Any warning from System Management is provided for information only.

5.4.3. Where a Market Participant with a contract to provide Ancillary Services or NCS provides the contracted service automatically and in accordance with the terms of the contract, AEMO must communicate the Operating Instruction to the relevant Market Participant as early as practicable.

Where AEMO is required to call on NCS from a Facility whose Standing Data notice period is less than gate closure, AEMO will issue the Operating Instruction immediately after gate closure based on the Forecast BMO. The NCS Facility would then update its Balancing Submission after gate closure, as allowed under the WEM Rules ***[Clause 7A.2.10]****.*

Note the above only applies where the NCS is for the provision of real power. Calling an NCS contract for reactive power will be done by a direction, i.e. outside the market.

5.5. Issuing of Dispatch Instructions and Dispatch Orders

5.5.1. The WEM Rules detail the requirements for Dispatch Instructions **[Clauses 7.7.1, 7.7.2 and 7.7.3]** and Dispatch Orders.

5.5.2. All Dispatch Instructions and Dispatch Orders for a Facility remain in force until superseded by a new Dispatch Instruction or Dispatch Order.

5.5.3. Dispatch Instructions to Demand Side Programmes will be expressed in terms of quantity of curtailment. The Dispatch Instruction will consider the amount of load indicated to be available for curtailment as per the latest Non Balancing Dispatch Merit Order as well as the number of hours for which this reduction is possible.

5.5.4. AEMO must issue Dispatch Instructions and Dispatch Orders electronically via one of the following methods (in order of preference):

(a) SCADA, if available; or

(b) AEMO's interface to its market system; or

(c) Email (SMS may be used as an adjunct to email); or

(d) Telephone (or other voice communication), with subsequent confirmation by one of the means above.

5.5.5. Other than for Facilities over which AEMO has direct control and so the Facility is capable of responding faster, when dispatching Facilities in merit **[Clause 7.6.1C(a)]** or just out of merit **[Clause 7.6.1C(b)]** AEMO must provide at least 5 minutes between the issuing and commencement time of Dispatch Instructions and Dispatch Orders.

5.5.6. AEMO must respect Standing Data Minimum Response Times when issuing Dispatch Instructions or Dispatch Orders to Facilities out of merit for system security reasons under clause 7.6.1C(c) of the WEM Rules, unless advised otherwise by the Market Participant concerned.

5.5.7. Where it is not practicable for AEMO to issue Dispatch Instructions or Dispatch Orders in the manner described in step 5.6.4, AEMO may use such other means as it deems best suited to the circumstances and the requirements of step 5.6.4 shall be deemed to have been fulfilled.

5.5.8. If a generating facility, which does not carry an obligation to provide a Spinning Reserve Service or Load Following Service satisfies the two following criteria:

(a) the system frequency moves above 50.025Hz or below 49.975Hz; and

(b) the generator facility's governor automatically moves the generator away from its most recent Dispatch Instruction to a point outside its Tolerance Range in a manner that assists reducing the frequency deviation, then AEMO must inform the IMO, when advising it of a breach by the relevant Market Participant of the WEM Rules **[Clause 7.10.1]**, that the deviation was due to an automatic governor response and state whether the deviation from the Dispatch Instruction was consistent with the Technical Rules. To ensure a controlled restoration of the frequency back to 50Hz, AEMO may issue Dispatch Instructions or Dispatch Orders to hold some Facilities at levels they have stabilised at after the frequency disturbance.

AEMO requires that each generating unit operating in parallel with the SWIS must have its governor enabled and governor response set at 4% droop, and have governor frequency dead band of less than 0.05 Hz, in accordance with the Technical Rules. Refer to clauses 3.3.4.4 (d) and (e) of the Technical Rules.

The above step is included to ensure that penalties are not imposed upon Market Generators that respond to assist in the event of a system emergency.

5.6. Response to Dispatch Instructions and Dispatch Orders

5.6.1. Where AEMO has operational control of a Facility, AEMO must deem any Dispatch Instruction or Dispatch Order issued to that Facility to have been accepted.

For the avoidance of doubt, System Management is still required to issue Dispatch Instructions to Facilities under its operational control.

5.6.2. Where AEMO issues a Dispatch Instruction to a Market Participant by telephone or other voice communication, the Market Participant must advise AEMO during that conversation if it cannot comply with the Dispatch Instruction and if so advise the extent and nature of its non-compliance.

5.6.3. Where AEMO issues a Dispatch Instruction or Dispatch Order via telephone or other voice communication and subsequently provides a confirmation of the Dispatch Instruction or Dispatch Order via AEMO's interface to its market system, the Market Participant is not required to provide a response to this subsequent electronic notification.

5.6.4. A Market Participant must confirm receipt of a Dispatch Instruction or Dispatch Order issued via SCADA within 30 seconds of receipt and in accordance with the Operating Protocol. If the Facility is unable to comply with the Dispatch Instruction or Dispatch Order the Market Participant must also advise AEMO by telephone or other voice communication that it cannot comply and the nature and extent of its non-compliance.

5.6.5. A Market Participant must confirm receipt of a Dispatch Instruction or Dispatch Order issued via AEMO's secure business-to-business gateway within 1 minute. If the Facility is unable to comply with the Dispatch Instruction or Dispatch Order the Market Participant must also advise AEMO by telephone or other voice communication that it cannot comply and the nature and extent of its non-compliance.

5.6.6. Where a Market Participant receives Dispatch Instructions or Dispatch Orders for a Facility via AEMO's portal, and the Market Participant receives one or more Dispatch Instructions or Dispatch Orders for the Facility and a Trading Interval over the period ending 5 minutes before the start of the Trading Interval, the Market Participant must, by no later than 3 minutes before the start of the Trading Interval:

(a) identify the most recent Dispatch Instruction or Dispatch Order received for the Facility and Trading Interval in the period ending 5 minutes before the start of the Trading Interval; and

(b) if the Facility is unable to comply with this Dispatch Instruction or Dispatch Order, advise AEMO by telephone or other voice communication that it cannot comply and the nature and extent of its non-compliance; and

(c) confirm receipt of this Dispatch Instruction or Dispatch Order via AEMO's portal.

The Market Participant may, but is not required to respond to any earlier Dispatch Instructions or Dispatch Orders received for the Facility and Trading Interval in this period.

5.6.7. Where a Market Participant advises AEMO that it cannot follow its Dispatch Instruction or Dispatch Order, AEMO must:

(a) Issue a new Dispatch Instruction or Dispatch Order to the Market Participant consistent with their advised capability, and tag the original Dispatch Instruction or Dispatch Order for non-compliance; and

If, under clause 7.7.6B, a Market Participant notifies AEMO that its Facility cannot meet a Dispatch Instruction and advises a reduced quantity or Ramp Rate, AEMO is obliged to use the generator to the maximum of that reduced quantity or Ramp Rate possible. For example, if a Dispatch Instruction was to move from 20 MW to 60 MW at a Ramp Rate of 6 MW/minute, and the Market Participant advises that it can only deliver 40 MW, then System Management must issue a second Dispatch Instruction to move to 40 MW. Alternatively, if the Market Participant advises that it can reach 60 MW but only at a Ramp Rate of 4 MW/minute, then AEMO must issue a Dispatch Instruction to move to 60 MW at 4 MW/minute.

(b) Issue Dispatch Instructions or Dispatch Orders to other Facilities as required; and

(c) Issue a Dispatch Advisory notice to advise the market of dispatch out of merit (where applicable).

5.6.8. Where AEMO does not receive confirmation that a Dispatch Instruction or Dispatch Order has been received within 3 minutes of the start of the Trading Interval to which the Dispatch Instruction relates, AEMO must deem the Dispatch Instruction or Dispatch Order to have been refused. AEMO must then:

(a) Send the Market Participant concerned a new Dispatch Instruction or Dispatch Order instructing them to stay at the output specified on their last accepted Dispatch Instruction or Dispatch Order; and

(b) Tag the Dispatch Instruction or Dispatch Order to which the Facility did not respond as non-compliant; and

(c) Issue Dispatch Instructions or Dispatch Orders to other Facilities as required; and

(d) Issue a Dispatch Advisory notice to advise the market of dispatch out of merit (where applicable).

5.7. Issuing of and response to Operating Instructions

5.7.1. The WEM Rules detail the requirements for Operating Instructions **[Clause 7.7.3A]**.

5.7.2. AEMO must issue Operating Instructions electronically via one of the following methods (in order of preference):

(a) Email (SMS may be used as an adjunct to email); or

(b) Telephone (or other voice communication), with subsequent confirmation by email.

5.7.3. A Market Participant must confirm receipt of an Operating Instruction by email as soon as practicable. If the Market Participant cannot comply with the Operating Instruction, then the email must advise that the Market Participant cannot comply and the nature and extent of the non-compliance.

5.7.4. If, after issuing an Operating Instruction for the provision of an Ancillary Service, NCS or service provided under a Supplementary Capacity Contract, AEMO requires the service provision to be extended beyond the estimated end time provided in the Operating Instruction, AEMO must issue another Operating Instruction for the expected period of the extension.

For the avoidance of doubt, a Market Participant must not modify the output level of its Balancing Facility simply because it has received an Operating Instruction for that Facility, but only in response to a Dispatch Instruction. AEMO will issue any required Dispatch Instructions to the Balancing Facility as appropriate.

5.8. Dispatch of generating Facility for system security

5.8.1. AEMO may issue a Dispatch Instruction or Dispatch Order requiring a Facility to move from zero generation to positive generation, or vice versa, where doing so is necessary to maintain Power System Security.

Dispatch Instructions/Dispatch Orders referred to in step 5.8.1 are implicitly instructions to synchronise and operate (commit) or de-synchronise (de-commit). The Dispatch Instruction protocol does not allow for explicit commit/de-commit instructions.

5.8.2. When the system is forecast to move into a High Risk Operating State, AEMO must observe as far as practicable the BMO or Forecast BMO for the Trading Intervals in which the threat to Power System Security occurs when selecting the Facility or Facilities to commit.

5.8.3. AEMO may select the Facility or Facilities to commit that provide the most flexibility for AEMO to deal with current or potential threats to Power System Security when the system is:

(a) In a High Risk Operating State; or

(b) In an Emergency Operating State; or

(c) Forecast to move into an Emergency Operating State.

In general, step 5.8.3 will result in the preferential commitment of large, fast-moving and/or flexible generating units.

5.9. Activation of Load Following Ancillary Service

5.9.1. AEMO must activate Load Following Ancillary Service from units scheduled to provide the service via AEMO's AGC system.

6. TRADING INTERVAL

6.1. Real-time monitoring during a Trading Interval

6.1.1. AEMO must monitor the operation of the power system in real time and must issue Dispatch Instructions or Dispatch Orders to re-balance if it considers that it is prudent to do so.

6.1.2. AEMO must not re-balance during a Trading Interval (including to return LFAS Facilities to their base point prior to the end of the Trading Interval) except to the extent that re-balancing is required to maintain Power System Security.

6.1.3. In determining whether it is prudent to re-balance, AEMO must consider a range of factors including but not limited to one or more of the following:

(a) System frequency; or

(b) position of LFAS Facilities relative to their AGC control target; or

(c) any reduction in Spinning Reserve; or

(d) the behaviour of Balancing Facilities, in particular Facilities outside their Tolerance Range or, if applicable, Facility Tolerance Range; or

(e) significant changes in load or wind forecasts; or

(f) the behaviour of commissioning generators; or

(g) the time remaining until the end of the Trading Interval.

*System Management will establish a Tolerance Range **[Clause 2.13.6D]** and Facility Tolerance Ranges **[Clause 2.13.6E]** according to the requirements of the WEM Rules.*

6.1.4. AEMO must create and issue any Dispatch Instructions or Dispatch Orders required to re-balance in accordance with the priority rules stipulated in the WEM Rules **[Clauses 7.6.1A, 7.6.1B, 7.6.1C 7.6.1D and 7.6.1E]**.

6.1.5. If a Facility is outside its Tolerance Range or, if applicable, Facility Tolerance Range and AEMO determines it is prudent to re-balance, AEMO must:

(a) Tag the affected Facility as non-compliant with its Dispatch Instruction; and

(b) Issue the affected Facility with a new Dispatch Instruction to stay at its current output level; and

(c) Issue new Dispatch Instructions as required in accordance with the BMO, skipping the affected Facility.

6.1.6. If the Facility is outside its Tolerance Range or, if applicable, Facility Tolerance Range and AEMO determines that no re-balancing is required, AEMO must tag the affected Facility as non-compliant with its Dispatch Instruction.

System Management may follow up verbally with the Market Participant but will take no further action for so long as re-balancing is not required.

6.2. Formulation and issuing of intermediate Dispatch Instructions and Dispatch Orders

6.2.1. AEMO may issue one or more Dispatch Instructions to a single Facility within a Trading Interval.

6.2.2. AEMO must provide voice communications as well as electronic notifications for Dispatch Instructions whose response time is in the same Trading Interval as its issued time, unless:

(a) AEMO has operational control of the Facility; or

(b) Dispatch Instructions are issued to the Facility via SCADA or AEMO's secure business-to-business gateway.

AEMO will need to issue intermediate Dispatch Instructions and Dispatch Orders to manage intra-period changes in ramp rate, contingency events, fluctuations in net system load outside the Load Following range, and for other reasons.

6.2.3. If, in the opinion of AEMO, a Facility providing LFAS is not performing adequately and either:

(a) the Facility is assigned more than 20% of the Upwards LFAS Quantity or Downwards Quantity (as applicable); or

(b) the LFAS output of other LFAS Facilities (measured as the MW difference between the Facility's dispatch point and its current output), in aggregate, is greater than 70% of the Upwards LFAS Quantity or Downwards LFAS Quantity (as applicable),

then AEMO must enable backup LFAS allocation on a Synergy Registered Facility for the required LFAS Quantity and disable LFAS allocation on the non-performing Facility.

6.2.4. In all other cases where, in the opinion of AEMO, a Facility providing LFAS is not performing adequately, AEMO must investigate the reasons for non-performance and may at its discretion initiate the disabling of the non-performing LFAS Facility and enabling of a Synergy Registered Facility to provide some or all of the LFAS that was meant to be provided by the disabled LFAS Facility as backup LFAS.

6.2.5. AEMO may enable one or more Synergy Registered Facilities to provide backup LFAS if the quantity of LFAS required by AEMO in a Trading Interval is greater than the most recent LFAS Quantity published for the Trading Interval.

6.3. Constrained operation of a Non-Scheduled Generator

6.3.1. AEMO may issue a Dispatch Instruction to a Non-Scheduled Generator to restrict the MW or MWh output of the Non-Scheduled Generator over specified Trading Intervals where the Dispatch Criteria are not being met, to restrict the variability that is occurring in the MW output from the Facility, if a High Risk Operating State or Emergency Operating State exists, or if adherence to the Balancing Merit Order requires it.

6.3.2. The reasons for non-observance of the limits of SWIS operation as defined in the Technical Envelope may include, but are not limited to one or more of the following:

(a) the Ancillary Service Requirements are not being satisfied; or

(b) operation of the Non-Scheduled Generator Facility is causing voltage swings in the region of the Facility's connection to the Network to exceed the range permitted by the Technical Rules or Security Limits; or

(c) operation of the Non-Scheduled Generator is causing Equipment Limits or Security Limits to be exceeded; or

(d) operation of the Non-Scheduled Generator is causing frequency deviations to exceed the normal frequency operating range.

6.3.3. In determining whether to constrain the operation of a Non-Scheduled Generator, AEMO may take account of the extent of any difference between the current operation of the generator, and any forecast of that generator's operation used to set the requirement for LFAS.

Except where required by the BMO, AEMO will generally only constrain Non-Scheduled Generator operation if the intermittency of that generator significantly exceeds what was planned for when setting the LFAS requirement.

Turn-down price, except for a marginal Non-Scheduled Generator being dispatched in accordance with the BMO, plays no role in AEMO's decisions with respect to constraining Non-Scheduled Generators.

6.4. Voltage control

6.4.1. AEMO may, in accordance with the Technical Rules, direct a Facility to change its reactive power output to assist with voltage control on the SWIS.

The Technical Rules (current as of June 2012) require "The overriding objective of a generating Facility's voltage control system is to maintain the specified voltage range at the connection point. Each Market Generator must therefore provide sufficient reactive power injection into, or absorption from, the transmission or distribution system to meet the reactive power requirements of its loads, plus all reactive power losses required to deliver its real power output at system voltages within the ranges specified in the relevant connection agreement for normal operation and contingency conditions."

This may reduce the capacity of a Facility to a level below its Dispatch Instruction. AEMO would then have to increase MW output from the next generator on the BMO. AEMO would issue a Dispatch Advisory and Dispatch Instructions for this instance.

Similarly if voltage issues on the network required AEMO to modify the generation plan across the SWIS (say move MW generation from one part of the SWIS to another to remove the voltage constraint), AEMO would have to issue a Dispatch Advisory, dispatch as per BMO if the market did respond or dispatch out of merit as per Standing Data if the market did not respond.

7. DISPATCH SETTLEMENT DATA

7.1. Introduction

7.1.1. The requirements for AEMO to prepare settlement data are specified in the clause 7.13 of the WEM Rules.

7.1.2. If AEMO is prevented from completing the processes that enable the recording of the data they may delay the recording of the data by up to two business days **[Clause 7.13.1B]**.

7.2. Quantification of Constrained off Quantities.

7.2.1. Where AEMO requires a Non-Scheduled Generator to reduce output in a Trading Interval, AEMO must provide an estimate of the maximum quantity of sent out energy in MWh which the Non-Scheduled Generator would have generated in that Trading Interval had a Dispatch Instruction not been issued [**Clause** 7.13.1(eF)].

7.2.2. AEMO may use, at its discretion, any of the following means to estimate the quantity referred to in step 7.2.1:

(a) a predictive algorithm provided by the Market Participant, providing an assessment of the Non-Scheduled Generator's MWh output from relevant independent variables over the Trading Interval; or

(b) a predictive algorithm developed by AEMO, providing an assessment of the Non-Scheduled Generator's MWh output from relevant independent variables over the Trading Interval; or

(c) an assessment by AEMO based on output of the Non-Scheduled Generator in a past Trading Interval under similar conditions; or

(d) an estimate using participant data provided to AEMO that uses output data from particular generating facilities that continue to operate unconstrained after the Dispatch Instruction, with the output data subsequently scaled up to represent the output from all generating facilities that otherwise would have operated.

7.2.3. AEMO must, from time to time, consult with the relevant Market Participant concerning the choice of option selected by AEMO in step 7.2.2.

7.3. Calculation of Spinning Reserve Response Quantities

7.3.1. For the purposes of this step 7.3, "Spinning Reserve Event" means a sudden loss to the power system of output from a Generating Unit.

7.3.2. Where a Facility provides a Spinning Reserve Response for a Spinning Reserve Event, AEMO must determine the response period of the Facility for the Spinning Reserve Event as the period which starts at the time of the Spinning Reserve Event and has a duration equal to the longest sustained response time of the classes of Spinning Reserve the Facility is certified to provide (defined the PSOP: Ancillary Services).

7.3.3. If for a Facility and a Trading Interval there is no Spinning Reserve Event for which the Facility's response period, as determined in step 7.3.2, overlaps the Trading Interval, then AEMO must determine the Spinning Reserve Response Quantity for that Facility and Trading Interval to be zero.

7.3.4. Where a Spinning Reserve Event has occurred, the Spinning Reserve Response Quantity of each Facility in each Trading Interval overlapping its response period must be calculated according to the formula:

RESP = Max (0, AVG_MW(Start_Time, End_Time) - G0) / (Duration_Mins/60)

Where:

RESP is the Spinning Reserve Response Quantity in MWh for the Facility in the Trading Interval;

AVG_MW(Start_Time, End_Time) is the average MW output of the Facility over the period between Start_Time and End_Time, measured at the generator terminals by AEMO's SCADA system with a resolution of 4 seconds or less;

G0 is the MW output of the Facility at the time of the Spinning Reserve Event, measured at the generator terminals by AEMO's SCADA system;

Start_Time is the later of the start time of the Trading Interval and the start time of the response period determined in step 7.3.2;

End_Time is the earlier of the end time of the Trading Interval and the end time of the response period determined in step 7.3.2;

Duration_Mins is the time, in minutes, between Start_Time and End_Time.

7.3.5. The Spinning Reserve Response Quantity for the Synergy Balancing Portfolio in a Trading Interval is the sum of the Spinning Reserve Response Quantities of the individual Facilities within the Synergy Balancing Portfolio.

7.4. Calculation of Load Rejection Reserve Response Quantities

7.4.1. For the purposes of this step 7.4, "Load Rejection Reserve Event" means a sudden decrease in SWIS load.

7.4.2. Where a Facility provides a Load Rejection Reserve Response for a Load Rejection Reserve Event, AEMO must determine the response period of the Facility for the Load Rejection Reserve Event as the period which starts at the time of the Load Rejection Reserve Event and has a duration equal to the longest sustained response

time of the classes of Load Rejection Reserve the Facility is certified to provide (defined the PSOP: Ancillary Services).

7.4.3. If for a Facility and a Trading Interval there is no Load Rejection Reserve Event for which the Facility's response period, as determined in step 7.4.2, overlaps the Trading Interval then AEMO must determine the Load Rejection Reserve Response Quantity for that Facility and Trading Interval to be zero.

7.4.4. Where a Load Rejection Reserve Event has occurred, the Load Rejection Reserve Response Quantity of each Facility in each Trading Interval overlapping its response period must be calculated according to the formula:

RESP = Max (0, G0 – AVG_MW (Start_Time, End_Time) / Duration_Mins/60)

Where:

RESP is the Load Rejection Reserve Response Quantity in MWh for the Facility in the Trading Interval;

AVG_MW(Start_Time, End_Time) is the average MW output of the Facility over the period between Start_Time and End_Time, measured at the generator terminals by AEMO's SCADA system with a resolution of 4 seconds or less;

G0 is the MW output of the Facility at the time of the Load Rejection Reserve Event, measured at the generator terminals by AEMO's SCADA system;

Start_Time is the later of the start time of the Trading Interval and the start time of the response period determined in step 7.4.2;

End_Time is the earlier of the end time of the Trading Interval and the end time of the response period determined in step 7.4.2;

Durations_Mins is the time, in minutes, between Start_Time and End_Time.

7.4.5. The Load Rejection Reserve Response Quantity for the Synergy Balancing Portfolio in a Trading Interval is the sum of the Load Rejection Reserve Response Quantities of the individual Facilities within the Synergy Balancing Portfolio.

7.5. SOI and EOI estimates

7.5.1. AEMO must determine the SOI Quantity for a Facility and a Trading Interval to be the EOI Quantity of the previous Trading Interval.

7.5.2. The EOI Quantity for a Facility and a Trading Interval will be the latest recorded value from AEMO's SCADA system within that Trading Interval.

7.5.3. AEMO may substitute this value if it has reason to believe it is inaccurate or if SCADA values were not recorded for the Trading Interval concerned.

7.5.4. Subject to step 7.5.5, where AEMO does not monitor the output of a Facility by use of SCADA, AEMO must determine the EOI Quantity for the Facility for each Trading

Interval as the MW offer quantity listed for that Facility in the BMO used by AEMO for the Trading Interval.

7.5.5. Where AEMO has reason to believe that an EOI Quantity determined in step 7.5.4 is inaccurate AEMO may determine and provide a substitute value.

7.6. Calculation of Demand Side Program curtailment

7.6.1. For the purpose of the calculation of the amount in MWh by which the Facility was requested to decrease its consumption **[Clause 7.13.5(a)]**, the following will be assumed:

(a) if an instruction is given that the demand should be reduced by a specific time then the calculation will be done assuming a reduction starting at the necessary time to achieve the final reduction by the prescribed time according to the ramp rate in the standing data.

(b) if an instruction is given to reduce demand as quickly as possible, then the calculation will assume the starting time as the time of the Dispatch Instruction and the ramp rate as described in the standing data, to determine the instructed reduction.

(c) if a ramp rate other than that described in the standing data is agreed on between the parties for the purpose of the Dispatch Instruction, this ramp rate will be considered for the purpose of the calculation.

8. ADMINISTRATION AND REPORTING IN RELATION TO SYNERGY

8.1.1. The requirements of steps 8.2, 8.3 and 8.4 shall apply only to steps 3 and 4.7.

8.2. Reporting in relation to Synergy's WEM Rules obligations

8.2.1. The requirements for AEMO to report to the ERA any instance where it believes that Synergy has failed to meet its obligations under this Procedure are specified in the WEM Rules **[Clauses 7.6A.5(c) and 7.6A.5(e)]**.

8.2.2. The reports referred to in step 8.2.1 must be submitted within 5 Business Days of the occurrence of the event, or within 5 Business Days of either party becoming aware of the event.

8.3. Appointment of Representative

8.3.1. Synergy and AEMO must:

(a) each appoint a representative who must act as the formal point of contact with regard to the operation of this Procedure; and

(b) provide each other and the IMO with the name, title and contact details of its representative; and

(c) maintain the appointed representative's currency.

8.4. Keeping of Records

8.4.1. The requirements for Synergy and AEMO to retain records created by the operation of this Procedure are specified in the WEM Rules **[Clause 7.6A.6]**.

8.5. Failure to Agree on an issue within the Procedure

8.5.1. The requirements for AEMO and Synergy to address and reach agreement on any issues arising from the application of this Procedure are specified in the WEM Rules **[Clause 7.6A.5(b)]**.

8.5.2. Where agreement cannot be reached and arbitration is required, the party seeking arbitration must, in good faith, seek to agree with the other party on an arbitrator.

8.5.3. If, within 7 days, the parties are unable to agree on an arbitrator, the ERA shall be the arbitrator.

8.5.4. Within 7 days of the appointment of an arbitrator, the party seeking arbitration must provide the arbitrator with a report setting out:

(a) a description of the issue in dispute; and

(b) the background to the dispute and a description of the endeavours of the parties to resolve the issue; and

(c) the position of both parties on the issue, including what is required to resolve the dispute.

8.5.5. The party submitting the report must provide a copy of the report to the other party at the same time the report is submitted to the arbitrator.

8.5.6. The other party must submit its own report on the issue to the arbitrator within 2 Business Days of the receipt of the report referred to in step 8.5.5.

8.5.7. In reviewing the issue, the arbitrator must have regard to the following, in order of precedence:

(a) the WEM Rules; and

(b) this Procedure; and

(c) other Market Procedures and PSOPs; and

(d) the alignment of the above to the Wholesale Market Objectives in the context of the issue.

8.5.8. The arbitrator may seek further information from either party, and this information must be provided within 2 Business Days of receipt of the request.

8.5.9. The arbitrator must provide its draft recommendation to Synergy and AEMO within two weeks of the receipt of the report in step 8.5.5. Both parties have 2 Business Days to provide the arbitrator with comments on the draft recommendation.

8.5.10. The arbitrator must, within 2 Business Days of receiving comments, issue a binding decision.

9. EXEMPTIONS TO COMMITMENT AND DE-COMMITMENT NOTIFICATION REQUIREMENTS

9.1. Application for exemption from a Market Participant with a distribution connected Scheduled Generator

9.1.1. A Market Participant with a Scheduled Generator connected to a distribution network that has operating equipment and processes which enable it to synchronise and de-synchronise only when it is safe to do so, may apply in writing to AEMO for an exemption from providing notification to AEMO under clauses **[Clauses 7.9.1 and 7.9.5]**.

9.1.2. The Market Participant's written application for exemption must advise that its Scheduled Generator has operating equipment and processes to enable it to synchronise and de-synchronise only when it is safe to do so. For guidance, the Scheduled Generator must meet the requirements of section 3.6 of the Technical Rules and in particular the provisions of clause 3.6.11 of the WEM Rules.

Section 3.6 of the Technical Rules sets out the requirements for connection of small generating units to the distribution network. Clause 3.6.11 of the Technical Rules specifies "…the Network Service Provided may also require the installation of an intertripping link between the Generator's main switch(es) and the feeder circuit breaker(s) in the zone substation or other upstream protection device nominated by the Network Service Provider".

9.1.3. The written application for an exemption to clauses **[Clauses 7.9.1 and 7.9.5]** (as described in step 9.1.1) must be directed to AEMO via email (wa.sm.operations@aemo.com.au) and signed by an Authorised Officer.

9.2. AEMO's assessment of the application

9.2.1. AEMO will assess a written application made under step 9.1.1 by reviewing the SCADA and protection systems to ensure that the criteria referred to in step 9.1.2 is satisfied.

9.2.2. Upon verification by AEMO that the Scheduled Generator satisfies the criteria set out in step 9.1.2, the Market Participant will be deemed to have operating equipment and processes which enable its distribution connected Scheduled Generator to synchronise and de-synchronise only when it is safe to do so, therefore qualifying for an exemption **[Clause 7.9.14]**.

9.2.3. If AEMO is unable to verify that the Market Participant's distribution connected Scheduled Generator satisfies the criteria set out in step 9.1.2then the Market Participant will not at that time be deemed to have operating equipment and processes which enable its distribution connected Scheduled Generator to synchronise and de-synchronise only when it is safe to do so, therefore not qualifying for an exemption.

9.3. AEMO's determination

9.3.1. AEMO must provide written notification to a Market Participant of the outcome of its assessment made under step 9.2as follows:

(a) if step 9.2.2 applies, the Market Participant will be advised that the distribution connected Scheduled Generator for which the application was made is exempt

from clauses 7.9.1 and 7.9.5 of the WEM Rules, including the reasons for the decision and the effective date of the exemption; or

(b) if step 9.2.3 applies, the Market Participant will be advised that the distribution connected Scheduled Generator does not qualify for an exemption from clauses 7.9.1 and 7.9.5 of the WEM Rules, including the reasons for this decision.

9.3.2. AEMO will use best endeavours to complete its assessment under step 9.2and provide written notice of its determination under step 9.3.1 within 10 business days of receiving an application under step 9.1.1.

9.3.3. Where written notification pursuant to step 9.3.1(b) is provided advising that the Scheduled Generator does not qualify for an exemption, the Market Participant may re-apply at any time following the steps set out in step 9.1.

9.4. Revocation of an exemption

9.4.1. A Market Participant must notify AEMO in writing via email wa.sm.operations@aemo.com.au) as soon as it becomes aware that it no longer satisfies the criteria referred to in step 9.1.2or any other matter or thing which might prevent the exempted Scheduled Generator from synchronising or de-synchronising safely **[Clause 7.9.16]**.

9.4.2. Upon assessing the information provided in the notification under step 9.4.1, or in the event that it becomes aware of any other information, AEMO may revoke an exemption if it is no longer satisfied that the Scheduled Generator meets the requirements assessed under step 9.4.1.

9.4.3. AEMO will notify the Market Participant of its decision to revoke an exemption in writing as soon as practicable after it has made its assessment under step 9.4.2. The notification will include reasons for its decision and the date and time from which the exemption will cease to apply **[Clause 7.9.17]**.

9.5. List of exempt distribution connected Scheduled Generators

9.5.1. AEMO will publish and maintain a list of Scheduled Generators subject to exemptions under clauses 7.9.1 and 7.9.5 of the WEM Rules on AEMO's website **[Clause 7.9.18]**. https://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Security-and-reliability/Facility-commitment-notification-exemptions).

9.5.2. The published list will include the details of the Market Participant and Facility and the date on which the exemption was granted.

9.5.3. A Scheduled Generator will be added to the published list as soon as practicable after the granting of an exemption.

9.5.4. Where an exemption is revoked for a Scheduled Generator, it will be removed from the list as soon as practicable after the revocation occurs.

APPENDIX 1: LIST OF DISPATCH ADVISORY NOTICE TYPES

DA type code	Description
A	Change in Power System Operating State
B	Energy shortfall
C	Energy surplus
D	Ramp rate shortfall
E	Ancillary Service shortfall
F	Ready Reserve shortfall
G	Change in outage status
H	Out-of-merit dispatch
I	Excessive intermittency
J	Commitment risk
K	Communications / IT issue
L	Fuel management issue
M	DSP to be Dispatched
Z	Other

~~ELECTRICITY INDUSTRY ACT~~

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

~~WHOLESALE ELECTRICITY MARKET RULES~~

POWER SYSTEM OPERATION PROCEDURE: DISPATCH

PREPARED BY:	System Management (WA)
DOCUMENT REF:	SO_OP_WA_3803
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Approved for distribution and use by:

APPROVED BY:	Cameron Parrotte
TITLE:	Executive General Manager, Strategy and Innovation

VERSION RELEASE HISTORY

Version	Effective date	Summary of changes
1	21 September 2006	Power System Operation Procedure (Market Procedure) for Dispatch
2	30 September 2009	AEMO proposed amendments to this procedure resulting in publication of Procedure Change Report PPCL 0013
3	5 January 2010	AEMO proposed amendments to this procedure resulting in publication of Procedure Change Report PPCL 0014
4	4 March 2010	AEMO proposed amendments to this procedure resulting in publication of Procedure Change Report PPCL 0015
5	28 June 2010	AEMO proposed amendments to this procedure resulting in publication of Procedure Change Report PPCL 0018
6	Balancing Market Commencement Day	Replacement of the Procedure resulting from Procedure Change Proposal PPCL0021
7	5 March 2014	AEMO proposed amendments to this procedure as a result of Procedure Change Proposal PPCL0027
8.0	1 October 2017	Update to Procedure resulting from Procedure Change Proposal AEPC_2017_10

CONTENTS

1. PROCEDURE OVERVIEW

1.1. Relationship with the Wholesale Electricity Market Rules

1.1.1. This Power System Operation Procedure (PSOP): Dispatch (Procedure) has been developed in accordance with~~, and should be read in conjunction with,~~ the Wholesale Electricity Market Rules (~~**Market**~~**WEM Rules**~~).~~) as described in step 1.3 below.

1.1.2. References to particular ~~Market~~WEM Rules within the Procedure in bold and square brackets **[~~MR~~Clause XX]** are current as ~~of 4 March 2014.~~at 1 October 2017. These references are included for convenience only~~,~~ and are not part of this Procedure.

~~1. This Procedure is subservient to the Market Rules. In the event of conflict between this Procedure and the Market Rules or any other document, the order of precedence is as set out in the Market Rules **[MR 1.5.2]**~~

1.1.3. References to WEM Rules in text boxes are included for convenience only and are not part of this Procedure.~~This Procedure may include explanatory text, including quotations from the Market Rules. Such explanatory text is for information only, does not form part of the Procedure, and is italicised and contained in a rectangular box~~.

1.2. ~~A WORD OR PHRASE~~Interpretation

1.2.1. In this Procedure:

(a) terms that are capitalised but not defined in ~~the Electricity Industry Act 2004, or in the Regulations or Market Rules made under that Act, has the same~~ this Procedure have the meaning ~~when used~~given in the WEM Rules;

(b) to the extent that this Procedure is contrary or inconsistent with the WEM Rules, the WEM Rules shall prevail to the extent of the inconsistency;

(c) a reference to the WEM Rules or Market Procedures includes any associated forms required or contemplated by the WEM Rules or Market Procedures; and

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

~~1.2.~~1.3. Purpose and application of this Procedure~~.~~

~~RELATED DOCUMENTS~~

~~1. This document is related to, and should be read in conjunction with, the following documents:~~

~~a. SWIS Technical Rules and Operating Standards~~

~~b. PSOP – Power System Security~~

~~c. PSOP – Ancillary Services~~

~~d. PSOP – Communications and Control Systems~~

~~e. PSOP – Commissioning and Testing~~

~~f. PSOP – Monitoring and Reporting~~

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~~1.2.1.~~1.3.1. ~~Market~~The purpose of this Procedure is to describe:

(a) the format and method by which each Market Generator must provide to ~~System Management~~AEMO for each of its Intermittent Generators with capacity exceeding 10MW, its most current forecast of the MWh energy output of the Intermittent Generator **[~~MR~~Clause 7.2.5]**;

(b) the procedure to be followed when scheduling and issuing Operating Instructions to dispatch Registered Facilities covered by any Ancillary Services Contract **[~~MR~~Clause 7.6.13]**;

(c) the format and time resolution for the provision of data by ~~Verve Energy~~Synergy to ~~System Management~~AEMO with respect to the scheduling of Stand Alone Facilities for Ancillary Services and the scheduling of Facilities in the ~~Verve Energy~~Synergy Balancing Portfolio **[~~MR~~Clause 7.6A.2]**;

(d) the process for selecting Non-Balancing Facilities from the Non-Balancing Dispatch Merit Order **[~~MR~~Clause 7.7.4A]**;

(e) the information that must be provided by a Market Participant to ~~System Management~~AEMO for each of its Non-Scheduled Generators to enable an estimation of the Facility's output by either the IMO or ~~System Management~~AEMO, as applicable **[~~MR~~Clause 7.7.5A & 7.7.5C]**;

(f) the procedure for ~~System Management~~AEMO to estimate the maximum amount of sent out energy, in MWh, which each Non-Scheduled Generator, by Trading Interval, would have supplied in the Trading Interval had a Dispatch Instruction not been issued **[~~MR~~Clause 7.7.5B]**;

(g) the procedure to be followed by ~~System Management~~AEMO and Market Participants in forming, issuing, recording, receiving, confirming and responding to Dispatch Instructions and Operating Instructions **[~~MR~~Clause 7.7.9]**;

(h) the procedure to be followed by ~~System Management~~AEMO in determining the quantities described under clause 7.7.5A(a) **[~~MR~~Clause 7.7.9]**;

(i) the procedure for calculating the Load Rejection Reserve Response Quantity and the Spinning Reserve Response Quantity **[~~MR~~Clause 7.13.1(eD)]**;

(j) the procedure to be followed in providing settlement and monitoring data ~~to the IMO~~ **[~~MR~~[Clause 7.13.3]**;

(k) the procedure for determining an estimate for each Trading Interval in the Trading Day and for each Balancing Facility of the:

(i) SOI Quantity;

(ii) EOI Quantity; and

(l) Relevant Dispatch Quantity at the end of a Trading Interval **[~~MR~~Clause 7A.3.7]**;

(m) the procedure for determining forecasts of the Relevant Dispatch Quantity and EOI Quantity for Non-Scheduled Generators for each future Trading Interval in the Balancing Horizon **[~~MR~~Clause 7A.3.15]**; and

(n) the procedure for determining the forecast LFAS Quantity for each Trading Interval in the next Trading Day **[~~MR~~Clause 7B.1.4]**.

(o) ~~This Procedure covers both Verve Energy and non-Verve Energy Facilities. It covers both System Management's~~the procedure for Market Participants who have been assigned DSM Capacity Credits to provide AEMO with their consumption information **[Clause7.6.10A].**

1.3.2. This Procedure applies to:

(a) AEMO in its general dispatch obligations~~,~~ and those relating to scheduling the ~~Verve Energy~~Synergy Balancing Portfolio as a service provided to ~~Verve Energy.~~ Synergy; and

~~2. This Procedure documents the obligations on:~~

~~a. System Management in respect of the scheduling and dispatch of Market Participants' Facilities and the provision of information to the IMO and to Market Participants on dispatch-related matters~~

~~b. Market Participants in respect of the provision of information and the operation of their Facilities~~

(b) Rule Participants in complying with the provision of information ~~the IMO~~required for Dispatch as described in ~~respect~~step 0.

2. MANAGEMENT OF ~~THE PROVISION OF~~DISPATCH INFORMATION~~.~~ AND DISPATCH CRITERIA

2.1. Management of ~~DISPATCH INFORMATION~~Dispatch Information

2.1.1. ~~System Management~~AEMO must store, and maintain from time to time, all necessary data needed to carry out the following processes:

(a) preparing the information ~~submitted to the IMO~~ on the Scheduling Day; and

(b) planning for dispatch; and

(c) issuing Dispatch Advisories; and

(d) issuing Dispatch Instructions, Operating Instructions and Dispatch Orders; and

(e) preparing the ex-post settlement and monitoring data.

2.1.2. ~~The IMO~~AEMO must provide all new and updated data in the Standing Data relating to a Trading Day ~~to System Management~~ as soon as practicable for updating of ~~System Management's~~ its Information Technology Systems in accordance with the ~~Market~~WEM Rules **[~~MR~~Clause** 2.34.1(b)].

2.2. Dispatch Criteria

2.2.1. When scheduling and dispatching Market Participant's Facilities, ~~System Management~~AEMO must at all times seek to meet the criteria described in the ~~Market~~WEM Rules [~~MR~~**Clause** 7.6.1].

2.2.2. The criteria are, in order of priority:

(a) ~~a. to~~to enable operation of the SWIS within the Technical Envelope Parameters appropriate for the applicable SWIS Operating State;

(b) ~~b. to~~to minimise involuntary load shedding on the SWIS; and

(c) ~~c. to~~to maintain Ancillary Services to meet the Ancillary Services standards appropriate for the applicable SWIS Operating State~~.~~

2.2.3. For the avoidance of doubt, satisfying the Dispatch Criteria will always take precedence over other dispatch rules such as adherence to the Balancing Merit Order~~.~~

3. SCHEDULING AND DISPATCH OF THE ~~VERVE ENERGY BALANCING PORTFOLIO~~SYNERGY BALANCING PORTFOLIO

3.1.1. ~~System Management's~~AEMO's and ~~Verve Energy's~~Synergy's obligations for scheduling and dispatching the Facilities of the ~~Verve Energy~~Synergy Balancing Portfolio are set out in the ~~Market~~WEM Rules **[~~MR~~Clause 7.6A]**.

3.1.2. ~~Verve Energy~~Synergy must provide ~~System Management~~AEMO with a set of dispatch guidelines for its Facilities comprising the ~~Verve Energy~~Synergy Balancing Portfolio in a form agreed between ~~Verve Energy~~Synergy and ~~System Management~~AEMO.

3.1.3. ~~System Management~~AEMO must prepare a ~~Verve Energy~~Synergy Dispatch Plan daily for the ~~Verve Energy~~Synergy Balancing Portfolio in a form agreed between ~~Verve Energy~~Synergy and ~~System Management~~AEMO.

3.1.4. ~~Verve Energy~~Synergy may update ~~the Verve Energy~~its Balancing Portfolio dispatch guidelines from time to time and advise ~~System Management~~AEMO of the date and time from which the updated guidelines are to take effect.

3.1.5. Communication of the ~~Verve Energy~~Synergy Balancing Portfolio dispatch guidelines must be made in a form agreed by ~~Verve Energy~~Synergy and ~~System Management~~AEMO.

3.1.6. Communication of, and consultation in relation to, the information referred to in the ~~Market~~WEM Rules **[~~MR~~Clause 7.6A.2 (c)]** must normally be by means of an electronic interface. ~~Verve Energy~~Synergy and ~~System Management~~AEMO may communicate by other means where necessary provided that all communications create, or are subsequently verified by, an electronic record.

4. PRE ~~GATE CLOSURE~~GATE CLOSURE

4.1. Pre-~~DISPATCH PLAN~~ dispatch plan

~~System Management~~

4.1.1. AEMO must produce, and update as required, a pre-Dispatch Plan covering all periods in the Balancing Horizon.

4.1.2. The pre-Dispatch Plan referred to in step ~~5.1.1~~4.1.1 must, where practicable, be produced using a mathematical program based on the same formulation used to create Dispatch Instructions (refer ~~section 6.3~~step 5.3 below).

4.1.3. Upon receiving a Forecast BMO ~~from the IMO, System Management~~, AEMO must formulate any constraints necessary to maintain Power System Security and use those constraints when producing the pre-Dispatch Plan referred to in step ~~5.1.1.~~4.1.1.

4.1.4. ~~System Management~~AEMO must report any pre-dispatch constraints binding, and any pre-dispatch constraints violated, via Dispatch Advisory notices as described in section ~~5.8 of this Procedure.~~5.9of this Procedure. In addition if it is expected that a Dispatch Instruction will be issued to a Non-Balancing Facility or a Demand Side Program within the next 24 hours, a Dispatch Advisory must be issued **[Clause 7.11.5 (j) and (k)].**

4.1.5. ~~System Management~~AEMO may communicate warnings to individual Market Participants if it detects significant discrepancies between Standing Data equipment limits and the pre-Dispatch Plan[1].

~~*The warnings referred to in step 5.1.5 are for information only. It remains the Market Participant's responsibility to ensure their Balancing Submissions reflect the physical capabilities of their Facilities at all times.*~~

4.2. Constraints used in the pre-Dispatch Plan

4.2.1. The constraints referred to in step ~~5.1.3~~4.1.3 may include, as appropriate, constraints to ensure any one or more of the following:

(a) ~~Maintenance~~maintenance of Ancillary Services standards~~.~~;

(b) ~~Appropriate~~appropriate use of contracted services, including Dispatch Support Services and Network Control Services;

(c) ~~Maintenance~~maintenance of the Ready Reserve Standard;

(d) ~~Adherence~~adherence to Equipment Limits, but only to the extent that those limits are not inconsistent with the dispatch of Balancing Facilities that, but for the Equipment Limits, would be dispatched under clause 7.6.1C of the WEM Rules;

(e) ~~Maintenance~~maintenance of overall system security; and

(f) ~~Appropriate~~appropriate management of fuel, if and to the extent that ~~System Management~~AEMO is required to manage such constraints during a fuel supply emergency.

[1] Note: The warnings referred to in step 4.1.5 are for information only. It remains the Market Participants responsibility to ensure their Balancing Submissions reflect the physical capabilities of their Facilities at all times.

4.3. Load forecasts

4.3.1. ~~System Management~~AEMO must, by 8:30 AM on the Scheduling Day associated with a Trading Day, determine and provide ~~Verve Energy~~Synergy with a forecast of total system demand for the Trading Day **[~~MR~~Clause 7.6A.2(b)]**.

4.3.2. Forecasts of total system demand in relation to step ~~5.3.1~~4.1.3 must separately itemise, for each Trading Interval in the Trading Day, the following quantities, Loss Factor adjusted to the Reference Node:

(a) Forecast SWIS system load, in MW, at the end of the Trading Interval; and

(b) Forecast total energy output, in MWh, over the Trading Interval.

4.3.3. The SWIS system load must be calculated as the combined energy (or power) exported from all generating facilities connected to each Network Operator's networks, as measured at the generating facility's connection points, Loss Factor adjusted to the Reference Node[2].

~~*Load forecasts are considered to be for system demand in the absence of any curtailment by Non-Balancing Facilities (i.e. Demand Side Management). Forecast curtailment will be communicated to the market via a Dispatch Advisory notice.*~~

4.3.4. Forecasts of total system demand must be provided to ~~Verve Energy~~Synergy through ~~System Management's~~AEMO's market system or any other medium agreed between ~~System Management~~AEMO and ~~Verve Energy~~Synergy.

4.3.5. ~~System Management~~AEMO must, by 7:30 AM on the Scheduling Day associated with a Trading Day, determine and provide ~~the IMO with~~ a Load Forecast for the Trading Day **[~~MR~~Clause 7.2.1]**.

4.3.6. Load Forecasts must be provided ~~to the IMO~~ electronically in accordance with the Market Procedure: IMS Interface.

4.3.7. When determining forecast quantities in step ~~5.3.1 or step 5.3.5, System Management~~4.3.1 or step 4.3.5, AEMO must, where practicable, utilise the most recent information available to it at the time the forecast is produced.

4.3.8. ~~System Management~~AEMO must, for each future Trading Interval in the Balancing Horizon, determine and provide ~~the IMO with~~ a forecast of the Relevant Dispatch Quantity. ~~System Management~~AEMO must, each time it has new information on which to determine these quantities, update these forecasts and provide the update ~~to the IMO~~, but is not required to do so more than once per Trading Interval **[~~MR~~Clause 7A.3.15]**.

4.3.9. Forecasts of Relevant Dispatch Quantities must be provided ~~to the IMO~~ electronically in accordance with the Market Procedure: IMS Interface.

4.3.10. ~~System Management~~AEMO must, by 12:00 PM on the Scheduling Day, provide ~~the IMO with System Management's~~ a forecast of the LFAS Quantity for each Trading Interval in the next Trading Day.

[2] Load forecasts are considered to be for system demand in the absence of any curtailment by Non-Balancing Facilities (i.e. Demand Side Management). Forecast curtailment will be communicated to the market via a Dispatch Advisory notice.

4.3.11. The LFAS Quantity will be forecast by adjusting the Load Following Service Requirement specified in the Ancillary Service Report to account for forecast conditions of Load and Non Scheduled Generation available to ~~System Management~~AEMO on the Scheduling Day.

4.3.12. The LFAS Quantity may be further adjusted to account for Commissioning that has been approved by ~~System Management~~AEMO to take place on the Trading Day.

4.4. [blank][3]

~~*This section, intended to cover treatment of significant discrete loads, is blank at this time.*~~

~~*System Management is considering whether it is necessary to model significant discrete loads (suggested definition is a load at a single connection point on the SWIS with a non-Loss Factor adjusted peak greater than or equal to 20MW or a set of related loads with more than one connection point sharing coincident load profiles with the sum of the non-Loss Factor adjusted peaks being greater than or equal to 20 MW). A summary of the requirements proposed by System Management for Significant Discrete Loads is as follows:*~~

~~*- A load forecast for the significant discrete load must be produced by the load customer or its retailer on the Scheduling Day for the upcoming Trading Day.*~~

~~*- Load forecast must be sent by the load customer or its retailer to System Management via System Management's market system interface by 12:00 PM on the Scheduling Day.*~~

~~*- The significant discrete load forecast must then be incorporated into System Management's system load forecast which is then used by the IMO to produce the market forecasts and then by System Management for its security constrained pre-dispatch and furthermore for security and dispatch purposes including Dispatch Advisories, Dispatch Instructions and Operating Instructions.*~~

~~*A Market Rule change would be required to give these requirements heads-of-power. System Management may propose a rule change to this effect in the future.*~~

4.5. Forecasts of non-scheduled generation

[3] This section intended to cover treatment of significant discrete loads, is blank at this time. AEMO is considering whether it is necessary to model significant discrete loads (suggested definition is a load at a single connection point on the SWIS with a non-Loss Factor adjusted peak greater than or equal to 20MW or a set of related loads with more than one connection point sharing coincident load profiles with the sum of the non-Loss Factor adjusted peaks being greater than or equal to 20 MW).

4.5.1. Unless specifically excused by ~~System Management~~AEMO, each Market Generator must provide, for each of its Intermittent Generators with a maximum output capacity exceeding 10 MW, the data specified in the ~~Market~~WEM Rules **[~~MR~~Clause 7.2.5]**.

4.5.2. A Market Generator must provide the forecast information referred to in step ~~5.5.1~~4.5.1 via the interface to ~~System Management's~~AEMO's market system unless an alternative medium is agreed between ~~System Management~~AEMO and the Market Generator.

4.5.3. Where so required by ~~System Management~~AEMO, if applicable, each Market Generator must provide, for each of its Non-Scheduled Generators, modelling data sufficient to allow ~~System Management~~AEMO to forecast the output of that Non-Scheduled Generator **[~~MR~~Clause 7.7.5A, ~~MR~~Clause 7.7.5C]**.

4.5.4. The modelling data provided in step ~~5.5.3~~4.5.3 must include, but is not necessarily limited to, identification of the main independent variables affecting output and the function relating those variables to output. All modelling data shall be provided on, or be sufficient to allow conversion to, a sent-out basis.

4.5.5. Where ~~System Management~~AEMO is required to determine a forecast of the output of a Non-Scheduled Generator:

(a) ~~System Management~~AEMO may utilise a forecast of sent-out energy for the Non-Scheduled Generator provided by the Market Generator in a Resource Plan or Balancing Submission; or

(b) Where ~~System Management~~AEMO considers that a forecast of sent-out energy received for a Non-Scheduled Generator is not reflective of the level of output actually occurring or likely to occur, ~~System Management~~AEMO may estimate the expected Non-Scheduled Generator output using the information provided under step ~~5.5.3~~4.5.3 and may substitute this data for part or all of the data provided for that Non-Scheduled Generator; or

(c) ~~System Management~~AEMO may utilise other forecast data where required, if Non-Scheduled Generator forecast data is received late or if sections of data are missing. This may be output data derived from recordings of injection levels from past Trading Intervals, or a separate forecast derived for that purpose.

4.5.6. Non-Scheduled Generation forecasts **[~~MR~~Clause 7.6A.2(e), ~~MR~~Clause 7A.3.15]** must be provided ~~to the IMO~~ electronically in accordance with the Market Procedure: IMS Interface.

4.6. Forecasts of Ancillary Services demand

4.6.1. ~~System Management~~AEMO must determine the estimated Ancillary Service requirements for each Market Participant that is a provider of Ancillary Services in accordance with the ~~Market~~WEM Rules **[~~MR~~Clause 7.2.3A]**.

4.6.2. ~~System Management~~AEMO must submit the Ancillary Service forecast data calculated pursuant to the ~~Market~~WEM Rules **[~~MR~~Clause 7.2.3A]** ~~to the IMO~~ in accordance with the Market Procedure: IMS Interface.

4.7. Updating the ~~VERVE ENERGY~~Synergy Dispatch Plan[4]

4.7.1. ~~System Management~~AEMO is required to notify ~~Verve Energy~~Synergy of significant changes to the ~~Verve Energy~~Synergy Dispatch Plan **[~~MR~~Clause 7.6A.2(f)]**.

4.7.2. The changes referred to in step ~~5.7.1~~4.7.1 must be deemed to be significant when they indicate:

(a) previously uncommitted generating Facilities are expected to be committed, or previously committed generating Facilities are expected to be de-committed; or

(a) fuel required is forecast to be outside the limits set by ~~Verve Energy~~Synergy; or

(b) ~~System Management~~AEMO expects to need to dispatch Facilities in the ~~Verve Energy~~Synergy Balancing Portfolio outside the ~~Verve Energy~~Synergy Balancing Portfolio dispatch guidelines described in step ~~4.2.3~~3.1.2.

4.7.3. ~~System Management~~AEMO must transmit the revised ~~Verve Energy~~Synergy Dispatch Plan to ~~Verve Energy~~Synergy as soon as practicable through the interface to ~~System Management's~~AEMO's market system.

4.7.4. ~~Verve Energy~~Synergy may request changes to the ~~Verve Energy~~Synergy Dispatch Plan, which ~~System Management~~AEMO must use reasonable endeavours to accommodate.

~~*System Management has an obligation to consult with Verve Energy in preparing the Verve Energy Dispatch Plan* ***[MR 7.6A.2(d)].***~~

4.8. Demand Side Programmes

[4] AEMO has an obligation to consult with Synergy in preparing the Synergy Dispatch Plan **[Clause 7.6A.2(d)]**

4.8.1. AEMO may request a Market Participant to provide a relevant recent consumption history **[Clause 7.6.10A]** in a manner agreed to between the parties when it is anticipated that the dispatch of the Non Balancing Facility may be required. This will include for each Trading Interval for which the information is requested, the consumption of each Associated Load of the Demand Side Program as well as the total of the Demand Side Program.

4.8.2. If AEMO issues a Dispatch Instruction to a Demand Side Program it must use best endeavours to ensure that the resulting Non-Balancing Facility Dispatch Instruction Payments across all DSP are zero in preference to any having to make any Tranche 2 or Tranche 3 payments. The NBDMO will initially indicate the available demand reduction in each tranche based on the Dispatch Instruction. As metering data becomes available to validate the actual reduction, this will be used to update the information on which the NBDMO is based.

Commented [TS1]: Need to check with legal/rules if this is allowed

4.8.3. AEMO is required to issue a Dispatch Advisory if it expects to issue a Dispatch Instruction to a Non-balancing Facility or a Demand Side Program within the next 24 hours **[Clause 7.11.5]**. A Dispatch Advisory must be issued at least two hours before the Dispatch Instruction is to come into effect.

~~4.8.~~4.9. Dispatch Advisory notices

~~4.8.1.~~4.9.1. The requirements for the issue and release of Dispatch Advisory notices to Market Participants, Network Operators and the IMO are specified in the ~~Market~~WEM Rules **[~~MR~~Clause 7.11]**.

~~4.8.2.~~4.9.2. Dispatch Advisories may arise as a result of one or more of:

(a) Conditions detected in the pre-Dispatch Plan; or

(b) Conditions detected in the Dispatch Plan; or

(c) Real-time monitoring thresholds being reached; or

(d) Conditions detected or forecast manually by ~~System Management~~AEMO Controllers.

~~4.8.3.~~4.9.3. Types of Dispatch Advisory notices are listed in Appendix 1.

~~4.8.4.~~4.9.4. ~~System Management~~AEMO must transmit automatically generated Dispatch Advisory notices as soon as practicable after the completion of each Trading Interval, and at other times if required. Manually generated Dispatch Advisory notices must be transmitted as soon as practicable.

~~4.8.5.~~4.9.5. Where there is a communication failure or insufficient time to issue such a notice, ~~System Management~~AEMO may convey the content of the notice via telephone or such other means as are practicable at the time, but must provide confirmation in the form of a formal Dispatch Advisory notice as soon as practicable.

~~4.8.6.~~4.9.6. ~~System Management~~AEMO has an obligation under the ~~Market~~WEM Rules [~~MR~~Clause 7.11.6A] to ensure that confidential information is not disclosed in Dispatch Advisory notices.

~~4.9.~~4.10. Content and management of Dispatch Advisory notices

~~4.9.1.~~4.10.1. Each occurrence of a condition triggering a Dispatch Advisory notice must result in a separate Dispatch Advisory notice being produced.

~~4.9.2.~~4.10.2. Each Dispatch Advisory notice must contain:

~~(e)~~(a) ~~The~~the information required under the ~~Market~~WEM Rules **[~~MR~~Clause 7.11.6]**; and

~~(f)~~(b) ~~A~~a Dispatch Advisory Type field, as defined in Appendix 1 of this Procedure.

~~4.9.3.~~4.10.3. Dispatch Advisory notices remain in force until withdrawn.

~~4.9.4.~~4.10.4. Withdrawal of Dispatch Advisory notices must occur as follows:

(a) Dispatch Advisory notices issued pursuant to the pre-Dispatch Plan or Dispatch Plan cover one Trading Interval and are deemed to have been withdrawn at the end of that Trading Interval; or

(b) Dispatch Advisory notices issued retrospectively in response to events that have already occurred are deemed to have been withdrawn at the later of the time of issue and the ending time. Such Dispatch Advisories may also be withdrawn by issuing a withdrawal notification; or

(c) Dispatch Advisory notices issued in circumstances not covered above are issued when required and expire automatically at the ending time unless withdrawn earlier.

~~4.10.~~4.11. Pre-issuing of Dispatch Instructions

~~4.10.1.~~4.11.1. Where ~~System Management~~AEMO determines that a specific Facility is required to operate in a particular way in a future period for the maintenance of Power System Security, ~~System Management~~AEMO may issue Dispatch Instructions to the required Facility prior to the normal issuance time.

~~4.10.2.~~4.11.2. Where the Facility referred to in step ~~5.10.1~~ 4.11.1would be required to be dispatched under ~~Market Rule~~clause 7.6.1C(c~~), System Management~~) of the WEM Rules, AEMO must:

(a) observe the Facility's Standing Data minimum response time when issuing Dispatch Instructions to that Facility; and

(b) if Dispatch Instructions for the Facility are issued via ~~System Management's~~AEMO's portal, also provide the Dispatch Instruction using voice communication; and

(c) ~~System Management~~AEMO must specify in its Dispatch Instruction that the Dispatch Instruction is being issued under ~~Market Rule~~clause 7.6.1C(c~~).~~) of the WEM Rules.

4.10.3.4.11.3. Where System ManagementAEMO determines that a Non-Balancing Facility is required to operate in a future period for the maintenance of Power System Security, System ManagementAEMO must issue Dispatch Instructions to the required Facility in accordance with that Facility's notice period. A Dispatch Advisory must be issued at least two hours before the Dispatch Instruction comes into effect.

4.10.4.4.11.4. System ManagementAEMO may issue new Dispatch Instructions to replace Dispatch Instructions issued pursuant to step 5.10.1 4.11.1or step 5.10.34.11.3 if required.

5. POST GATE CLOSURE

5.1. Bona fide changes to physical status of Facilities

5.1.1. The MarketWEM Rules **[MRClause 7A.2.10]** require a Market Participant, except Verve EnergySynergy in respect of the Verve EnergySynergy Balancing Portfolio, to update its Balancing Submission if after Balancing Gate Closure it becomes aware that the Balancing Submission does not reflect the physical capabilities of its Facilities.

5.1.2. If the circumstances described in step 6.1.1 5.1.1occur, and reflect a reduction or expected reduction in the capability of the Market Participant's Facility or Facilities, the affected Market Participant must also advise System ManagementAEMO of the nature and extent of that reduction as soon as practicable. This notification must initially be by telephone or other voice communication but then followed as soon as practicable on System Management'sAEMO's market system.

5.1.3. When advised in accordance with step 6.1.2, System Management5.1.2, AEMO must for any Trading Intervals for which it expects to receive no further updates to the Balancing Merit Order:

(a) Assessassess power system security in accordance with the PSOP: Power System Security and take any required actions resulting from that assessment; and

(b) Immediatelyimmediately issue a Dispatch Advisory notice specifying the extent of the reduction in capacity and whether the affected Facility is marginal, above or below the balancing point; and

(c) Ifif required to issue a Dispatch Instruction to the affected Facility take the notification in step 6.1.25.1.2 to be an advice given under step 6.6.6.5.6.6.

5.1.4. If a Market Participant receives a Dispatch Instruction in accordance with the Non Balancing Dispatch Merit Order (NBDMO) and becomes aware that its forecasted consumption profile is no longer a reasonable forecast of its consumption profile for the relevant trading interval, then it must notify AEMO telephonically or as agreed between the parties of the revised forecast **[Clause 7.7.6C]**.

5.2. Commitment and de-commitment of generating Facilities

5.2.1. The obligations of ~~System Management~~AEMO and Market Participants in respect of commitment and de-commitment of generating Facilities are set out in the ~~Market~~WEM Rules [**~~MR~~Clause** 3.21B & **~~MR~~Clause** 7.9].

5.2.2. A Market Participant, except ~~Verve Energy~~Synergy with respect to the ~~Verve Energy~~Synergy Balancing Portfolio, must communicate confirmation of expected time of synchronisation and de-synchronisation under the ~~Market~~WEM Rules via telephone or other voice communication **[~~MR~~Clause 7.9.1]**, unless it is exempt from doing so in accordance with the ~~Market~~WEM Rules **[~~MR~~Clause 7.9.14]**.

5.2.3. The ~~Market~~WEM Rules set out the circumstances where a Market Participant intending on putting a Scheduled Generator holding Capacity Credits into a state where it will take more than four hours to re-synchronise, is not required to seek permission from ~~System Management [MR~~AEMO **[Clause 3.21B.1]**. Where these exceptions do not apply, the Market Participant must seek approval and the request must be communicated via telephone or other voice communication, and include the information required by the ~~Market~~WEM Rules **[~~MR~~Clause 3.21B.2]**.

> *A Market Participant is required by the ~~Market~~WEM Rules **[~~MR~~Clause 3.21B.2]** to include in the request for permission the following information:*
>
> *"(a) the identity of the Scheduled Generator;*
>
> *(b) the time at which the Market Participant wants to have the Scheduled Generator enter a state where it will take more than four hours to re-synchronise; and*
>
> *(c) the first time after that in (b) at which the Scheduled Generator will be able to be resynchronised with four hours notice."*

5.2.4. ~~System Management~~AEMO will assess the request made under ~~6.2.3~~ step 5.2.3to determine if permission should be withheld in accordance with the ~~Market~~WEM Rules **[~~MR~~Clause 3.21B.5]**.

> *The ~~Market~~WEM Rules **[~~MR~~Clause 3.21B.5]** provide that System Management may only withhold permission if:*
>
> *"(a) the request for that permission is not in accordance with clause 3.21B.2 or the Power System Operation Procedure; or*
>
> *(b) granting permission would mean that System Management would be incapable of maintaining the Ready Reserve Standard".*

5.2.5. Where ~~System Management~~AEMO approves or rejects the request for permission, ~~System Management~~AEMO must inform the Market Participant of its decision as soon as practicable by telephone or other voice communication in accordance with the ~~Market~~WEM Rules **[~~MR~~Clause 3.21B.4]**.

5.2.6. Where ~~System Management~~AEMO has notified the Market Participant of its decision to reject the request for permission in accordance with ~~section 6.2.5, System Management~~step 6.2.5, AEMO and the Market Participant must use best endeavours to find an alternative time for the Scheduled Generator to be put into a state where it will take more than four hours to re-synchronise in accordance with the ~~Market~~WEM Rules **[~~MR~~Clause 3.21B.6]**.

5.2.7. ~~System Management~~AEMO must log the reasons when permission to synchronise or de-synchronise is refused.

5.3. Creation of Dispatch Instructions and Dispatch Orders

5.3.1. ~~System Management~~AEMO must create Dispatch Instructions and Dispatch Orders in such a way as to ensure the Dispatch Criteria in the ~~Market~~WEM Rules [**~~MR~~Clause** 7.6.1] are met at all times.

5.3.2. ~~System Management~~AEMO must, wherever practicable, create Dispatch Instructions and Dispatch Orders using a mathematical program.

5.3.3. The ~~Market~~WEM Rules [**~~MR~~Clauses** 7.6.1A, 7.6.1B~~.~~**,** 7.6.1C**, 7.6.1D** and 7.6.**~~1D~~1E**] stipulate the priority rules that ~~System Management~~AEMO must follow in formulating Dispatch Instructions.

5.3.4. ~~System Management~~AEMO must **[~~MR~~Clause 7.6.1A]** give priority to the dispatch of a Registered Facility under a Network Control Service (NCS) Contract if doing so would assist ~~System Management~~AEMO to meet the Dispatch Criteria. ~~System Management~~AEMO must consider that an NCS Contract would assist it to meet the Dispatch Criteria if ~~System Management~~AEMO considers that:

(a) ~~The~~the dispatch of the power system without calling upon the NCS Contract would adversely affect Power System Security; and

(b) ~~Dispatching~~dispatching the Facilities covered by the NCS Contract according to the terms of the contract would prevent the circumstances described in step ~~6.3.4(a)~~ 5.3.4(a)from arising or alleviate them if they have already arisen.

5.3.5. ~~System Management~~AEMO may **[~~MR~~Clause 7.6.1B]** give priority to the issuing of Operating Instructions that call on Ancillary Services, NCS or Supplementary Capacity Contracts, or enable a Test. ~~System Management~~AEMO must, as far as possible without breaching its obligations in relation to maintaining Power System Security, apply its discretion in the following manner:

(a) NCS Contracts must be called upon in accordance with step ~~6.3.4~~5.3.4 or as agreed with the applicable Network Operator; or

(b) Ancillary Services Contracts must be called upon in accordance with the terms of the contract; in accordance with ~~System Management's~~AEMO's approved Ancillary Services Plan; and in a way that at all times meets the Ancillary Services Standards; or

(c) Supplementary Capacity Contracts must be called upon in accordance with the terms of the contract; or

(d) Tests must be scheduled in accordance with the PSOP: Commissioning and Testing.

5.3.6. ~~System Management~~AEMO must **[~~MR~~Clause 7.6.1C]** take into account Ramp Rate Limits when formulating Dispatch Instructions in accordance with the Balancing Merit Order. For the avoidance of doubt:

(a) ~~A~~a Facility that is below the balancing point in the BMO and is not dispatched for its full offered quantity, but that is dispatched for the maximum quantity its Ramp Rate Limit implies it is capable of achieving in the Trading Interval, must be considered to have been dispatched "in merit"; or

(b) ~~A~~a Facility that is above the balancing point in the BMO and is dispatched for a non-zero quantity, being the minimum quantity its Ramp Rate Limit implies it is capable of achieving, must be considered to have been dispatched "in merit".

~~System Management~~AEMO will not consider Standing Data minimum generation constraints when formulating Dispatch Instructions in accordance with the BMO. Market Participants must prepare their Balancing Submissions in such a way as to achieve either dispatch above minimum generation, or de-commitment. When ~~System Management~~AEMO issues Dispatch Instructions out of merit in accordance with Market Rule 7.6.1C(b), it will however observe minimum generation constraints.

5.3.7. Where ~~System Management~~AEMO determines in accordance with the ~~Market~~WEM Rules **[~~MR~~Clause 7.7.4A]** that dispatch of a Non-Balancing Facility is required, ~~System Management~~AEMO must apply the following process to select the Non-Balancing Facility or Facilities from the Dispatch Merit Order~~:~~ while acting in according with the WEM Rules **[Clause 7.6.1C]**:

(a) ~~Exclude~~exclude from selection any Non-Balancing Facility that could not offer the required response inside its specified Minimum Response Time or for any other Standing Data limitation;

(b) ~~Exclude~~exclude from selection any Non-Balancing Facility that ~~System Management~~AEMO reasonably believes, on the basis of the Pre-Dispatch Plan described in Section ~~5~~4.1, will be required to be dispatched at some later time within the Balancing Horizon; that its dispatch at that later time would provide a larger benefit in terms of system security that its dispatch to meet immediate system needs; and that the Standing Data limitations under which the Facility may be dispatched preclude it from being dispatched on both occasions;

(c) ~~Exclude~~exclude from selection any Non-Balancing Facility that ~~System Management~~AEMO reasonably believes will be required to be dispatched at some later time (or times) outside of the Balancing Horizon; that its dispatch at that later time (or times) would provide a larger benefit in terms of system security than its dispatch to meet immediate system needs; and that the Standing Data limitations under which the Facility may be dispatched may preclude it from being dispatched on all occasions;

(d) ~~Otherwise, dispatch~~as in the Pre-Gate Closure actions (step 4.8.2), Dispatch Non~~-~~ Balancing Facilities ~~in merit order, using the merit order type~~

~~applicable~~according to the ~~Trading Intervals in~~ Non Balancing Dispatch Merit Order using best endeavours to maximise the extent to which the resulting Non-Balancing Facility Dispatch Instruction Payments are zero **[Clause 6.17.6C]** in preference to causing any Tranche 2 or ~~Facilities will~~Tranche 3 DSM Dispatch Payments to be ~~required.~~payable; and

(e) AEMO may request the Market Participant to provide the relevant recent consumption **[Clause 7.6.10A]** in a manner agreed to between the parties of each Associated Load of the Demand Side Program as well as the total load of the Demand Side Program.

5.4. Creation of Operating Instructions

5.4.1. ~~System Management~~AEMO must issue Operating Instructions to:

(a) Call on services provided by Facilities (other than Facilities in the ~~Verve Energy~~Synergy Balancing Portfolio) under an NCS Contract, an Ancillary Service Contract, or a Supplementary Capacity Contract; or

(b) call on Stand Alone Facilities to provide Ancillary Services other than LFAS but including LFAS Backup Enablement; or

(c) in connection with a Test.

5.4.2. Where ~~System Management~~AEMO identifies, based on the BMO or Forecast BMO, that a Facility's Balancing Submission is inconsistent with an Operating Instruction to that Facility, ~~System Management~~AEMO may send a warning to the Market Participant[5].

The obligation to ensure dispatch consistent with Operating Instructions remains with the Market Participant. Any warning from System Management is provided for information only.

5.4.3. Where a Market Participant with a contract to provide Ancillary Services or NCS provides the contracted service automatically and in accordance with the terms of the contract, ~~System Management~~AEMO must communicate the Operating Instruction to the relevant Market Participant as early as practicable.

*Where ~~System Management~~AEMO is required to call on NCS from a Facility whose Standing Data notice period is less than gate closure, ~~System Management~~AEMO will issue the Operating Instruction immediately after gate closure based on the Forecast BMO. The NCS Facility would then update its Balancing Submission after gate closure, as allowed under the ~~Market~~WEM Rules **[~~MR~~Clause 7A.2.10]**.*

Note the above only applies where the NCS is for the provision of real power. Calling an NCS contract for reactive power will be done by a direction, i.e. outside the market.

5.5. Issuing of Dispatch Instructions and Dispatch Orders

5.5.1. The ~~Market~~WEM Rules detail the requirements for Dispatch Instructions **[~~MR~~Clauses 7.7.1, ~~MR~~ 7.7.2 and ~~MR~~ 7.7.3]** and Dispatch Orders.

5.5.2. All Dispatch Instructions and Dispatch Orders for a Facility remain in force until superseded by a new Dispatch Instruction or Dispatch Order.

5.5.3. Dispatch Instructions to Demand Side Programmes will be expressed in terms of ~~"quantity of curtailment".~~quantity of curtailment. The Dispatch Instruction will consider the amount of load indicated to be available for curtailment as per the latest Non Balancing Dispatch Merit Order as well as the number of hours for which this reduction is possible.

5.5.4. ~~System Management~~AEMO must issue Dispatch Instructions and Dispatch Orders electronically via one of the following methods (in order of preference):

(a) SCADA, if available; or

(b) ~~System Management's~~AEMO's interface to its market system; or

(c) Email (SMS may be used as an adjunct to email); or

(d) Telephone (or other voice communication), with subsequent confirmation by one of the means above.

5.5.5. Other than for Facilities over which ~~System Management~~AEMO has direct control and so the Facility is capable of responding faster, when dispatching Facilities in merit **[~~MR~~Clause 7.6.1C(a)]** or just out of merit **[~~MR~~Clause 7.6.1C(b)]** ~~System Management~~AEMO must provide at least 5 minutes between the issuing and commencement time of Dispatch Instructions and Dispatch Orders.

5.5.6. ~~System Management~~AEMO must respect Standing Data Minimum Response Times when issuing Dispatch Instructions or Dispatch Orders to Facilities out of merit for system security reasons under ~~Market Rule~~clause 7.6.1C(c~~),~~) of the WEM Rules, unless advised otherwise by the Market Participant concerned.

5.5.7. Where it is not practicable for ~~System Management~~AEMO to issue Dispatch Instructions or Dispatch Orders in the manner described in step ~~6.5.3, System Management~~5.6.4, AEMO may use such other means as it deems best suited to the circumstances and the requirements of step ~~6.5.3~~5.6.4 shall be deemed to have been fulfilled.

5.5.8. If a generating facility, which does not carry an obligation to provide a Spinning Reserve Service or Load Following Service satisfies the two following criteria:

(a) the system frequency moves above 50.025Hz or below 49.975Hz; and

~~(b)~~ the generator facility's governor automatically moves the generator away from its most recent Dispatch Instruction to a point outside its Tolerance Range in a manner that assists reducing the frequency deviation,

~~(c)~~(b) then ~~System Management~~AEMO must inform the IMO, when advising it of a breach by the relevant Market Participant of the ~~Market~~WEM Rules **[~~MR~~Clause 7.10.1]**, that the deviation was due to an automatic governor response and state whether the deviation from the Dispatch Instruction was consistent with the Technical Rules. To ensure a controlled restoration of the frequency back

to 50Hz, ~~System Management~~AEMO may issue Dispatch Instructions or Dispatch Orders to hold some Facilities at levels they have stabilised at after the frequency disturbance.

~~System Management~~AEMO requires that each generating unit operating in parallel with the SWIS must have its governor enabled and governor response set at 4% droop, and have governor frequency dead band of less than 0.05 Hz, in accordance with the Technical Rules. Refer to clauses 3.3.4.4 (d) and (e) of the Technical Rules.

The above step is included to ensure that penalties are not imposed upon Market Generators that respond to assist in the event of a system emergency.

5.6. Response to Dispatch Instructions and Dispatch Orders

5.6.1. Where ~~System Management~~AEMO has operational control of a Facility, ~~System Management~~AEMO must deem any Dispatch Instruction or Dispatch Order issued to that Facility to have been accepted.

For the avoidance of doubt, System Management is still required to issue Dispatch Instructions to Facilities under its operational control.

5.6.2. Where ~~System Management~~AEMO issues a Dispatch Instruction to a Market Participant by telephone or other voice communication, the Market Participant must advise ~~System Management~~AEMO during that conversation if it cannot comply with the Dispatch Instruction and if so advise the extent and nature of its non-compliance.

5.6.3. Where ~~System Management~~AEMO issues a Dispatch Instruction or Dispatch Order via telephone or other voice communication and subsequently provides a confirmation of the Dispatch Instruction or Dispatch Order via ~~System Management's~~AEMO's interface to its market system, the Market Participant is not required to provide a response to this subsequent electronic notification.

5.6.4. A Market Participant must confirm receipt of a Dispatch Instruction or Dispatch Order issued via SCADA within 30 seconds of receipt and in accordance with the Operating Protocol. If the Facility is unable to comply with the Dispatch Instruction or Dispatch Order the Market Participant must also advise ~~System Management~~AEMO by telephone or other voice communication that it cannot comply and the nature and extent of its non-compliance.

5.6.5. A Market Participant must confirm receipt of a Dispatch Instruction or Dispatch Order issued via ~~System Management's~~AEMO's secure business-to-business gateway within 1 minute. If the Facility is unable to comply with the Dispatch Instruction or Dispatch Order the Market Participant must also advise ~~System Management~~AEMO by telephone or other voice communication that it cannot comply and the nature and extent of its non-compliance.

5.6.6. Where a Market Participant receives Dispatch Instructions or Dispatch Orders for a Facility via ~~System Management's~~AEMO's portal, and the Market Participant receives one or more Dispatch Instructions or Dispatch Orders for the Facility and a Trading Interval over the period ending 5 minutes before the start of the Trading Interval, the Market Participant must, by no later than 3 minutes before the start of the Trading Interval:

(a) identify the most recent Dispatch Instruction or Dispatch Order received for the Facility and Trading Interval in the period ending 5 minutes before the start of the Trading Interval; and

(b) if the Facility is unable to comply with this Dispatch Instruction or Dispatch Order, advise ~~System Management~~AEMO by telephone or other voice communication that it cannot comply and the nature and extent of its non-compliance; and

(c) confirm receipt of this Dispatch Instruction or Dispatch Order via ~~System Management's~~AEMO's portal.

The Market Participant may, but is not required to respond to any earlier Dispatch Instructions or Dispatch Orders received for the Facility and Trading Interval in this period.

5.6.7. Where a Market Participant advises ~~System Management~~AEMO that it cannot follow its Dispatch Instruction or Dispatch Order, ~~System Management~~AEMO must:

(a) Issue a new Dispatch Instruction or Dispatch Order to the Market Participant consistent with their advised capability, and tag the original Dispatch Instruction or Dispatch Order for non-compliance; and

If, under clause 7.7.6B, a Market Participant notifies ~~System Management~~AEMO that its Facility cannot meet a Dispatch Instruction and advises a reduced quantity or Ramp Rate, ~~System Management~~AEMO is obliged to use the generator to the maximum of that reduced quantity or Ramp Rate possible. For example, if a Dispatch Instruction was to move from 20 MW to 60 MW at a Ramp Rate of 6 MW/minute, and the Market Participant advises that it can only deliver 40 MW, then System Management must issue a second Dispatch Instruction to move to 40 MW. Alternatively, if the Market Participant advises that it can reach 60 MW but only at a Ramp Rate of 4 MW/minute, then ~~System Management~~AEMO must issue a Dispatch Instruction to move to 60 MW at 4 MW/minute.

(b) Issue Dispatch Instructions or Dispatch Orders to other Facilities as required; and

(c) Issue a Dispatch Advisory notice to advise the market of dispatch out of merit (where applicable).

5.6.8. Where ~~System Management~~AEMO does not receive confirmation that a Dispatch Instruction or Dispatch Order has been received within 3 minutes of the start of the Trading Interval to which the Dispatch Instruction relates, ~~System Management~~AEMO must deem the Dispatch Instruction or Dispatch Order to have been refused. ~~System Management~~AEMO must then:

(a) Send the Market Participant concerned a new Dispatch Instruction or Dispatch Order instructing them to stay at the output specified on their last accepted Dispatch Instruction or Dispatch Order; and

(b) Tag the Dispatch Instruction or Dispatch Order to which the Facility did not respond as non-compliant; and

(c) Issue Dispatch Instructions or Dispatch Orders to other Facilities as required; and

(d) Issue a Dispatch Advisory notice to advise the market of dispatch out of merit (where applicable).

5.7. Issuing of and response to Operating Instructions

5.7.1. The ~~Market~~WEM Rules detail the requirements for Operating Instructions **[~~MR~~Clause 7.7.3A]**.

5.7.2. ~~System Management~~AEMO must issue Operating Instructions electronically via one of the following methods (in order of preference):

(a) Email (SMS may be used as an adjunct to email); or

(b) Telephone (or other voice communication), with subsequent confirmation by email.

5.7.3. A Market Participant must confirm receipt of an Operating Instruction by email as soon as practicable. If the Market Participant cannot comply with the Operating Instruction, then the email must advise that the Market Participant cannot comply and the nature and extent of the non-compliance.

5.7.4. If, after issuing an Operating Instruction for the provision of an Ancillary Service, NCS or service provided under a Supplementary Capacity Contract, ~~System Management~~AEMO requires the service provision to be extended beyond the estimated end time provided in the Operating Instruction, ~~System Management~~AEMO must issue another Operating Instruction for the expected period of the extension.

For the avoidance of doubt, a Market Participant must not modify the output level of its Balancing Facility simply because it has received an Operating Instruction for that Facility, but only in response to a Dispatch Instruction. ~~System Management~~AEMO will issue any required Dispatch Instructions to the Balancing Facility as appropriate.

5.8. Dispatch of generating Facility for system security

5.8.1. ~~System Management~~AEMO may issue a Dispatch Instruction or Dispatch Order requiring a Facility to move from zero generation to positive generation, or vice versa, where doing so is necessary to maintain Power System Security.

Dispatch Instructions/Dispatch Orders referred to in step ~~6.8.1~~5.8.1 are implicitly instructions to synchronise and operate (commit) or de-synchronise (de-commit). The Dispatch Instruction protocol does not allow for explicit commit/de-commit instructions.

5.8.2. When the system is forecast to move into a High Risk Operating State, ~~System Management~~AEMO must observe as far as practicable the BMO or Forecast BMO for the Trading Intervals in which the threat to Power System Security occurs when selecting the Facility or Facilities to commit.

5.8.3. ~~System Management~~AEMO may select the Facility or Facilities to commit that provide the most flexibility for ~~System Management~~AEMO to deal with current or potential threats to Power System Security when the system is:

(a) In a High Risk Operating State; or

(b) In an Emergency Operating State; or

(c) Forecast to move into an Emergency Operating State.

In general, step ~~6.8.3~~5.8.3 will result in the preferential commitment of large, fast-moving and/or flexible generating units.

5.9. Activation of Load Following Ancillary Service

5.9.1. ~~System Management~~AEMO must activate Load Following Ancillary Service from units scheduled to provide the service via ~~System Management's~~AEMO's AGC system.

6. TRADING INTERVAL

6.1. Real-time monitoring during a Trading Interval

6.1.1. ~~System Management~~AEMO must monitor the operation of the power system in real time and must issue Dispatch Instructions or Dispatch Orders to re-balance if it considers that it is prudent to do so.

6.1.2. ~~System Management~~AEMO must not re-balance during a Trading Interval (including to return LFAS Facilities to their base point prior to the end of the Trading Interval) except to the extent that re-balancing is required to maintain Power System Security.

6.1.3. In determining whether it is prudent to re-balance, ~~System Management~~AEMO must consider a range of factors including but not limited to one or more of the following:

~~(d)~~(a) System frequency; or

~~(e)~~(b) ~~Position~~position of LFAS Facilities relative to their AGC control target; or

~~(f)~~(c) ~~Any~~any reduction in Spinning Reserve; or

~~(g)~~(d) ~~The~~the behaviour of Balancing Facilities, in particular Facilities outside their Tolerance Range or, if applicable, Facility Tolerance Range; or

~~(h)~~(e) ~~Significant~~significant changes in load or wind forecasts; or

~~(i)~~(f) ~~The~~the behaviour of commissioning generators; or

~~(j)~~(g) ~~The~~the time remaining until the end of the Trading Interval.

*System Management will establish a Tolerance Range **[~~MR~~Clause 2.13.6D]** and Facility Tolerance Ranges **[~~MR~~Clause 2.13.6E]** according to the requirements of the ~~Market~~WEM Rules.*

6.1.4. ~~System Management~~AEMO must create and issue any Dispatch Instructions or Dispatch Orders required to re-balance in accordance with the priority rules stipulated in the ~~Market~~WEM Rules **[~~MR~~Clauses 7.6.1A, ~~MR~~ 7.6.1B, ~~MR~~ 7.6.1C ~~and MR~~ 7.6.1D and 7.6.1E]**.

6.1.5. If a Facility is outside its Tolerance Range or, if applicable, Facility Tolerance Range and ~~System Management~~AEMO determines it is prudent to re-balance, ~~System Management~~AEMO must:

(a) Tag the affected Facility as non-compliant with its Dispatch Instruction; and

(b) Issue the affected Facility with a new Dispatch Instruction to stay at its current output level; and

(c) Issue new Dispatch Instructions as required in accordance with the BMO, skipping the affected Facility.

6.1.6. If the Facility is outside its Tolerance Range or, if applicable, Facility Tolerance Range and ~~System Management~~AEMO determines that no re-balancing is required, ~~System Management~~AEMO must tag the affected Facility as non-compliant with its Dispatch Instruction.

System Management may follow up verbally with the Market Participant but will take no further action for so long as re-balancing is not required.

6.2. Formulation and issuing of intermediate Dispatch Instructions and Dispatch Orders

6.2.1. ~~System Management~~AEMO may issue one or more Dispatch Instructions to a single Facility within a Trading Interval.

6.2.2. ~~System Management~~AEMO must provide voice communications as well as electronic notifications for Dispatch Instructions whose response time is in the same Trading Interval as its issued time, unless:

(a) ~~System Management~~AEMO has operational control of the Facility; or

(b) Dispatch Instructions are issued to the Facility via SCADA or ~~System Management's~~AEMO's secure business-to-business gateway.

~~System Management~~AEMO will need to issue intermediate Dispatch Instructions and Dispatch Orders to manage intra-period changes in ramp rate, contingency events, fluctuations in net system load outside the Load Following range, and for other reasons.

6.2.3. If, in the opinion of ~~System Management~~AEMO, a Facility providing LFAS is not performing adequately and either:

(a) the Facility is assigned more than 20% of the Upwards LFAS Quantity or Downwards Quantity (as applicable); or

(b) the LFAS output of other LFAS Facilities (measured as the MW difference between the Facility's dispatch point and its current output), in aggregate, is greater than 70% of the Upwards LFAS Quantity or Downwards LFAS Quantity (as applicable),

then ~~System Management~~AEMO must enable backup LFAS allocation on a ~~Verve Energy~~Synergy Registered Facility for the required LFAS Quantity and disable LFAS allocation on the non-performing Facility.

6.2.4. In all other cases where, in the opinion of ~~System Management~~AEMO, a Facility providing LFAS is not performing adequately, ~~System Management~~AEMO must investigate the reasons for non-performance and may at its discretion initiate the disabling of the non-performing LFAS Facility and enabling of a ~~Verve Energy~~Synergy Registered Facility to provide some or all of the LFAS that was meant to be provided by the disabled LFAS Facility as backup LFAS.

6.2.5. ~~System Management~~AEMO may enable one or more ~~Verve Energy~~Synergy Registered Facilities to provide backup LFAS if the quantity of LFAS required by ~~System Management~~AEMO in a Trading Interval is greater than the most recent LFAS Quantity published for the Trading Interval.

6.3. Constrained operation of a Non-Scheduled Generator

6.3.1. ~~System Management~~AEMO may issue a Dispatch Instruction to a Non-Scheduled Generator to restrict the MW or MWh output of the Non-Scheduled Generator over specified Trading Intervals where the Dispatch Criteria are not being met, to restrict the variability that is occurring in the MW output from the Facility, if a High Risk Operating State or Emergency Operating State exists, or if adherence to the Balancing Merit Order requires it.

6.3.2. The reasons for non-observance of the limits of SWIS operation as defined in the Technical Envelope may include, but are not limited to one or more of the following:

(a) the Ancillary Service Requirements are not being satisfied; or

(b) operation of the Non-Scheduled Generator Facility is causing voltage swings in the region of the Facility's connection to the Network to exceed the range permitted by the Technical Rules or Security Limits; or

(c) operation of the Non-Scheduled Generator is causing Equipment Limits or Security Limits to be exceeded; or

(d) operation of the Non-Scheduled Generator is causing frequency deviations to exceed the normal frequency operating range.

6.3.3. In determining whether to constrain the operation of a Non-Scheduled Generator, ~~System Management~~AEMO may take account of the extent of any difference between the current operation of the generator, and any forecast of that generator's operation used to set the requirement for LFAS.

Except where required by the BMO, ~~System Management~~AEMO will generally only constrain Non-Scheduled Generator operation if the intermittency of that generator significantly exceeds what was planned for when setting the LFAS requirement.

Turn-down price, except for a marginal Non-Scheduled Generator being dispatched in accordance with the BMO, plays no role in ~~System Management's~~AEMO's decisions with respect to constraining Non-Scheduled Generators.

6.4. Voltage control

6.4.1. ~~System Management~~AEMO may, in accordance with the Technical Rules, direct a Facility to change its reactive power output to assist with voltage control on the SWIS.

The Technical Rules (current as of June 2012) require "The overriding objective of a generating Facility's voltage control system is to maintain the specified voltage range at the connection point. Each Market Generator must therefore provide sufficient reactive power injection into, or absorption from, the transmission or distribution system to meet the reactive power requirements of its loads, plus all reactive power losses required to deliver its real power output at system voltages within the ranges specified in the relevant connection agreement for normal operation and contingency conditions."

This may reduce the capacity of a Facility to a level below its Dispatch Instruction. ~~System Management~~AEMO would then have to increase MW output from the next generator on the BMO. ~~System Management~~AEMO would issue a Dispatch Advisory

and Dispatch Instructions for this instance. Similarly if voltage issues on the network required ~~System Management~~AEMO to modify the generation plan across the SWIS (say move MW generation from one part of the SWIS to another to remove the voltage constraint), ~~System Management~~AEMO would have to issue a Dispatch Advisory, dispatch as per BMO if the market did respond or dispatch out of merit as per Standing Data if the market did not respond.

7. DISPATCH SETTLEMENT DATA

7.1. Introduction

~~3.~~ The requirements for ~~System Management~~AEMO to ~~provide~~prepare settlement data ~~to the IMO~~ are specified in the ~~Market Rules **[MR**~~clause 7.13~~**].**~~

~~4. System Management must submit the data to the IMO in accordance with the Market Procedure: IMS Interface.~~

7.1.1. ~~The IMO must confirm to System Management receipt~~ of the ~~data in accordance with the Market Procedure: IMS Interface~~WEM Rules.

~~5. If System Management has not received confirmation of receipt of the data by 12.10 PM on the required Business Day, System Management must re-send the data.~~

~~6. If System Management has not received confirmation of receipt of the data by 12.20 PM, System Management and IMO should investigate the cause of the data failure and if necessary, transfer the data in accordance with the backup procedures defined in the Market Procedure: IMS Interface.~~

7.1.2. If AEMO is prevented from completing the processes that enable the recording of the data they may delay the recording of the data by up to two business days **[Clause 7.13.1B]**.

7.2. Quantification of Constrained off Quantities.

7.2.1. Where ~~System Management~~AEMO requires a Non-Scheduled Generator to reduce output in a Trading Interval, ~~System Management~~AEMO must provide ~~the IMO with~~ an estimate of the maximum quantity of sent out energy in MWh which the Non-Scheduled Generator would have generated in that Trading Interval had a Dispatch Instruction not been issued [~~**MR**~~**Clause** 7.13.1(eF)].

7.2.2. ~~System Management~~AEMO may use, at its discretion, any of the following means to estimate the quantity referred to in step ~~8.1.1:~~7.2.1:

(a) a predictive algorithm provided by the Market Participant, providing an assessment of the Non-Scheduled Generator's MWh output from relevant independent variables over the Trading Interval; or

(b) a predictive algorithm developed by ~~System Management~~AEMO, providing an assessment of the Non-Scheduled Generator's MWh output from relevant independent variables over the Trading Interval; or

(c) an assessment by ~~System Management~~AEMO based on output of the Non-Scheduled Generator in a past Trading Interval under similar conditions; or

(d) an estimate using participant data provided to ~~System Management~~AEMO that uses output data from particular generating facilities that continue to operate unconstrained after the Dispatch Instruction, with the output data subsequently scaled up to represent the output from all generating facilities that otherwise would have operated.

7.2.3. ~~System Management~~AEMO must, from time to time, consult with the relevant Market Participant concerning the choice of option selected by ~~System Management~~AEMO in step ~~8.1.2.~~7.2.2.

7.3. Calculation of Spinning Reserve Response Quantities

7.3.1. For the purposes of this ~~Section 8.2,~~step 7.3, "Spinning Reserve Event" means a sudden loss to the power system of output from a Generating Unit.

7.3.2. Where a Facility provides a Spinning Reserve Response for a Spinning Reserve Event, ~~System Management~~AEMO must determine the response period of the Facility for the Spinning Reserve Event as the period which starts at the time of the Spinning Reserve Event and has a duration equal to the longest sustained response time of the classes of Spinning Reserve the Facility is certified to provide (defined ~~in section 2.2 of~~ the PSOP: Ancillary Services).

7.3.3. If for a Facility and a Trading Interval there is no Spinning Reserve Event for which the Facility's response period, as determined in step ~~8.2.2,~~7.3.2, overlaps the Trading Interval, then ~~System Management~~AEMO must determine the Spinning Reserve Response Quantity for that Facility and Trading Interval to be zero.

7.3.4. Where a Spinning Reserve Event has occurred, the Spinning Reserve Response Quantity of each Facility in each Trading Interval overlapping its response period must be calculated according to the formula:

RESP = Max (0, AVG_MW(Start_Time, End_Time) - G0) / (Duration_Mins/60)

Where:

RESP is the Spinning Reserve Response Quantity in MWh for the Facility in the Trading Interval;

AVG_MW(Start_Time, End_Time) is the average MW output of the Facility over the period between Start_Time and End_Time, measured at the generator terminals by ~~System Management's~~AEMO's SCADA system with a resolution of 4 seconds or less;

G0 is the MW output of the Facility at the time of the Spinning Reserve Event, measured at the generator terminals by ~~System Management's~~AEMO's SCADA system;

Start_Time is the later of the start time of the Trading Interval and the start time of the response period determined in step ~~8.2.2;~~7.3.2;

End_Time is the earlier of the end time of the Trading Interval and the end time of the response period determined in ~~8.2.2;~~step 7.3.2;

Duration_Mins is the time, in minutes, between Start_Time and End_Time.

7.3.5. The Spinning Reserve Response Quantity for the ~~Verve Energy~~Synergy Balancing Portfolio in a Trading Interval is the sum of the Spinning Reserve Response Quantities of the individual Facilities within the ~~Verve Energy~~Synergy Balancing Portfolio.

7.4. Calculation of Load Rejection Reserve Response Quantities

7.4.1. For the purposes of this ~~Section 8.3,~~step 7.4, "Load Rejection Reserve Event" means a sudden decrease in SWIS load.

7.4.2. Where a Facility provides a Load Rejection Reserve Response for a Load Rejection Reserve Event, ~~System Management~~AEMO must determine the response period of the Facility for the Load Rejection Reserve Event as the period which starts at the time of the Load Rejection Reserve Event and has a duration equal to the longest sustained response time of the classes of Load Rejection Reserve the Facility is certified to provide (defined ~~in section 2.3 of~~ the PSOP: Ancillary Services).

7.4.3. If for a Facility and a Trading Interval there is no Load Rejection Reserve Event for which the Facility's response period, as determined in step ~~8.3.2,~~7.4.2, overlaps the Trading Interval then ~~System Management~~AEMO must determine the Load Rejection Reserve Response Quantity for that Facility and Trading Interval to be zero.

7.4.4. Where a Load Rejection Reserve Event has occurred, the Load Rejection Reserve Response Quantity of each Facility in each Trading Interval overlapping its response period must be calculated according to the formula:

RESP = Max (0, G0 – AVG_MW (Start_Time, End_Time) / Duration_Mins/60)

Where:

RESP is the Load Rejection Reserve Response Quantity in MWh for the Facility in the Trading Interval;

AVG_MW(Start_Time, End_Time) is the average MW output of the Facility over the period between Start_Time and End_Time, measured at the generator terminals by ~~System Management's~~AEMO's SCADA system with a resolution of 4 seconds or less;

G0 is the MW output of the Facility at the time of the Load Rejection Reserve Event, measured at the generator terminals by ~~System Management's~~AEMO's SCADA system;

Start_Time is the later of the start time of the Trading Interval and the start time of the response period determined in step ~~8.3.2;~~7.4.2;

End_Time is the earlier of the end time of the Trading Interval and the end time of the response period determined in step ~~8.3.2;~~7.4.2;

Durations_Mins is the time, in minutes, between Start_Time and End_Time.

7.4.5. The Load Rejection Reserve Response Quantity for the ~~Verve Energy~~Synergy Balancing Portfolio in a Trading Interval is the sum of the Load Rejection Reserve Response Quantities of the individual Facilities within the ~~Verve Energy~~Synergy Balancing Portfolio.

7.5. SOI and EOI estimates

7.5.1. ~~System Management~~AEMO must determine the SOI Quantity for a Facility and a Trading Interval to be the EOI Quantity of the previous Trading Interval.

7.5.2. The EOI Quantity for a Facility and a Trading Interval will be the latest recorded value from ~~System Management's~~AEMO's SCADA system within that Trading Interval.

7.5.3. ~~System Management~~AEMO may substitute this value if it has reason to believe it is inaccurate or if SCADA values were not recorded for the Trading Interval concerned.

7.5.4. Subject to step ~~8.4.5,~~7.5.5, where ~~System Management~~AEMO does not monitor the output of a Facility by use of SCADA, ~~System Management~~AEMO must determine the EOI Quantity for the Facility for each Trading Interval as the MW offer quantity listed for that Facility in the BMO used by ~~System Management~~AEMO for the Trading Interval.

7.5.5. Where ~~System Management~~AEMO has reason to believe that an EOI Quantity determined in step ~~8.4.4~~7.5.4 is inaccurate ~~System Management~~AEMO may determine and provide ~~to the IMO~~ a substitute value.

7.6. Calculation of Demand Side Program curtailment

7.6.1. For the purpose of the calculation of the amount in MWh by which the Facility was requested to decrease its consumption **[Clause 7.13.5(a)]**, the following will be assumed:

(a) if an instruction is given that the demand should be reduced by a specific time then the calculation will be done assuming a reduction starting at the necessary time to achieve the final reduction by the prescribed time according to the ramp rate in the standing data.

(b) if an instruction is given to reduce demand as quickly as possible, then the calculation will assume the starting time as the time of the Dispatch Instruction and the ramp rate as described in the standing data, to determine the instructed reduction.

(c) if a ramp rate other than that described in the standing data is agreed on between the parties for the purpose of the Dispatch Instruction, this ramp rate will be considered for the purpose of the calculation.

8. ADMINISTRATION AND REPORTING IN RELATION TO ~~VERVE ENERGY~~SYNERGY

8.1.1. The requirements of ~~sections 9.2, 9.3 and 9.4~~steps 8.2, 8.3 and 8.4 shall apply only to ~~sections 4 and 5.7 of this Procedure.~~steps 3 and 4.7.

8.2. Reporting in relation to ~~VERVE ENERGY'S MARKET~~Synergy's WEM Rules obligations

8.2.1. The requirements for ~~System Management~~AEMO to report to the ~~IMO~~ERA any instance where it believes that ~~Verve Energy~~Synergy has failed to meet its obligations under this Procedure are specified in the ~~Market~~WEM Rules **[~~MR~~Clauses 7.6A.5(c)~~],~~ ~~[MR~~) and 7.6A.5(e)]**.

8.2.2. The reports referred to in step ~~9.1.1~~8.2.1 must be submitted ~~to the IMO~~ within 5 Business Days of the occurrence of the event, or within 5 Business Days of either party becoming aware of the event.

8.3. Appointment of Representative

8.3.1. ~~Verve Energy~~Synergy and ~~System Management~~AEMO must:

(a) each appoint a representative who must act as the formal point of contact with regard to the operation of this Procedure; and

(b) provide each other and the IMO with the name, title and contact details of its representative; and

(c) maintain the appointed representative's currency.

8.4. Keeping of Records

8.4.1. The requirements for ~~Verve Energy~~Synergy and ~~System Management~~AEMO to retain records created by the operation of this Procedure are specified in ~~Market~~the WEM Rules **[~~MR~~Clause 7.6A.6]**.

8.5. Failure to Agree on an issue within the Procedure

8.5.1. The requirements for ~~System Management~~AEMO and ~~Verve Energy~~Synergy to address and reach agreement on any issues arising from the application of this Procedure are specified in the ~~Market~~WEM Rules **[~~MR~~Clause 7.6A.5(b)]**.

8.5.2. Where agreement cannot be reached and arbitration is required, the party seeking arbitration must, in good faith, seek to agree with the other party on an arbitrator.

8.5.3. If, within 7 days, the parties are unable to agree on an arbitrator, the ~~IMO~~ERA shall be the arbitrator.

8.5.4. Within 7 days of the appointment of an arbitrator, the party seeking arbitration must provide the arbitrator with a report setting out:

(a) a description of the issue in dispute; and

(b) the background to the dispute and a description of the endeavours of the parties to resolve the issue; and

(c) the position of both parties on the issue, including what is required to resolve the dispute.

8.5.5. The party submitting the report must provide a copy of the report to the other party at the same time the report is submitted to the arbitrator.

8.5.6. The other party must submit its own report on the issue to the arbitrator within 2 Business Days of the receipt of the report referred to in step ~~9.4.5.~~8.5.5.

8.5.7. In reviewing the issue, the arbitrator must have regard to the following, in order of precedence:

(a) the ~~Market~~WEM Rules; and

(b) this Procedure; and

(c) other Market Procedures and PSOPs; and

(d) the alignment of the above to the Wholesale Market Objectives in the context of the issue.

8.5.8. The arbitrator may seek further information from either party, and this information must be provided within 2 Business Days of receipt of the request.

8.5.9. The arbitrator must provide its draft recommendation to ~~Verve Energy~~Synergy and ~~System Management~~AEMO within two weeks of the receipt of the report in step ~~9.4.5.~~8.5.5. Both parties have 2 Business Days to provide the arbitrator with comments on the draft recommendation.

8.5.10. The arbitrator must, within 2 Business Days of receiving comments, issue a binding decision.

9. EXEMPTIONS TO COMMITMENT AND DE-COMMITMENT NOTIFICATION REQUIREMENTS

9.1. Application for exemption from a Market Participant with a distribution connected Scheduled Generator

9.1.1. A Market Participant with a Scheduled Generator connected to a distribution network that has operating equipment and processes which enable it to synchronise and de-synchronise only when it is safe to do so, may apply in writing to ~~System Management~~AEMO for an exemption from providing notification to ~~System Management~~AEMO under clauses **[~~MR~~Clauses 7.9.1~~]~~ and ~~[MR~~ 7.9.5]**.

9.1.2. The Market Participant's written application for exemption must advise that its Scheduled Generator has operating equipment and processes to enable it to synchronise and de-synchronise only when it is safe to do so. For guidance, the Scheduled Generator must meet the requirements of section 3.6 of the Technical Rules and in particular the provisions of clause 3.6.11 of the WEM Rules.

Section 3.6 of the Technical Rules sets out the requirements for connection of small generating units to the distribution network. Clause 3.6.11 of the Technical Rules specifies "…the Network Service Provided may also require the installation of an intertripping link between the Generator's main switch(es) and the feeder circuit breaker(s) in the zone substation or other upstream protection device nominated by the Network Service Provider".

9.1.3. The written application for an exemption to clauses **[~~MR~~Clauses 7.9.1~~]~~ and ~~[MR~~ 7.9.5]** (as described in ~~Paragraph 10.1.1)~~step 9.1.1) must be directed to ~~System Management~~AEMO via email ~~(market.operations@westernpower.com.au)~~(wa.sm.operations@aemo.com.au) and signed by an Authorised Officer.

9.2. ~~SYSTEM MANAGEMENT'S~~AEMO's assessment of the application

9.2.1. ~~System Management~~AEMO will assess a written application made under ~~Paragraph 10.1.1~~step 9.1.1 by reviewing the SCADA and protection systems to ensure that the criteria referred to in ~~Paragraph 10.1.2~~step 9.1.2 is satisfied.

9.2.2. Upon verification by ~~System Management~~AEMO that the Scheduled Generator satisfies the criteria set out in ~~Paragraph 10.1.2,~~ step 9.1.2, the Market Participant will be deemed to have operating equipment and processes which enable its distribution connected Scheduled Generator to synchronise and de-synchronise only when it is safe to do so, therefore qualifying for an exemption **[~~MR~~Clause 7.9.14]**.

9.2.3. If ~~System Management~~AEMO is unable to verify that the Market Participant's distribution connected Scheduled Generator satisfies the criteria set out in ~~Paragraph 10.1.2~~ step 9.1.2then the Market Participant will not at that time be deemed to have operating equipment and processes which enable its distribution connected Scheduled Generator to synchronise and de-synchronise only when it is safe to do so, therefore not qualifying for an exemption.

9.3. ~~SYSTEM MANAGEMENT'S~~AEMO's determination

9.3.1. ~~System Management~~AEMO must provide written notification to a Market Participant of the outcome of its assessment made under ~~section 10.2~~ step 9.2as follows:

(a) ~~If Paragraph 10.2.2~~if step 9.2.2 applies, the Market Participant will be advised that the distribution connected Scheduled Generator for which the application was made is exempt from clauses **~~[MR~~** 7.9.1**~~]~~** and **~~[MR~~** 7.9.5**~~],~~** of the WEM Rules, including the reasons for the decision and the effective date of the exemption; or

(b) ~~If Paragraph 10.2.3~~if step 9.2.3 applies, the Market Participant will be advised that the distribution connected Scheduled Generator does not qualify for an exemption from clauses **~~[MR~~** 7.9.1**~~]~~** and **~~[MR~~** 7.9.5**~~],~~** of the WEM Rules, including the reasons for this decision.

9.3.2. ~~System Management~~AEMO will use best endeavours to complete its assessment under ~~section 10.2~~ step 9.2and provide written notice of its determination under ~~Paragraph 10.3.1~~ step 9.3.1 within 10 business days of receiving an application under ~~Paragraph 10.1.1.~~step 9.1.1.

9.3.3. Where written notification pursuant to ~~Paragraph 10.3.1b~~step 9.3.1(b) is provided advising that the Scheduled Generator does not qualify for an exemption, the Market Participant may re-apply at any time following the steps set out in ~~section 10.1.~~step 9.1.

9.4. Revocation of an exemption

9.4.1. A Market Participant must notify ~~System Management~~AEMO in writing via email ~~(market.operations@westernpower.com.au)~~wa.sm.operations@aemo.com.au) as soon as it becomes aware that it no longer satisfies the criteria referred to in ~~Paragraph 10.1.2~~ step 9.1.2or any other matter or thing which might prevent the exempted Scheduled Generator from synchronising or de-synchronising safely **[~~MR~~Clause 7.9.16]**.

9.4.2. Upon assessing the information provided in the notification under ~~Paragraph 10.4.1.~~step 9.4.1, or in the event that it becomes aware of any other information, ~~System Management~~AEMO may revoke an exemption if it is no longer satisfied that the Scheduled Generator meets the requirements assessed under ~~Paragraph 10.4.1.~~step 9.4.1.

9.4.3. ~~System Management~~AEMO will notify the Market Participant of its decision to revoke an exemption in writing as soon as practicable after it has made its assessment under ~~Paragraph 10.4.2.~~step 9.4.2. The notification will include reasons for its decision and the date and time from which the exemption will cease to apply **[~~MR~~Clause 7.9.17]**.

9.5. List of exempt distribution connected Scheduled Generators

9.5.1. ~~System Management~~AEMO will publish and maintain a list of Scheduled Generators subject to exemptions under clauses **[~~MR~~ 7.9.1~~]~~** and **[~~MR~~ 7.9.5~~]~~** of the WEM Rules on ~~System Management's~~AEMO's website **[~~MR~~Clause 7.9.18~~]~~** ~~(http://www.westernpower.com.au/retailersgenerators/systemManagement/System_management_.html).~~ **~~]~~**. https://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM/Security-and-reliability/Facility-commitment-notification-exemptions).

9.5.2. The published list will include the details of the Market Participant and Facility and the date on which the exemption was granted.

9.5.3. A Scheduled Generator will be added to the published list as soon as practicable after the granting of an exemption.

9.5.4. Where an exemption is revoked for a Scheduled Generator, it will be removed from the list as soon as practicable after the revocation occurs.

APPENDIX 1: LIST OF DISPATCH ADVISORY NOTICE TYPES

DA type code	Description
A	Change in Power System Operating State
B	Energy shortfall
C	Energy surplus
D	Ramp rate shortfall
E	Ancillary Service shortfall
F	Ready Reserve shortfall
G	Change in outage status
H	Out-of-merit dispatch
I	Excessive intermittency
J	Commitment risk
K	Communications / IT issue
L	Fuel management issue
M	DSP to be Dispatched
Z	Other

MARKET PROCEDURE: NOTICES AND COMMUNICATIONS

PREPARED BY:	AEMO
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Approved for distribution and use by:

APPROVED BY:	Peter Geers
TITLE:	Executive General Manager, Markets

VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	21 September 2006	Market Procedure for Notices and Communications
2.0	20 January 2009	Amendments to Market Procedure resulting from PC_2008_16
3.0	8 November 2010	Amendments to Market Procedure resulting from PC_2010_02
4.0	30 November 2015	Changes resulting from the transfer of functions from the IMO to AEMO
5.0	7 December 2015	Update contact details due to the transfer of function from the IMO to AEMO
6.0	1 October 2017	Update as per Procedure Change Proposal AEPC_2017_11

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1 PROCEDURE OVERVIEW

1.1 Relationship with the WEM Rules

1.1.1 This Market Procedure: Notices and Communications (Procedure) is developed in accordance with clause 1.6.2 of the Wholesale Electricity Market Rules (**WEM Rules**).

1.1.2 Reference to particular WEM Rules within the Procedure in bold and square brackets **[Clause XX]** are current as of 1 October 2017. These references are included for convenience only, and are not part of this Procedure.

1.2 Interpretation

1.2.1 In this Procedure:

(a) terms that are capitalised but not defined in this Procedure have the meaning given in the WEM Rules;

(b) to the extent that this Procedure is inconsistent with the WEM Rules, the WEM Rules prevail to the extent of the inconsistency;

(c) a reference to the WEM Rules or Market Procedures includes any associated forms required or contemplated by the WEM Rules or Market Procedures; and

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

Table 1: Defined terms

Term	Definition
Business Hours	8.00 AM to 5.00 PM (Western Standard Time) from Monday to Friday (excluding Western Australian public holidays and in relation to clauses 9.16.1(b), 9.16.2(e) and 9.16.4(d) excluding Western Australian and New South Wales public holidays).

1.3 Purpose and application of this Procedure

1.3.1 The purpose of the Procedure is to:

(a) describe the methods by which notices and communications are to be provided to or by AEMO; and

(b) outline when such notices will be considered to have been duly given.

1.3.2 This Procedure applies to notices and communications:

(a) required under the WEM Rules;

(b) contemplated by the WEM Rules; or

(c) relating to the WEM Rules.

1.3.3 For the avoidance of doubt, this Procedure does not apply to:

(a) information or documents required to be published or released by AEMO on the Market Web Site, in accordance with clause 1.7.1 of the WEM Rules; or

(b) information or documents required to be distributed via another method specified in the WEM Rules.

2 PROCEDURE STEPS

2.1 Provision of Notice

2.1.1 Unless otherwise provided in the WEM Rules or Market Procedures, notices and communications may be properly provided using any one or more of the following methods:

(a) Courier or other form of personal delivery, to the recipient's notified place of business.

(b) By prepaid Australia Post, express post, registered post, or air mail (if outside Australia), to the recipient's notified postal address.

(c) By facsimile, to the recipient's notified facsimile number.

(d) By electronic mail, to the recipient's notified electronic communication address (for Market Participants this is the Wholesale Electricity Market Systems main contact).

(e) By voice communication by or to AEMO, provided the relevant party confirms the communication in writing by any manner set out in steps 2.1.1(a) to (d).

2.2 Timing of Notice and Communications

2.2.1 Unless otherwise provided in the WEM Rules and Market Procedures, a notice or communication is deemed to be provided:

(a) where given by Australia Post or air mail:

(i) within Australia, on the third Business Day after the day on which it is mailed; or

(ii) outside Australia, on the tenth Business Day after the day on which it is mailed.

(b) subject to step 2.2.2, where given by facsimile, on the date and at the time of successful transmission as indicated on the sender's facsimile transmission report;

(c) subject to step 2.2.2, where given by electronic mail:

(i) on the date and at the time when the sender receives an automated message confirming delivery; or

(ii) four hours after the time the notice was sent (as recorded on the device from which the sender sent the notice) unless the sender receives an automated message advising that the email has not been delivered,

whichever happens first;

(d) where given by voice communication by or to AEMO, on the date and at the time of communication; and

(e) in the case of any other method specified in step 2.1.1, when the person actually receives the notice or communication.

2.2.2 If:

(a) a notice given by facsimile or electronic mail would, but for this step 2.2.2, be considered to be provided outside Business Hours; and

(b) the addressee is not required to monitor the receipt of notices sent by facsimile or electronic mail (as applicable) outside Business Hours,

then the notice is deemed to be provided at 9:00 AM on the following Business Day.

2.2.3 If:

(a) a notice is given by electronic mail under the WEM Rules; and

(b) either of the following applies:

(i) the notice requires, or is likely to require, the recipient to take action (including acknowledging receipt of the notice) within a limited period of time after receiving the notice; or

(ii) having regard to the subject matter of the notice, a reasonable and prudent sender would use reasonable endeavours to ensure that the notice is received by the intended recipient,

then the sender must use reasonable endeavours to ensure the timely delivery of the notice.

2.2.4 The "reasonable endeavours" in step 2.2.3 may require the sender to do one or more of the following:

(a) request a delivery receipt for the notice;

(b) include a request for confirmation of receipt in the notice; or

(c) request confirmation of receipt using a different method of communication.

2.3 Contact Details

2.3.1 The contact details for AEMO are:

(a)	Mailing address:	PO Box 7096 CLOISTERS SQUARE PERTH WA 6850
(b)	Telephone Number:	+ 61 (0) 8 9469 9800
(c)	Facsimile:	+ 61 (0) 8 9469 9801
(d)	Email (as relevant):	
(i)	For general enquiries:	wa@aemo.com.au
(ii)	For Rule/Procedure Change enquiries:	wa@aemo.com.au
(iii)	For System Capacity enquiries:	wa.capacity@aemo.com.au
(iv)	For Market Operation enquiries:	wa.operations@aemo.com.au
(v)	For System Management enquiries:	wa.sm.operations@aemo.com.au

2.3.2 The contact details for Rule Participants are as advised on the Rule Participant's Rule Participant registration application, unless otherwise advised.

2.3.3 The contact details for other recipients are as advised by the recipient.

MARKET PROCEDURE: NOTICES AND COMMUNICATIONS

PREPARED BY:	~~Market Development (WA)~~AEMO
DOCUMENT REF:	
VERSION:	~~4.0~~6.0
EFFECTIVE DATE:	~~30 November 2015~~1 October 2017
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Approved for distribution and use by:

APPROVED BY:	Peter Geers~~Erin Stone~~
TITLE:	Executive General Manager, Markets~~Group Manager, Development and Capacity (WA)~~

VERSION RELEASE HISTORY

Version	Effective Date	Summary of Changes
1.0	21 September 2006	Market Procedure for Notices and Communications
2.0	20 January 2009	Amendments to Market Procedure resulting from PC_2008_16
3.0	8 November 2010	Amendments to Market Procedure resulting from PC_2010_02
4.0	30 November 2015	Changes resulting from the transfer of functions from the IMO to AEMO
5.0	7 December 2015	Update contact details due to the transfer of function from the IMO to AEMO
6.0	1 October 2017	Update as per Procedure Change Proposal AEPC_2017_11

CONTENTS

LIST OF TABLES

1 PROCEDURE OVERVIEW

1.1 Relationship with the ~~Market~~ WEM Rules

1.1.1 ~~———~~This Market Procedure: Notices and Communications ~~Procedure~~ (Procedure) ~~has been~~is developed in accordance with ~~, and should be read in conjunction with~~ clause 1.6.~~1~~2 of the Wholesale Electricity Market ~~(WEM)~~ Rules (~~Market~~ **WEM Rules**).

1.1.2 ~~———~~Reference to particular ~~Market Rules~~WEM Rules within the Procedure in bold and square brackets **[~~MR~~ Clause XX]** are current as of 1 October ~~2010~~2017. These references are included for convenience only, and are not part of this Procedure.

~~1.2 Purpose~~

1.2 Interpretation

1.2.1 In this Procedure:

(a) terms that are capitalised but not defined in this Procedure have the meaning given in the WEM Rules;

(b) to the extent that this Procedure is inconsistent with the WEM Rules, the WEM Rules prevail to the extent of the inconsistency;

(c) a reference to the WEM Rules or Market Procedures includes any associated forms required or contemplated by the WEM Rules or Market Procedures; and

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

Table 1: Defined terms

Term	Definition
Business Hours	8.00 AM to 5.00 PM (Western Standard Time) from Monday to Friday (excluding Western Australian public holidays and in relation to clauses 9.16.1(b), 9.16.2(e) and 9.16.4(d) excluding Western Australian and New South Wales public holidays).

1.3 Purpose and application of this Procedure

~~1.3 Application~~

1.3.1 The purpose of the Procedure is to:

(a) describe the methods by which notices and communications are to be provided to or by ~~the IMO or~~ AEMO; and

(b) outline when ~~the timing of~~ such notices will be considered to have been duly given.

1.3.2 This Procedure applies to notices and communications:

(a) required under the ~~Market Rules~~WEM Rules;

(b) contemplated by the ~~Market Rules~~WEM Rules; ~~and~~or

(c) relating to the ~~Market Rules~~WEM Rules.

1.3.3 For the avoidance of doubt, this Procedure does not apply to:

(a) information or documents required to be published or released by ~~the IMO or~~ AEMO on the Market Web Site, in accordance with clause 1.7.1 of the ~~Market Rules~~WEM Rules; or

(b) information or documents required to be distributed via another method specified in the ~~Market Rules~~WEM Rules.

~~1.4 Associated Market Procedures~~

~~1.4.1 There are no other Market Procedures associated with this Procedure.~~

~~1.5 Interpretation~~

~~1.5.1 In this Procedure the conventions specified in clauses 1.3- 1.5 of the Market Rules apply. The following additional clarification is noted:~~

~~(a) the term "Business Hours" means 8.00 AM to 5.00 PM (Western Standard Time) from Monday to Friday (excluding Western Australian public holidays and in relation to clauses 9.16.1(b), 9.16.2(e) and 9.16.4(d) excluding Western Australian and New South Wales public holidays).~~

2 PROCEDURE STEPS

2.1 Provision of Notice

2.1.1 Unless otherwise provided in the ~~Market Rules~~WEM Rules or Market Procedures, notices and communications may be properly provided using any one or more of the following methods:

(a) Courier or other form of personal delivery, to the recipient's notified place of business.

(b) By prepaid Australia ~~p~~Post, express post, registered post, or air mail (if outside Australia), to the recipient's notified postal address.

(c) By facsimile, to the recipient's notified facsimile number.

(d) By electronic mail, to the recipient's notified electronic communication address (for Market Participants this is the Wholesale Electricity Market Systems main contact).

(e) By voice communication by ~~the IMO~~ or to AEMO, provided the relevant party confirms the communication in writing by any manner set out in steps 2.1.1~~2.1.1~~ (a)~~a~~ ~~–~~ to (d)~~d~~.

2.2 Timing of Notice and Communications

2.2.1 Unless otherwise provided in the ~~Market Rules~~WEM Rules and Market Procedures, a notice or communication ~~will be considered to be properly~~is deemed to be provided ~~on the following basis~~:

(a) ~~W~~where given by Australia ~~p~~Post or air mail:

(i) within Australia, on the third Business Day after the day on which it is mailed; or

(ii) outside Australia, on the tenth Business Day after the day on which it is mailed.

(b) subject to step 2.2.2, w~~W~~here given by facsimile, on the date and at the time of successful transmission as indicated on the sender's facsimile transmission report;~~:~~

~~(i) during Business Hours, on the date and at the time of successful transmission as indicated on the sender's facsimile transmission report;~~

~~(ii) outside Business Hours and the addressee is obliged to monitor the receipt by facsimile outside of Business Hours, on the date and at the time of transmission as indicated on the sender's facsimile transmission report;~~

~~(iii) outside Business Hours and the addressee is not obliged to monitor the receipt by facsimile outside of Business Hours, at 9.00 am on the first Business Day following transmission.~~

(c) subject to step 2.2.2, ~~W~~where given by electronic mail:

(i) ~~during Business Hours,~~ on the date and at the time when the sender receives an automated message confirming delivery~~notification is recorded by the sender's electronic communication system as having been first received at the electronic mail destination. To ensure valid notification, the sender should request a return receipt, request confirmation from the recipient or follow up the email with alternate confirmation~~; or

(ii) four hours after the time the notice was sent (as recorded on the device from which the sender sent the notice) unless the sender receives an automated message advising that the email has not been delivered,

whichever happens first;~~outside Business Hours and the addressee is obliged to monitor the receipt by electronic mail outside of Business Hours, on the date and at the time when notification is recorded by the sender's electronic communication system as having been first received at the electronic mail destination;~~

~~(ii) outside Business Hours and the addressee is not obliged to monitor the receipt by electronic mail outside of Business Hours, at 9.00 AM on the following Business Day.~~

~~(d) W~~where given by voice communication by ~~the IMO~~ or to AEMO, ~~:~~

~~(e)~~(d) on the date and at the time of communication~~; and~~.

~~(f) I~~in the case of any other ~~case~~method specified in step 2.1.1, ~~:~~

(e) when the person actually receives the notice or communication.

2.2.2 If:

(a) a notice given by facsimile or electronic mail would, but for this step 2.2.2, be considered to be provided outside Business Hours; and

(b) the addressee is not required to monitor the receipt of notices sent by facsimile or electronic mail (as applicable) outside Business Hours,

then the notice is deemed to be provided at 9:00 AM on the following Business Day.

2.2.3 If:

(a) a notice is given by electronic mail under the WEM Rules; and

(b) either of the following applies:

(i) the notice requires, or is likely to require, the recipient to take action (including acknowledging receipt of the notice) within a limited period of time after receiving the notice; or

(ii) having regard to the subject matter of the notice, a reasonable and prudent sender would use reasonable endeavours to ensure that the notice is received by the intended recipient,

then the sender must use reasonable endeavours to ensure the timely delivery of the notice.

2.2.4 The "reasonable endeavours" in step 2.2.3 ~~This~~ may require the sender to do one or more of the following:

(a) request a delivery receipt for the notice;

(b) include a request for confirmation of receipt in the notice; or

(c) request confirmation of receipt using a different method of communication.

2.3 Contact Details

~~2.3.1 The contact details for the IMO are:~~

~~(a) Mailing address: PO Box 7096~~
~~CLOISTERS SQUARE~~
~~PERTH WA 6850~~

~~(b) Courier / Personal Delivery: Level 17, Governor Stirling Tower~~
~~St Georges Terrace~~
~~PERTH WA 6000~~

~~(c) Telephone Number: + 61 (0) 8 9254 4300~~

~~(d) Facsimile: + 61 (0) 8 9254 4399~~

~~(e) Email (as relevant):~~

~~(i) For general enquiries: wa@aemo.com.au~~

~~2.3.2~~2.3.1 The contact details for AEMO are:

(a) Mailing address: PO Box 7096
CLOISTERS SQUARE
PERTH WA 6850

~~(b) Courier / Personal Delivery: Level 17~~45~~, Governor Stirling Tower~~152
~~St Georges Terrace~~
~~PERTH WA 6000~~

~~(c)~~(b) Telephone Number: + 61 (0) 8 9469 9800~~9254 4300~~

~~(d)~~(c) Facsimile: + 61 (0) 8 9469 9801~~9254 4399~~

~~(e)~~(d) Email (as relevant):

(i) For general enquiries: wa@aemo.com.au

(ii) For Rule/Procedure Change enquiries: wa~~.marketdevelopment~~@aemo.com.au

(iii) For System Capacity enquiries: wa.capacity@aemo.com.au

(iv) For Market Operation enquiries: wa.operations@aemo.com.au

~~(iv)~~ For System Management enquiries: wa.sm.operations@aemo.com.au

(v)

~~2.3.3~~2.3.2 The contact details for Rule Participants are as advised on the Rule Participant's Rule Participant registration application, unless otherwise advised.

~~2.3.4~~2.3.3 The contact details for other recipients are as advised by the recipient.