

Final Rule Change Report:  
Removal of Resource Plans and Dispatchable  
Loads (RC\_2014\_06)

Standard Rule Change Process

29 October 2018

## Contents

<b>1.</b>	<b>Rule Change Process and Timeline .....</b>	<b>4</b>
<b>2.</b>	<b>Proposed Amendments .....</b>	<b>5</b>
2.1	The Rule Change Proposal .....	5
2.2	The IMO's Initial Assessment of the Proposal .....	7
<b>3.</b>	<b>Consultation .....</b>	<b>7</b>
3.1	General Consultation .....	7
3.2	Market Advisory Committee Consultation by the IMO before the Formal Submission of the Rule Change Proposal.....	7
3.3	Submissions Received During the First Submission Period .....	8
3.4	The Rule Change Panel's Response to Submissions Received During the First Submission Period.....	9
3.5	MAC Consultation by the Rule Change Panel after the Close of the First Submission Period.....	9
3.6	Call for Further Submissions .....	10
3.7	Submissions Received During the Further Submission Period.....	10
3.7.1	Overview and General Feedback .....	10
3.7.2	Feedback from Submitters on the Explicit Questions in the Call for Further Submissions.....	11
3.7.3	Submitters' Assessment of Proposal against the Wholesale Market Objectives .....	12
3.8	The Rule Change Panel's Response to Submissions Received During the Call for Further Submissions.....	13
3.9	Submissions Received During the Second Submission Period .....	13
3.10	The Rule Change Panel's Response to Submissions Received During the Second Submission Period.....	14
3.11	Public Forums and Workshops.....	14
<b>4.</b>	<b>The Rule Change Panel's Draft Assessment .....</b>	<b>15</b>
<b>5.</b>	<b>The Rule Change Panel's Proposed Decision from the Draft Rule Change Report.....</b>	<b>15</b>
<b>6.</b>	<b>The Rule Change Panel's Final Assessment .....</b>	<b>15</b>
6.1	Assessment Criteria.....	15
6.2	Assessment of the Proposed Changes .....	16
6.2.1	Removal of Resource Plans (Issue 1) .....	16
6.2.2	Removal of the Dispatchable Load Facility Class (Issue 2) .....	20
6.2.3	Extension of the STEM Submission Window (Issue 3) .....	22
6.2.4	Clarification that AEMO Updates STEM Submission Parameters upon Acceptance of a STEM Submission (Issue 4) .....	22
6.2.5	Removal of Requirements around Market Participants Accessing their STEM Auction Results (Issue 5).....	22
6.2.6	Removal of Requirement for AEMO to Provide System Management with Fuel Declarations Derived from STEM Submissions (Issue 6).....	23
6.2.7	Clarification of the Interaction between Forecast and Final BMOs and LFAS Merit Orders (Issue 7) .....	23
6.2.8	Removal of the Requirement for System Management and Synergy to Meet Monthly (Issue 8).....	24
6.2.9	Clarification on how Plant Availability must be reflected in Balancing Submissions (Issue 9).....	24

6.2.10	Allow the Update of Forecast Output Quantities for Non-Scheduled Generators past Balancing Gate Closure (Issue 10).....	24
6.2.11	Minor and Administrative Amendments .....	25
6.3	Additional Related Issues Identified by the Rule Change Panel .....	27
6.3.1	Reinstatement of AEMO's Power to Extend the STEM due to Issues with Ancillary Services Data (Issue 11) .....	28
6.3.2	Introduction of Provisions for AEMO to Repeat Scheduling Day Steps to Rectify Errors (Issue 12) .....	28
6.3.3	Additional Administrative Changes .....	28
6.4	Additional Amendments to the Proposed Amending Rules.....	29
6.4.1	Additional Amendments following the First and Further Submission Period.....	29
6.4.2	Additional Amendments following the Second Submission Period .....	29
6.5	Assessment against the Wholesale Market Objectives.....	29
6.6	Protected Provisions, Reviewable Decisions and Civil Penalties.....	30
6.7	Cost and Practicality of Implementation .....	31
6.7.1	Cost.....	31
6.7.2	Practicality.....	31
6.7.3	Amendments to Associated Market Procedures .....	32
6.7.4	Assessment of Cost and Practicality .....	32
<b>7.</b>	<b>The Rule Change Panel's Decision .....</b>	<b>33</b>
7.1	Reasons for the Decision.....	33
<b>8.</b>	<b>Amending Rules.....</b>	<b>34</b>
8.1	Commencement.....	34
8.2	Amending Rules.....	34
<b>Appendix A</b>	<b>Details of MAC Consultation by the IMO before the Formal Submission of the Proposal and Key Effects of the EMR on RC_2014_06.....</b>	<b>132</b>
<b>Appendix B</b>	<b>Details of MAC Consultation by the Rule Change Panel after the Close of The First Submission Period .....</b>	<b>137</b>
<b>Appendix C</b>	<b>Responses to Submissions Received in the Further Submission Period .....</b>	<b>140</b>
<b>Appendix D</b>	<b>Amendments following the First and Further Submission Period.....</b>	<b>142</b>
<b>Appendix E</b>	<b>Further Amendments to the Proposed Amending Rules.....</b>	<b>144</b>

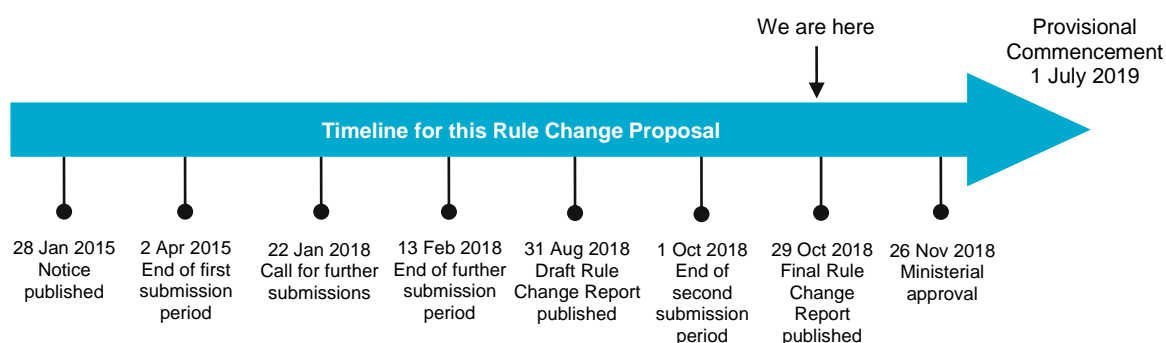
## 1. Rule Change Process and Timeline

On 28 January 2015, the Independent Market Operator (**IMO**) submitted a Rule Change Proposal titled “Removal of Resource Plans and Dispatchable Loads” (RC\_2014\_06), which addresses a number of issues as set out in section 2 of this report.

This proposal is being processed using the Standard Rule Change Process, described in section 2.7 of the Market Rules. The timeframes for the first submission period and the preparation of the Draft Rule Change Report were extended by the IMO under clause 2.5.10; and the timeframe for the preparation of the Draft Rule Change Report was further extended by the Rule Change Panel under clauses 1.18.3(b) and 2.5.10. Further details of the extensions are available on the Rule Change Panel’s website.

On 22 January 2018, the Rule Change Panel published a call for further submissions on the basis that a significant period of time had passed since the IMO consulted on the Rule Change Proposal, during which the Market Rules had undergone numerous changes.

The key dates for progressing this Rule Change Proposal, as amended in the extension notices, are:



The Rule Change Panel’s final decision is to accept the Rule Change Proposal in a modified form, as set out in section 8 of this Final Rule Change Report.

All documents related to this Rule Change Proposal can be found on the Rule Change Panel’s website at [Rule Change: RC\\_2014\\_06 - Economic Regulation Authority Western Australia](#).

## 2. Proposed Amendments

### 2.1 The Rule Change Proposal

In RC\_2014\_06, the IMO proposed to make a number of amendments to the Market Rules to facilitate the changes outlined in Table 1.

**Table 1: Summary of Proposed Changes and Associated Reasons**

Proposed Change	The IMO's Reason for the Proposed Change
Removal of Resource Plans from the Market Rules	The requirement to submit valid Resource Plans for each Trading Day placed a significant and unnecessary administrative burden on Market Generators. The support of the Resource Plan process also contributed to the IMO's operational and IT costs, which were passed through to Market Participants. The primary purpose of Resource Plans no longer existed following the commencement of the Balancing Market.
Removal of the Dispatchable Load Facility Class from the Market Rules	The Dispatchable Load provisions were confusing for stakeholders, potentially open to gaming and likely to prove unworkable in practice. The cost of addressing the issues with Dispatchable Loads would be significant and the potential benefits low, as no Facility had been registered as a Dispatchable Load <sup>1</sup> and the Facility Type is not appropriate for storage facilities.
Extension of the STEM Submission window by one hour	Extending the STEM Submission window would provide more time for Market Participants to rectify any issues or correct any errors that may affect their STEM Submissions.
Clarification of the STEM Submission parameter update process	Under the Market Rules, the IMO was required to update the STEM Submission parameters for Market Participants by a specific time. In reality, the IMO updated these parameters in real time whenever it accepted a new STEM Submission.
Removal of the obligation for Market Participants to access STEM Auction results and for the IMO to contact Market Participants that cannot access their STEM Auction results	Market Participants were required to access their STEM Auction results by a specific time, and the IMO was required to endeavour to contact participants that could not access their results by that time. The necessity for these obligations would disappear with the proposed removal of Resource Plans, because the STEM Auction results would not be needed as quickly to inform the Resource Plan Submissions.

<sup>1</sup> No Facility had been registered as a Dispatchable Load as of the date that the IMO submitted this Rule Change Proposal, and this remains the case as of the date of this Final Rule Change Report.

Proposed Change	The IMO's Reason for the Proposed Change
Removal of section 7.5 obligations to provide Fuel Declaration updates	System Management had advised that it no longer required these declarations as it received the fuel use information it needed through the Balancing Merit Order ( <b>BMO</b> ).
Clarification of the interaction between forecast and final BMOs, and between forecast and final LFAS Merit Orders	The Market Rules described two different processes for the determination of forecast and final merit orders. In reality, the IMO used a common process to determine forecast and final merit orders, which met all the prescribed requirements.
Removal of requirement for System Management and Synergy to meet monthly	System Management and Synergy advised that they did not find it necessary to meet monthly and therefore the requirement created an unnecessary administrative burden for both parties.
Clarification of Balancing Submission quantities	The IMO considered the Market Rules were ambiguous around how available and unavailable capacity was shown in Balancing Submissions.
Allow the update of Non-Scheduled Generator forecasts after Balancing Gate Closure	The accuracy of Non-Scheduled Generator output forecasts increases as the time between the forecasts and the Trading Interval decreases. The IMO considered that allowing updates to the forecasts after Balancing Gate Closure could improve the accuracy of the Forecast BMO.
Administrative changes	The IMO proposed a number of minor amendments to the Market Rules to improve the clarity and integrity of the drafting.

Since the formal submission of RC\_2014\_06:

- the Market Rules have changed significantly;
- the market operator function has transferred from the IMO to AEMO; and
- the system management function has transferred to AEMO.

Some former references to System Management have been removed from the Market Rules. The remainder now refer to:

- AEMO;
- AEMO in its capacity as System Management; or
- System Management, with System Management being defined in the Glossary as "AEMO in its capacity as System Management".

The Rule Change Panel has therefore applied the proposed changes to the current Market Rules, accounting where applicable for the changes made to the Market Rules since the submission of the proposal. The proposed changes relating to the IMO and System Management have been updated to relate to the entity that is now referred to in the context of the relevant function.

In this Final Rule Change Report, references are therefore changed as follows:

- where the proposal referred to the IMO in its market operator function, the report refers to AEMO; and
- where the proposal referred to System Management, the report refers, as applicable, to:
  - AEMO;
  - System Management; or
  - AEMO in its capacity as System Management.

The Rule Change Panel notes that the reasons for the proposed changes are, in most cases, unaffected by changes made to the Market Rules since the submission of the proposal and the transfer of functions to AEMO.

Full details of the Rule Change Proposal are available at the Rule Change Panel's website.

## 2.2 The IMO's Initial Assessment of the Proposal

The IMO decided to progress this Rule Change Proposal on the basis of its preliminary assessment that the proposed amendments were likely to better achieve Wholesale Market Objectives (a), (b) and (d) and were consistent with the other Wholesale Market Objectives.

## 3. Consultation

### 3.1 General Consultation

The IMO developed this Rule Change Proposal in accordance with the Market Rules Evolution Plan 2013-2016 (**MREP**),<sup>2</sup> which was developed in consultation with the Market Advisory Committee (**MAC**) and other industry stakeholders.

### 3.2 Market Advisory Committee Consultation by the IMO before the Formal Submission of the Rule Change Proposal

Aspects that were relevant for the development of RC\_2014\_06, including two different Pre-Rule Change Proposals, were discussed during several MAC meetings between 9 October 2013 and 3 December 2014.

The development of RC\_2014\_06 was significantly affected by the then Government's Electricity Market Review (**EMR**).

A complete summary of the relevant discussions in the relevant MAC meetings, and an overview of how RC\_2014\_06 was affected by the EMR are provided in Appendix A of this report.

Further details of the relevant MAC meetings are available in the MAC meeting papers and minutes available on the Rule Change Panel's website at <https://www.erawa.com.au/rule-change-panel/market-advisory-committee/market-advisory-committee-meetings>.

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<sup>2</sup> The MREP was the third Market Rules Evolution Plan to be developed by the IMO. The MREP's purpose was to assist the IMO to set work priorities for the next phase of market development, and to assist the IMO and System Management in developing their Allowable Revenue submissions for each three year Review Period.

### 3.3 Submissions Received During the First Submission Period

The first submission period for this Rule Change Proposal was held between 29 January 2015 and 2 April 2015. The IMO received submissions from Alinta Energy, Community Electricity and Perth Energy.

All of the submissions were supportive of the proposal and explicitly supported the removal of Resource Plans and the extension of the STEM Submission window. Perth Energy also explicitly supported several other components of the proposal, including the removal of Dispatchable Loads.

Perth Energy noted that it considered the proposed approach for dealing with the secondary impacts of the removal of Resource Plans to be practical and reasonable. However, Perth Energy raised concerns that the proposed approach included relying on STEM Submissions for the calculation of Reserve Capacity Obligations for all Market Participants. Perth Energy noted that it would prefer a solution that does not require participants to make a STEM Submission and that it would prefer to preserve Market Participants' ability to opt out of the STEM Submission process.

Perth Energy further noted that, should the proposed approach of mandating the use of STEM Submissions in the new process go ahead, it would be desirable to somehow highlight the new importance of always providing a STEM Submission in the Market Rules.

Perth Energy also expressed concerns that the proposed changes could have a short life span because of the EMR and the associated upcoming changes to the market. Perth Energy noted that the costs to implement the proposed changes should be assessed considering that the changes may prove to be short lived.

The assessment by submitting parties as to whether the proposal would better achieve the Wholesale Market Objectives is summarised in Table 2.

**Table 2: Submitting Parties' Assessment as to whether the Proposal would Better Achieve the Wholesale Market Objectives**

Submitter	Wholesale Market Objective Assessment
Alinta Energy	Alinta Energy considers that the proposed amendments will improve the efficiency of the operation of the market (Wholesale Market Objective (a)) and contribute to achieving the Wholesale Market Objectives.
Community Electricity	Community Electricity considers that the Rule Change Proposal improves the integrity of the Market Rules and is consistent with all of the Wholesale Market Objectives.
Perth Energy	Subject to its concerns about the potential costs to implement this Rule Change Proposal, given the state of uncertainty about the future of the Wholesale Electricity Market ( <b>WEM</b> ) at the time of the end of the first submission period, Perth Energy considers the Rule Change Proposal will improve efficiency and reduce costs by removing the now unnecessary process of providing Resource Plans and also remove unnecessary costs associated with accommodating an unused Facility Class. These changes will therefore likely improve the ability to achieve Wholesale Market



Submitter	Wholesale Market Objective Assessment
	<p>Objectives (a) relating to efficiency and (d) relating to minimising long-term cost of electricity.</p> <p>Perth Energy considers the transparency of the Market Rules will also be enhanced by a number of the proposed changes, such as the proposal to clarify how to reflect available and unavailable capacity in Balancing Submissions. This would serve to further promote efficiency, safety and reliability within the system and therefore promote achievement of Wholesale Market Objective (a).</p>

Copies of all submissions received during the first submission period are available on the Rule Change Panel's website.

### 3.4 The Rule Change Panel's Response to Submissions Received During the First Submission Period

The Rule Change Panel's response to each of the specific issues raised in the first submission period is detailed in Appendix B of the Draft Rule Change Report for this proposal, which is available on the Rule Change Panel's website. A more general discussion of the proposal, which addresses the main issues raised in the submissions and provides the Rule Change Panel's response to these issues, is available in section 6.2 of this report.

### 3.5 MAC Consultation by the Rule Change Panel after the Close of the First Submission Period

#### Background on the Extensions of the Timeframe to Publish the Draft Rule Change Report

In May 2015, the Minister asked the IMO to exercise its discretion under clause 2.5.10 of the Market Rules to extend the normal timeframes for processing all Rule Change Proposals in progress (except for those relating to the deferral of Reserve Capacity Cycles) until the new rule change approval body was established as part of the EMR reforms.

The rule making functions of the IMO were transferred to the Rule Change Panel on 26 November 2016, and the Rule Change Panel commenced its rule making functions on 3 April 2017.

The Rule Change Panel further extended the timeframe for the publication of the Draft Rule Change Report in extension notices published on 10 April 2017 and 21 December 2017. The reasons for the extensions was to allow the Rule Change Panel sufficient time to assess the Draft Rule Change Report against the recent changes to the Market Rules while managing competing priorities of other Rule Change Proposals.

#### MAC Consultation

On 8 August 2017, RCP Support circulated a paper to the MAC outlining proposed urgency ratings for the remaining open Rule Change Proposals (that had not already been assigned an urgency rating of High), with a request for feedback by 14 August 2017. Some of the feedback received related to RC\_2014\_06. This was discussed at the MAC's 16 August 2018 meeting.

At the 13 December MAC meeting, RCP Support gave a presentation on RC\_2014\_06 including several additional issues that could be addressed within the scope of RC\_2014\_06

and asked for feedback on the additional issues by 20 December 2017. RCP Support received six emails with feedback.

A complete summary of the relevant discussions in the MAC meetings and the feedback received via email is provided in Appendix B of this report.

Further details of the relevant MAC meetings are available in the MAC meeting papers and minutes available on the Rule Change Panel's website at <https://www.erawa.com.au/rule-change-panel/market-advisory-committee/market-advisory-committee-meetings>.

### **3.6 Call for Further Submissions**

On 22 January 2018, the Rule Change Panel published a call for further submissions on Rule Change Proposal RC\_2014\_06 because:

- a significant amount of time had passed since the IMO consulted on the Rule Change Proposal; and
- the Market Rules had undergone numerous changes since the publication of the Rule Change Proposal.

The call for further submissions requested feedback on the following issues that could be addressed with the proposal:

- whether the proposed changes to the Scheduling Day timeline should be further amended so that the timeline is future proofed for the implementation of the National Electricity Market Dispatch Engine (**NEMDE**) by:
  - extending the Balancing Horizon at 12:30 PM instead of 1:00 PM;
  - moving the deadline for the publication of STEM Auction results to 11:00 AM instead of 11:30 AM; and
  - closing the STEM Submission window at 10:20 AM instead of 10:50 AM;
- whether AEMO's discretion to delay the STEM because of issues with the Ancillary Service data should be reinstated;
- whether AEMO should be given discretion to repeat relevant Scheduling Day steps and delay the STEM to rectify a possible error; and
- what possible restrictions should be placed on AEMO's ability to repeat Scheduling Day steps and delay the STEM.

The call for further submissions is available on the Rule Change Panel's website.

### **3.7 Submissions Received During the Further Submission Period**

The further submission period was held between 22 January 2018 and 13 February 2018. The Rule Change Panel received submissions from AEMO, Alinta Energy, Carnegie Clean Energy, Perth Energy and Synergy.

#### **3.7.1 Overview and General Feedback**

The submissions of AEMO, Alinta Energy, Carnegie Clean Energy and Perth Energy were supportive of the Rule Change Proposal.

In its submission, AEMO noted that the changes to the Scheduling Day timeline are expected to reduce the volumes of Market Participant queries in relation to Scheduling Day processes

and allow for longer on-call response times. This would support AEMO transitioning its current weekend and public holiday support arrangements to on-call support.

Synergy's submission raised concerns about the removal of the Dispatchable Load Facility Class from the Market Rules, noting that the composition and dynamics of the WEM have drastically changed since the original Rule Change Proposal was published. The Rule Change Panel subsequently engaged with Synergy, which clarified that its only concern regarding the removal of Dispatchable Load Facility Class was that it could hinder storage facilities from participating in the WEM.

### **3.7.2 Feedback from Submitters on the Explicit Questions in the Call for Further Submissions**

#### **Scheduling Day Timeline**

Synergy was supportive of the alternative STEM Submission window and Balancing Horizon extension times proposed to future proof the timeline for NEMDE.

AEMO considered that the Scheduling Day Timeline and the implementation of NEMDE raised distinct issues and needed to be addressed separately. AEMO suggested amending the Scheduling Day timeline as proposed in the original Rule Change Proposal,<sup>3</sup> but noted that it could also implement a different Scheduling Timeline to suit Market Participants.

AEMO noted that the choice of dispatch engine to support the introduction of a security-constrained economic dispatch model in the WEM (NEMDE or something else) was yet to be fully assessed and finalised. AEMO proposed that this Rule Change Proposal (which sought to address current and longstanding WEM issues) be progressed without a direct linkage to market reform initiatives that were yet to be finalised.

Alinta Energy noted that it had no concerns with the Scheduling Day timeline being future proofed for the potential implementation of NEMDE. However, Alinta Energy emphasised that it did not advocate the automatic assumption that NEMDE was the correct solution for the WEM.

Perth Energy requested that the Rule Change Panel seek formal advice from the Public Utilities Office (**PUO**) in relation to the direction of the electricity sector reforms, prior to the adoption of any amendments to align the WEM systems and processes with those in the National Energy Market.

Synergy suggested that further industry consultation should occur to discuss the proposed implementation of NEMDE and its potential implications on existing systems.

#### **AEMO's Discretion to Delay the STEM Because of Issues with the Ancillary Service Data**

AEMO considered that the recent removal of its discretion to delay the STEM because of issues with the Ancillary Service data was unintended and has resulted in a manifest error in the Market Rules. In the absence of this discretion, AEMO would have to continue to make a time-critical assessment of whether any issues relating to the preparation of the Ancillary Service data each day were serious enough to warrant potentially breaching clause 6.4.6.

Alinta Energy and Perth Energy supported reinstating the provision for AEMO to delay the STEM because of issues with the Ancillary Service data.

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<sup>3</sup> STEM Submission window to occur from 9:00 AM to 10:50 AM; STEM Auction results to be published between 11:00 AM and 11:30 AM; and the Balancing Horizon to commence at 1:00 PM.

## Repeating Relevant Scheduling Day Steps and Associated Delay of STEM

AEMO considered that it should be allowed to repeat Scheduling Day steps and/or delay the STEM if required to rectify any issues. In some cases, where data or technology issues prevent the orderly operation of STEM, it may be necessary for AEMO to repeat the relevant Scheduling Day steps. Where there is a known issue, repeating the relevant Scheduling Day steps would ensure that correct and accurate outcomes are achieved for Market Participants.

Alinta Energy and Synergy supported AEMO being allowed to repeat relevant Scheduling Day steps and/or delay STEM timelines where required to rectify issues.

## Possible Restrictions for AEMO when Repeating Scheduling Day Steps and Associated Delay of STEM

AEMO noted that the Market Rules already restrict the circumstances in which AEMO may exercise its discretion to extend STEM process timelines, and currently require AEMO to notify Rule Participants of any extension (clause 6.4.6). AEMO noted that it was not apparent how additional restrictions or conditions would benefit Market Participants.

Alinta Energy noted that allowing AEMO to repeat relevant Scheduling Day steps meant that consideration will need to be given to the flow on effects of a delay.

Synergy noted that criteria should be set up regarding the reasons for AEMO to repeat Scheduling Day steps and that there should also be restrictions placed on AEMO on how long they can delay publication of STEM Auction results to avoid market inefficiencies.

Synergy noted that it preferred for the minimum time between publication of STEM Auction results and the extension of the Balancing Horizon to be 1.5 hours. If a shorter timeframe was adopted, Synergy believed that Market Participants should be relieved of their obligation to make a submission 'just prior' to opening of the Balancing Horizon. Synergy suggested that in this case AEMO could still potentially publish a Forecast BMO at 12:30 PM based on standing submissions, but advise Market Participants that it may be based on incomplete data.

Alinta Energy considered that the minimum time between publication of the STEM Auction results and the extension of the Balancing Horizon should be one hour.

Synergy noted that AEMO should be obligated to notify Market Participants if it intends to repeat any Scheduling Day steps or delay the STEM timelines. This would decrease the likelihood of errors occurring, which in turn would increase the likelihood of economically efficient market outcomes.

### 3.7.3 Submitters' Assessment of Proposal against the Wholesale Market Objectives

The assessment by submitting parties as to whether the proposal would better achieve the Wholesale Market Objectives is summarised in Table 3:

**Table 3: Submitting Parties' Assessment as to whether the Proposal would better achieve the Wholesale Market Objectives**

Submitter	Wholesale Market Objective Assessment
AEMO	AEMO agrees with the Wholesale Market Objective assessment set out in the original 2014 proposal.

Submitter	Wholesale Market Objective Assessment
Alinta Energy	<p>Alinta Energy considers that the proposed amendments will better achieve Wholesale Market Objectives (a) and (d) and are consistent with the other Wholesale Market Objectives. Specifically:</p> <ul style="list-style-type: none"> <li>the proposed removal of Resource Plans will promote economic efficiency (Wholesale Market Objective (a)) and contribute to minimising the long-term cost of electricity (Wholesale Market Objective (d)) by eliminating unnecessary processes from the Market Rules; and</li> <li>the proposed extension of the STEM Submission window will promote economic efficiency (Wholesale Market Objective (a)) by reducing the risks for Market Participants of not meeting the deadline for making a valid STEM Submission.</li> </ul>
Carnegie Clean Energy	<p>Removal of Resource Plans will remove multiple cost streams from all generators' business requirements in the form of system and process design and implementation, daily compliance activity and ongoing financial exposure. Removing those requirements from a business' obligations and activities will reduce operating costs. As such, the rule change will assist in achieving Wholesale Market Objective (d) (reducing the long term cost of supplying energy) to the extent that any systematic reduction in underlying system and processing obligations contributes to a lowering of costs that otherwise need to be recovered from customers.</p>
Perth Energy	<p>Perth Energy considers that, subject to the concerns raised, the proposed Amending Rules would better achieve the Wholesale Market Objectives.</p>
Synergy	<p>No assessment provided.</p>

Copies of all submissions received during the further submission period are available on the Rule Change Panel's website.

### 3.8 The Rule Change Panel's Response to Submissions Received During the Call for Further Submissions

The Rule Change Panel's response to each of the specific issues raised in the further submission period is presented in Appendix C of the Draft Rule Change Report. A more general discussion of the proposal, which addresses the main issues raised in submissions and the Rule Change Panel's response to these issues, is available in section 6.2 of this report.

### 3.9 Submissions Received During the Second Submission Period

The second submission period was held between 31 August 2018 and 1 October 2018. The Rule Change Panel received submissions from AEMO and Alinta Energy.

On 3 October 2018, the Rule Change Panel received a late submission from Perth Energy, which it was able to consider as this did not affect the timeline of the rule change process.

All three submission were supportive of the proposed changes.

Alinta Energy expressed particular support for the proposed removal of Resource Plans and the one-hour extension of the STEM Submission window. Alinta Energy also expressed support for the proposed changes that are consequential to the removal of Resource Plans.

Alinta Energy raised concerns that that the proposed amendments to clause 7A.2.4A, which require the quantities in the Balancing Price-Quantity Pairs and any unavailable capacity to equal the Scheduled Generator’s Sent Out Capacity, will limit a generator’s ability to bid higher than its Sent Out Capacity (for example for a Reserve Capacity Test).

Copies of the submissions received during the second submission period are available on the Rule Change Panel’s website. All issues raised in the submissions received during the second submission period are outlined in Appendix C of this report.

The assessment by submitting parties as to whether the proposal would better achieve the Wholesale Market Objectives is summarised in Table 4:

**Table 4: Submitting Parties’ Assessment as to whether the Proposal would better achieve the Wholesale Market Objectives**

Submitter	Wholesale Market Objective Assessment
AEMO	AEMO agrees with the Wholesale Market Objective assessment set out in in section 5.5 of the Draft Rule Change Report.
Alinta Energy	<p>Alinta Energy considers that the proposed amendments will better achieve Wholesale Market Objectives (a) and (d) and are consistent with the other Wholesale Market Objectives. Specifically:</p> <ul style="list-style-type: none"> <li>• The proposed removal of Resource Plans will promote economic efficiency (Wholesale Market Objective (a)) and contribute to minimising the long-term cost of electricity (Wholesale Market Objective (d)) by eliminating unnecessary processes from the Market Rules; and</li> <li>• The proposed extension of the STEM Submission window will promote economic efficiency (Wholesale Market Objective (a)) by reducing the risks for Market Participants of not meeting the deadline for making a valid STEM Submission.</li> </ul>
Perth Energy	Perth Energy considers that, subject to the comments made in Perth Energy’s submission, the proposed amending WEM Rules would better achieve the Wholesale Market Objectives.

**3.10 The Rule Change Panel’s Response to Submissions Received During the Second Submission Period**

The Rule Change Panel’s response to each of the specific issues raised in the second submission period is presented in Appendix C of this report. A more general discussion of the proposal, which addresses the main issues raised in submissions and the Rule Change Panel’s response to these issues, is available in section 6.2 of this report.

**3.11 Public Forums and Workshops**

No public forums or workshops were held in regard to this Rule Change Proposal.

## 4. The Rule Change Panel's Draft Assessment

The Rule Change Panel's draft assessment against clauses 2.4.2 and 2.4.3 of the Market Rules and analysis of the Rule Change Proposal are provided in section 5 of the Draft Rule Change Report, available on the Rule Change Panel's website.

## 5. The Rule Change Panel's Proposed Decision from the Draft Rule Change Report

The Rule Change Panel's proposed decision in the Draft Rule Change Report was to accept the Rule Change Proposal in a modified form, as set out in section 7 of the Draft Rule Change Report.

The reasons for the Rule Change Panel's proposed decision are set out in section 6.1 of the Draft Rule Change Report.

## 6. The Rule Change Panel's Final Assessment

### 6.1 Assessment Criteria

In preparing its Final Rule Change Report, the Rule Change Panel must assess the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3 of the Market Rules.

Clause 2.4.2 of the Market Rules states that the Rule Change Panel "*must not make Amending Rules unless it is satisfied that the Market Rules, as proposed to be amended or replaced, are consistent with the Wholesale Market Objectives*". Additionally, clause 2.4.3 of the Market Rules states that, when deciding whether to make Amending Rules, the Rule Change Panel must have regard to:

- any applicable statement of policy principles the Minister has issued to the Rule Change Panel under clause 2.5.2 of the Market Rules;
- the practicality and cost of implementing the proposal;
- the views expressed in submissions and by the MAC; and
- any technical studies that the Rule Change Panel considers necessary to assist in assessing the Rule Change Proposal.

In making its final decision, the Rule Change Panel has had regard to each of the matters identified in clauses 2.4.2 and 2.4.3 of the Market Rules as follows:

- the Rule Change Panel's assessment of the Rule Change Proposal against the Wholesale Market Objectives is available in section 6.5 of this report;
- the Rule Change Panel notes that there has not been any applicable statement of policy principles from the Minister in respect of this Rule Change Proposal;
- the Rule Change Panel's assessment of the practicality and cost of implementing the Rule Change Proposal is available in section 6.6 of this report;
- a summary of the views expressed in submissions and by the MAC is available in section 3, Appendix A, Appendix B, and Appendix C of this report. The Rule Change Panel's responses to the submissions are available in Appendix B and Appendix C of the Draft Rule Change Report, and in section 6.2 and Appendix C of this report; and

- the Rule Change Panel does not believe a technical study in respect of this Rule Change Proposal is required and therefore has not commissioned one.

The Rule Change Panel's assessment is presented in the following sections.

## **6.2 Assessment of the Proposed Changes**

The Rule Change Panel's assessment of the changes proposed in RC\_2014\_06 is provided in this section 6.2. The Rule Change Panel's assessment of additional issues it has identified after the first submission period is provided in section 6.3 of this report.

The Rule Change Panel's overall assessment of the following aspects of the Rule Change Proposal has not changed since the publication of the Draft Rule Change Report:

- removal of Resource Plans (issue 1);
- removal of the Dispatchable Load Facility Class (issue 2);
- extension of the STEM Submission window (issue 3);
- clarification that AEMO updates STEM Submission parameters upon acceptance of a STEM Submission (issue 4);
- removal of requirements around Market Participants accessing their STEM Auction results (issue 5);
- removal of requirement for AEMO to provide System Management with Fuel Declarations derived from STEM Submissions (issue 6);
- removal of the requirement for System Management and Synergy to meet monthly (issue 8); and
- allow the update of forecast output quantities for Non-Scheduled Generators past Balancing Gate Closure (issue 10).

The Rule Change Panel has undertaken additional assessments of the following aspects of the proposed Amending Rules, mainly in response to issues raised in the second submission period:

- clarification of the interaction between Forecast and Final BMOs and LFAS Merit Orders (issue 7); and
- clarification on how plant availability must be reflected in Balancing Submissions (issue 9).

The Rule Change Panel's complete final assessment is presented in the remainder of this section.

### **6.2.1 Removal of Resource Plans (Issue 1)**

In RC\_2014\_06 the IMO sought to:

- remove Resource Plans from the Market Rules; and
- address a number of secondary issues caused by the proposed removal of Resource Plans.



## General Concept

The Rule Change Panel agrees with the IMO that the obligation for Market Generators to submit Resource Plans creates an unnecessary administrative burden; and that the requirement for AEMO to support Resource Plans in its operational processes and IT systems leads to unnecessary costs for all Market Participants. This is because Resource Plans are no longer used for their original primary purpose, the dispatch of Independent Power Producers (**IPPs**). Additionally, since the commencement of the Balancing Market, the dispatch quantities in Resource Plans are non-binding, and therefore the information provided in Resource Plans is of little value.

During the consultation process, Market Generators indicated that they incur significant costs for:

- including provisions related to the submission of Resource Plans in their ongoing operational processes;
- maintaining Resource Plans in their IT systems; and
- catering for Resource Plans in upgrades of IT systems or the development of new IT systems.

These costs represent an inefficiency in the WEM and are eventually passed through to end customers.

In addition, a Market Generator who fails to submit a Resource Plan may incur significant Capacity Cost Refunds, potentially up to several hundred thousand dollars.

The Rule Change Panel considers that the submission of Resource Plans provides no benefit to the market, and therefore the associated costs and risks to Market Generators are unnecessary.

The Rule Change Panel supports the proposed removal of Resource Plans from the Market Rules as it will increase the efficiency of the WEM.

## Changing the Time of the Balancing Horizon Extension from 6:00 PM to 1:00 PM

Currently, System Management uses the information from Resource Plans to assess likely Facility commitment decisions, check load flow implications and develop the initial Synergy Dispatch Plan. Currently System Management receives the Resource Plans around 1:00 PM on the Scheduling Day.

To facilitate the removal of Resource Plans from the Market Rules, the IMO proposed to change the time for the extension of the Balancing Horizon from 6:00 PM to 1:00 PM on the Scheduling Day. This is so System Management receives the information in the Forecast BMO at 1:00 PM, and therefore does not need the information from the Resource Plans. System Management agreed, during the consultation process, that the Forecast BMO would deliver adequate information to replace the information currently received from Resource Plans.

However, during the EMR, it was planned for NEMDE to be implemented in the WEM, so the Balancing Horizon would need to open at 12:30 PM to avoid significant additional costs for amending NEMDE.

In its call for further submissions, the Rule Change Panel asked whether this Rule Change Proposal should future-proof the Scheduling Day timeline, and therefore the extension of the Balancing Horizon, against a possible NEMDE implementation. Most submissions were

generally supportive of future proofing the Scheduling Day timeline, even though reservations were expressed about whether NEMDE should be implemented in the WEM.

AEMO's suggestion was to implement the timeline proposed in the original proposal, as it was not certain that NEMDE would be implemented. The Rule Change Panel does not consider it appropriate to modify the proposed Scheduling Day timelines different from the advice of AEMO, given AEMO's expected role in the selection of the next dispatch engine for the WEM. The Rule Change Panel notes that the timeline can be changed at a later point in the rule change process or through a different Rule Change Proposal at a later time if the situation changes.

No issues were raised during the consultation process regarding the obligation for Market Generators to submit their first Balancing Submissions by 1:00 PM.

The Rule Change Panel therefore considers that the daily extension of the Balancing Horizon should move from 6:00 PM to 1:00 PM as originally proposed.

Under the proposed timeline changes, a delay of the STEM Auction would reduce the period between the publication of STEM Auction results and the extension of the Balancing Horizon below 1.5 hours. In the worst case, the STEM Auction results could be published as late as 1:30 PM, 30 minutes after the extension of the Balancing Horizon. The Rule Change Panel considers that this is acceptable because:

- clauses 7A.2.8 and 7A.2.9 clearly state that Balancing Submissions must reflect all information reasonably available to Market Participants at the time - this means that, if a Market Participant does not have its STEM Auction results at the time it needs to make its initial Balancing Submission for a Trading Day, it will still be compliant if it bases the submission on the information that was available to it at the time;
- extensions to the STEM timeline are likely to only happen on rare occasions; and
- even if the STEM Auction results are published after the extension of the Balancing Horizon, Market Participants will have ample opportunity to update their Balancing and LFAS Submissions to reflect these results before the close of the relevant submission window.<sup>4</sup>

### **Amending the Methodologies to Determine the Reserve Capacity Obligations and the Net STEM Shortfall**

The Reserve Capacity Obligations of a Market Participant include an obligation to demonstrate, for each Trading Interval, that it has made its total Reserve Capacity Obligation Quantity<sup>5</sup> available to the market through the Scheduling Day mechanisms.

The Net STEM Shortfall for a Market Generator is that part (if any) of its Reserve Capacity Obligation Quantity that has not been made available via the Scheduling Day mechanisms. Market Participants incur Capacity Cost Refunds for this quantity.

For both Synergy and IPPs, any energy sold to other Market Participants under bilateral arrangements and reported through Bilateral Submissions is deemed to have been made available to the market. Currently there are two ways an IPP can account for its remaining capacity:

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<sup>4</sup> For the first Trading Interval of a Trading Day:

- for Synergy gate closure is at 10:00 PM for LFAS (8.5 hours after 1:30 PM) and 4:00 AM for Balancing (14.5 hours after 1:30 PM); and
- for IPPs LFAS Gate Closure is at 3:00 AM (13.5 hours after 1:30 PM) and Balancing Gate Closure at 6:00 AM (16.5 hours after 1:30 PM).

<sup>5</sup> Excluding any Reserve Capacity Obligation Quantities associated with Demand Side Programmes or subject to a Forced Outage.

1. If the IPP does not intend to use all of its remaining capacity to serve its own demand, then it needs to make all that capacity available to the market through a STEM Submission. In this case the IPP must form its STEM Submission so that it effectively sells itself any energy it intends to generate to meet its own demand.
2. If the IPP intends to use all of its remaining capacity to serve its own demand, then it can choose to not make a STEM Submission. In this case AEMO will deem the quantity of self-supplied demand reported in the IPP's Resource Plan to have been made available to the market.

As Synergy does not submit Resource Plans, it cannot use option 2 and so must offer all of its remaining capacity (including any capacity that it intends to use to meet its own demand) into the STEM.

The IMO proposed to align the method for calculating Net STEM Shortfall for IPPs with the method used for Synergy. The Rule Change Panel agrees with the proposed approach.

In its first period submission, Perth Energy raised concerns that the proposed change would make participation in the STEM mandatory for Market Participants, and while it considers the approach practical and reasonable, it would prefer a solution that preserves the ability for Market Participants to opt out of STEM.

The Rule Change Panel notes that fundamental changes to the Reserve Capacity Mechanism, such as changes to the obligations to make capacity available on the Scheduling Day, are not within the scope of this Rule Change Proposal. Given the removal of Resource Plans, it is efficient and equitable for Synergy and IPPs to meet their Scheduling Day obligations using the same mechanisms. The Rule Change Panel also notes that IPPs with Scheduled Generators already need to make STEM Submissions if their capacity is not all bilaterally allocated or used to meet their own demand, and in practice most if not all such Generators make regular STEM Submissions.

Perth Energy also suggested that, if the proposed changes were implemented, the new importance of always providing STEM Submissions should be highlighted in the Market Rules. The Rule Change Panel considers that it may be misleading to highlight in the Market Rules that failing to make a STEM Submission could lead to Reserve Capacity Refunds, because this will not necessarily be the case for all Market Generators. For example, if a Market Generator declares via a Bilateral Submission that all its capacity is sold bilaterally, then it would not have to make a STEM Submission to avoid Capacity Cost Refunds.

The Rule Change Panel considers that it would be difficult to document all of the specific circumstances under which a Market Participant must make a STEM Submission to avoid Capacity Cost Refunds. Therefore the Rule Change Panel considers it more appropriate to specify in the Market Rules what outcomes Market Participants need to achieve and let each Market Participant determine how to achieve these outcomes given their specific circumstances. However, AEMO will, as per usual, implement the proposed changes first in its market trial systems to give Market Participants the opportunity to test how they are affected by the changes.

### **Changes to Restrictions for Balancing Facilities not Meeting the Balancing Facility Requirements to make Balancing Submissions**

The current Market Rules allow AEMO to impose conditions on the participation of Balancing Facilities in the Balancing Market when they do not meet the Balancing Facility

Requirements.<sup>6</sup> These conditions are published in the Market Procedure: Balancing Facility Requirements, and currently require such Facilities to bid the expected generation quantity nominated in their Resource Plans at the Minimum STEM Price, and their remaining capacity at the Maximum STEM Price or the Alternative Maximum STEM Price, as applicable.

The IMO proposed to change the Market Procedure: Balancing Facility Requirements to limit the Balancing Submission restrictions for such Facilities to the requirement to offer quantities only at the relevant Price Caps.<sup>7</sup>

The Rule Change Panel supports the proposed approach but notes that it will be a matter for AEMO, as the responsible procedure administrator, to decide how to reflect the removal of Resource Plans in the Market Procedure.

### **Removal of Discretion for System Management to Refuse Permission for Synchronisation or Desynchronisation if it is not in Accordance with the Resource Plan**

Under the current Market Rules, System Management may refuse permission for a Generator to synchronise or desynchronise, if this synchronisation or desynchronisation is not in accordance with the relevant Resource Plan, Dispatch Instruction or Operating Instruction.

The IMO proposed to remove the reference to Resource Plans from these discretions. The IMO noted that since the commencement of the Balancing Market, the references in these clauses to Resource Plans have been unnecessary because, even if a Scheduled Generator is expected to follow its Resource Plan (because it does not comply with the Balancing Facility Requirements), System Management must still issue a Dispatch Instruction.

The Rule Change Panel agrees with the IMO and considers further that, as Resource Plans are no longer binding, it is not appropriate that System Management can deny synchronisation or desynchronisation for the sole reason that it is not in accordance with a Resource Plan.

The Rule Change Panel agrees with the proposed change. No issues were raised during the consultation process regarding the removal of this discretion.

#### **6.2.2 Removal of the Dispatchable Load Facility Class (Issue 2)**

The IMO proposed to remove the Dispatchable Load Facility Class from the Market Rules.

The Rule Change Panel agrees with the IMO that the Dispatchable Load provisions in the Market Rules are flawed and likely to prove unworkable, for reasons including:

- The consumption baselines used to calculate Non-Balancing Facility Dispatch Instruction Payments for Dispatchable Loads are provided by Market Participants for each Trading Interval through their Resource Plans. However, since the commencement of the Balancing Market there is no requirement under the Market Rules for a Dispatchable Load to adhere to its Resource Plan consumption levels, making these levels effectively irrelevant as a baseline.
- The Market Rules provide no guidelines about how AEMO would assign Capacity Credits to a Dispatchable Load.

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<sup>6</sup> The Balancing Facility Requirements comprise the ability to receive and confirm the receipt of electronic Dispatch Instructions, and to appropriately implement those Dispatch Instructions.

<sup>7</sup> The Rule Change Panel notes that at the time the proposal was submitted, the IMO was the responsible procedure administrator for the Market Procedure: Balancing Facility Requirements.

- The Reserve Capacity Security and Reserve Capacity Testing requirements for Dispatchable Loads are based on their Required Level, which is undefined in the Market Rules.
- The Market Rules do not include any provisions about when and how Dispatchable Loads should incur Capacity Cost Refunds.

The Rule Change Panel also shares the IMO's concerns about the usefulness of the Dispatchable Load Facility Class in the WEM, and in particular its suitability for the registration of storage facilities. A storage facility should be able to:

- provide energy to the SWIS;
- actively participate in the Balancing Market and be dispatched through the BMO; and
- potentially provide Ancillary Services.

The Dispatchable Load Facility Class does not currently account for a facility of this nature.

When developing the Rule Change Proposal, the IMO investigated the IT implications and determined that it would be more practical and cost-effective to design and implement a new Facility Class based on the expected characteristics of a storage facility, than to attempt to modify the current Dispatchable Load Facility Class. The Rule Change Panel also notes that the inclusion of storage facilities in the WEM is within the scope of the current Government's WEM Reform Program.

In its further period submission, Synergy raised concerns that the market would forego potential economic efficiency gains if the Dispatchable Load Facility Class was removed from the Market Rules. Synergy noted that the components and dynamics of the WEM have drastically changed since the submission of the proposal. In particular, there has been a significant increase in renewable penetration and other jurisdictions have started to install large scale battery storage. Synergy expressed the view that the Rule Change Panel must address the potential detrimental effect on economic efficiency that the proposed removal of Dispatchable Loads may have in light of the changed composition and dynamics of the WEM.

The Rule Change Panel clarified with Synergy that its sole concern was that the removal of the Dispatchable Load Facility Class would impede the participation of storage facilities in the WEM.

The Rule Change Panel agrees with Synergy that the participation of storage facilities in the WEM should be supported. However, the Rule Change Panel considers that developing a workable Facility Class for storage facilities will require extensive additional analysis and consultation, which lies within the scope of the WEM Reform Program rather than this Rule Change Proposal.

While the Rule Change Panel considers it inappropriate to amend the provisions for Dispatchable Loads to make them workable (and in particular suitable for storage facilities), it also considers it inappropriate to reject the IMO's proposal to remove the Dispatchable Load Facility Class because:

- this would mean leaving a confusing and unworkable concept in the Market Rules that provides no benefit; and
- the retention of these provisions could lead to significant problems if anyone was to attempt to register a Dispatchable Load and apply for Capacity Credits.

The Rule Change Panel cannot identify any aspects of the current Dispatchable Load provisions in the Market Rules that warrant preserving the provisions, for example to expedite the participation of storage facilities in the WEM at a later point in time.

The Rule Change Panel therefore supports the proposed removal of the Dispatchable Load Facility Class. However, the Rule Change Panel emphasises that the reason for this decision is that the current implementation of the Dispatchable Load Facility Class in the Market Rules is unworkable, and fully supports the future participation of storage facilities in the WEM.

The Rule Change Panel has identified that the removal of the Dispatchable Load Facility Class will make the condition specified in clause 2.30B.2(d) that an Intermittent Load must be an Interruptible Load or a Non-Dispatchable Load unnecessary, as those are the only Load types that will remain under the Market Rules. Therefore, the Rule Change Panel has changed the Amending Rules to remove this clause.

### **6.2.3 Extension of the STEM Submission Window (Issue 3)**

The IMO proposed to extend the STEM Submission window by one hour, so it closes at 10:50 AM instead of 9:50 AM. To account for this change, the IMO also proposed to shift the deadline for publication of STEM Auction results from 10:30 AM to 11:30 AM.

The Rule Change Panel agrees with the IMO that the current STEM Submission window of 50 minutes can leave Market Participants with little time to rectify any possible issues (e.g. issues with a participant's IT system). This increases the risk that a Market Participant will fail to make a valid STEM Submissions and incur material Capacity Cost Refunds.

With the proposed removal of the Resource Plans, there is no longer any need for STEM Auction results to be published by 10:30 AM.

Feedback to the call for further submissions supported a longer STEM Submission window. No issues were raised during the consultation process regarding the later publication of STEM Auction results.

The Rule Change Panel supports the proposed timing changes for the STEM Submission window and the publication of STEM Auction results.

### **6.2.4 Clarification that AEMO Updates STEM Submission Parameters upon Acceptance of a STEM Submission (Issue 4)**

Under the current Market Rules, AEMO must, by 9:05 AM on the Scheduling Day, provide each Market Participant with a set of parameters to assist them with the STEM Submission process. The parameters include details of any STEM Submissions that AEMO has already accepted from this Market Participant. By 9:30 AM, AEMO must provide each Market Participant with updates of these parameters.

The IMO proposed to clarify that Market Participants receive updates of the parameters immediately, whenever a STEM Submission is accepted.

The Rule Change Panel supports the proposed clarification. No issues were raised about this during the consultation process.

### **6.2.5 Removal of Requirements around Market Participants Accessing their STEM Auction Results (Issue 5)**

Under clause 6.4.3 of the Market Rules, AEMO must make available to Market Participants their STEM Auction results by 10:30 AM on the Scheduling Day. The Market Rules require:

- a Market Participant to access this information by 10:45 AM on the Scheduling Day (clause 6.4.4); and

- AEMO, if it becomes aware that a Market Participant has been unable to access this information by 10:45 AM, to use reasonable endeavours to contact the Market Participant to convey the relevant information in time for their Resource Plan Submission (clause 6.4.5).

The IMO proposed to remove the obligations for Market Participants to access the information (clause 6.4.4) and for AEMO to contact a Market Participant that has been identified as unable to access its STEM results (clause 6.4.5).

The Rule Change Panel agrees with the IMO that these explicit obligations are unnecessary, in particular with the removal of Resource Plans.

The Rule Change Panel supports the removal of these obligations. No issues were raised about this during the consultation process.

### **6.2.6 Removal of Requirement for AEMO to Provide System Management with Fuel Declarations Derived from STEM Submissions (Issue 6)**

The IMO proposed to remove the following provisions from section 7.5 of the Market Rules:

- provisions under which the IMO must provide System Management with Fuel Declarations derived from STEM Submissions; and
- provisions describing how Market Participants must provide updates to System Management regarding a change in the type of fuel to be used.

The change was proposed following advice from System Management that it does not need these notifications because it receives the information it needs through the BMO.

The provisions under which the IMO must provide System Management with Fuel Declarations derived from STEM Submissions were removed from the Market Rules by the Minister when the system management function was transferred to AEMO.

The Rule Change Panel supports the removal of the remaining provisions. No issues were raised about this during the consultation process.

### **6.2.7 Clarification of the Interaction between Forecast and Final BMOs and LFAS Merit Orders (Issue 7)**

The IMO proposed to restructure sections 7A.3 and 7B.3 of the Market Rules, which set out the process for the provision of BMOs and LFAS Merit Orders.

The Rule Change Panel agrees with the IMO that the proposed changes will:

- clarify the current processes for the provision of BMOs and LFAS Merit Orders; and
- remove unnecessary inconsistencies between the requirements for forecast merit orders and final merit orders.

The Rule Change Panel supports the proposed changes. No issues were raised about this during the consultation process.

However, the Rule Change Panel has identified that as an inadvertent result of the proposed changes to section 7B.2 there would have been no restriction preventing Synergy from making an updated LFAS Submission for the Balancing Portfolio after LFAS Gate Closure. The Rule Change Panel has therefore made further changes to the Amending Rules to include such restriction.

### **6.2.8 Removal of the Requirement for System Management and Synergy to Meet Monthly (Issue 8)**

The current Market Rules require System Management and Synergy to meet at least once per month, to review the procedures for the scheduling and dispatch of the Balancing Portfolio. The IMO proposed to remove the requirement for a monthly meeting where both System Management and Synergy agree that the meeting is not required.

The Rule Change Panel agrees with the IMO that requiring System Management and Synergy to hold a monthly meeting that neither party needs creates an unnecessary administrative burden and provides no value for the market.

The Rule Change Panel supports the removal of the requirement. No issues were raised about this during the consultation process.

### **6.2.9 Clarification on how Plant Availability must be reflected in Balancing Submissions (Issue 9)**

The IMO proposed to clarify how available and unavailable capacity are to be represented in Balancing Submissions.

The Rule Change Panel agrees that some ambiguity exists in the current Market Rules around how available and unavailable capacity are included in Balancing Submissions.

In its second period submission, Alinta Energy expressed concerns that the proposed drafting of clause 7A.2.4A, which requires the quantities in the Balancing Price-Quantity Pairs and any unavailable capacity to equal the Scheduled Generator's Sent Out Capacity, will limit a generator's ability to bid higher than its Sent Out Capacity (for example for a Reserve Capacity Test). The Rule Change Panel notes that this is already the case under the current Market Rules because the current definition of the term 'Balancing Submission' prescribes a Balancing Submission as a ranking of Balancing Price-Quantity Pairs for each MW of its Sent Out Capacity. This means that the total quantity of capacity in the Price-Quantity Pairs of a Balancing Submission cannot exceed the relevant Facility's Sent Out Capacity. The Rule Change Panel considers that the current restrictions on Balancing Submissions does not present a problem.<sup>8</sup>

However, the Rule Change Panel notes that the current definition of Sent Out Capacity in Appendix 1 of the Market Rules could benefit from clarification as it is unspecific and does not refer to the restriction placed by the definition of the Balancing Submission. The Rule Change Panel notes that amending the definition of Sent Out Capacity would require further consultation and would not warrant delaying the progression of this Rule Change Proposal. However some of the definitions in Appendix 1, including the definition of Sent Out Capacity are likely to be clarified in the scope of RC\_2013\_15 (Outage Planning Phase 2 – Outage Process Refinements) or RC\_2014\_03 (Administrative Improvements to the Outage Process).

The Rule Change Panel supports the proposed changes as outlined in the Draft Rule Change Report.

### **6.2.10 Allow the Update of Forecast Output Quantities for Non-Scheduled Generators past Balancing Gate Closure (Issue 10)**

Under the current Market Rules, AEMO must provide a Forecast BMO for each future Trading Interval in the Balancing Horizon and provide each Market Participant the quantity expected to be provided from that Market Participant. AEMO calculates the Forecast BMO

<sup>8</sup> In any case, the Rule Change Panel notes that this cannot be changed without further consultation.



based on the latest Balancing Submissions. The accuracy of the Forecast BMO depends significantly on the accuracy of Non-Scheduled Generators' output forecasts that are provided in their Balancing Submissions.

However, Market Participants are not allowed to update their Non-Scheduled Generator output forecasts after Balancing Gate Closure. The IMO proposed to allow, but not require, these output forecasts to be updated after Balancing Gate Closure.

The Rule Change Panel agrees with the IMO that if Market Generators continue to update their non-scheduled generation output forecasts past Balancing Gate Closure, this would potentially improve the quality of the Forecast BMO. The Rule Change Panel considers that allowing these updates presents no detriment to any Market Participant.

The Rule Change Panel supports the proposed change. No issues were raised during the consultation process.

**6.2.11 Minor and Administrative Amendments**

The IMO also proposed a number of minor amendments to improve the clarity and integrity of the Market Rules. The Rule Change Panel's assessment of the proposed minor amendments is provided in Table 5.

**Table 5: Minor Amendments Proposed by the IMO and the Rule Change Panel's Assessment**

Proposed Amendment	The Rule Change Panel's Assessment
Update of the Glossary definition of Balancing Market to clarify its role in the dispatch of generation in the WEM.	The Rule Change Panel supports the proposed change.
Removal of the obsolete transitional provisions in sections 1.10 and 1.11, and in clause 3.13.3AB, and their associated Glossary definitions.	Section 1.10, section 1.11 and the defined terms 'Pre-Amending Rules' and 'Post Amending Rules' have already been removed from the Market Rules. The Rule Change Panel supports the removal of clause 3.13.3AB and the related defined term 'Balancing Final Rule Change Proposal', as they relate to the commencement of the Balancing Market and are no longer required.
Update of clause 2.16.2(hC) to clarify that the Market Surveillance Data Catalogue must identify any substantial variations in Metered Balancing Quantities (i.e. the net sum of Metered Schedules less Net Contract Position) rather than Balancing Quantities (currently defined as the forecast End of Interval (EOI) Quantities provided to Market Participants by the IMO when it determines a Forecast BMO) Remove the Glossary definition 'Balancing Quantity', as the term is only used in clause	The Rule Change Panel agrees with the IMO's assessment and supports the proposed clarification and the removal of the defined term 'Balancing Quantity' from the Glossary.

Proposed Amendment	The Rule Change Panel's Assessment
2.16.2(hC) and, as discussed above, this reference is incorrect and proposed to be removed.	
Inclusion of a Glossary definition for the term 'Balancing Settlement'.	The Rule Change Panel supports the inclusion of the defined term 'Balancing Settlement' in the Glossary.
Removal of the Glossary definition 'Balancing', as the current definition ("the process for meeting supply and consumption deviations from contracted bilateral and STEM positions in each Trading Interval") is obsolete and is no longer required.	The Rule Change Panel agrees with the IMO's assessment and supports the removal of the defined term 'Balancing' from the Glossary.
Removal of the Glossary definition 'Balancing Portfolio Supply Curve', as there is no requirement for a specific term to describe the set of Balancing Price-Quantity Pairs for the Balancing Portfolio.	The Rule Change Panel agrees with the IMO's assessment and supports the removal of the defined term 'Balancing Portfolio Supply Curve' from the Glossary.
Remove the Glossary definition 'Non-Balancing Facility', as with the proposed removal of Dispatchable Loads this term becomes synonymous with Demand Side Programme Update of clauses 7.6.1C(d), 7.7.2 and 7.7.5 to refer to a 'Demand Side Programme' instead of a 'Non-Balancing Facility'.	The Rule Change Panel agrees with the IMO's assessment and supports the removal of the defined term 'Non-Balancing Facility' from the Glossary and the update of the relevant clauses.
Clarification that reflecting an Operating Instruction in a Balancing Submission might require more than bidding a specific quantity at the Minimum STEM Price in clause 7A.2.3.	The Rule Change Panel agrees with the IMO's assessment and supports the proposed clarification.
Removal of prescriptive detail about the tie-break processes for Forecast BMOs in clause 7A.3.3 and for Forecast LFAS Merit Orders in clause 7B.3.3, which is already included in the Balancing Forecast Market Procedure.	The Rule Change Panel agrees with the IMO's assessment and supports the proposed changes.
Improvements to the consistency of the names used for various LFAS quantities and constrained on and off payments.	The Rule Change Panel agrees with the IMO's assessment and supports the proposed changes.

Proposed Amendment	The Rule Change Panel's Assessment
Clarification (in the Glossary definition of 'Provisional Pricing BMO') that the Ramp Rate Limits of Non-Scheduled Generators are not used in the determination of Provisional Pricing BMOs.	The Rule Change Panel agrees with the IMO's assessment and supports the proposed clarification.
Removal of references to RCOQ(f,d,t) in clauses 4.26.2B and clause 4.26.5, as the term is no longer used in the Market Rules.	<p>The term RCOQ(f,d,t) has already been removed from clause 4.26.2B.</p> <p>The reference to RCOQ(f,d,t) in clause 4.26.5 has changed to RCOQ(f,t) since the submission of the proposal.</p> <p>The Rule Change Panel notes that the term RCOQ(f,t) has been introduced into clause 4.26.1 since the submission of the proposal. However, the reference to RCOQ(f,t) in clause 4.26.5 is still incorrect, because clause 4.26.5 relates to generation systems, while RCOQ(f,t) is defined in clause 4.26.1 as the Reserve Capacity Obligation Quantity of a Demand Side Programme.</p> <p>Therefore the Rule Change Panel supports the removal of the reference to RCOQ(f,t) in clause 4.26.5.</p>
Removal of the requirement to publish the Balancing Price in clause 10.5.1(j) as this requirement is already covered in clause 10.5.1(iA)(i)(4).	The Rule Change Panel agrees with the IMO's assessment and supports the proposed changes.
Clarification of the requirement in clause 10.5.1(iA)(ii) to publish full Balancing Submission details after seven days.	The Rule Change Panel agrees with the IMO's assessment and supports the proposed changes.
Correction of minor and typographical errors.	The Rule Change Panel agrees with the IMO's assessment and supports the proposed changes.

### 6.3 Additional Related Issues Identified by the Rule Change Panel

The Rule Change Panel identified several issues with the following related aspects of the Market Rules after the first submission period:

- reinstatement of AEMO's power to extend the STEM due to issues with Ancillary Services Data (Issue 11);
- introduction of provisions for AEMO to repeat Scheduling Day steps to rectify errors (Issue 12); and
- additional Administrative Changes.

The Rule Change Panel's assessment of these issues has not changed since the publication of the Draft Rule Change Report. The full assessment of these issues is provided in the remainder of this section.

### **6.3.1 Reinstatement of AEMO's Power to Extend the STEM due to Issues with Ancillary Services Data (Issue 11)**

As noted in the call for further submissions, prior to 1 July 2016 AEMO had the power to delay the STEM under clause 6.4.6 if it had issues receiving the information described in clause 7.2.3B (Load Forecast data and Ancillary Services data) or clause 7.3.4 (Outage data) from System Management.

The rule change made by the Minister on 1 July 2016 inadvertently removed the power for AEMO to delay the STEM for issues relating to the Ancillary Services data. However, the power to delay the STEM in the case of issues relating to the receipt of Load Forecast data and Outage data remains.

The Rule Change Panel considers that the absence of such a provision is a manifest error in the Market Rules. The Rule Change Panel has decided to make changes to the Amending Rules to reinstate AEMO's power to delay the STEM due to issues with the Ancillary Services data. The reinstatement of this power was strongly supported by submissions received in the further submission period.

### **6.3.2 Introduction of Provisions for AEMO to Repeat Scheduling Day Steps to Rectify Errors (Issue 12)**

The Market Rules also do not provide for AEMO to repeat any Scheduling Day steps and/or delay STEM timelines where required to correct errors it identifies in the Load Forecast, Ancillary Services or Outage data received from System Management. This can potentially lead to a Market Participant being unable to make a valid STEM Submission, as discussed in the call for further submissions.

The Rule Change Panel considers that the absence of such a provision is a manifest error in the Market Rules, and has decided to make changes to the Amending Rules to implement:

- a provision that allows AEMO to repeat Scheduling Day steps and/or delay STEM timelines where required to correct such errors within allowed timeframes; and
- a provision that requires AEMO to notify Market Participants if it repeats any Scheduling Day steps and/or delays any STEM timelines.

Submissions received in the further submission period supported the implementation of such provisions.

### **6.3.3 Additional Administrative Changes**

The Rule Change Panel has decided to make some additional minor changes to clauses affected by the Rule Change Proposal to:

- increase clarity; and
- correct punctuation, typographical and grammatical errors and align with standard drafting conventions.

## **6.4 Additional Amendments to the Proposed Amending Rules**

### **6.4.1 Additional Amendments following the First and Further Submission Period**

Following the first and the further submission periods, the Rule Change Panel made some additional changes to the proposed Amending Rules. A summary of these changes, originally presented in section 5.4 of the Draft Rule Change Report, is available in Appendix D of this report.

### **6.4.2 Additional Amendments following the Second Submission Period**

Following the second submission period, the Rule Change Panel has made some further additional changes to the proposed Amending Rules. The additional amendments are shown in Appendix E of this report, with a summary of these changes provided below.

The Rule Change Panel has made amendments to clause 7A.2.4A to move the restriction 'must be equal to the Scheduled Generator's Sent Out Capacity' from clause 7A.2.4A(d) into the main body of the clause as per the drafting in the Rule Change Proposal as the restriction applies to the sum of the quantities outlined in 7A.2.4A(c) and 7A.2.4A(d).

The Rule Change Panel has renumbered clause 7A.2.9A to clause 7A.2.10A to account for the possible introduction of new clauses 7A.2.9A, 7A.2.9A, 7A.2.9A by Rule Change Proposal RC\_2013\_15 (Outage Planning Phase 2 – Outage Process Refinements).

The Rule Change Panel has further amended clause 7B.2.4 to reinstate the restriction that Synergy cannot make an updated LFAS Submission for the Balancing Portfolio after LFAS Gate Closure, which had been inadvertently removed by the proposed changes.

## **6.5 Assessment against the Wholesale Market Objectives**

The Rule Change Panel considers that the Market Rules as a whole, if amended as presented in section 8 of this report, will better achieve Wholesale Market Objectives (a), (b) and (d), and are consistent with the other Wholesale Market Objectives.

The Rule Change Panel's assessment is presented below.

### **Removal of Resource Plans (Issue 1)**

The removal of Resource Plans will:

- promote economic efficiency (Wholesale Market Objective (a)) and contribute to minimising the long-term cost of electricity (Wholesale Market Objective (d)) by eliminating unnecessary processes from the Market Rules and therefore reducing administrative burden and the related unnecessary costs for Market Participants; and
- reduce the costs of participation in the WEM and therefore facilitate the efficient entry of new competitors (Wholesale Market Objective (b)).

The changes to the bidding restrictions on Facilities that do not meet the Balancing Facility Requirements will promote economic efficiency by providing greater flexibility to these Facilities (Wholesale Market Objective (a)).

### **Removal of the Dispatchable Load Facility Class (Issue 2)**

The removal of Dispatchable Loads from the Market Rules will promote economic efficiency (Wholesale Market Objective (a)) and contribute to minimising the long-term cost of electricity (Wholesale Market Objective (d)) by eliminating a Facility Class that has provided no benefit to the WEM and imposes ongoing administrative and system costs on the market.

### **Extension of the STEM Submission Window (Issue 3)**

The extension of the STEM Submission window will promote economic efficiency (Wholesale Market Objective (a)) and encourage competition among generators and retailers (Wholesale Market Objective (b)) by reducing the risks for Market Participants of not meeting the deadline for making a valid STEM Submission.

### **Clarification of STEM Submission Parameter Update Process (Issue 4), Clarification of Interaction between Forecast and Final BMOs and LFAS Merit Orders (Issue 7) and Clarification of Balancing Submission Quantities (Issue 9)**

The changes will increase the clarity of the Market Rules.

### **Removal of Obligation to Access STEM Auction Results (Issue 5), Removal of Section 7.5 Obligation to Provide Fuel Declaration Updates (Issue 6) and Removal of Requirement for System Management and Synergy to Meet Monthly (Issue 8)**

The changes will promote economic efficiency (Wholesale Market Objective (a)) and contribute to minimising the long-term cost of electricity (Wholesale Market Objective (d)) by eliminating unnecessary processes from the Market Rules.

### **Update of Non-Scheduled Generator Forecast after Balancing Gate Closure (Issue 10)**

Allowing Market Participants to update the forecast output quantities in Non-Scheduled Generator Balancing Submissions after Balancing Gate Closure will promote economic efficiency (Wholesale Market Objective (a)) by improving the accuracy of Forecast BMOs and Balancing Forecasts.

### **Reinstatement of AEMO's Power to Extend the STEM due to Issues with the Ancillary Services Data (Issue 11) and Introduction of Provisions for AEMO to Repeat Scheduling Day Steps to Rectify Errors (Issue 12)**

The changes will promote economic efficiency (Wholesale Market Objective (a)) by allowing AEMO to recover from Scheduling Day issues caused by errors in key input data and ensure the effective operation of the STEM Auction process.

## **6.6 Protected Provisions, Reviewable Decisions and Civil Penalties**

The Amending Rules include changes to clauses 2.13.9, 2.16.2, 2.16.4, 2.16.12, 2.22A.1, 2.36.1 and 9.13.1 which are Protected Provisions. Under clause 2.8.3 of the Market Rules, the Amending Rules in the Rule Change Proposal need approval by the Minister if they affect a Protected Provision.

The Amending Rules include the removal of clauses 2.29.8, 6.5.1A and 7.5.5, which are civil penalty provisions. In addition, clauses 2.34.3, 2.35.1, 7.6A.5(e), 7A.2.8, 7A.2.9, 7A.2.13 and 7B.2.10, are amended, and are also civil penalty provisions. The Rule Change Panel considers that the proposed changes do not affect the suitability of these clauses to be civil penalty provisions.

The Rule Change Panel has engaged with the PUO during the second submission period regarding the amendments to Market Rules that are civil penalty provisions. The PUO noted that it had no concerns regarding the amendments affecting civil penalty provisions.

The Amending Rules do not affect any Reviewable Decisions.

## **6.7 Cost and Practicality of Implementation**

### **6.7.1 Cost**

In its second period submission, AEMO confirmed that its cost for implementing the proposed changes should not exceed \$320,000, as stated in the Draft Rule Change Report.

In its response to the call for further submissions, Alinta Energy noted that the Rule Change Proposal will have implications for its IT and business systems. However, Alinta Energy considers that these changes can largely be progressed within its current IT change program, do not represent significant additional cost, and will not require additional resources to complete. Alinta Energy also indicated that it will need to update its internal procedures and training documentation but that these amendments can be incorporated into its business as usual activities.

In its first period submission, Community Electricity noted that it will not incur any costs due to the proposed changes.

In its further period submission, Carnegie Clean Energy noted that it will not incur costs to incorporate the Rule Change Proposal but may avert future costs as a consequence of this Rule Change Proposal.

In its further period submission and second period submission, Perth Energy noted that it will need to make minor changes to internal procedures and IT systems as a result of the proposed changes. Perth Energy did not provide any information about the cost of these changes.

### **6.7.2 Practicality**

In its second period submission, AEMO requested that the commencement of the Amending Rules be extended by two months to 1 July 2019, so that the implementation of the required (significant) system changes can be scheduled appropriately in AEMO's current project pipeline.

AEMO also indicated in its second period submission that its ability to implement RC\_2014\_06 within the proposed timeframe is dependent on the Economic Regulation Authority's (ERA) determination in respect to AEMO's supplementary Allowable Revenue submission covering the 2018/19 financial year. AEMO did not include a specific allowance for delivery of RC\_2014\_06 in its Allowable Revenue submission to the ERA, but indicated that it is confident there will be sufficient budget within the allowed variation from its Forecast Capital Expenditure approved by the ERA to enable it to implement RC\_2014\_06.

AEMO noted that the ERA's determination is not expected until November 2018 and suggests that a review of the implementation date for RC\_2014\_06 may be required following this decision.

Perth Energy expressed the view in its out of session submission that implementation of the proposed changes should not be delayed due to the implementation of other, less time critical changes, including:

- the move of System Management IT systems from Western Power to AEMO;
- the amendments to the prudential regime; and
- the deferral of the Reserve Capacity Cycle to allow Generator Interim Access participants to apply.

Alinta Energy noted in its further period submission that, while it has yet to see any specification documents on the changes to the submission formats, it expects any changes to be reasonably simple to implement for Market Participants within the time that AEMO requires.

In its first period submission, Community Electricity noted that the proposed changes have no implications for Community Electricity.

In its further period submission Carnegie Clean Energy noted that it requires no lead time to implement any changes as a result of the Rule Change Proposal.

In its further period submission and second period submission, Perth Energy noted that it expects that it can make the necessary changes relatively quickly once the Amending Rules have been confirmed.

### **6.7.3 Amendments to Associated Market Procedures**

AEMO is the Responsible Procedure Administrator for a number of Market Procedures and Power System Operation Procedures (PSOPs) that will be affected by the Amending Rules, including:

- Market Procedure: Balancing Facility Requirements;
- Balancing Market Forecast Procedure;
- Market Procedure: Data and IT Interface Requirements;
- AEMO's Monitoring and Reporting Protocol;
- IMS Interface Market Procedure;
- Market Procedure: Determining Loss Factors;
- Market Procedure: Settlement;
- Market Procedure: Certification of Reserve Capacity;
- Market Procedure: Reserve Capacity Testing;
- Market Procedure: Information Confidentiality;
- PSOP: Ancillary Services;
- PSOP: Communications and control systems;
- PSOP: Dispatch;
- PSOP: Power System Security;
- PSOP: Operational Data Points for Generating Plant; and
- PSOP: Operational Data Points for Non-Western Power Networks, Substations and Loads.

Changes will also be required to a range of other market documents published by AEMO, including market design summaries and user guides.

The ERA is the Responsible Procedure Administrator for the ERA's Monitoring Protocol that may be affected by the Amending Rules.

### **6.7.4 Assessment of Cost and Practicality**

In the Draft Rule Change Report, the Rule Change Panel asked Market Participants to provide information on any net cost savings from the proposed changes in RC\_2014\_06 to



assist the Rule Change Panel with its assessment of the proposal. Market Participants did not provide any responses to this request, but previously in the consultation process indicated that the changes would reduce IT development and ongoing operational costs.

Throughout the consultation process Market Participants were strongly supportive of the benefits of the proposal and indicated that they would incur little or no costs to implement the proposal.

Therefore, the Rule Change Panel has not conducted a formal cost-benefit analysis of RC\_2014\_06. However, the Rule Change Panel is of the view that AEMO's costs to implement RC\_2014\_06 (no more than \$320,000) are justified by:

- the likely administrative and ongoing IT cost savings for AEMO from not having to support the Resource Plan process;
- the likely administrative cost savings for Market Participants from not having to submit Resource Plans on a daily basis; and
- the significant benefits that will be derived from implementing the proposal, as enumerated in section 7.1.

The Rule Change Panel considers AEMO's proposed timeframe for RC\_2014\_06 (1 July 2019) is reasonable and agrees that the commencement date should account for AEMO's workload resulting from other rule changes.

The Rule Change Panel expects that AEMO's costs to implement RC\_2014\_06 are sufficiently small relative to AEMO's overall capital budget for the WEM, so it should be able to manage implementation within the timeframe specified in section 8.1. However, the Rule Change Panel can reconsider the commencement date if any budgetary issues arise that prevent AEMO from meeting the provisional commencement date.

## 7. The Rule Change Panel's Decision

Based on the considerations set out in this report, the Rule Change Panel's final decision is to accept the Rule Change Proposal in a modified form, as set out in section 8 of this Final Rule Change Report.

### 7.1 Reasons for the Decision

The Rule Change Panel has made its decision on the basis that the Amending Rules, as amended following the first, further, and second submission periods:

- will remove unnecessary processes and costs from the Market Rules through:
  - the removal of Resource Plans (Issue 1);
  - the removal of Dispatchable Loads (Issue 2);
  - the removal of unnecessary obligations relating to the access of STEM Auction results (Issue 5);
  - the removal of section 7.5 obligations to provide Fuel Declaration updates (Issue 6); and
  - the removal of the requirement for System Management and Synergy to meet monthly (Issue 8);

- will reduce the risk for Market Generators to incur Reserve Capacity Refunds without reducing the value that the market receives from the associated Reserve Capacity through:
  - the removal of Resource Plans (Issue 1); and
  - the extension of the STEM Submission window (Issue 3);
- will increase consistency between the treatment of Synergy and IPPs through the removal of Resource Plans (Issue 1);
- will reduce the risk for Market Participants to miss out on participation in the STEM through the extension of the STEM Submission window (Issue 3);
- will facilitate improvements to the accuracy of Forecast BMOs through the update of Non-Scheduled Generator Forecasts after Balancing Gate Closure (Issue 10);
- will remove several manifest errors from the Market Rules through:
  - the removal of Dispatchable Loads (Issue 2);
  - the reinstatement of AEMO's power to extend the STEM (Issue 11); and
  - the introduction of provisions for AEMO to repeat Scheduling Day steps (Issue 12);
- will increase the clarity of the Market Rules through:
  - the clarification of the STEM Submission parameter update process (Issue 4);
  - the clarification of the interaction between forecast and final BMO/LFAS Merit Orders (Issue 7);
  - the clarification of Balancing Submission quantities (Issue 9); and
  - general amendments;
- will allow the Market Rules to better achieve Wholesale Market Objectives (a), (b) and (d); and will be consistent with the remaining Wholesale Market Objectives; and
- are supported by the MAC.

Additional detail outlining the analysis behind the Rule Change Panel's decision is outlined in section 6 of this report.

## 8. Amending Rules

### 8.1 Commencement

Subject to Ministerial approval, the Amending Rules commence at 8:00 AM on 1 July 2019.

### 8.2 Amending Rules

The Rule Change Panel has decided to implement the following Amending Rules (~~deleted text~~, added text, clauses that are included for context but not amended):

...

2.13.9. System Management must monitor Rule Participants for breaches of the following clauses:

...

(hB) ~~clause 7.5.5~~[Blank];

...

...

2.16.2. AEMO must develop a Market Surveillance Data Catalogue, which identifies data to be compiled concerning the market. The Market Surveillance Data Catalogue must identify the following data items:

...

(hC) any substantial variations in Balancing Prices, Non-Balancing Facility Dispatch Instruction Payments or Metered Balancing Quantities relative to recent past behaviour;

(i) the capacity available from Balancing Facilities through the Balancing Market~~from Balancing Facilities, Dispatchable Loads~~ and from Demand Side Programmes specified in the Non-Balancing Dispatch Merit Order;

...

...

2.16.4. AEMO must undertake the following analysis of the data identified in the Market Surveillance Data Catalogue to calculate relevant summary statistics:

(a) where applicable, calculation of the means and standard deviations of values in the Market Surveillance Data Catalogue;

(b) monthly, quarterly and annual moving averages of ~~prices for the STEM Auctions, the Balancing Market and the LFAS Market~~ STEM Clearing Prices, Balancing Prices and LFAS Prices;

(c) statistical analysis of the volatility of ~~prices in the STEM Auctions, the Balancing Market and the LFAS Market~~ STEM Clearing Prices, Balancing Prices and LFAS Prices;

(cA) any consistent or significant variations between the Fuel Declarations, Availability Declarations, and Ancillary Service Declarations for, and the actual operation of, a Market Participant facility in real-time;

(d) the proportion of time ~~the prices in the STEM Auctions and through~~ Balancing STEM Clearing Prices and Balancing Prices are at each Energy Price Limit;

(e) correlation between capacity offered into the STEM Auctions and the incidence of high ~~prices~~ STEM Clearing Prices;

(f) correlation between capacity offered into and made available in the Balancing Market and the incidence of high ~~prices~~ Balancing Prices;

- (fA) correlation between capacity offered into and made available in the LFAS Market and the incidence of high ~~prices~~ LFAS Prices;
- (g) exploration of the key determinants for high ~~prices in the STEM, in Balancing, in the Balancing Market and in the LFAS Market~~ STEM Clearing Prices, Balancing Prices and LFAS Prices, including determining correlations or other statistical analysis between explanatory factors that AEMO considers relevant and price movements; and
- (h) such other analysis as AEMO considers appropriate or is requested of AEMO by the Economic Regulation Authority.

...

2.16.12. A report referred to in clause 2.16.11 must contain but is not limited to the following:

...

- (b) the Economic Regulation Authority's assessment of the effectiveness of the market, including the effectiveness of, AEMO (including in its capacity as System Management) in carrying out ~~their~~ its functions, with discussion of each of:
  - i. the Reserve Capacity ~~market~~ Mechanism;
  - ii. the market for bilateral contracts for capacity and energy;
  - iii. the STEM;
  - iv. the Balancing Market;

...

...

...

2.22A.1. For the purposes of this ~~clause~~ section 2.22A, the services provided by AEMO ~~are; are—~~

- (a) market operation services, including AEMO's operation of the Reserve Capacity Mechanism, STEM ~~and~~, Balancing Market and LFAS Market and settlement and information release functions;

...

...

2.26.3. The Economic Regulation Authority must review the methodology for setting the Benchmark Reserve Capacity Price and the Energy Price Limits not later than the fifth anniversary of the first Reserve Capacity Cycle and, subsequently, not later than the fifth anniversary of the completion of the preceding review under this clause 2.26.3. A review must examine:

...

- (h) the performance of Reserve Capacity Auctions, STEM Auctions and the Balancing Market in meeting the Wholesale Market Objectives; and

...

...

2.27.1. Network Operators must, in accordance with this section 2.27, calculate and provide to AEMO Loss Factors for:

- (a) each connection point in their Networks at which any of the following is connected:
  - i. a Scheduled Generator;
  - ii. a Non-Scheduled Generator;
  - iii. an Interruptible Load; or
  - iv. ~~a Dispatchable Load; or~~ [Blank]
  - v. a Non-Dispatchable Load equipped with an interval meter; and
- (b) in the case of Western Power, the Notional Wholesale Meter.

...

2.27.5. In calculating Loss Factors, Network Operators must apply the following principles:

...

- (d) a specific Loss Factor must be calculated for each:
  - i. Scheduled Generator;
  - ii. Non-Scheduled Generator;
  - iii. Interruptible Load; and
  - iv. ~~Dispatchable Load; and~~ [Blank]
  - v. Non-Dispatchable Load above 7000 kVA peak consumption;

...

...

2.27.15. A Market Participant may apply to AEMO for a reassessment of any Transmission Loss Factor or Distribution Loss Factor applying to a Scheduled Generator, Non-Scheduled Generator, Interruptible Load, ~~Dispatchable Load~~ or Non-Dispatchable Load registered to that Market Participant. The following requirements apply to each application for reassessment:

...

...

2.29.1A. The Facility Classes are:

- (a) a Network;
- (b) a Scheduled Generator;
- (c) a Non-Scheduled Generator;
- (d) an Interruptible Load; and
- (e) ~~a Dispatchable Load; and~~ [Blank]
- (f) a Demand Side Programme.

...

2.29.5. Subject to clauses 2.29.9 and 2.29.8A, a Market Customer that owns, operates or controls a Load: may register that Load as an Interruptible Load if that Load has equipment installed to cause it to be interrupted in response to under frequency situations.

~~(a) — may register that Load as an Interruptible Load if that Load has equipment installed to cause it to be interrupted in response to under frequency situations;~~

~~(b) — [Blank]~~

~~(c) — may register that Load as a Dispatchable Load if that Load:~~

~~i. — is able to respond to instructions from System Management to increase or decrease consumption; and~~

~~ii. — has a rated capacity of not less than 0.2 MW.~~

...

~~2.29.8. A Rule Participant must ensure a Dispatchable Load registered by that Rule Participant is able to respond to instructions from System Management to increase or decrease consumption. [Blank]~~

2.29.8A. A Rule Participant must ensure that an Interruptible Load ~~or Dispatchable Load~~ registered by that Rule Participant is equipped with an interval meter.

...

2.30B.2. For a Load or part of a Load to be eligible to be an Intermittent Load AEMO must be satisfied that the following conditions are met:

- (a) a generation system must exist:
  - i. which can typically supply the maximum amount of that Load to be treated as Intermittent Load either in accordance with clause 2.30B.11 or without requiring energy to be withdrawn from a Network. Where clause 2.30B.11 applies then, for the purpose of this clause 2.30B.2(a)(i), the amount that the generation system can supply must be Loss Factor adjusted from the connection point of

- the generation system to the connection point of the Intermittent Load;
- ii. the output of which is netted off consumption of the Load either in accordance with clause 2.30B.12 or by the meter registered to that Load; and
  - iii. which would in the view of AEMO, if it were not serving an Intermittent Load, be eligible to hold an amount of Certified Reserve Capacity, determined in accordance with clause 2.30B.4, at least sufficient to supply the amount of energy that the generation system is required by clause 2.30B.2(a)(i) to be able to supply while simultaneously being able to satisfy obligations on any Capacity Credits associated with that generation system;
- (b) the Intermittent Load shall reasonably be expected to have net consumption of energy (based on Metered Schedules calculated in accordance with the methodology prescribed in clause 2.30B.10) for not more than 4320 Trading Intervals in any Capacity Year;
  - (c) the Market Customer for that Load must have an agreement in place with a Network Operator to allow energy to be supplied to the Load from a Network; and
  - (d) ~~the Load is an Interruptible Load or a Non-Dispatchable Load; and~~ [Blank]
  - (e) the Load is not expected (based on applications accepted by AEMO under clause 2.29.5D and any amendments accepted by AEMO under clause 2.29.5K) to be associated with any Demand Side Programme for any period following the registration of the Load or part of the Load as an Intermittent Load.

...

2.30B.13. Where a generation system described in clause 2.30B.2(a) satisfies the requirements of clause 2.30B.11 and is associated with an Intermittent Load then that generation system is to be deemed to be at the location of the Intermittent Load with respect to its inclusion in Bilateral Submissions, and STEM Submissions, ~~and Resource Plans.~~

...

2.34.3. A Rule Participant that seeks to change its Standing Data, other than Standing Data changed in accordance with the processes set out in clauses sections 6.2A, 6.3C, ~~6.5C~~ or 6.11A, must notify AEMO of:

- (a) the revisions it proposes be made to its Standing Data;
- (b) the reason for the change; and
- (c) the date from which the revision will take effect.

...

- 2.34.8. Other than Standing Data changed in accordance with the processes set out in ~~clauses sections~~ 6.2A, 6.3C, ~~6.5C~~ or 6.11A, AEMO must notify the Rule Participant of its acceptance or rejection of the change in Standing Data as soon as practicable, and no later than three Business Days after the later of:
- (a) the date of notification described in clause 2.34.3; and
  - (b) if AEMO makes a request under clause 2.34.6, the date on which the information requested is received by AEMO.

...

Amendments to clause 2.34.14 are also proposed in RC\_2014\_07 (Omnibus Rule Change). If RC\_2014\_07 is approved within the timeline in the Rule Change Panel's current work program, it is likely that the Amending Rules proposed in RC\_2014\_07 will commence before the Amending Rules in this Final Rule Change Report. The Rule Change Panel will delay any commencement of changes to clause 2.34.14 under RC\_2014\_07 until after the commencement of RC\_2014\_06.

- 2.34.14. AEMO must commence using revised Standing Data from:
- (a) 8:00 AM on the Scheduling Day following AEMO's acceptance of the revised Standing Data in the case of:
    - i. Standing STEM Submissions;
    - iA. Standing Bilateral Submissions;
    - ~~iB. Standing Resource Plan Submissions;~~
    - ii. ~~Consumption Increase Prices~~, Consumption Decrease Prices and Extra Consumption Decrease Prices; and
    - iii. Standing Data changes stemming from acceptance of an application under clause 6.6.9,with the exception that the previous Standing Data remains current for the purpose of settling the Trading Day that commences at the same time as that Scheduling Day; and
  - (b) as soon as practicable in the case of any other revised Standing Data.

...

- 2.35.1. Market Participants with Scheduled Generators, Non-Scheduled Generators, ~~Dispatchable Loads~~ and Demand Side Programmes that are not under the direct control of System Management must maintain communication systems that enable communication with System Management for dispatch of those Registered Facilities.

...

- 2.36.1. Where AEMO uses software systems to determine Balancing Prices, to determine Non-Balancing Facility Dispatch Instruction Payments, to determine LFAS Prices,



in the Reserve Capacity Auction, in the STEM Auction or for settlement processes, it must:

- (a) maintain a record of which version of software was used in producing each set of results, and maintain records of the details of the differences between each version and the reasons for the changes between versions;
- (b) maintain each version of the software in a state where results produced with that version can be reproduced for a period of at least 4 one year from the release date of the last results produced with that version;

...

...

2.37.5. When determining a Market Participant's Credit Limit AEMO must take into account:

...

- (e) the Market Participant's historical level of Balancing ~~settlement~~ Settlement payments under clause 9.8.1, or an estimate of the Market Participant's future level of Balancing ~~settlement~~ Settlement payments based on its expected transactions in the Balancing Market where no historical Balancing ~~settlement~~ Settlement payment data is available;

...

...

3.9.2. Spinning Reserve Service is the service of holding capacity associated with a synchronised Scheduled Generator, ~~Dispatchable Load~~ or Interruptible Load in reserve so that the relevant Facility is able to respond appropriately in any of the following situations:

- (a) to retard frequency drops following the failure of one or more generating works or transmission equipment; and
- (b) in the case of Spinning Reserve Service provided by Scheduled Generators ~~and Dispatchable Loads~~, to supply electricity if the alternative is to trigger involuntary load curtailment.

~~(c) — [Blank]~~

...

3.9.6. Load Rejection Reserve Service is the service of holding capacity associated with a Scheduled Generator ~~or Dispatchable Load~~ in reserve so that: the Scheduled Generator can reduce output rapidly in response to a sudden decrease in SWIS load.

~~(a) — the Scheduled Generator can reduce output rapidly; or~~

~~(b) — the Dispatchable Load can increase consumption rapidly;~~

~~in response to a sudden decrease in SWIS load.~~

...

3.13.2. ~~Payments for usage~~ Market Participants pay for the use of Ancillary Services ~~are achieved~~ through the operation of the ~~Balancing mechanism~~ Ancillary Service settlement process, ~~and no additional payments will be due to System Management for the use of Ancillary Services in section 9.9.~~

...

3.13.3A. ~~Subject to clause 3.13.3AB, for~~ For each Financial Year, by 31 March prior to the start of that Financial Year, the Economic Regulation Authority must determine values for the parameters Margin\_Peak and Margin\_Off-Peak, taking into account the Wholesale Market Objectives and in accordance with the following:

...

~~3.13.3AB. During the period:~~

- ~~(a) — from 8:00 AM on the Balancing Market Commencement Day to 8:00 AM on 1 July 2013:~~
  - ~~i. — the Margin\_Peak value is, subject to clause 3.13.3AB(b), the value determined by the Economic Regulation Authority and published on the Market Web Site; and~~
  - ~~ii. — the Margin\_Off-Peak value is, subject to clause 3.13.3AB(b), the value determined by the Economic Regulation Authority and published on the Market Web Site;~~
- ~~(b) — if the Economic Regulation Authority has not determined a Margin\_Peak or Margin\_Off-Peak value under clause 3.13.3AB(a) by 8:00 AM on the Balancing Market Commencement Day, then any such value is to be the value determined by AEMO and published on the Market Web Site as soon as reasonably practicable after the Balancing Market Commencement Day;~~
- ~~(c) — in determining values for Margin\_Peak and Margin\_Off-Peak under clause 3.13.3AB(a) the Economic Regulation Authority must undertake a public consultation process, which must include publishing an issues paper and issuing an invitation for public submissions;~~
- ~~(d) — when determining a value for the parameter Margin\_Peak under this clause 3.13.3AB the Economic Regulation Authority or AEMO, as applicable, must take account of~~
  - ~~i. — the margin Synergy could reasonably have been expected to earn on energy sales foregone due to the supply of Spinning Reserve during Peak Trading Intervals; and~~
  - ~~ii. — the loss in efficiency of Synergy's Scheduled Generators that System Management has scheduled (or caused to be scheduled) to provide Spinning Reserve during Peak Trading Intervals that could~~

~~reasonably be expected due to the scheduling of those reserves;  
and~~

- ~~(e) when determining a value for the parameter Margin\_Off-Peak under this clause 3.13.3AB the Economic Regulation Authority or AEMO, as applicable, must take account of:~~
- ~~i. the margin Synergy could reasonably have been expected to earn on energy sales foregone due to the supply of Spinning Reserve during Off-Peak Trading Intervals; and~~
  - ~~ii. the loss in efficiency of Synergy's Scheduled Generators that System Management has scheduled (or caused to be scheduled) to provide Spinning Reserve during Off-Peak Trading Intervals that could reasonably be expected due to the scheduling of those reserves.~~

...

4.1.26. Reserve Capacity Obligations apply:

- (a) in the case of the first Reserve Capacity Cycle:
  - i. from the Initial Time, for Facilities that were commissioned before Energy Market Commencement;
  - ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), for Scheduled Generators and Non-Scheduled Generators commissioned between Energy Market Commencement and 30 November 2007, inclusive; and
  - iii. from the Trading Day commencing on 1 October 2007 for Interruptible Loads, ~~Curtailable Loads or Dispatchable Loads~~ commissioned after Energy Market Commencement;

...

...

4.10.1. Each Market Participant must ensure that information submitted to AEMO with an application for certification of Reserve Capacity pertains to the Reserve Capacity Cycle to which the certification relates, and is supported by documented evidence and includes, where applicable, except to the extent that it is already accurately provided in Standing Data, the following information:

...

- (bA) with the exception of applications for Conditional Certified Reserve Capacity, the ~~following; following—~~

...

- (c) if the Facility, or part of the Facility, is yet to enter service:

- i. [Blank]
- ii. with the exception of applications for Conditional Certified Reserve Capacity, evidence that any necessary Environmental Approvals have been granted or evidence supporting the Market Participant's expectation that any necessary Environmental Approvals will be granted in time to have the Facility meet its Reserve Capacity Obligations by the date specified in clause 4.10.1(c)(iii)(7); and
- iii. the Key Project Dates occurring after the date the request is submitted, including, if applicable, but not limited to:
  - 1. when all approvals will be finalised or, in the case of Interruptible Loads and Demand Side Programmes, when all required contracts will be in place;
  - 2. when financing will be finalised;
  - 3. when site preparation will begin;
  - 4. when construction will commence;
  - 5. when generating equipment ~~or Dispatchable Load equipment~~ will be installed or, in the case of Interruptible Loads and Demand Side Programmes, when all required control equipment will be in place;
  - 6. when the Facility, or part of the Facility, will be ready to undertake Commissioning Tests; and
  - 7. when the Facility, or part of the Facility, will have completed all Commissioning Tests and be capable of meeting Reserve Capacity Obligations in full;

...

(e) for a generation system other than an Intermittent Generator:

...

- v. details of primary and any alternative fuels,<sup>9</sup> ~~including~~ including—
  - 1. where the Facility has primary and alternative ~~fuels~~ fuels—

...

...

...

(f) for Interruptible Loads, and Demand Side Programmes; ~~and Dispatchable Loads~~—

- i. the Reserve Capacity that the Market Participant expects to make available from each of up to three blocks of capacity;

<sup>9</sup> A Facility may satisfy its fuel obligations using a combination of primary and alternative fuels.

- ii. the maximum number of hours that the Interruptible Load, or Demand Side Programme ~~or Dispatchable Load is will be~~ available to provide Reserve Capacity during a Capacity Year, which must be at least 200 hours;
- iii. the maximum number of hours per day that the Facility ~~is~~ will be available to provide Reserve Capacity if issued a Dispatch Instruction, where this must be ~~not less than~~ at least twelve hours;
- iv. [Blank]
- v. the minimum notice period required for dispatch under clause 7.6.1C(e) of the Facility;
- vi. the periods when the Facility can be dispatched, which must include the period between 8:00 AM and 8:00 PM on all Business Days; and

...

...

...

4.11.4. Subject to clause 4.11.12, when assigning Certified Reserve Capacity to an Interruptible Load, or a Demand Side Programme ~~or Dispatchable Load~~, AEMO must assign an Availability Class to apply to that Certified Reserve Capacity as ~~follows: follows—~~

- (a) Availability Class 1 where AEMO reasonably expects the Facility to be available to be dispatched for all Trading Intervals in a Capacity Year, allowing for Outages and any restrictions on the availability specified by the applicant under clause 4.10.1(g); or
- (b) Availability Class 2 otherwise.

...

4.12.1. The Reserve Capacity Obligations ~~of a~~ for each Market Participant holding Capacity Credits are as follows:

- (a) a Market Participant ~~(other than Synergy)~~ must ensure that for each Trading Interval:
  - i. the aggregate MW equivalent of the quantity of Capacity Credits held by the Market Participant applicable in that Trading Interval for Interruptible Loads and Demand Side Programmes registered to the Market Participant; plus
  - ii. the MW quantity calculated by doubling ~~the net MWh quantity of energy to be sent out during the Market Participant's Net Contract Position in MWh for~~ the Trading Interval, corrected for Loss Factor adjustments so as to be a sent out quantity by Facilities registered by that Market Participant; plus

- ~~iiA. if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load, during that Trading Interval as indicated in the applicable Resource Plan; plus~~
- iii. the MW quantity calculated by doubling the total MWh quantity covered by STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction determined by AEMO for that Market Participant under clause section 6.9 for that Trading Interval, corrected for loss factor adjustments so as to be a sent out quantity; plus
- iv. capacity expected to experience a Forced Outage at the time that STEM submissions were due which becomes available in real time, is not less than the total Reserve Capacity Obligation Quantity for that Trading Interval for all Facilities registered to ~~the that~~ Participant Participant, less double the total MWh quantity to be provided as Ancillary Services as specified by AEMO for that Market Participant in accordance with clause 6.3A.2(e)(i).

(b) ~~Synergy must ensure that for each Trading Interval:~~

- ~~i. the aggregate MW equivalent of the quantity of Capacity Credits held by Synergy applicable in that Trading Interval for Interruptible Loads and Demand Side Programmes registered to it; plus~~
- ~~ii. the MW quantity calculated by doubling the total MWh quantity which Synergy is selling to other Market Participants as indicated by the applicable Net Contract Position of Synergy, corrected for loss factor adjustments so as to be a sent out quantity; plus~~
- ~~iii. the MW quantity calculated by doubling the total MWh quantity covered by STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction determined by AEMO for Synergy clause 6.9 for that Trading Interval, corrected for loss factor adjustments so as to be a sent out quantity; plus~~
- ~~iv. capacity expected to experience a Forced Outage at the time that STEM submissions were due which becomes available in real time, is not less than the total Reserve Capacity Obligation Quantity for Synergy for that Trading Interval, less double the total MWh quantity to be provided as Ancillary Services as specified by AEMO for Synergy in accordance with clause 6.3A.2(e)(i). [Blank]~~

- (c) the Market Participant must make the capacity associated with the Capacity Credits provided by a Facility applicable to a Trading Interval, up to the Reserve Capacity Obligation Quantity for the Facility for that Trading

Interval, available for dispatch by System Management in accordance with Chapter 7.

...

4.12.4. Subject to clause 4.12.5, where AEMO establishes the initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:

...

(c) for Interruptible Loads, ~~and Demand Side Programmes~~ ~~and Dispatchable Loads~~, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:

...

...

4.18.1. A Market Participant must ensure that its Reserve Capacity Offers include the following information:

- (a) the identity of the Market Participant submitting the Reserve Capacity Offer;
- (b) the identity of the Market Participant's Facility covered by the Reserve Capacity Offer;
- (c) for Interruptible Loads ~~and Dispatchable Loads~~, a single Price-Quantity Pair for each block of Certified Reserve Capacity associated with the Facility; and
- (d) for every other Facility, a single Price-Quantity Pair for each Facility.

4.18.2. Each Reserve Capacity Price-Quantity Pair must comprise:

...

(d) if the Facility is an Interruptible Load ~~or Dispatchable Load~~, the Availability Class of that Price-Quantity Pair, as specified by AEMO in assigning Certified Reserve Capacity to that Facility in accordance with section 4.11.

...

4.25.2. ~~The verification referred to in clause 4.25.1 can be achieved by AEMO~~ AEMO may verify the matters specified in clause 4.25.1 by:

...

(c) in the case of an Interruptible Load ~~or Dispatchable Load~~, testing (in its capacity as System Management), in accordance with clause 4.25.9, the Facility's ability to reduce demand to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval and the Facility successfully passing that test.

...

4.25.4. Subject to clause 4.25.3B, if a Facility fails a Reserve Capacity Test requested by AEMO under clause 4.25.2, AEMO (in its capacity as System Management) must re-test that Facility in accordance with clause 4.25.2, not earlier than 14 days and not later than 28 days after the first Reserve Capacity Test. If the Facility fails this second Reserve Capacity Test, then AEMO must, from the second Trading Day following the Scheduling Day on which AEMO determines that the second Reserve Capacity Test was failed:

...

- (b) if the Reserve Capacity Test related to a ~~Dispatchable Load~~, Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to the maximum level of reduction achieved in either of the two Reserve Capacity Tests.

...

4.26.2. AEMO must determine the net STEM shortfall (“Net STEM Shortfall”) in Reserve Capacity supplied by each Market Participant *p* holding Capacity Credits associated with a generation system in each Trading Interval *t* ~~as:as—~~

$$SF(p, t) = \text{Max}(RCDF(p, t), RCOQ(p, t) - A(p, t)) - RCDF(p, t)$$

~~where:Where—~~

$$A(p, t) = \text{Min}(RCOQ(p, t), CAPA(p, t));$$

RCOQ(*p*,*t*) for Market Participant *p* and Trading Interval *t* is equal ~~to:to—~~

- (a) the total Reserve Capacity Obligation Quantity of Market Participant *p*’s unregistered facilities that have Reserve Capacity Obligations, excluding Loads that can be interrupted on request; plus
- (b) the sum of the product ~~of:of—~~
  - i. the factor described in clause 4.26.2B as it applies to Market Participant *p*’s Registered Facilities; and
  - ii. the Reserve Capacity Obligation Quantity for each Facility, for all Market Participant *p*’s Registered Facilities, excluding Demand Side Programmes,

CAPA(*p*,*t*) ~~is~~ for Market Participant *p* and Trading Interval *t* ~~is:t—~~

- (c) equal to RCOQ(*p*,*t*) for a Trading Interval where the STEM Auction has been suspended by AEMO in accordance with section 6.10;
- (d) subject to clause 4.26.2(c), ~~for the case where Market Participant *p* is not Synergy~~, the sum ~~of:of—~~
  - i. the Reserve Capacity Obligation Quantities in Trading Interval *t* of that Market Participant’s Interruptible Loads; plus
  - ii. the MW quantity calculated by doubling ~~the net MWh quantity of energy sent out by Facilities registered by~~ that Market Participant’s ~~during that Trading Interval calculated~~



~~as the Net Contract Position in MWh for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A less the shortfall as indicated by the applicable Resource Plan; plus~~

- ~~iiA. if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus~~
  - iii. the MW quantity calculated by doubling the total MWh quantity covered by the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by AEMO for that Market Participant under section 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
  - iv. double the total MWh quantity to be provided as Ancillary Services as specified by AEMO in accordance with clause 6.3A.2(e)(i) for that Market Participant corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
  - v. the greater of zero and  $(BSFO(p,t) - RTFO(p,t))$ ; ~~and~~
- ~~(e) subject to clause 4.26.2(c), for the case where Market Participant p is Synergy, the sum of —~~
- ~~i. the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads; plus~~
  - ~~ii. the MW quantity calculated by doubling the total MWh quantity of energy that Synergy is selling to other Market Participants as indicated by the Net Contract Position for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus~~
  - ~~iii. the MW quantity calculated by doubling the total MWh quantity of the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by AEMO for that Market Participant under section 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus~~

- iv. ~~double the total MWh quantity to be provided as Ancillary Services as specified by AEMO in accordance with clause 6.3A.2(e)(i) for Synergy corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus~~
- v. ~~the greater of zero and (BSFO(p,t) – RTFO(p,t)).~~

$$RCDF(p, t) = RTFO(p, t) + RTNREPO(p, t);$$

$$RTNREPO(p, t) = \sum_{f \in F} (\text{Max}(0, NREPO(f, t) - BSPO(f, t)));$$

NREPO(f,t) is the total MW quantity of Refund Payable Planned Outage associated with Facility f for Trading Interval t;

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

F is the set of Scheduled Generators registered to Market Participant p, and f is a Facility within that set;

BSFO(p,t) is the total MW quantity of Forced Outage associated with Market Participant p before the STEM Auction for Trading Interval t, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as recorded in accordance with section 7.3; and

RTFO(p,t) is the total MW quantity of Forced Outage associated with Market Participant p in real-time for Trading Interval t, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as recorded in accordance with clause 7.13.1A(b).

...

- 4.26.2B. AEMO is to set the factor described in the definition of RCOQ(p,t) in clause 4.26.2 to equal one in all situations except for Scheduled Generators, and Non-Scheduled Generators ~~and Dispatchable Loads~~ with Loss Factors less than one, in which ~~event case~~ the factor must equal the facilities Facility's Loss Factor.

...

- 4.26.5. To support the calculation of the values of RCOQ(p,t) ~~and RCOQ(f,t)~~ required by clause 4.26.2:
- (a) AEMO must record the following temperature data for generation systems (other than Intermittent Generators) in respect of which Market Participants hold Capacity Credits and which, in accordance with clause 4.10.1(e)(iv), indicated a valid method for measuring ambient temperature:

- i. the publicly available maximum daily temperature associated with a Facility for which temperature is defined in accordance with clause 4.10.1(e)(iv)(1); and
- ii. temperatures measured by the SCADA system for Facilities for which temperature is defined in accordance with clause 4.10.1(e)(iv)(2).

(b) [Blank]

...

6.3A.2. By 9:00 AM on the Scheduling Day AEMO must have calculated and released to each Market Participant the following parameters to be applied by that Market Participant in forming its STEM Submissions for each Trading Interval in the Trading Day:

- (a) the Maximum Supply Capability where this equals the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval based on the Standing Data of that Market Participant's Scheduled Generators and Non-Scheduled Generators and assuming the use of the fuel which maximises the capacity of each Facility:
  - i. less an allowance for Outages in the schedule maintained in accordance with clause 7.3.4; and
  - ii. less, for each Market Participant that is a provider of Ancillary Services, the estimated Loss Factor adjusted quantity of energy, in units of MWh, that could potentially be called upon by System Management from that Market Participant after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day,

where the Maximum Supply Capability may be higher than the actual capacity available during the Trading Interval;

- (b) the Maximum Consumption Capability where this equals the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be consumed during a Trading Interval by that Market Participant's Non-Dispatchable Loads, and Interruptible Loads ~~and Dispatchable Loads~~ based on the Standing Data maximum consumption quantities for those Facilities and Non-Dispatchable Loads, less an allowance for Outages in the schedule maintained in accordance with clause 7.3.4;
- (c) for each Scheduled Generator and Non-Scheduled Generator that is registered as being able to run on Liquid Fuel only, the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval based on the Standing Data of that Scheduled Generator or Non-Scheduled Generator less an allowance for Outages in the schedule maintained in accordance with clause 7.3.4;

- (d) for each Scheduled Generator and Non-Scheduled Generator that is registered as being able to run on both Liquid Fuel and Non-Liquid Fuel, the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval when run on each of Liquid Fuel and Non-Liquid Fuel based on the Standing Data of that Scheduled Generator or Non-Scheduled Generator less an allowance for Outages in the schedule maintained in accordance with clause 7.3.4; and
- (e) in the case of each Market Participant that is a provider of Ancillary Services:
  - i. the estimated Loss Factor adjusted quantity of energy, in units of MWh, that could potentially be called upon by System Management after 1:00 PM on the Scheduling -Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day; and
  - ii. the list of Facilities that System Management might reasonably expect to call upon to provide the energy described in clause 6.3A.2(e)(i).

6.3A.3. By 9:05 AM on the Scheduling Day AEMO must have calculated and released to each Market Participant the following parameters for information in forming its STEM Submissions for each Trading Interval in the Trading Day:

- (a) the total quantity of Capacity Credits held by that Market Participant for the Trading Day, in units of MW;
- (b) the estimated Loss Factor adjusted quantity of energy that could potentially be called upon by System Management after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day, multiplied by 2, in units of MW;
- (c) the total quantity of Planned Outages and Consequential Outages for that Market Participant in the schedule maintained in accordance with clause 7.3.4, in units of MW;
- (d) the total quantity specified in any STEM submission Portfolio Supply Curve from that Market Participant that has been accepted by AEMO for that Trading Interval, multiplied by 2, in units of MW; and
- (e) the total quantity specified in any STEM submission Ancillary Service Declaration from that Market Participant that has been accepted by AEMO for that Trading Interval, multiplied by 2, in units of MW.

6.3A.4. ~~By 9:30 AM on the Scheduling Day AEMO must have updated its calculations of the quantities specified in clause 6.3A.3(a) to (e), and must release to each Market Participant those updated parameters applicable to that Market Participant. If AEMO accepts a STEM Submission from a Market Participant after it has calculated and released the parameters required under clause 6.3A.3, then AEMO must as soon as practicable update its calculations of the quantities specified in clauses 6.3A.3(d) and 6.3A.3(e) for that Trading Day and release those updated parameters to the Market Participant.~~

## 6.3B. STEM Submissions Timetable and Process

6.3B.1. A Market Participant may submit STEM Submission data for a Trading Day to AEMO between:

- (a) 9:00 AM on the Scheduling Day; and
- (b) ~~9:50 AM~~10:50 AM on the Scheduling Day.

...

6.4.1. AEMO must undertake the process described in ~~clause section~~ 6.9 and determine the STEM Auction results for a Trading Day ~~no earlier than 10:00 AM~~ after 10:50 AM, and ~~no later than 10:30 AM~~ before 11:30 AM, on the relevant Scheduling Day.

6.4.2. AEMO must determine the total quantity of energy scheduled to be supplied under Bilateral Contracts and in the STEM Auction, by each Market Participant, for each Trading Interval of a Trading Day by ~~10:30 AM~~ 11:30 AM on the relevant Scheduling Day.

6.4.3. AEMO must make available to each Market Participant the following information in relation to a Trading Day by ~~10:30 AM~~ 11:30 AM on the relevant Scheduling Day:

- (a) the Trading Intervals, if any, in which the STEM Auction was suspended;
- (b) the STEM Clearing Price in all Trading Intervals for which the STEM Auction was not suspended;
- (c) the quantities scheduled in respect of that Market Participant in the STEM Auction for each Trading Interval; and
- (d) the Net Contract Position of the Market Participant in each Trading Interval, as determined in accordance with clause 6.9.13.

6.4.4. ~~Market Participants to which the information described in clause 6.4.3 relates for a Trading Day must access that information by 10:45 AM on the relevant Scheduling Day.~~[Blank]

6.4.5. ~~If AEMO becomes aware that a Market Participant has been unable to access the information described in clause 6.4.3 for a Trading Day by 10:45 AM of the relevant Scheduling Day, it must use reasonable endeavours to contact the affected Market Participant to ensure that at least the information in clauses 6.4.3(c) and 6.4.3(d) is conveyed to the Market Participant in sufficient time for that Market Participant to make a Resource Plan Submission where required.~~[Blank]

6.4.6. In the event of a software system failure at AEMO's site or its supporting infrastructure, or any delay in preparing any of the information as described in clauses 7.2.1, 7.2.3A or 7.3.4, which prevents AEMO from completing the relevant processes, AEMO may extend one or more of the timelines prescribed in ~~clauses sections~~ 6.2, 6.3A, 6.3B and this ~~clause section~~ 6.4, subject to:

- (a) any such extension not resulting in more than a ~~two-hour~~ two-hour delay to any of the timelines prescribed in ~~clauses sections~~ sections 6.2, 6.3A, 6.3B and this ~~clause section~~ section 6.4; and
- (b) any such extension maintaining a ~~50~~ 110 minute window between the timelines prescribed in clauses 6.3B.1(a) and 6.3B.1(b) as extended by AEMO<sub>7.2</sub>

~~and AEMO must advise Rule Participants of any such extension as soon as practicable.~~

6.4.6A. If AEMO becomes aware of an error in any of the information described in clauses 7.2.1, 7.2.3A or 7.3.4 at any time before the publication of the relevant STEM Auction results under clause 6.4.3 or a suspension of the STEM under clause 6.10.1, AEMO may:

- (a) publish or release (as applicable) corrected versions of the information it has published or released under clauses 6.3A.1, 6.3A.2, 6.3A.3 or 6.3A.4; and
- (b) extend any of the relevant timelines prescribed in sections 6.2, 6.3A, 6.3B and this section 6.4 to address the error, subject to:
  - i. any such extension not resulting in more than a two-hour delay to any of the timelines prescribed in sections 6.2, 6.3A, 6.3B and this section 6.4; and
  - ii. any such extension maintaining a 110 minute window between the timelines prescribed in clauses 6.3B.1(a) and 6.3B.1(b) as extended by AEMO.

6.4.6B. If AEMO extends one or more of the timelines in sections 6.2, 6.3A, 6.3B and this section 6.4 under clauses 6.4.6 or 6.4.6A or publishes or releases corrected information under clause 6.4.6A(a), AEMO must notify Rule Participants of any extension and any amended timelines and any corrected information as soon as possible.

...

## **6.5. ~~Resource Plan Submission Timetable and Process~~[Blank]**

~~6.5.1. Market Participants, including Synergy but only in respect of its Stand Alone Facilities, may submit Resource Plan Submission data for a Trading Day to AEMO between:~~

- ~~(a) 11:00 AM on the Scheduling Day, with the exception that if AEMO has delayed any timelines in accordance with clause 6.4.6, AEMO may at its discretion extend this time up to 1:00 PM on the Scheduling Day; and~~
- ~~(b) 12:50 PM on the Scheduling Day, with the exception that if:~~
  - ~~i. a software system failure at AEMO's site has prevented any Market Participant from submitting a Resource Plan; or~~

- ii. ~~a software system failure at a Market Participant site has prevented that Market Participant from submitting a Resource Plan and that Market Participant has informed AEMO of this failure by 12:30 PM on the Scheduling Day; or~~
- iii. ~~the opening time for Resource Plan Submissions was delayed, AEMO may at its discretion extend the closing time up to 3:00 PM on the Scheduling Day.~~

~~6.5.1A. Market Generators with Registered Facilities, including Synergy but only in respect of its Stand Alone Facilities, that are not undergoing a Commissioning Test or Market Customers with Dispatchable Loads, must provide AEMO with a Resource Plan Submission by:~~

- ~~(a) submitting Resource Plan Submissions; or~~
- ~~(b) in accordance with clause 6.5.1B.~~

~~6.5.1B. Where AEMO holds a Standing Resource Plan Submission for a Market Participant as at the time specified in clause 6.5.1(a) where that Standing Resource Plan Submission is applicable to the Trading Day to which clause 6.5.1 relates then, provided that Standing Resource Plan Submission data is accepted by AEMO in accordance with clause 6.5.2, it becomes the Resource Plan Submission with respect to the Trading Day as at the time specified in clause 6.5.1(a).~~

~~6.5.2. When AEMO receives Resource Plan Submission data from a Market Participant during the time interval described in clause 6.5.1 it must as soon as practicable communicate to that Market Participant whether or not AEMO accepts the data as conforming to the requirements of clause 6.11.2. Where AEMO accepts the data then AEMO must revise the Resource Plan Submission to reflect that data.~~

~~6.5.3. Where AEMO has issued a Market Advisory concerning an IT systems failure at AEMO, AEMO may accept Resource Plan submissions from Market Participants by email or facsimile, where this is in accordance with the applicable Contingency Market Procedure.~~

~~6.5.3A. Where clause 6.5.3 applies, the times at which a Market Participant may make a submission will remain in accordance with clause 6.5.1.~~

~~6.5.4. If AEMO has not accepted a Resource Plan Submission for a Trading Day by the closing time specified in clause 6.5.1(b) from a Market Participant that is required to make a Resource Plan Submission, then AEMO must prepare a default Resource Plan for that Market Participant which must include, for each Trading Interval on the Trading Day:~~

- ~~(a) in respect of a Market Participant (other than Synergy in relation to its Stand Alone Facilities):~~

- ~~i. all the Market Participant's Scheduled Generators and Non-Scheduled Generators having a scheduled output of zero;~~
  - ~~ii. all Dispatchable Loads having a scheduled consumption of zero;  
and~~
  - ~~iii. the level of the supply shortfall required pursuant to clause 6.11.1(e) equal to the total Net Contract Position; or~~
- ~~(b) in respect of all of Synergy's Stand Alone Facilities, having a scheduled output of zero.~~

~~6.5A. [Blank]~~

~~6.5B. [Blank]~~

### ~~6.5C. Standing Resource Plan Submission Timetable and Process~~

~~6.5C.1. All references to a Market Participant in this clause 6.5C include Synergy, but only in respect of its Stand Alone Facilities.~~

~~6.5C.1A. A Market Participant may submit Standing Resource Plan Submission data on any day between the times of:~~

~~(a) 1:00 PM; and~~

~~(b) 3:50 PM,~~

~~where, if accepted by AEMO, the data will apply from the commencement of the subsequent Scheduling Day.~~

~~6.5C.2. When AEMO receives Standing Resource Plan data from a Market Participant during the time interval described in clause 6.5C.1A, it must as soon as practicable:~~

~~(a) communicate to that Market Participant whether or not AEMO accepts the received data as conforming to the requirements of clause 6.11.2; and~~

~~(b) where AEMO accepts the data then AEMO must revise the Standing Resource Plan Submission to reflect that data.~~

~~6.5C.3. Standing Resource Plan Submission data must be associated with a day of the week and when used as a Resource Plan Submission will only apply to Trading Days commencing on that day of the week.~~

~~6.5C.4. A Market Participant may cancel Standing Resource Plan Submission data held by AEMO for any Trading Interval of the Trading Day during the time interval specified in clause 6.5C.1.~~

~~6.5C.5. AEMO must confirm to the Market Participant any cancellation of Standing Resource Plan Submission data made in accordance with clause 6.5C.4. Where such cancellation is made then AEMO must remove the relevant data from the Resource Plan Submission.~~



~~6.5C.6. If a Market Participant's ability to consume or supply energy in any Trading Interval of a Trading Day is less than the maximum level of its consumption or supply as indicated by its Standing Resource Plan Submission then that Market Participant must either:~~

~~(a) submit to AEMO Standing Resource Plan Submission data so as to revise its Standing Resource Plan Submission to comply with this clause 6.5C.6; or~~

~~(b) for each Trading Interval for which the Standing Resource Plan Submission over-states the Market Participant's consumption or supply capabilities, submit valid Resource Plan Submission data to AEMO on the Scheduling Day immediately prior to that Trading Day.~~

~~6.5C.7. [Blank]~~

...

6.6.9. A Market Generator may apply to AEMO for all or part of the capacity of one of its Scheduled Generators that is not Liquid Fuel capable to be treated as if it was dual-fuel capable where one fuel is Liquid Fuel for the purposes of the STEM, the Balancing Market and Settlement settlement. ~~The Market Generator must submit to AEMO an application must be in a form specified by AEMO, including supporting evidence of the relevant arrangements arrangement described in clause 6.6.10(a), and specifying the dates over which the application will apply must specify the period to which the application relates.~~

...

## Resource Plans

### 6.11. ~~Format of Resource Plans~~ [Blank]

~~6.11.1. A Market Participant submitting Resource Plan Submission data or Standing Resource Plan Submission data must ensure the submission is made in the form and manner prescribed and published by AEMO and include in the submission:~~

~~(a) the sum of the expected Loss Factor adjusted output of each of its Non-Scheduled Generators, in MWh, for each Trading Interval in the Trading Day;~~

~~(aA) [Blank]~~

~~(b) in respect of each Scheduled Generator and Dispatchable Load registered by the Market Participant:~~

~~i. the name of the Facility;~~

~~ii. for a Scheduled Generator, the intended times of synchronisation and de-synchronisation, expressed to the nearest minute, during the Trading Day;~~

- iii. ~~the target energy, in MWh, to be sent out or consumed during each Trading Interval of the Trading Day included in the submission where this amount:
 
  - 1. ~~must be zero if the Facility is expected not to operate during the Trading Interval; and~~
  - 2. ~~must not exceed the expected capability of the Facility at that time, allowing for de-ratings and outages;~~~~
- iv. ~~the Ramp Rate Limit, for each Trading Interval; and~~
- v. ~~the target MW level, which must be consistent with the Ramp Rate Limit, that each Facility must achieve and continue to operate at until the end of each Trading Interval included in the submission;~~

~~(c) [Blank]~~

~~(d) the total Loss Factor adjusted demand, in MWh, to be consumed by that Market Participant for each Trading Interval excluding demand associated with any Dispatchable Load;~~

~~(dA) the end of Trading Interval MW level of demand resulting from the demand in clause 6.11.1(d); and~~

~~(e) other than for Synergy, any shortfall in MWh for each Trading Interval between the net energy scheduled in the Resource Plan Submission and the Net Contract Position of the Market Participant.~~

~~6.11.2. For Resource Plan Submission data or Standing Resource Plan Submission data to be valid:~~

~~(a) it must conform to the form specified by AEMO under clause 6.11.1;~~

~~(aA) 48 Trading Intervals of data must be submitted for each Trading Day;~~

~~(b) it must only include Facilities registered by the submitting Market Participant;~~

~~(bA) it must not include a generator for any Trading Interval if that generator is undergoing a Commissioning Test during that Trading Interval; and~~

~~(c) [Blank]~~

~~(d) it must meet the requirements of clause 6.11.3.~~

~~6.11.3. A Market Participant, other than Synergy, must ensure that either:~~

~~(a)  $\text{Target}_{\text{LFA}} = (\text{NCP} + \text{DQ} - \text{NonSchGen} - \text{Shortfall}) \pm \text{Tol}$~~

~~Where:~~

~~$\text{Target}_{\text{LFA}}$  = the sum of the Loss Factor adjusted energy quantities, in MWh, submitted by the Market Participant under clause 6.11.1(b)(iii)~~

~~$\text{NCP}$  = the Net Contract Position~~

~~DQ = the demand quantity, in MWh, provided by the Market Participant in accordance with clause 6.11.1(d)~~

~~NonSchGen = the amount, in MWh, provided by the Market Participant under clause 6.11.1(a)~~

~~Shortfall = the amount, in MWh, provided by the Market Participant under clause 6.11.1(e)~~

~~Tol = min(3MWh, max(0.5, 3% of NCP));~~

~~or~~

~~(b) Target MW<sub>LFA</sub> = (NCP - NonSchGen - Shortfall) \* 2 + DQ ± Tol~~

~~Where:~~

~~Target MW<sub>LFA</sub> = the sum of the Loss Factor adjusted MW quantities provided by the Market Participant under clause 6.11.1(b)(v)~~

~~NCP = Net Contract Position~~

~~DQ = the demand quantity in MW provided by the Market Participant in accordance with clause 6.11.1(dA)~~

~~NonSchGen = the amount provided by the Market Participant under clause 6.11.1(a)~~

~~Shortfall = the amount provided by the Market Participant under clause 6.11.1(e)~~

~~Tol = min(6MW, max(1, 3% of NCPx2)).~~

## 6.11A Nominating Consumption Decrease Price and Extra Consumption Decrease Price

### 6.11A.1. A Market Customer with a Demand Side Programme; ~~or Dispatchable Load~~

~~(a) must submit to AEMO~~

~~i. for a Dispatchable Load a Consumption Decrease Price; and~~

~~ii. for a Demand Side Programme a Consumption Decrease Price and an Extra Consumption Decrease Price; and~~

~~(b) may from time to time submit to AEMO~~

~~i. for a Dispatchable Load a changed Consumption Decrease Price; and~~

~~ii. for a Demand Side Programme either or both of a changed Consumption Decrease Price and a changed Extra Consumption Decrease Price.~~

(a) must submit to AEMO a Consumption Decrease Price and an Extra Consumption Decrease Price; and

(b) may from time to time submit to AEMO either or both of a changed Consumption Decrease Price and a changed Extra Consumption Decrease Price.

...

6.12.1.

- (a) By 5:00 PM on the Scheduling Day, AEMO must determine the Non-Balancing Dispatch Merit Orders identified in clauses 6.12.1(b) and 6.12.1(c) for the Trading Day. A Non-Balancing Dispatch Merit Order: Order—
- i. lists the order in which Non-Balancing Facilities Demand Side Programmes will be issued Dispatch Instructions by System Management under clause 7.6.1C(d) to ~~increase or~~ decrease consumption, ~~as applicable~~;
  - ii. lists the order in which Non-Balancing Facilities Demand Side Programmes will be issued Dispatch Instructions by System Management under clause 7.6.1C(e) to decrease consumption, as applicable; and
  - iii. provides for each Facility Demand Side Programme in the list in clauses 6.12.1(a)(i) and 6.12.1(a)(ii): (ii)—
    1. the Reserve Capacity Obligation Quantity determined in accordance with clause 4.12.4(c); ~~and~~
    2. ~~for a Demand Side Programme~~
      - A. ~~the Unused Expected DSM Dispatch Quantity;~~
      - B. ~~the Relevant Demand; and~~
      - C. ~~the aggregate of Minimum Consumptions across all the Facility's Associated Loads.~~
    2. the Unused Expected DSM Dispatch Quantity;
    3. the Relevant Demand; and
    4. the aggregate of Minimum Consumptions across all the Facility's Associated Loads.
- (b) A Non-Balancing Dispatch Merit Order for a decrease in consumption relative to ~~the quantities included in the applicable Resource Plan or~~ the current operating level of a Facility ~~not included in a Resource Plan~~ for a Trading Interval must: must—
- i. list all Demand Side Programmes ~~and Dispatchable Loads~~ registered by Market Participants; and
  - ii. be determined by ranking the Registered Facilities Demand Side Programmes referred to in clause 6.12.1(b)(i) as follows: follows—

- ~~1. Registered Facilities with a Reserve Capacity Obligation Quantity greater than zero in that Trading Interval ranked in increasing order of—
 
  - ~~A. for Non-Balancing Facilities other than Demand Side Programmes—the Facility’s Consumption Decrease Price applicable to that Trading Interval; and~~
  - ~~B. for Demand Side Programmes—the Facility’s Extra Consumption Decrease Price applicable to that Trading Interval;~~~~
  1. Demand Side Programmes with a Reserve Capacity Obligation Quantity greater than zero in that Trading Interval ranked in increasing order of the Facility’s Extra Consumption Decrease Price applicable to that Trading Interval;

followed by

2. Registered Facilities with a Reserve Capacity Obligation Quantity of zero in that Trading Interval, ranked in increasing order of the Facility’s Consumption Decrease Price applicable to that Trading Interval.
- (c) ~~A Non-Balancing Dispatch Merit Order for an increase in consumption relative to the quantities included in the applicable Resource Plan for a Trading Interval must—~~
- ~~i. list all Dispatchable Loads registered by Market Participants; and~~
  - ~~ii. be determined by ranking the Registered Facilities referred to in clause 6.12.1(c)(i) in increasing order of the Facility’s Consumption Increase Price applicable to that Trading Interval. [Blank]~~
- (d) [Blank]
- (e) [Blank]
- (f) Where the prices described in Standing Data for two or more ~~Registered Facilities Demand Side Programmes~~ are equal, then, for the purposes of determining the ranking in any Non-Balancing Dispatch Merit Order, AEMO must rank those ~~Registered Facilities Demand Side Programmes~~ in decreasing order of the time since the Facility’s consumption was last reduced in response to a Dispatch Instruction. In the event of a tie, AEMO will randomly assign priority to break the tie.

## Balancing Pricing Prices and Quantities

### 6.13. Real Time Real-Time Dispatch Information

- 6.13.1. System Management must maintain dispatch data for settlement purposes in accordance with clause 7.13.

6.14. [Blank]

6.15. Maximum and Minimum Theoretical Energy Schedule

6.15.1. The Maximum Theoretical Energy Schedule in a Trading Interval is:

...

(c) for the Balancing Portfolio:

- i. the maximum amount of sent out energy, in MWh, which could have been dispatched in the Trading Interval from Balancing Price-Quantity Pairs ~~within in respect of~~ the Balancing Portfolio ~~Supply Curve~~ with an associated price less than or equal to the Balancing Price; plus
- ii. if the Balancing Portfolio's SOI Quantity is greater than the sum of the quantities in the Balancing Portfolio's Balancing Price-Quantity Pairs ~~within the Balancing Portfolio Supply Curve~~ which have an associated price that is less than or equal to the Balancing Price, the minimum amount of sent out energy, in MWh, if any, which could have been dispatched in the Trading Interval from any of the Balancing Portfolio's Balancing Price-Quantity Pairs ~~within the Balancing Portfolio Supply Curve~~ which have an associated price greater than the Balancing Price,

taking into account the Portfolio Ramp Rate Limit and the SOI Quantity.

6.15.2. The Minimum Theoretical Energy Schedule in a Trading Interval equals:

...

(c) for the Balancing Portfolio, the amount which is the lesser of:

- i. the sum of:
  1. the maximum amount of sent out energy, in MWh, which could have been dispatched in the Trading Interval from Balancing Price-Quantity Pairs ~~within in respect of~~ the Balancing Portfolio ~~Supply Curve~~ with an associated price less than the Balancing Price; plus
  2. if the Balancing Portfolio's SOI Quantity is greater than the sum of the quantities in the Balancing Portfolio's Balancing Price-Quantity Pairs ~~within the Balancing Portfolio Supply Curve~~ which have an associated price that is less than the Balancing Price, the minimum amount of sent out energy, in MWh, if any, which could have been dispatched in the Trading Interval from any of the Balancing Portfolio's Balancing Price-Quantity Pairs ~~within the Balancing Portfolio Supply Curve~~ which have an associated price greater than or equal to the Balancing Price,

taking into account the Portfolio Ramp Rate Limit and SOI Quantity;  
and

- ii. where a Facility in the Balancing Portfolio is subject to an Outage, the maximum amount of sent out energy, in MWh, which could have been dispatched given the sum of the Available Capacity of Facilities in the Balancing Portfolio for that Trading Interval.

...

## 6.16A. Facility Out of Merit

6.16A.1. The Upwards Out of Merit Generation in a Trading Interval for a Balancing Facility equals:

- (a) subject to clause 6.16A.1(b), the Sent Out Metered Schedule less the Maximum Theoretical Energy Schedule; or
- (b) zero where:
  - i. the Economic Regulation Authority has notified AEMO under clause 7.10.8 that the relevant Market Participant has not adequately or appropriately complied with a Dispatch Instruction in respect of the Facility;
  - ii. the Facility was undergoing a Test or complying with an Operating Instruction; or
  - iii. the Sent Out Metered Schedule less the Maximum Theoretical Energy Schedule is less than the sum of:
    - 1. any Upwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any ~~Upwards~~ Backup Upwards LFAS Enablement, which the Facility was instructed by System Management to provide, divided by two so that it is expressed in MWh; and
    - 2. the applicable Settlement Tolerance.

6.16A.2. The Downwards Out of Merit Generation in a Trading Interval for a Balancing Facility equals:

- (a) subject to clause 6.16A.2(b), the Minimum Theoretical Energy Schedule less the Sent Out Metered Schedule; or
- (b) zero if:
  - i. the Economic Regulation Authority has notified AEMO under clause 7.10.8 that the relevant Market Participant has not adequately or appropriately complied with a Dispatch Instruction in respect of the Facility;
  - ii. the Facility was undergoing a Test or complying with an Operating Instruction;

- iii. the Minimum Theoretical Energy Schedule less the Sent Out Metered Schedule is less than the sum of:
  - 1. any Downwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any ~~Downwards Backup~~ Downwards LFAS Enablement, which the Facility was instructed by System Management to provide, divided by two so that it is expressed in MWh; and
  - 2. the applicable Settlement Tolerance; or
- iv. the Balancing Facility is a Non-Scheduled Generator and System Management has not determined a MWh quantity for the Facility and the Trading Interval under clause 7.13.1(eF).

### 6.16B. Balancing Portfolio Out of Merit

6.16B.1. The Portfolio Upwards Out of Merit Generation in a Trading Interval for the Balancing Portfolio equals:

- (a) subject to clause 6.16B.1(b), the sum of any Sent Out Metered Schedules for Facilities in the Balancing Portfolio less the Maximum Theoretical Energy Schedule for the Balancing Portfolio; or
- (b) zero if:
  - i. the Economic Regulation Authority has notified AEMO under clause 7.10.8 that Synergy has not adequately or appropriately complied with a Dispatch Order ~~in respect of the Balancing Portfolio~~; or
  - ii. the sum of any Sent Out Metered Schedules for Facilities in the Balancing Portfolio less the Maximum Theoretical Energy Schedule for the Balancing Portfolio is less than the sum of:
    - 1. any increase in sent out energy due to a Network Control Service Contract which System Management instructed a Facility within the Balancing Portfolio to provide;
    - 2. if Facilities within the Balancing Portfolio were instructed by System Management to provide LFAS, the sum of Upwards LFAS Enablement and Backup Upwards LFAS ~~Backup~~ Enablement, both divided by two so that they are expressed in MWh;
    - 3. if a Spinning Reserve Event has occurred, any Spinning Reserve Response Quantity; and
    - 4. the Portfolio Settlement Tolerance.

6.16B.2. The Portfolio Downwards Out of Merit Generation in a Trading Interval for the Balancing Portfolio equals:



- (a) subject to clause 6.16B.2(b), the Minimum Theoretical Energy Schedule less the sum of any Sent Out Metered Schedules for Facilities in the Balancing Portfolio; or
- (b) zero if:
  - i. the Economic Regulation Authority has notified AEMO under clause 7.10.8 that Synergy has not adequately or appropriately complied with a Dispatch Order; or
  - ii. the Minimum Theoretical Energy Schedule of the Balancing Portfolio less the sum of any Sent Out Metered Schedules for Facilities in the Balancing Portfolio is less than the sum of:
    - 1. any reduction in sent out energy due to a Network Control Service Contract which System Management instructed a Facility within the Balancing Portfolio to provide;
    - 2. if Facilities within the Balancing Portfolio were instructed by System Management to provide LFAS, the sum of the Downwards LFAS Enablement plus the Backup Downwards LFAS ~~Backup~~ Enablement, both divided by two so that they are expressed in MWh;
    - 3. if a Load Rejection Reserve Event has occurred, any Load Rejection Reserve Response Quantity; and
    - 4. the Portfolio Settlement Tolerance.

## 6.17. Balancing Settlement Quantities

6.17.1. AEMO must determine for each Market Participant and each Trading Interval of each Trading Day:

- (a) the Metered Balancing Quantity;
- (b) the Non-Balancing Facility Dispatch Instruction Payment;
- (c) ~~Loss Factor adjusted Facility~~ Constrained On Quantities and associated ~~prices~~ Constrained On Compensation Prices;
- (d) ~~Loss Factor adjusted Facility~~ Constrained Off Quantities and associated ~~prices~~ Constrained Off Compensation Prices;
- (e) ~~Loss Factor adjusted Portfolio~~ Constrained On ~~Balancing Portfolio~~ Quantities and associated ~~prices~~ Portfolio Constrained On Compensation Prices; and
- (f) ~~Loss Factor adjusted Portfolio~~ Constrained Off ~~Balancing Portfolio~~ Quantities and associated ~~prices~~ Portfolio Constrained Off Compensation Prices,

in accordance with this ~~clause~~ section 6.17.

6.17.2. The Metered Balancing Quantity, MBQ(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals:

- (a) the net sum of all Metered Schedules for Trading Interval t for the Registered Facilities registered by Market Participant p and Non-Dispatchable Loads associated with Market Participant p as indicated in Standing Data;
- (b) less, the Net Contract Position of Market Participant p in Trading Interval t.

**Constrained On-Facility Balancing Quantities and Compensation Prices**

6.17.3. Subject to clauses 6.17.5B and 6.17.5C, AEMO must attribute any Upwards Out of Merit Generation from a Balancing Facility that is a Scheduled Generator, in a Trading Interval, as follows:

...

- (e) The Non-Qualifying Constrained On Generation for the Balancing Facility equals the sum, divided by two so that it is expressed as sent out MWh, of any Upwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any Backup Upwards LFAS Backup Enablement, which the Balancing Facility was instructed to provide by System Management;

...

6.17.3A Subject to clause 6.17.5B, for any Balancing Facility that is a Non-Scheduled Generator, in a Trading Interval:

- (a) ConQ1 equals the Upwards Out of Merit Generation, in MWh, for the Trading Interval, which for settlement purposes under Chapter 9 AEMO must Loss Factor adjust; and
- (b) ConP1 equals the greater of:
  - i. zero; and
  - ii. the Loss Factor Adjusted Price in the Balancing Price-Quantity Pair associated with the Balancing Facility for that Trading Interval less the Balancing Price for that Trading Interval.

**Constrained Off-Facility Balancing Quantities and Compensation Prices**

6.17.4. Subject to clauses 6.17.5B and 6.17.5C, AEMO must attribute any Downwards Out of Merit Generation from a Balancing Facility that is a Scheduled Generator, in a Trading Interval, as follows:

...

- (e) The Non-Qualifying Constrained Off Generation for the Balancing Facility equals the sum, divided by two so that it is expressed as sent out MWh, of any Downwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any Backup Downwards Backup LFAS Enablement, which the Balancing Facility was instructed to provide by System Management;

...

- 6.17.4A. Subject to clause 6.17.5B, for any Balancing Facility that is a Non-Scheduled Generator, in a Trading Interval:
- (a) CoffQ1 equals the Downwards Out of Merit Generation, in MWh, for that Trading Interval, which for settlement purposes under Chapter 9 AEMO must Loss Factor adjust; and
  - (b) CoffP1 equals the Balancing Price for that Trading Interval less the Loss Factor Adjusted Price in the Balancing Price-Quantity Pair associated with the Balancing Facility for that Trading Interval.

**Portfolio Constrained On ~~Balancing Portfolio~~ Quantities and Compensation Prices**

- 6.17.5. Subject to clause 6.17.5C, AEMO must attribute any Upwards Out of Merit Generation from the Balancing Portfolio in a Trading Interval as follows:
- (a) Portfolio Constrained On Quantity1 (PConQ1) equals the lesser of:
    - i. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched from the Balancing Portfolio's Balancing Price-Quantity Pair N ~~in the Balancing Portfolio Supply Curve~~ with a price (Price N) higher than but closest to the Balancing Price, taking into account the actual Balancing Portfolio SOI Quantity and the Portfolio Ramp Rate Limit; and
    - ii. the Upwards Out of Merit Generation for the Balancing Portfolio;
  - (b) Portfolio Constrained On Compensation Price1 (PConP1) equals the Price N identified in clause 6.17.5(a) less the Balancing Price;
  - (c) ~~If~~ if the Portfolio Upwards Out of Merit Generation exceeds PConQ1 and a Balancing Price-Quantity Pair exists ~~in~~ for the Balancing Portfolio ~~Supply Curve~~ with a price higher than Price N, then:
    - i. additional Portfolio Constrained On Quantity2 (PConQ2) equals the lesser of:
      - 1. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched from the Balancing Portfolio's ~~Supply Curve~~ Balancing Price-Quantity Pair N+1 with a price (Price N+1) higher than but closest to the Price N, taking into account when the Balancing Portfolio MW level reached the top, or the bottom, as applicable, of Balancing Price-Quantity Pair N in the calculation in clause 6.17.5(a)(i) and the Portfolio Ramp Rate Limit; and
      - 2. the Portfolio Upwards Out of Merit Generation less PConQ1; and
    - ii. Portfolio Constrained On Compensation Price2 (PConP2) equals the Price N+1 identified in clause 6.17.5(c)(i) less the Balancing Price;

- (d) AEMO must repeat the process set out in clause 6.17.5(c) to identify, from the next highest priced Balancing Price-Quantity Pair N+1, any PConQN+1 and PConPN+1 until all Portfolio Upwards Out of Merit Generation has been attributed to Balancing Price-Quantity Pairs or, otherwise, until there are no remaining Balancing Price-Quantity Pairs ~~in the Balancing Portfolio Supply Curve~~;
- (e) ~~The~~ the Non-Qualifying Constrained On Generation for the Balancing Portfolio equals the sum, expressed in sent out MWh, of any increase in energy due to a Network Control Service Contract and of the following Ancillary Services (if any), which System Management instructed Synergy to provide from Facilities within the Balancing Portfolio:
  - i. Upwards LFAS Enablement;
  - ii. Backup Upwards LFAS ~~Backup~~ Enablement; and
  - iii. the Spinning Reserve Response Quantity;
- (f) ~~If~~ if:
  - i. the Non-Qualifying Constrained On Generation exceeds PConQ1, set PConQ1 to zero; or
  - ii. otherwise reduce PConQ1 by the amount of Non-Qualifying Constrained On Generation;
- (g) AEMO must repeat the process set out in clause 6.17.5(f) for each PConQN in ascending order until all Non-Qualifying Constrained On Generation has been deducted from PConQN or otherwise until there are no remaining PConQN; and
- (h) ~~For~~ for settlement purposes under Chapter 9, each PConQN calculated in this clause 6.17.5 is to be Loss Factor adjusted by the Portfolio Loss Factor.

### Portfolio Constrained Off ~~Balancing Portfolio~~ Quantities and Compensation Prices

- 6.17.5A. Subject to clause 6.17.5C, AEMO must attribute any Downwards Out of Merit Generation from the Balancing Portfolio in a Trading Interval as follows:
- (a) Portfolio Constrained Off ~~Portfolio~~ Quantity1 (PCoffQ1) equals the lesser of:
    - i. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched down from the Balancing Portfolio's Balancing Price-Quantity Pair N, with Price N, ~~in the Balancing Portfolio Supply Curve~~, taking into account the Available Capacity of the Balancing Portfolio, the MW level at the start of the Trading Interval and the Portfolio Ramp Rate Limit, where N is determined from either of the following Balancing Price-Quantity Pairs or, if different, the one with the lower price:
      - 1. the Balancing Price-Quantity Pair associated with the intersection of Available Capacity and the quantities in all

- Balancing Price-Quantity Pairs ~~in the Balancing Portfolio Supply Curve~~ summed in order of lowest to highest price;  
and
2. the Balancing Price-Quantity Pair with a price lower than but closest to the Balancing Price; and
- ii. the Portfolio Downwards Out of Merit Generation;
- (b) Portfolio Constrained Off Compensation Price1 (PCoffP1) equals the Balancing Price less the Price N identified in clause 6.17.5A(a);
- (c) ~~If~~ if the Portfolio Downwards Out of Merit Generation (in MWh) exceeds PCoffQ1 and a Balancing Price-Quantity Pair exists ~~in for~~ in for the Balancing Portfolio ~~Supply Curve~~ with a price lower than Price N, then:
- i. additional Portfolio Constrained Off ~~Portfolio~~ Quantity2 (PCoffQ2) equals the lesser of:
    1. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched down from the Balancing Portfolio's ~~Supply Curve~~ Balancing Price-Quantity Pair N+1 with a price (Price N+1) lower than but closest to Price N, taking into account when the Balancing Portfolio MW level reached the bottom, or top, as applicable, of Balancing Price-Quantity Pair N in the calculation in clause 6.17.5A(a)(i) and the Portfolio Ramp Rate Limit; and
    2. the Portfolio Downwards Out of Merit Generation less PCoffQ1; and
  - ii. Portfolio Constrained Off Compensation Price2 (PCoffP2) equals the Balancing Price less the Price N+1 identified in clause 6.17.5A(c)(i);
- (d) AEMO must repeat the process set out in clause 6.17.5A(c) to identify, from the next lowest priced Balancing Price-Quantity Pair N+1, any PCoffQN+1 and PCoffPN+1 until all Portfolio Downwards Out of Merit Generation has been attributed to Balancing Price-Quantity Pairs or, otherwise, until there are no remaining Balancing Price-Quantity Pairs ~~in the Balancing Portfolio Supply Curve~~;
- (e) ~~The~~ the Non-Qualifying Constrained Off Generation for the Balancing Portfolio equals the sum, expressed in sent out MWh, of any reduction in sent out energy due to a Network Control Service Contract and of the following Ancillary Services (if any), which System Management instructed Synergy to provide from Facilities in the Balancing Portfolio:
- i. Downwards LFAS Enablement;
  - ii. Backup Downwards LFAS ~~Backup~~ Enablement; and
  - iii. the Load Rejection Reserve Response Quantity;
- (f) ~~If~~ if:

- i. the Non-Qualifying Constrained Off Generation exceeds PCoffQ1 set PCoffQ1 to zero; or
  - ii. otherwise reduce PCoffQ1 by the amount of Non-Qualifying Constrained On Generation;
- (g) AEMO must repeat the process set out in clause 6.17.5A(f) for each PCoffQN in ascending order until all Non-Qualifying Constrained Off Generation has been deducted from PCoffQN or there are no remaining PCoffQN; and
- (h) ~~For~~ settlement purposes under Chapter 9, each PCoffQN calculated in this clause 6.17.5A is to be Loss Factor adjusted by the Portfolio Loss Factor.

### **Balancing Constrained On and Off Quantities and Compensation Prices – Exceptions**

...

#### **Non-Balancing Facility Dispatch**

6.17.6. The Non-Balancing Facility Dispatch Instruction Payment, DIP(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals the sum ~~of~~ over all Demand Side Programmes registered to Market Participant p of the amount that is the sum of:

- (a) the Tranche 2 DSM Dispatch Payments; and
- (b) the Tranche 3 DSM Dispatch Payments.
- ~~(a) the sum over all Dispatchable Loads registered to Market Participant p of the amount that is the product of:~~
  - ~~i. the quantity, in MWh, by which the Dispatchable Load reduced its consumption in response to a Dispatch Instruction, where this quantity is equal to the lesser of:~~
    - ~~1. the Loss Factor adjusted quantity of the value determined by System Management under clause 6.17.6A; or~~
    - ~~2. the greater of zero and the difference between the Metered Schedule for the Facility in Trading Interval t and the Loss Factor adjusted quantity provided in the Facility's Resource Plan for Trading Interval t under clause 6.11.1(b)(iii); and~~
  - ~~ii. the applicable Consumption Decrease Price for the Facility in Trading Interval t;~~
- ~~(b) the sum over all Dispatchable Loads registered to Market Participant p of the amount that is the product of:~~
  - ~~i. the quantity, in MWh, by which the Dispatchable Load increased its consumption in response to a Dispatch Instruction, where this quantity is equal to the lesser of:~~

1. ~~the Loss Factor adjusted quantity of the value determined by System Management under clause 6.17.6A; or~~
  2. ~~the greater of zero and the difference between the Loss Factor adjusted quantity provided in the Facility's Resource Plan for Trading Interval t under clause 6.11.1(b)(iii) and the Metered Schedule for the Facility in Trading Interval t and;~~  
and
  - ii. ~~the applicable Consumption Increase Price for the Facility in Trading Interval t; and~~
- (c) ~~the sum over all Demand Side Programmes registered to Market Participant p of the amount that is the sum of—~~
- i. ~~the Tranche 2 DSM Dispatch Payments; and~~
  - ii. ~~the Tranche 3 DSM Dispatch Payments.~~

6.17.6A. ~~System Management must, for each Trading Interval in which a Dispatchable Load was subject to a Dispatch Instruction, determine the non-Loss Factor adjusted quantity, in MWh, by which the Dispatchable Load was dispatched, where this must be a positive number, together with information regarding whether it was dispatched upwards or downwards from its Resource Plan. [Blank]~~

...

- 6.17.6C. The methodology described in 6.17.6B must ensure that, subject to clauses 6.17.6D and 6.17.6E, the Non-Balancing Facility Dispatch Instruction Payment is determined as ~~follows: follows—~~
- (a) **(Tranche 1)** while the Demand Side Programme's Cumulative Annual DSM Dispatch for a Capacity Year is less than or equal to the Demand Side Programme's Calculated DSP ~~Quantity, the~~ ~~Quantity—the~~ Non-Balancing Facility Dispatch Instruction Payment for each MWh of Deemed DSM Dispatch is zero;
  - (b) **(Tranche 2)** once the Demand Side Programme's Cumulative Annual DSM Dispatch for a Capacity Year exceeds the Demand Side Programme's Calculated DSP ~~Quantity, the~~ ~~Quantity—the~~ Non-Balancing Facility Dispatch Instruction Payment for each MWh of Deemed DSM Dispatch is the Extra Consumption Decrease Price ~~until: until—~~
    - i. an amount equal ~~to: to—~~
      - A. the sum, across all 12 months in the Capacity Year, of all the amounts payable (or anticipated to become payable) in respect of the Demand Side Programme as "DSM Capacity Payments (p,m)" under clause 9.7.1A;

plus

B. the aggregate of all Non-Balancing Facility Dispatch Instruction Payments received by the Demand Side Programme up to that time in the Capacity Year,

equals or exceeds

ii. an amount equal to the Reserve Capacity Price multiplied by an amount equal to the number of the Demand Side Programme's DSM Capacity Credits; and

~~(b)(c)~~ **(Tranche 3)** thereafter until the end of the Capacity ~~Year, the Year—the~~ Non-Balancing Facility Dispatch Instruction Payment for each MWh of Deemed DSM Dispatch is the Consumption Decrease Price.

...

6.17.7. The Consumption Decrease Price and Extra Consumption Decrease Price~~Consumption Increase Price~~ used in ~~clauses 6.17.6(a)(ii), 6.17.6(b)(ii) and 6.17.6(c)(ii)~~ clauses 6.17.6C(b) and 6.17.6C(c) must be at the applicable Peak Trading Interval or Off-Peak Trading Interval price.

6.17.8. [Blank]

6.17.9. AEMO must, other than for Facilities in the Balancing Portfolio, determine a Settlement Tolerance for each Scheduled Generator, and Non-Scheduled Generator ~~and Dispatchable Load~~, where this Settlement Tolerance is equal to:

(a) for a Scheduled Generator ~~or Dispatchable Load~~ for which an applicable Tolerance Range or Facility Tolerance Range has been determined by System Management, the applicable value determined by System Management under clause 2.13.6D, divided by two to be expressed as MWh; or

(b) for Facilities for which no applicable Tolerance Range or Facility Tolerance Range has been determined by System Management, the lesser of:

i. 3 MWh; and

ii. the greater of:

1. 0.5 MWh; and

2. 3% of the Facility's: Sent Out Capacity divided by two to be expressed as MWh.

~~i. Sent Out Capacity in the case of a Non-Scheduled Generator and a Scheduled Generator; or~~

~~ii. nominated maximum consumption quantity in the case of a Dispatchable Load,~~

~~as set out in Standing Data divided by two to be expressed as MWh.~~



6.17.10. The Portfolio Settlement Tolerance equals the lesser of:

- (a) 3 MWh; and
- (b) 3% of the Sent Out Capacity of the Balancing Portfolio divided by two to be expressed as MWh.

...

## Settlement Data

### 6.21. Settlement Data

6.21.1. AEMO must provide the following information to the settlement system for each STEM Auction:

- (a) a flag for each Trading Interval indicating if the STEM Auction was suspended for that Trading Interval;
- (b) the STEM Clearing Price in each Trading Interval in units of \$/MWh; and
- (c) for each Market Participant participating in the STEM Auction, the STEM quantity scheduled in each Trading Interval, in units of MWh, where this amount must be positive for a sale of energy to AEMO and negative for a purchase of energy from AEMO.

6.21.2. AEMO must provide the following information to the settlement system for each Trading Interval in a Trading Day:

- (a) the Balancing Price; and
- (b) for each Market Participant:
  - i. the Metered Balancing Quantity;
  - ii. the ~~Facility Loss Factor adjusted~~ Constrained On Quantities and Loss Factor Adjusted associated Constrained On Compensation Prices calculated in accordance with clauses 6.17.3 and 6.17.3A;
  - iii. the ~~Facility Loss Factor adjusted~~ Constrained Off Quantities and Loss Factor Adjusted associated Constrained Off Compensation Prices calculated in accordance with clauses 6.17.4 and 6.17.4A;
  - iv. the ~~Balancing Portfolio Loss Factor adjusted~~ Constrained On Quantities and prices associated Portfolio Constrained On Compensation Prices calculated in accordance with clause 6.17.5;
  - v. the ~~Balancing Portfolio Loss Factor adjusted~~ Constrained Off Quantities and prices associated Portfolio Constrained Off Compensation Prices calculated in accordance with clause 6.17.5A;
  - vi. the Non-Balancing Facility Dispatch Instruction Payment; and
  - vii. the Tranche 2 DSM Dispatch Payment.

# 7 Dispatch

## Data used in the ~~Non-Balancing~~ Dispatch Process

### 7.1. Data Used in the Non-Balancing and Out of Merit Dispatch Process

- 7.1.1. System Management must maintain and, in accordance with ~~clause section~~ 7.6, use the following data set ~~in giving when issuing~~ Dispatch Instructions to ~~Non-Balancing Facilities Demand Side Programmes~~, ~~when issuing~~ Dispatch Instructions to Balancing Facilities dispatched Out of Merit, and ~~in when~~ providing Operating Instructions:
- (a) Standing Data ~~on for~~ Registered Facilities determined in accordance with ~~clausesection~~ 2.34;
  - (b) Loss Factors determined in accordance with ~~clause section~~ 2.27;
  - (c) expected Scheduled Generator and Non-Scheduled Generator capacities by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
  - (d) transmission ~~Network network~~ configuration and capacity by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
  - (e) forecasts of load and ~~Non-Scheduled Generation non-scheduled generation~~ by Trading Interval determined in accordance with ~~clausesection~~ 7.2;
  - (f) Ancillary Service Requirements for each Trading Interval determined in accordance with clause 7.2.4;
  - (g) schedules of approved Planned Outages for generating works and transmission equipment by Trading Interval determined in accordance with ~~clausesection~~ 3.19;
  - (h) transmission Forced Outages and Consequential Outages by Trading Interval received from Network Operators in accordance with ~~clause section~~ 3.21;
  - (i) Scheduled Generator, Non-Scheduled Generator, ~~Dispatchable Load~~ and Interruptible Load Forced Outages and Consequential Outages by Trading Interval received from Market Participants in accordance with ~~clausesection~~ 3.21;
  - (j) [Blank]
  - ~~(jA) — the Fuel Declarations, and notifications received from Market Participants in accordance with clause 7.5;~~
  - (k) the Non-Balancing Dispatch Merit Order;
  - (l) Supplementary Capacity Contract data, if any, ~~in accordance with clause~~ 4.24; and

- (m) Network Control Service Contract data, if any, received from a Network Operator in accordance with clauses 5.3A.3 and 5.3A.4.

7.1.2. System Management must continually modify its records of the data described in clause 7.1.1 as System Management becomes aware of changes in that data.

7.1.3. System Management may, but is not required to, revise its earlier Dispatch Instructions when advised of Forced Outages during the Trading Day.

## 7.2. Load Forecasts and Ancillary Service Requirements

7.2.1. System Management must prepare a Load Forecast for a Trading Day by 7:30 AM on the Scheduling Day for the Trading Day, where this Load Forecast is for information purposes.

7.2.2. The Load Forecasts for a Trading Day described in clause 7.2.1 must:

- (a) represent Non-Dispatchable Load and Interruptible Load net of forecast ~~N~~non-~~S~~scheduled ~~G~~generation;

...

...

## 7.4. ~~Resource Plans~~[Blank]

~~7.4.1.~~ ~~[Blank]~~

~~7.4.2.~~ ~~[Blank]~~

~~7.4.3.~~ ~~[Blank]~~

~~7.4.4.~~ ~~At any time between the time that it receives the Resource Plans for a Trading Day and the end of the Trading Intervals covered by the Resource Plans, System Management may request that a Market Participant confirm that it can conform to its Resource Plan for the relevant Trading Intervals and, if not, to indicate what lesser level of compliance the Market Participant is capable of achieving.~~

## 7.5. ~~Non-Balancing Dispatch Merit Orders and Fuel Declarations~~[Blank]

~~7.5.1.~~ ~~[Blank]~~

~~7.5.2.~~ ~~[Blank]~~

~~7.5.3.~~ ~~[Blank]~~

~~7.5.4.~~ ~~Subject to clause 7.5.5, a Market Participant other than Synergy may at any time between 1:30 PM on the Scheduling Day and 30 minutes prior to the commencement of the Trading Interval described in clause 7.5.4(b) notify System Management that the Market Participant will change the fuel upon which a~~

~~Scheduled Generator registered to it will operate on from a Liquid Fuel to a Non-Liquid Fuel, or vice versa, where the notification must include:~~

- ~~(a) the identity of the Scheduled Generator;~~
- ~~(b) the first Trading Interval in the Trading Day from which the fuel change will take effect;~~
- ~~(c) the last Trading Interval in the Trading Day for which the fuel change will apply; and~~
- ~~(d) the fuel (Liquid Fuel or Non-Liquid Fuel) to be used.~~

~~7.5.5. A Market Participant may only issue a notification in accordance with clause 7.5.4 for a Scheduled Generator if:~~

- ~~(a) the Scheduled Generator is switching from Non-Liquid Fuel to Liquid Fuel because it has lost its supply of Non-Liquid Fuel; or~~
- ~~(b) the Scheduled Generator is switching from Liquid Fuel to Non-Liquid Fuel because it has obtained a new supply of Non-Liquid Fuel.~~

~~7.5.6. System Management must retain a record of all notifications provided to it in accordance with clause 7.5.4.~~

## Dispatch Process

### 7.6. The Dispatch Criteria

7.6.1. Subject to clause 7.6.1B, when scheduling and issuing Dispatch Instructions or Dispatch Orders to Registered Facilities, System Management must seek to meet the following criteria, in descending 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 Service standards appropriate for the applicable SWIS Operating State.

7.6.1A. System Management must give priority to the dispatch of a Registered Facility under a Network Control Service Contract over the dispatch of a Registered Facility under any other arrangement, if the Network Control Service provided under that contract would assist System Management to meet the Dispatch Criteria.

7.6.1B. In seeking to meet the Dispatch Criteria, System Management may issue an Operating Instruction in priority to any Dispatch Instruction provided the Operating Instruction is also in accordance with:

- (a) a Network Control Service Contract;
- (b) an Ancillary Service Contract;

- (c) these Market Rules in connection with a Test; or
- (d) a Supplementary Capacity Contract.

7.6.1C. In seeking to meet the Dispatch Criteria System Management must, subject to clause 7.6.1D, issue Dispatch Instructions in the following descending order of priority:

...

- (d) subject to clauses 7.6.1E and 7.6.1F, a Dispatch Instruction in accordance with the Non-Balancing Dispatch Merit Order to a ~~Non-Balancing Facility~~ Demand Side Programme which holds Capacity Credits, taking into ~~account~~ account the DSP Ramp Rate Limit; and
  - ~~i. for a Demand Side Programme the DSP Ramp Rate Limit; and~~
  - ~~ii. for any other Non-Balancing Facility non-ramp rate Standing Data limitations relevant to that Facility; and~~
- (e) subject to clause 7.6.1E, a Dispatch Instruction in accordance with the Non-Balancing Dispatch Merit Order to a ~~Non-Balancing Facility~~ Demand Side Programme (whether or not it holds Capacity Credits) taking into account the DSP Ramp Rate Limit and non-ramp rate Standing Data limitations relevant to that Facility and any other relevant information available to System Management.

7.6.1D. System Management may only issue Dispatch Instructions under:

- (a) clause 7.6.1C(b) in priority to clause 7.6.1C(a);
- (b) clause 7.6.1C(c) in priority to clause 7.6.1C(b);
- (c) clause 7.6.1C(d) in priority to clause 7.6.1C(c); and
- (cA) clause 7.6.1C(e) in priority to clause 7.6.1C(d),

...

...

~~7.6.2B. A reference to a BMO in this clause 7.6 means, for a Trading Interval:~~

- ~~(a) the BMO determined by AEMO under clause 7A.3.6;~~
- ~~(b) if no such BMO is determined, the most recent Forecast BMO for that Trading Interval determined under clause 7A.3.16; and~~
- ~~(c) if no such Forecast BMO is determined, the BMO or the Forecast BMO that was used by System Management for issuing Dispatch Instructions for the same Trading Interval on the previous day if both Trading Intervals occur on a Business Day, or the most recent non-Business Day if the Trading Interval occurs on a non-Business Day.~~

...

**7.6A. Scheduling and Dispatch of ~~the Balancing Portfolio and Stand Alone Facilities (for certain Ancillary Services)~~ and the Balancing Portfolio**

7.6A.1. Subject to System Management's obligations under ~~clause~~ section 7.6, this ~~clause~~section 7.6A describes the rules governing the relationship between System Management and Synergy for the purpose of scheduling and dispatching the Stand Alone Facilities for Ancillary Services and for scheduling and dispatching Facilities in the Balancing Portfolio generally.

7.6A.2. With respect to the scheduling of Stand Alone Facilities for Ancillary Services and the scheduling of Facilities in the Balancing Portfolio generally:

- (a) at least once every month, Synergy must provide to System Management the following information in regard to the subsequent month:
  - i. a plant schedule describing the merit order in which the Facilities in the Balancing Portfolio are to be called upon and any restrictions on the operations of such Facilities;
  - ii. a plan for which fuels will be used in each Facility in the Balancing Portfolio and guidance as to how that plan might be varied depending on circumstances;
  - iii. a description as to how Ancillary Services are to be provided from Facilities in the Balancing Portfolio; and
  - iv. a description as to how Ancillary Services are to be provided from the Stand Alone Facilities,

where the format and time resolution of this data is to be described in a procedure;

- (b) System Management must provide to Synergy by 8:30 AM on the Scheduling Day associated with a Trading Day a forecast of total system demand for the Trading Day where the format and time resolution of this data is to be described in a procedure;
- (c) System Management must provide to Synergy by 4:00 PM on the Scheduling Day associated with a Trading Day:
  - i. ~~a forecast of the requirements for energy in the Balancing Portfolio, being a forecast of the whole of system energy requirement less:[Blank]~~
    - 1. ~~the aggregate energy of all Resource Plans associated with other Market Participants' Scheduled Generators and Dispatchable Loads, including Synergy's Dispatchable Loads; and~~
    - 2. ~~the aggregate forecast output of other Market Participants' Non-Scheduled Generators, including the aggregate forecast~~

~~output of any Non-Scheduled Generators which are Stand Alone Facilities, for the Trading Day;~~

- ii. the Dispatch Plan for each Facility for the Trading Day; and
- iii. a forecast of the detailed Ancillary Services required from each Facility in the Balancing Portfolio and Ancillary Services from each Stand Alone Facility,

where the format and time resolution of this data is to be described in a procedure;

- (d) System Management must consult with Synergy in developing the information described in clause 7.6A.2(c), and Synergy must provide System Management with any information required by System Management, in accordance with a procedure to support the preparation of the information in clause 7.6A.2(c). -In the event of any failure by Synergy to provide information required by System Management in a timely fashion then System Management may use its reasonable judgement to substitute its own information;
- (e) ~~System Management must determine by 4:00 PM on the Scheduling Day associated with a Trading Day the aggregate forecast output of all Non-Scheduled Generators for the Trading Day, referred to in clause 7.6A.2(c)(i)(2); [Blank]~~
- (f) ~~If~~ if, after 4:00 PM on the Scheduling Day but prior to the start of a Trading Interval on the corresponding Trading Day, System Management becomes aware of a change in conditions which will require a significant change in the Dispatch Plan, ~~then~~ it may make such change but must notify Synergy of such change; and
- (g) Synergy must notify System Management as soon as practicable if it becomes aware that it is unable to comply with a Dispatch Plan, providing reasons as to why it cannot comply.

7.6A.3. With respect to the dispatch of Stand Alone Facilities for the purposes of Ancillary Services other than LFAS but including ~~LFAS~~ Backup LFAS Enablement, and the dispatch of Facilities in the Balancing Portfolio generally, during a Trading Day:

...

7.6A.4. With respect to the dispatch compliance of Synergy for Facilities in the Balancing Portfolio:

- (a) System Management may deem Synergy to be in non-compliance for a Trading Interval if Synergy fails to comply with the Dispatch Plan, its obligations to provide Ancillary Services, or an instruction given under clause 7.6A.3(a), to an extent that could endanger Power System Security;
- (b) In determining whether or not to deem Synergy to be in non-compliance, System Management must give due regard to any reasonable mitigating

circumstances of which Synergy has notified it in accordance with clause 7.6A.3(c);

- (c) In determining whether or not to deem Synergy to be in non-compliance, System Management may only consider a deviation by an individual Synergy Facility from an output level specified in any instruction from System Management to be in non-compliance if the deviation at any time exceeds 10 MW; and
- (d) In the event that System Management deems Synergy to be in non-compliance for a Trading Interval then System Management must determine a single MWh quantity describing the total non-compliance of Synergy for that Trading Interval.

7.6A.5. ~~With respect to administration and reporting:~~ The following provisions apply with respect to administration and reporting:

- (a) Representatives of System Management and Synergy must, unless both parties agree otherwise, meet at least once per month to review the procedures operating under this ~~section clause~~ 7.6A. The minutes of these meetings must be recorded by System Management;
- (b) At the meetings described in clause 7.6A.5(a), System Management and Synergy must use best endeavours to address any issues arising from the application of the procedures operating under this ~~section clause~~ 7.6A. Where agreement cannot be reached either party may seek arbitration by the Economic Regulation Authority;
- (c) System Management must report to the Economic Regulation Authority any instance where it believes that Synergy has failed to meet its obligations under this ~~section clause~~ 7.6A;
- (d) Synergy may report to the Economic Regulation Authority any instance where it believes that System Management has failed to meet its obligations under this ~~section clause~~ 7.6A;
- (e) Upon request by the Economic Regulation Authority, Synergy and System Management must make available to the Economic Regulation Authority, records created because of the operation of this ~~section clause~~ 7.6A and procedures required by this ~~section clause~~ 7.6A.

...

7.7.4A. When selecting ~~Non-Balancing Facilities~~ Demand Side Programmes from the Non-Balancing Dispatch Merit Order, and subject to 7.6.1C and 7.6.1E, System Management must select them in accordance with the Power System Operation Procedure. The selection process specified in the Power System Operation Procedure must:

- (a) only discriminate between ~~Non-Balancing Facilities~~ Demand Side Programmes based on response time and availability;



- (b) permit System Management to not curtail a Demand Side Programme when, due to limitations on the availability of the Demand Side Programme, such curtailment would prevent that Demand Side Programme from being available to System Management at a later time when it would have greater benefit with respect to maintaining Power System Security and Power System Reliability; and
- (c) not be inconsistent with section 7.6.

7.7.5. ~~A System Management must not issue a Dispatch Instruction for a Balancing Facility Out of Merit and a Non-Balancing Facility or a Demand Side Programme for a Trading Interval must not be issued earlier than 6:00 PM on the Scheduling Day for the Trading Day on which the Trading Interval falls or later than the end of the Trading Interval.;~~

- (a) before 6:00 PM on the Scheduling Day for the Trading Day on which the Trading Interval falls; or
- (b) after the end of the relevant Trading Interval.

...

7.9.4. System Management must grant permission to synchronise unless:

- (a) the synchronisation is not in accordance with the relevant ~~Resource Plan, Dispatch Instruction, or Operating Instruction or an~~ instruction issued under clause 7.6A.3(a); or
- (b) System Management considers that it would not be able to meet the criteria set out in clause 7.6.1 ~~were if~~ synchronisation were to occur; or
- (c) in the case of a Facility that is undergoing a Commissioning Test, synchronisation is not in accordance with the Commissioning Test Plan for the Facility approved by System Management pursuant to ~~section~~clause 3.21A.

...

7.9.8. System Management must grant permission to desynchronise unless:

- (a) the desynchronisation is not in accordance with the relevant ~~Resource Plan or Dispatch Instruction, Operating Instruction or an~~ instruction issued under clause 7.6A.3(a); or
- (b) System Management considers that it would not be able to meet the criteria set out in clause 7.6.1 ~~were if~~ desynchronization were to occur.

...

## Dispatch Advisories, Balancing Suspension and Reporting Status Reports

### 7.11. Dispatch Advisories

...

7.11.5. System Management must release a Dispatch Advisory in the event of, or in anticipation of situations where:

...

(e) fuel supply on the Trading Day is significantly more restricted than usual, ~~or if fuel supply limitations mean it is not possible for some Market Participants to supply in accordance with their Resource Plans;~~

...

(h) System Management expects to use LFAS Facilities other than in accordance with the ~~LFAS Merit Order~~ LFAS Enablement Schedules, under clause 7B.3.8; or

...

(j) System Management expects to issue a Dispatch Instruction to a ~~Non-Balancing Facility~~ Demand Side Programme within the next 24 hours; or

...

...

## Settlement and Monitoring Data

### 7.13. Settlement and Monitoring Data

7.13.1. System Management must prepare the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

...

(eA) for each LFAS Facility, the quantity of any Backup Upwards LFAS ~~Backup~~ Enablement that System Management activated by the end of each Trading Interval by that LFAS Facility;

(eB) for each LFAS Facility, the quantity of any Backup Downwards LFAS ~~Backup~~ Enablement that System Management activated by the end of each Trading Interval by that LFAS Facility;

...

(eE) ~~details of notifications received by System Management in accordance with clause 7.5.4[Blank];~~

...

...

## 7A. Balancing Market

### 7A.1. Balancing Market

7A.1.1. AEMO must operate the Balancing Market.

7A.1.2. [Blank]

7A.1.3. The objectives of the Balancing Market are to:

- (a) enable Balancing Facilities to participate in the Balancing Market;
- (b) dispatch the ~~lowest cost~~ lowest-cost combination of Facilities made available for Balancing dispatch in the Balancing Market;
- (c) establish a Balancing Price which is consistent with dispatch;
- (d) seek to ensure timely and accurate Balancing energy pricing and dispatch quantity information, including forecasts, and system security information, is provided to all Market Participants; and
- (e) seek to ensure timely and accurate information relevant to the operation and administration of the Balancing Market is provided to affected Rule Participants.

...

7A.1.6. AEMO must develop a Balancing Facility Requirements Market Procedure specifying:

- (a) technical and communication criteria that a Balancing Facility, or a type of Balancing Facility, must meet, including:
  - i. Facility quantity parameters and limits for participation in the Balancing Market;
  - ii. the manner and forms of communication to be used while participating in the Balancing Market, including receiving Dispatch Instructions; and
  - iii. ramp rate limitations; and
- (b) the type of conditions AEMO may impose under clause 7A.1.11(b) and the manner and circumstances in which they may be imposed and lifted.

...

7A.2.1. A Market Participant must at all times ensure that: it has made a Balancing Submission in accordance with clause 7A.2.4 for each Trading Interval in the Balancing Horizon for each of its Balancing Facilities.

- ~~(a) it has made a Balancing Submission in accordance with clause 7A.2.4 for each of its Balancing Facilities, excluding Facilities in the Balancing Portfolio;~~
- ~~(b) it has made a Balancing Submission for all Trading Intervals in the Balancing Horizon for each of its Balancing Facilities; and~~
- ~~(c) the Balancing Submission is made before Balancing Gate Closure or, in the case of the Balancing Portfolio, before the times specified in clause 7A.2.9(d), for those Trading Intervals.~~

7A.2.2. A Market Participant may submit a subsequent Balancing Submission in accordance with clause 7A.2.4 in respect of any of its Balancing Facilities, excluding Facilities in the Balancing Portfolio, and:

- (a) the Balancing Submission may be for one or more Trading Intervals in the Balancing Horizon; and
- (b) the Balancing Submission must be made before Balancing Gate Closure for any Trading Interval in the submission.

7A.2.3. A Market Participant with a Balancing Facility that is:

- (a) the subject of an Operating Instruction; or
- (b) undergoing a Test that has an approved Test Plan,

must ensure that ~~the price in the Balancing Price-Quantity Pair for~~ a Balancing Submission submitted under this ~~clause~~section 7A.2 is ~~at the Minimum STEM Price for the quantity consistent with the proposed operation of the Balancing Facility~~ for each Trading Interval specified in the Operating Instruction or the Test Plan. ~~The provisions of this clause 7A.2.3 do not apply to the Balancing Portfolio.~~

7A.2.4. A Balancing Submission must:

- (a) be in the manner and form prescribed and published by AEMO;
- (b) constitute a declaration by an Authorised Officer;
- (c) have Balancing Price-Quantity Pair prices within the Price Caps;
- (d) specify, for each Trading Interval covered in the Balancing Submission, whether the Balancing Facility is to use Liquid Fuel or Non-Liquid Fuel; ~~and~~
- (e) ~~specify, for each Trading Interval covered in the Balancing Submission, Ramp Rate Limits,~~ specify the Ramp Rate Limit or the Portfolio Ramp Rate Limit (as applicable) for each Trading Interval covered in the Balancing Submission; and
- (f) specify the available capacity and the unavailable capacity as determined under clause 7A.2.4A, 7A.2.4B or 7A.2.4C (as applicable) for each Trading Interval covered in the Balancing Submission.

7A.2.4A. A Balancing Submission for a Balancing Facility that is a Scheduled Generator must specify the following details for each Trading Interval covered in the Balancing Submission:

(a) a ranking of Balancing Price-Quantity Pairs covering available capacity; and

(b) a declaration of the MW quantity that will be unavailable for dispatch, where the sum of:

(c) the quantities in the Balancing Price-Quantity Pairs; and

(d) the declared MW quantity of unavailable capacity,

must be equal to the Scheduled Generator's Sent Out Capacity.

7A.2.4B. A Balancing Submission for a Balancing Facility that is a Non-Scheduled Generator must specify, for each Trading Interval covered in the Balancing Submission, a single Balancing Price-Quantity Pair with a MW quantity equal to the Market Participant's best estimate of the Facility's output at the end of the Trading Interval (based on an assumption, for the purposes of this clause 7A.2.4B, that the Facility will not be subject to a Dispatch Instruction that limits its output during that Trading Interval).

7A.2.4C. A Balancing Submission for the Balancing Portfolio must specify the following details for each Trading Interval covered in the Balancing Submission:

(a) a ranking of Balancing Price-Quantity Pairs covering available capacity in the Balancing Portfolio; and

(b) a declaration of the MW quantity of the Balancing Portfolio that will be unavailable for dispatch (excluding any unavailable capacity to the extent that it relates to a temporary limitation in the intermittent energy source used by a Non-Scheduled Generator in the Balancing Portfolio to generate electrical energy).

7A.2.5. For the purposes of clause 7A.2.4(b), where AEMO accepts a Balancing Submission from a Market Participant that complies with clause 7A.2.4(a), the submission will be deemed to constitute a declaration by an Authorised Officer of the Market Participant.

7A.2.6. A subsequent Balancing Submission made under clauses 7A.2.2, 7A.2.9(d), 7A.2.9(e) or 7A.2.9(f), 7A.2.10 or 7A.3.5 in respect of the same Balancing Facility covering the same Trading Interval as an earlier Balancing Submission, overrides the earlier Balancing Submission for, and has effect in relation to, that Trading Interval.

7A.2.7. Where a subsequent Balancing Submission is made under clause 7A.2.6, a Market Participant must create and maintain internal records of the reasons for submitting the subsequent Balancing Submission, including details of any changed

circumstances and the impacts of those circumstances that gave rise to the new Balancing Submission.

7A.2.8. A Market Participant (other than Synergy in relation to the Balancing Portfolio) must ensure that, A Balancing Submission for each Trading Interval in the Balancing Horizon for which Balancing Gate Closure has not occurred ~~must accurately reflect, its most recently submitted Balancing Submission in respect of its Balancing Facility and that Trading Interval accurately reflects:~~

- (a) all information reasonably available to the Market Participant, including Balancing Forecasts published by AEMO, the information provided by AEMO under clause ~~7A.3.17~~ 7A.3.1(c) and the latest information available to it in relation to any Internal Constraint or External Constraint;
- (b) the Market Participant's reasonable expectation of the capability of its Balancing Facilities to be dispatched in the Balancing Market; and
- (c) the price at which the Market Participant submitting the Balancing Submission intends to have the Balancing Facility participate in the Balancing Market.

7A.2.9. Synergy, in relation to the Balancing Portfolio:

(a) ~~must, subject to clauses 7A.2.9(e) and 7A.2.9(f), ensure that its Balancing Portfolio Supply Curve accurately reflects~~ must, subject to clauses 7A.2.9(d) to 7A.2.9(f), ensure that for each Trading Interval in the Balancing Horizon the most recently submitted Balancing Submission in respect of that Trading Interval accurately reflects:

- i. all information reasonably available to ~~it~~ Synergy, including Balancing Forecasts published by AEMO and the latest information available to ~~it~~ Synergy in relation to any Forced Outage for a Facility in the Balancing Portfolio;
  - ii. Synergy's reasonable expectation of the capability of its Balancing Portfolio to be dispatched in the Balancing Market for that Trading Interval; and
  - iii. the price at which Synergy intends to have the Balancing Portfolio participate in the Balancing Market;
- (b) must indicate in a manner and form prescribed by AEMO:
- i. ~~which quantities in the Balancing Portfolio Supply Curve of the Balancing Price-Quantity Pairs that~~ it has priced at the Minimum STEM Price are for Facilities that are to provide LFAS;
  - ii. which Facilities ~~which~~ are likely to provide LFAS; and
  - iii. for each completed Trading Interval, which Facilities actually provided the LFAS in the Trading Interval;
- (c) must:

- i. ensure that quantities in the ~~Balancing Portfolio Supply Curve~~ Balancing Price-Quantity Pairs in its Balancing Submissions that are required for the provision of Ancillary Services, other than LFAS, are priced at the Price Caps, ~~to reflect that these quantities are not generally available for Balancing;~~
  - ii. advise AEMO in a manner and form prescribed by AEMO, the Facilities which are likely to provide the quantities specified in clause 7A.2.9(c)(i); and
  - iii. for each completed Trading Interval, advise AEMO which Facilities actually provided the Ancillary Services referred to in clause 7A.2.9(c)(i) in the Trading Interval;
- (d) ~~may update its Balancing Portfolio Supply Curve~~ submit a new, updated Balancing Submission in relation to any Trading Interval in the Balancing Horizon for which ~~Balancing Gate Closure for that Trading Interval~~ is more than two hours in the future:
- i. by submitting its updated Balancing ~~Portfolio Supply Curve~~ Submission to AEMO immediately before ~~6:00 PM~~ 1:00 PM; or
  - ii. otherwise by submitting its updated Balancing ~~Portfolio Supply Curve~~ Submission to AEMO within one hour after LFAS Gate Closure;
- (e) ~~may update its Balancing Portfolio Supply Curve~~ submit a new, updated Balancing Submission in relation to any Trading Interval in the Balancing Horizon for which Balancing Gate Closure is more than two hours in the future if a Facility in the Balancing Portfolio has experienced a Forced Outage since the last Balancing Submission; and
- (f) may after the time specified in clause 7A.2.9(d), ~~update its Balancing Portfolio Supply Curve~~ submit a new, updated Balancing Submission to reflect the impact of a Forced Outage which Synergy expects will cause a Facility to run on Liquid Fuel, where the Facility would not have run on Liquid Fuel but for the Forced Outage, in order to meet Synergy's Balancing Market obligations in relation to the Balancing Portfolio under this Chapter 7A.

7A.2.10. A Market Participant (other than Synergy in relation to the Balancing Portfolio) as soon as it becomes aware that a Balancing Submission for a Trading Interval for which Balancing Gate Closure has occurred is inaccurate:

- (a) if the inaccuracy is due to an Internal Constraint, must make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the available Sent Out Capacity of that Facility and the Ramp Rate Limit is accurate but no prices are altered, in respect of that Trading Interval as soon as reasonably practicable;
- (b) if the inaccuracy is due to an External Constraint, may make a new, accurate Balancing Submission so that the quantity in the Balancing

Submission reflects the available Sent Out Capacity of that Facility and the Ramp Rate Limit is accurate but no prices are altered, in respect of that Trading Interval, as soon as reasonably practicable; ~~or~~

- (c) if the inaccuracy is due to the Market Participant receiving an Operating Instruction, may make a new, accurate Balancing Submission that reflects the Operating Instruction; or
- (d) if the inaccuracy is due to a variation of the availability of the intermittent energy source used by a Non-Scheduled Generator, may make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the Market Participant's best estimate of the Facility's output at the end of the Trading Interval and the Ramp Rate Limit is accurate but the price is not altered, in respect of that Trading Interval.

7A.2.10A. A Market Participant (other than Synergy in relation to the Balancing Portfolio) must not submit a new, updated Balancing Submission in respect of a Trading Interval for which Balancing Gate Closure has occurred except in accordance with clause 7A.2.10.

7A.2.11. Where a Market Participant has submitted a Balancing Submission in accordance with clauses 7A.2.10(a) or 7A.2.10(b) after Balancing Gate Closure, the Market Participant must, as soon as reasonably practicable, provide AEMO with written details of the nature of the Internal Constraint or External Constraint, when it occurred and its duration.

7A.2.12. Where Synergy has submitted an updated Balancing ~~Portfolio Supply Curve Submission for the Balancing Portfolio~~ in accordance with clauses 7A.2.9(e) or 7A.2.9(f) because of a Forced Outage of one of the Facilities in the Balancing Portfolio after the time specified in ~~these the applicable~~ clauses it must, as soon as reasonably practicable, provide AEMO with written details of:

- (a) the nature of the Forced Outage;
- (b) when the Forced Outage occurred;
- (c) the duration of the Forced Outage; and
- (d) information substantiating the commercial impact, if any, of the Forced Outage.

7A.2.13. A Market Participant must:

- (a) make a Balancing Submission under this ~~clause section~~ 7A.2 in good faith;
- (b) not act in a manner that:
  - i. is intended to lead; or
  - ii. the Market Participant should have reasonably known is likely to lead,

to another Rule Participant being misled or deceived as to the existence or non-existence of a material fact relating to the Balancing Market; and



- (c) not include information in a Balancing Submission relating to prices for a purpose of influencing the determination of the Constrained Off Compensation Price, the Constrained Off Quantity which the Facility may provide, the Constrained On Compensation Price or the Constrained On Quantity which the Facility may provide.

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### **7A.3. Forecast BMO and Pricing BMO**

~~7A.3.1. AEMO must convert the prices for each Trading Interval in Balancing Price-Quantity Pairs in Balancing Submissions from Market Participants, other than Synergy in respect of the Balancing Portfolio, into Loss Factor Adjusted Prices.~~

~~7A.3.2. AEMO must determine the BMO for a Trading Interval as the ranked list of Balancing Submissions which, subject to clause 7A.3.3, is obtained by:~~

- ~~(a) ranking the Balancing Price-Quantity Pairs for a Trading Interval and associated Balancing Facilities contained in Balancing Submissions in order of lowest to highest prices (where these prices have been adjusted where appropriate in accordance with clause 7A.3.1); and~~
- ~~(b) where AEMO (in its capacity as System Management) prepares a forecast of the EOI Quantity for a Non-Scheduled Generator under clause 7A.3.15, adjusting the Non-Scheduled Generator's Balancing Submission to reflect that quantity.~~

~~7A.3.3. In circumstances where there is a tie in the ranking of Balancing Facilities under clause 7A.3.2 in the BMO, AEMO must break the tie in accordance with the Balancing Forecast Market Procedure, which must give effect to the following descending order of priority:~~

- ~~(a) a Balancing Facility that meets the Balancing Facility Requirements;~~
- ~~(b) a Balancing Facility that is subject to a condition under clause 7A.1.11(b);~~
- ~~(c) a Balancing Facility that does not meet the Balancing Facility Requirements;~~
- ~~(d) a Balancing Facility providing an Ancillary Service other than LFAS;~~
- ~~(e) a Balancing Facility providing LFAS; and~~
- ~~(f) priority will be based on the daily random number assigned to the Facility.~~

~~7A.3.4. A Balancing Facility assigned priority under clause 7A.3.3 means that the Facility will be placed in the BMO so that it will be issued a Dispatch Instruction in priority to the other Balancing Facility with which it was tied.~~

7A.3.1. AEMO must, to the extent that it is reasonably able, as soon as practicable during the first 15 minutes of each Trading Interval, for each future Trading Interval in the Balancing Horizon:

- (a) determine the Forecast BMO in accordance with clause 7A.3.2 using the most recent, valid Balancing Submissions available to it;
- (b) provide System Management with the Forecast BMO determined under clause 7A.3.1(a);
- (c) provide each Market Participant with the EOI Quantities expected to be provided by each of that Market Participant's Balancing Facilities in the Forecast BMO determined under clause 7A.3.1(a); and
- (d) if AEMO has sufficient information available to it, determine the Balancing Forecast in accordance with the Balancing Forecast Market Procedure and publish it on the Market Web Site.

7A.3.2. AEMO must determine a Forecast BMO for a Trading Interval for the purposes of clause 7A.3.1(a) by:

- (a) converting the prices in Balancing Price-Quantity Pairs contained in Balancing Submissions for that Trading Interval into Loss Factor Adjusted Prices, for all Balancing Facilities except the Balancing Portfolio;
- (b) subject to clause 7A.3.2(c), ranking the Balancing Price-Quantity Pairs and associated Balancing Facilities contained in Balancing Submissions for that Trading Interval in order of lowest to highest price, where these prices have been adjusted where appropriate in accordance with clause 7A.3.2(a);
- (c) where there is a tie in the ranking of Balancing Facilities under clause 7A.3.2(b), breaking the tie in accordance with the Balancing Forecast Market Procedure; and
- (d) where a forecast of the EOI Quantity for a Non-Scheduled Generator prepared under clause 7A.3.15 is available, adjusting the Non-Scheduled Generator's Balancing Submission to reflect that quantity.

7A.3.3. AEMO must document in the Balancing Forecast Market Procedure the processes it must follow when:

- (a) determining Forecast BMOs and providing them to System Management;
- (b) preparing and publishing Balancing Forecasts; and
- (c) assigning priority to Facilities in the case where there is a tie in a Forecast BMO or Forecast LFAS Merit Order.

7A.3.4. AEMO must develop the Balancing Forecast Market Procedure in accordance with the following principles:

- (a) to the extent reasonably practicable, Balancing Forecasts must use the latest information available to AEMO; and
- (b) Balancing Forecasts must provide Market Participants with information upon which to make an assessment regarding their Balancing Submissions and whether to update a Balancing Submission.

7A.3.5. A Market Participant, other than Synergy in respect of the Balancing Portfolio, must, within 60 minutes after LFAS Gate Closure for an LFAS Horizon, for each Trading Interval in that LFAS Horizon, use its best endeavours to make a new Balancing Submission within 30 minutes of the end of the Trading Interval in which the information is published under clause 7B.3.4(e) as follows: for each of its LFAS Facilities in the LFAS Enablement Schedules for that Trading Interval, which must fulfil the following conditions:

- (a) where its LFAS Price-Quantity Pair is selected under clause 7B.3.4(b) for the Trading Interval, so that the price in the selected LFAS Price-Quantity Pair for the quantity of capacity equal to the Upwards LFAS Enablement of the Facility for that Trading Interval is at the Alternative Maximum STEM Price and the quantity of capacity for the Facility specified in item 1(b)(xiii) of Standing Data is at the Minimum STEM Price; and the total quantity in Balancing Price-Quantity Pairs priced at the Alternative Maximum STEM Price is at least the Upwards LFAS Enablement for the Facility; and
- (b) where its LFAS Price-Quantity Pair is selected under clause 7B.3.4(c) for the Trading Interval, so that the price in the selected LFAS Price-Quantity Pair for the sum of the quantity of capacity for the Facility specified in item 1(b)(xiii) of Standing Data, plus the quantity of capacity equal to the Downwards LFAS Enablement of the Facility for that Trading Interval, is at the Minimum STEM Price; the total quantity in Balancing Price-Quantity Pairs priced at the Minimum STEM Price is at least the quantity of capacity for the Facility specified in Appendix 1(b)(xiii) plus the Downwards LFAS Enablement for the Facility.

7A.3.6. ~~AEMO must determine the BMO under clause 7A.3.2 for a Trading Interval using the most recent, valid Balancing Submissions available to it.~~[Blank]

7A.3.7. System Management must, no later than two hours after the end of the Trading Day, prepare an estimate of:

- (a) the SOI Quantity and the EOI Quantity for each Balancing Facility; and
- (b) the Relevant Dispatch Quantity,

for each Trading Interval in the Trading Day, determined in accordance with the Power System Operation Procedure.

7A.3.7A. System Management must make reasonable endeavours to prepare, no later than five minutes after the end of each Trading Interval, an estimate of:

- (a) the SOI Quantity and the EOI Quantity for each Balancing Facility; and
- (b) the Relevant Dispatch Quantity,

for that Trading Interval, determined in accordance with the Power System Operation Procedure.

7A.3.8. AEMO must, by the end of a Trading Day where ~~#System Management~~ has prepared the information under clause 7A.3.7 for a Trading Interval in the previous Trading Day:

- (a) use that information to determine a Provisional Pricing BMO for that Trading Interval; being the last Forecast BMO generated by AEMO for the Trading Interval, adjusted to take into account:
  - i. Balancing Submissions made after AEMO has generated the last Forecast BMO for the Trading Interval;
  - ii. for the Balancing Portfolio and Balancing Facilities that are Scheduled Generators, the associated Ramp Rate Limits to reflect the physically achievable capacity of the Balancing Portfolio or Balancing Facility given the SOI Quantity; and
  - iii. for Balancing Facilities that are Non-Scheduled Generators, the EOI Quantity,

where the SOI Quantity and the EOI Quantity are the quantities prepared by System Management under clause 7A.3.7;
- (b) use the Provisional Pricing BMO under clause 7A.3.8(a) to determine the Provisional Balancing Price, being the Loss Factor Adjusted Price corresponding to the point where the estimated Relevant Dispatch Quantity plus 1 MW intersects the Provisional Pricing BMO; and
- (c) publish the Provisional Balancing Price on the Market Web Site.

7A.3.9. System Management must, as soon as reasonably practicable but in any event no later than 24 hours after the start of the Business Day following the time specified in clause 7A.3.7, make updated adjustments to the information recorded under clause 7A.3.7 and AEMO must use any such updated SOI Quantity and EOI Quantity information to revise the Provisional Pricing BMO accordingly.

7A.3.9A. AEMO must determine the Pricing BMO, which is the Provisional Pricing BMO, adjusted in accordance with clause 7A.3.9 as appropriate.

7A.3.10. AEMO must ~~calculate the Pricing BMO~~, subject to clause 7A.3.13, ~~using the Provisional~~ calculate the Balancing Price using the Pricing BMO determined under clause ~~7A.3.8(a), as revised under clause 7A.3.9A, to determine the Balancing Price,~~ being the Loss Factor Adjusted Price corresponding to the point where the Relevant Dispatch Quantity plus 1 MW intersects the Pricing BMO. ~~Where there is no change to the Provisional Balancing Price determined under clause 7A.3.8(b), that price is deemed to be the Balancing Price.~~

7A.3.11. AEMO must publish the Balancing Price for each Trading Interval in a Trading Day on the next Business Day after the latest time specified in clause 7A.3.9.

7A.3.12. [Blank]

- 7A.3.13. If AEMO is unable to determine the Balancing Price under clause 7A.3.10 in time to publish it in accordance with clause 7A.3.11, then AEMO must determine the Balancing Price:
- (a) where the Relevant Dispatch Quantity and/or Pricing BMO is not available, AEMO must use the most recent estimate of the Relevant Dispatch Quantity and/or the Forecast BMO and/or the Forecast Relevant Dispatch Quantity for the Trading Interval so that the Balancing Price is the point where the Relevant Dispatch Quantity or most recent forecast estimate of the Relevant Dispatch Quantity (as applicable) plus 1 MW intersects the Pricing BMO or most recent Forecast BMO (as applicable); or
  - (b) where the Pricing BMO and the BMO are not available for the Trading Interval AEMO must use the most recent Forecast BMO in place of the BMO in clause 7A.3.13(a); and [Blank]
  - (c) where there is no Forecast BMO:
    - i. if AEMO is determining the Balancing Price for a Trading Interval in a Business Day, the Balancing Price will be the value for the equivalent Trading Interval in the most recent Trading Day in the past which is also a Business Day; or
    - ii. if AEMO is determining the Balancing Price for a Trading Interval in a day which is not a Business Day, the Balancing Price will be the value for the equivalent Trading Interval in the most recent Trading Day in the past which is also not a Business Day.

7A.3.14. Once AEMO has published the Balancing Price under clause 7A.3.11 it cannot be altered by:

- (a) disagreement under clause 9.20.6; or
- (b) disputes under clause 9.21.1.

## **Forecast BMO**

7A.3.15. System Management must, for each future Trading Interval in the Balancing Horizon, prepare a forecast of the Relevant Dispatch Quantity, and may prepare a forecast of the EOI Quantity for Non-Scheduled Generators, each determined in accordance with the Power System Operation Procedure. System Management must, each time it has new information on which to determine these quantities, update these forecasts, but is not required to do so more than once per Trading Interval.

~~7A.3.16. AEMO must for each future Trading Interval in the Balancing Horizon determine a Forecast BMO.~~

~~7A.3.17. Where AEMO determines a Forecast BMO under clause 7A.3.16, AEMO must provide to each Market Participant the Balancing Quantities expected to be provided by that Market Participant for each future Trading Interval in the Balancing Horizon.~~

~~7A.3.18. AEMO must provide the information required under clause 7A.3.17 at approximately the same time as AEMO publishes the Balancing Forecasts under clause 7A.3.21.~~

## **Balancing Forecast**

~~7A.3.19. AEMO must, if it has sufficient information available to it, determine and publish under clause 7A.3.21 the Balancing Forecast for each Trading Interval in the Balancing Horizon in accordance with the Balancing Forecast Market Procedure.~~

~~7A.3.20. AEMO must develop the Balancing Forecast Market Procedure in accordance with the following principles:~~

- ~~(a) — to the extent reasonably practicable, the Balancing Forecasts and the Forecast BMOs must use the latest information available to AEMO; and~~
- ~~(b) — to provide Market Generators with information upon which to make an assessment regarding whether to make a Balancing Submission or to update a Balancing Submission in accordance with the Market Rules.~~

~~7A.3.21. AEMO must, to the extent it is reasonably able within the Trading Interval, commencing at 6:00 PM on Balancing Market Commencement Day:~~

- ~~(a) — publish on the Market Web Site a Balancing Forecast for each Trading Interval during the Balancing Horizon;~~
- ~~(b) — by the end of every half hour thereafter, publish a Balancing Forecast for each future Trading Interval in the Balancing Horizon; and~~
- ~~(c) — as soon as practicable, publish any aggregate forecast output of Non-Scheduled Generators which is determined (in its capacity as System Management) under clause 7.6A.2(e).~~

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## **7B. Load Following Service Market**

### **7B.1. LFAS Market**

7B.1.1. AEMO must operate the LFAS Market.

7B.1.2. System Management must, in the Power System Operation Procedure, specify any technical and communication criteria that an LFAS Facility, or a type of LFAS Facility, must meet, including:

- (a) Facility quantity parameters and limits in providing LFAS, including the Minimum LFAS Quantity;
- (b) the manner and forms of communication to be used in providing LFAS, including how LFAS Facilities which are Non-Scheduled Generators, are to be activated; and

- (c) the nature and type of any enablement and quantity restrictions that will apply.
- 7B.1.3. A Market Participant must ensure that its LFAS Facility and any LFAS Submission meets the LFAS Facility Requirements.
- 7B.1.4. System Management must, by 12:00 PM on the Scheduling Day, ~~prepare a forecast of~~ determine the Forecast Upwards LFAS Quantity and the Forecast Downwards LFAS Quantity for each Trading Interval in the next Trading Day; ~~determined~~ in accordance with the Power System Operation Procedure.
- 7B.1.5. System Management may update the ~~forecast~~ Forecast LFAS ~~Quantity~~ Quantities ~~determined~~ made under clause 7B.1.4 for a Trading Interval in the Balancing Horizon at any time until ~~60 minutes~~ one hour before the LFAS Gate Closure for that Trading Interval. System Management may update the ~~forecast~~ Forecast LFAS ~~Quantity~~ Quantities more than once.

## 7B.2. LFAS Submissions

- 7B.2.1. A Market Participant may submit an LFAS Submission in respect of any of its LFAS Facilities, other than the Balancing Portfolio:
- (a) in accordance with clause 7B.2.7 ~~in respect of any of its LFAS Facilities, other than the Balancing Portfolio~~;
  - (b) for any or all Trading Intervals in the Balancing Horizon; and
  - (c) before LFAS Gate Closure for those Trading Intervals.
- 7B.2.2. A Market Participant may submit ~~a new, an~~ updated LFAS Submission in respect of any of its LFAS Facilities other than the Balancing Portfolio:
- (a) in accordance with clause 7B.2.7 ~~in respect of any of its LFAS Facilities, other than the Balancing Portfolio~~;
  - (b) for one or more Trading Intervals in the Balancing Horizon; and
  - (c) before LFAS Gate Closure for those Trading Intervals.
- 7B.2.3. ~~Subject to clause 7B.2.5,~~ Synergy must, immediately before ~~6:00 PM~~ 1:00 PM, submit an LFAS Submission, for ~~one or more~~ all Trading Intervals in the Balancing Horizon for which ~~LFAS Gate Closure has not occurred~~ it has not already made an LFAS Submission, by submitting it to AEMO in accordance with clauses 7B.2.5, 7B.2.6 and 7B.2.7.
- 7B.2.4. Subject to clause 7B.2.5, Synergy may submit ~~or update an~~ an updated LFAS Submission, ~~for one or more Trading Intervals in the Balancing Horizon for which LFAS Gate Closure has not occurred, by submitting it to AEMO~~ in respect of the Balancing Portfolio:
- (a) in accordance with clauses ~~7B.2.5~~ 7B.2.6 and 7B.2.7; ~~and~~

- (aA) for one or more Trading Intervals in the Balancing Horizon for which LFAS Gate Closure has not occurred; and
  - (b) at the time it ~~submits~~ makes an updated Balancing ~~Portfolio Supply Curve Submission~~ under clause 7A.2.9(d).
- 7B.2.5. Synergy must ensure that, for each Trading Interval for which it has made LFAS Submissions ~~under this Chapter 7B, the sum of the MW quantities contained in those LFAS Submissions equals at least the latest forecast LFAS Quantity for that Trading Interval published under clause 7B.3.15(b), if any.;~~
- (a) the sum of the MW quantities contained in the Upwards LFAS Price-Quantity Pairs in those LFAS Submissions equals at least the latest Forecast Upwards LFAS Quantity for that Trading Interval published under clause 7B.3.1(d)(i), if any; and
  - (b) the sum of the MW quantities contained in the Downwards LFAS Price-Quantity Pairs in those LFAS Submissions equals at least the latest Forecast Downwards LFAS Quantity for that Trading Interval published under clause 7B.3.1(d)(i), if any.
- 7B.2.6. Synergy, in its LFAS Submission for the Balancing Portfolio, must include a cost per MW for providing any Backup Upwards LFAS ~~Backup~~ Enablement and for providing any Backup Downwards LFAS ~~Backup~~ Enablement for each Trading Interval in the Balancing Horizon.
- 7B.2.7. An LFAS Submission must:
- (a) be in the manner and form prescribed and published by AEMO;
  - (b) constitute a declaration by an Authorised Officer; and
  - (c) abide by any enablement or quantity restrictions specified under clause 2.34.7A.
- 7B.2.8. For the purposes of clause 7B.2.7(b), where AEMO accepts an LFAS Submission from a Market Participant that complies with clause 7B.2.7(a), the submission will be deemed to constitute a declaration by an Authorised Officer of the Market Participant.
- 7B.2.9. A subsequent LFAS Submission made under clauses 7B.2.2 or 7B.2.4 in respect of the same LFAS Facility covering the same Trading Interval as an earlier LFAS Submission, overrides the earlier LFAS Submission for, and has effect in relation to, that Trading Interval.
- 7B.2.10. A-Subject to clause 7B.2.4, a Market Participant with an LFAS Facility must ensure that ~~any LFAS Submission for a,~~ for each Trading Interval in an LFAS Horizon for which LFAS Gate Closure has not occurred, its most recent LFAS Submission in respect of that LFAS Facility and Trading Interval (if any) accurately reflects:
- (a) all information reasonably available to it;



- (b) the Market Participant's reasonable expectation of the capability of the LFAS Facility to provide the LFAS to the LFAS Market; and
- (c) the price at which the Market Participant intends to have the LFAS Facility provide LFAS.

7B.2.11. A Market Participant must:

- (a) make an LFAS Submission under this clause 7B.2 in good faith; and
- (b) not act in a manner that:
  - i. is intended to lead; or
  - ii. the Market Participant should have reasonably known is likely to lead,  
to another Rule Participant being misled or deceived as to the existence or non-existence of a material fact relating to the LFAS Market.

7B.2.12. An LFAS Submission is made in good faith under clause 7B.2.11 if, at the time it is submitted, the Market Participant had a genuine intention to honour the terms of that LFAS Submission if the material conditions and circumstances upon which the LFAS Submission was based remained unchanged until the relevant Trading Interval.

7B.2.13. A Market Participant may be taken to have not made an LFAS Submission in good faith notwithstanding that the intention of the Market Participant is ascertainable only by inference from:

- (a) the conduct of the Market Participant;
- (b) the conduct of any other person; or
- (c) the relevant circumstances.

7B.2.14.

- (a) If a Market Participant does not have reasonable grounds for the price and quantity it has included in a LFAS Submission at the time it submits the LFAS Submission, then the Market Participant is, for the purposes of clause 7B.2.11(b), taken to have known that the LFAS Submission was likely to lead to another Rule Participant being misled or deceived as to the existence or non-existence of a material fact relating to the LFAS Market.
- (b) For the purposes of clause 7B.2.14(a), a Market Participant must adduce evidence that it had reasonable grounds for including the price or quantity in the LFAS Submission.
- (c) To avoid doubt, the effect of clause 7B.2.14(b) is to place an evidentiary burden on a Market Participant, and clause 7B.2.14(b) does not have the effect that, merely because such evidence is adduced, the Market Participant who submitted the LFAS Submission is taken to have had reasonable grounds for including the price or quantity, as applicable.

- (d) Clause 7B.2.14(a) does not imply that merely because the Market Participant had reasonable grounds for making the representation or the conduct referred to in this Chapter 7B, and in particular putting the price or quantity in a LFAS Submission submitted by a Market Participant, that such representation or conduct is not misleading.
- 7B.2.15. A Market Participant must not, for any Trading Interval, offer prices within its LFAS Submission in excess of the Market Participant's reasonable expectation of the incremental change in short run marginal cost incurred by the LFAS Facility providing LFAS when such behaviour relates to market power.
- 7B.2.16. In determining whether a Market Participant has made an LFAS Submission in accordance with its obligations under this Chapter 7B, the Economic Regulation Authority or AEMO, as applicable, may take into account:
- (a) historical LFAS Submissions and/or Balancing Submissions, including changes made to LFAS Submissions and/or Balancing Submissions in which a pattern of behaviour may indicate an intention to create a false impression in the LFAS Market;
  - (b) any information as to whether a Facility was not able to provide LFAS and the reasons for that failure; and
  - (c) any other information that is considered by the Economic Regulation Authority or AEMO, as applicable, to be relevant.
- 7B.2.17. For the purpose of regulation 37(a) of the WEM Regulations, where a civil penalty is imposed for a contravention of clauses 7B.2.10, 7B.2.11 or 7B.2.15, the civil penalty amount must be distributed amongst all Market Participants in proportion to their Market Fees calculated over the previous full 12 months, or part thereof if the Balancing Market Commencement Day was less than 12 months, prior to the date the civil penalty is received.
- 7B.2.18. ~~Where an LFAS Facility is selected under clauses 7B.3.4(b) or 7B.3.4(c) to provide LFAS in a Trading Interval, then a~~ Market Participant must, as soon as it becomes aware that ~~the an~~ an LFAS Facility registered to the Market Participant in an LFAS Enablement Schedule is physically unable to provide some or all of ~~the LFAS Quantity for which it has been selected~~ its LFAS Enablement, advise System Management, in the manner and form prescribed by System Management, whether the LFAS Facility is physically able to provide any LFAS in that Trading Interval and if so, the quantity, in MW.
- 7B.2.19. ~~Where an LFAS Facility is selected under clauses 7B.3.4(b) or 7B.3.4(c) to provide LFAS in a Trading Interval, then a~~ Market Participant must, unless it has provided advice to System Management under clause 7B.2.18, ensure that LFAS Facilities registered to the Market Participant in the LFAS Enablement Schedule provide the relevant LFAS in the Trading Interval when required to do so by System Management under the Market Rules.

## 7B.3. LFAS Merit Orders and LFAS Prices

~~7B.3.1.—AEMO must determine the LFAS Upwards Merit Order for a Trading Interval by deriving a ranked list of LFAS Submissions and associated LFAS Facilities. Subject to clause 7B.3.3, the list is obtained by ranking LFAS Upwards Price-Quantity Pairs for a Trading Interval contained in LFAS Submissions in order of lowest to highest price.~~

~~7B.3.2.—AEMO must determine the LFAS Downwards Merit Order for a Trading Interval by deriving a ranked list of LFAS Submissions and associated LFAS Facilities. Subject to clause 7B.3.3, the list is obtained by ranking LFAS Downwards Price-Quantity Pairs for a Trading Interval contained in LFAS Submissions in order of lowest to highest price.~~

~~7B.3.3.—In circumstances where there is a tie in the ranking of LFAS Facilities under clauses 7B.3.1 or 7B.3.2 in the LFAS Merit Order AEMO must assign priority to break the tie for the Trading Interval in which the tie occurred. Priority, for the relevant Trading Day, will be based on a daily random number assigned to each LFAS Facility in accordance with the Balancing Forecast Market Procedure.~~

~~7B.3.4.—AEMO must to the extent that it is able:~~

- ~~(a) — determine the LFAS Merit Order for each Trading Interval in an LFAS Horizon for which LFAS Gate Closure has occurred, as soon as reasonably practicable after the LFAS Gate Closure, using the most recent, valid LFAS Submissions available to it;~~
- ~~(b) — select from the LFAS Upwards Merit Order derived under clause 7B.3.4(a) the lowest priced LFAS Upwards Price-Quantity Pair or LFAS Upwards Price-Quantity Pairs, and associated LFAS Facility or LFAS Facilities, so that:
  - ~~i. — the capacity in the lowest priced LFAS Upwards Price-Quantity Pair, or the sum of the capacity in the lowest priced LFAS Upwards Price-Quantity Pairs, equals the LFAS Requirement; and~~
  - ~~ii. — if only part of the capacity in the highest priced LFAS Upwards Price-Quantity Pair selected in clause 7B.3.4(b)(i) is required to make up the LFAS Requirement, that LFAS Upwards Price-Quantity Pair is selected for that part of its capacity only;~~~~
- ~~(c) — select from the LFAS Downwards Merit Order derived under clause 7B.3.4(a) the lowest priced LFAS Downwards Price-Quantity Pair or Pairs, and associated LFAS Facility or Facilities, so that:
  - ~~i. — the capacity in the lowest priced LFAS Downwards Price-Quantity Pair, or the sum of the capacity in the lowest priced LFAS Downwards Price-Quantity Pairs, equals the LFAS Requirement; and~~
  - ~~ii. — if only part of the capacity in the highest priced LFAS Downwards Price-Quantity Pair selected in clause 7B.3.4(c)(i) is required to~~~~

make up the LFAS Requirement, that LFAS Downwards Price-Quantity Pair is selected for that part of its capacity only;

(d) ~~determine the details of:~~

- ~~i. the LFAS Facility or Facilities determined under clause 7B.3.4(b) and the associated LFAS Facility quantities and the associated Trading Interval; and~~
- ~~ii. the LFAS Facility or Facilities determined under clause 7B.3.4(c) and the associated LFAS Facility quantities and the associated Trading Interval; and~~

(e) ~~each time AEMO creates an LFAS Merit Order, publish the highest price selected under each of clauses 7B.3.4(b) and 7B.3.4(c) for each Trading Interval in the LFAS Horizon to which the LFAS Merit Order relates, as soon as reasonably practicable after the determination, but no later than 15 minutes after the LFAS Gate Closure to which the LFAS Merit Order relates.~~

~~7B.3.5. AEMO must, to the extent it is reasonably able, notify the Market Participant with the LFAS Facility or Facilities selected under clauses 7B.3.4(b) and 7B.3.4(c) of that selection and the associated LFAS Facility quantities to be provided by Trading Interval, within 15 minutes of the LFAS Gate Closure for that Trading Interval.~~

7B.3.1. AEMO must, to the extent that it is reasonably able, as soon as practicable during the first 15 minutes of each Trading Interval, for all Trading Intervals for which LFAS Gate Closure occurred at the end of the previous Trading Interval and for each later Trading Interval in the Balancing Horizon:

(a) determine using the most recent, valid LFAS Submissions available to it:

- i. the Forecast Upwards LFAS Merit Order in accordance with clause 7B.3.2(a);
- ii. the Forecast Downwards LFAS Merit Order in accordance with clause 7B.3.2(b);
- iii. the Forecast Upwards LFAS Enablement Schedule in accordance with clause 7B.3.3(a);
- iv. the Forecast Downwards LFAS Enablement Schedule in accordance with clause 7B.3.3(b);
- v. the Forecast Upwards LFAS Price in accordance with clause 7B.3.4(a); and
- vi. the Forecast Downwards LFAS Price in accordance with clause 7B.3.4(b);

(b) provide System Management with the Forecast LFAS Enablement Schedules determined under clauses 7B.3.1(a)(iii) and 7B.3.1(a)(iv);

- (c) notify each Market Participant with an LFAS Facility in an LFAS Enablement Schedule determined under clause 7B.3.1(a)(iii) or 7B.3.1(a)(iv) of the details of the Market Participant's LFAS Enablements in respect of the LFAS Facility; and
- (d) publish on the Market Web Site to each Market Participant:
  - i. the most recent Forecast LFAS Quantities provided by System Management under clauses 7B.1.4 or 7B.1.5;
  - ii. the Forecast LFAS Merit Orders, determined under clauses 7B.3.1(a)(i) and 7B.3.1(a)(ii), in the form of anonymous LFAS Price-Quantity Pairs;
  - iii. the Forecast LFAS Prices, provided in clauses 7B.3.1(a)(v) and 7B.3.1(a)(vi); and
  - iv. the Forecast Backup LFAS Prices, determined from the most recent, valid LFAS Submissions made in accordance with clause 7B.2.6.

7B.3.2. AEMO must:

- (a) subject to clause 7B.3.2(c), determine a Forecast Upwards LFAS Merit Order for a Trading Interval for the purposes of clause 7B.3.1(a)(i) by ranking Upwards LFAS Price-Quantity Pairs and associated LFAS Facilities contained in LFAS Submissions for that Trading Interval in order of lowest to highest price;
- (b) subject to clause 7B.3.2(c), determine a Forecast Downwards LFAS Merit Order for a Trading Interval for the purposes of clause 7B.3.1(a)(ii) by ranking Downwards LFAS Price-Quantity Pairs and associated LFAS Facilities contained in LFAS Submissions for that Trading Interval in order of lowest to highest price; and
- (c) in circumstances where there is a tie in the ranking of LFAS Facilities under clauses 7B.3.2(a) or 7B.3.2(b) in an LFAS Merit Order, break the tie for the Trading Interval in which the tie occurred in accordance with the Balancing Forecast Market Procedure.

7B.3.3. AEMO must:

- (a) determine a Forecast Upwards LFAS Enablement Schedule for a Trading Interval for the purposes of clause 7B.3.1(a)(iii) by selecting the lowest priced Upwards LFAS Price-Quantity Pairs and associated LFAS Facilities from the Forecast Upwards LFAS Merit Order determined under clause 7B.3.1(a)(i), so that:
  - i. the sum of the quantities in the selected Upwards LFAS Price-Quantity Pairs equals the Forecast Upwards LFAS Quantity; and
  - ii. if only part of the quantity in the highest priced Upwards LFAS Price-Quantity Pair selected is required to make up the Forecast

Upwards LFAS Quantity, that Upwards LFAS Price-Quantity Pair is selected for that part of the offered quantity only; and

- (b) determine a Forecast Downwards LFAS Enablement Schedule for a Trading Interval for the purposes of clause 7B.3.1(a)(iv) by selecting the lowest priced Downwards LFAS Price-Quantity Pairs and associated LFAS Facilities from the Forecast Downwards LFAS Merit Order determined under clause 7B.3.1(a)(ii), so that:
  - i. the sum of the quantities in the selected Downwards LFAS Price-Quantity Pairs equals the Forecast Downwards LFAS Quantity; and
  - ii. if only part of the quantity in the highest priced Downwards LFAS Price-Quantity Pair selected is required to make up the Forecast Downwards LFAS Quantity, that Downwards LFAS Price-Quantity Pair is selected for that part of the offered quantity only.

7B.3.4. AEMO must:

- (a) determine a Forecast Upwards LFAS Price for a Trading Interval for the purposes of clause 7B.3.1(a)(v) by determining the highest price in those Upwards LFAS Price-Quantity Pairs in the Forecast Upwards Enablement Schedule; and
- (b) determine a Forecast Downwards LFAS Price for a Trading Interval for the purposes of clause 7B.3.1(a)(vi) by determining the highest price in those Downwards LFAS Price-Quantity Pairs in the Forecast Downwards Enablement Schedule.

7B.3.5. [Blank]

7B.3.6. Subject to clauses 7B.2.18, 7B.3.7, 7B.3.8 and 7B.4.1, for each Trading Interval, System Management must use the LFAS Facilities referred to in clause 7B.3.4(d) for meeting LFAS requirements in the associated Trading Interval in reasonable proportion to the quantities selected under clauses 7B.3.4(b) and 7B.3.4(c), as applicable activate each LFAS Facility in each LFAS Enablement Schedule for its full LFAS Enablement and use those LFAS Facilities to provide the relevant LFAS in reasonable proportion to their relevant LFAS Enablement, and those LFAS Facilities must provide those that LFAS requirements.

7B.3.7. ~~Where AEMO is unable to determine an LFAS Merit Order for a Trading Interval in accordance with clause 7B.3.4(d)~~Where an LFAS Enablement Schedule for a Trading Interval does not exist, System Management must use Synergy's LFAS Facilities to provide LFAS for that Trading Interval.

7B.3.8. System Management may select and use LFAS Facilities other than in accordance with ~~the LFAS Merit Order~~ an LFAS Enablement Schedule where System Management considers, on reasonable grounds, that it needs to do so in order to ensure the SWIS is operated in a reliable and safe manner.

## LFAS Price

- 7B.3.9. ~~AEMO must, at the time it makes the selection under clause 7B.3.4(b), determine the Upwards LFAS Price for a Trading Interval as the highest price in those selected LFAS Upwards Price-Quantity Pairs. [Blank]~~
- 7B.3.10. ~~AEMO must, at the time it makes the selection under clause 7B.3.4(c), determine the Downwards LFAS Price for a Trading Interval as the highest price in those selected LFAS Downward Price-Quantity Pairs. [Blank]~~
- 7B.3.11. AEMO must, by the end of a Trading Day, publish the LFAS Prices<sub>s</sub> for each Trading Interval for that Trading Day.
- 7B.3.12. If AEMO is unable to determine an LFAS Price under clauses ~~7B.3.9 or 7B.3.10~~ 7B.3.4(a) or 7B.3.4(b) in time to publish it in accordance with clause 7B.3.11, AEMO must determine ~~the~~ that LFAS Price as follows:
- (a) if AEMO is determining an LFAS Price for a Trading Interval in a Business Day, ~~the~~ that LFAS Price will be the value of the equivalent LFAS Price for the equivalent Trading Interval in the most recent Trading Day in the past which is also a Business Day; or
  - (b) if AEMO is determining an LFAS Price for a Trading Interval in a day which is not a Business Day, ~~the~~ that LFAS Price will be the value of the equivalent LFAS Price for the equivalent Trading Interval in the most recent Trading Day in the past which is also not a Business Day.
- 7B.3.13. Once AEMO has published an LFAS Price under clause 7B.3.11 it cannot be altered by:
- (a) disagreement under clause 9.20.6; or
  - (b) disputes under clause 9.21.1.

## Forecast LFAS Merit Order

- ~~7B.3.14. AEMO must, for each future Trading Interval in the Balancing Horizon for which LFAS Gate Closure has not occurred, determine a forecast LFAS Merit Order.~~
- ~~7B.3.15. Where AEMO determines the forecast LFAS Merit Order under clause 7B.3.14, AEMO must, to the extent it is reasonably able, within a Trading Interval, publish on the Market Web Site to each Market Participant:~~
- ~~(a) the LFAS Quantities expected to be provided by that Market Participant for each Trading Interval in the Balancing Horizon as indicated by the forecast LFAS Merit Orders;~~
  - ~~(b) any quantities forecast by System Management under clauses 7B.1.4 and 7B.1.5;~~
  - ~~(c) forecasts of LFAS Prices based upon the forecast LFAS Merit Orders;~~

- ~~(d) forecasts of LFAS Upwards Merit Orders and LFAS Downwards Merit Orders in the form of anonymous LFAS Upwards Price-Quantity Pairs and LFAS Downwards Price-Quantity Pairs; and~~
- ~~(e) forecasts of Backup Upwards LFAS Prices and Backup Downwards LFAS Prices for each future Trading Interval in the Balancing Horizon.~~

~~7B.3.16. [Blank]~~

## **7B.4. Synergy – ~~Back Up Backup~~ LFAS Provider**

7B.4.1. Where:

- (a) an LFAS Facility in an LFAS Enablement Schedule has failed to provide all or part of its LFAS Enablement when called upon to do so by System Management in accordance with clause 7B.3.6 or 7B.3.8; ~~or~~

(aA) the LFAS Enablement of an LFAS Facility in an LFAS Enablement Schedule is greater than the LFAS Facility's available capacity, taking into account the BMO, Ramp Rate Limits and the quantities for the Facility specified in Appendix 1(b)(iii), Appendix 1(b)(xiii) and Appendix 1(b)(xv); or

- (b) the quantity of upwards or downwards LFAS in a Trading Interval required by System Management is greater than the ~~most recent~~ Upwards LFAS Quantity or Downwards LFAS Quantity published under clause (b) for that Trading Interval,

System Management may use the Balancing Portfolio or a Stand Alone Facility, to provide the LFAS Quantity Balance and/or the Increased LFAS Quantity, as applicable.

7B.4.2. Where System Management has used the Balancing Portfolio or a Stand Alone Facility to provide LFAS under clause 7B.3.7 or 7B.4.1 in a Trading Interval, System Management must, as soon as reasonably practicable, make a record of the Facilities which provided the LFAS and the quantity, in MW, of LFAS which was provided by the Facility in the Trading Interval.

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## **Settlement Data**

### **9.3. Data Collection**

9.3.1. The following information is to be used by AEMO in performing its settlement obligations:

- (a) the Ancillary Service, and outage compensation settlement data described in clause 3.22;
- (b) the Reserve Capacity settlement data described in clause 4.29;
- (c) the Network Control Service settlement data described in clause 5.9; and



- (d) the Energy Market Settlement data described in clause 6.21.
- 9.3.2. Metering Data Agents must provide to the Settlement System, settlement ready metering data in accordance with Chapter 8.
- 9.3.3. AEMO must determine the Metered Schedule for each of the following Facility types for each Trading Interval in accordance with clause 9.3.4:
- (a) Non-Dispatchable Loads;
  - (b) Interruptible Loads;
  - (c) ~~Dispatchable Loads;~~[Blank]
  - (d) Scheduled Generators; and
  - (e) Non-Scheduled Generators.
- 9.3.4. Subject to clause 2.30B.10, the Metered Schedule for a Trading Interval for each of the following Facilities:
- (a) Non-Dispatchable Loads, excluding those Non-Dispatchable Loads referred to in clause 9.3.4A;
  - (b) Interruptible Loads;
  - (c) ~~Dispatchable Loads;~~[Blank]
  - (d) Scheduled Generators; and
  - (e) Non-Scheduled Generators,
- is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility during that Trading Interval, Loss Factor adjusted to the Reference Node, and determined from Meter Data Submissions received by AEMO in accordance with ~~clause section~~ 8.4 or SCADA data maintained by System Management in accordance with clause 7.13.1(cA) where interval meter data is not available.
- 9.3.4A. AEMO must determine a single Metered Schedule for a Trading Interval for those Non-Dispatchable Loads without interval meters or with meters not read as interval meters that are served by Synergy where:
- (a) the Metered Schedule equals the Notional Wholesale Meter value for that Trading Interval;
  - (b) the Notional Wholesale Meter value for a Trading Interval equals negative one multiplied by:
    - i. the sum of the Metered Schedules with positive quantities for that Trading Interval; plus
    - ii. the sum of the Metered Schedules with negative quantities for that Trading Interval;

where the Metered Schedules referred to in clauses 9.3.4A(b)(i) and 9.3.4A(b)(ii) exclude the Metered Schedule for the Notional Wholesale Meter.

9.3.5 For the purpose of clauses 9.3.4 and 9.3.4A, a quantity of energy generated and sent out into the relevant Network has a positive value and a quantity of energy consumed has a negative value.

9.3.6. Market Participants may provide the Capacity Credit Allocation Submissions described in clause 9.4. to AEMO.

9.3.7. AEMO must determine the Consumption\_Share(p,m) for Market Participant p in each Trading Month m, to equal

- (a) the Market Participant's contributing quantity; divided by
- (b) the total contributing quantity of all Market Participants,

where the contributing quantity for a Market Participant for Trading Month m is the sum of the Metered Schedules for the Non-Dispatchable Loads, and Interruptible Loads and Dispatchable Loads registered to the Market Participant for all Trading Intervals during Trading Month m.

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## 9.8. The Balancing Settlement Calculations for a Trading Day

9.8.1. The ~~balancing settlement~~ Balancing Settlement amount for Market Participant p for Trading Interval t of Trading Day d is:

$$\text{BSA}(p,d,t) = \text{Balancing Price}(d,t) \times \text{MBQ}(p,d,t) + \text{CONC}(p,d,t) + \text{COFFC}(p,d,t) + \text{DIP}(p,d,t).$$

Where:

MBQ(p,d,t) is the Metered Balancing Quantity for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.2;

Balancing Price (d,t) is the Balancing Price for Trading Interval t of Trading Day d calculated in accordance with clause 7A.3.10;

CONC(p,d,t) is the Constrained On Compensation for Market Participant p for Trading Interval t of Trading Day d. For a Market Participant other than Synergy, CONC(p,d,t) is the sum of all ConQN x ConPN for each of the Market Participant's Scheduled Generators and Non-Scheduled Generators for Trading Interval t. For Synergy, CONC(p,d,t) is the sum of all PConQN x PConPN plus the sum of all ConQN x ConPN for each Stand Alone Facility for Trading Interval t, where ConQN, ConPN, PConQN and PConPN are calculated in accordance with ~~clause section~~ 6.17;

COFFC(p,d,t) is the Constrained Off Compensation for Market Participant p for Trading Interval t of Trading Day d. For a Market Participant other than

Synergy,  $COFFC(p,d,t)$  is the sum of all  $CoffQN \times CoffPN$  for each of the Market Participant's Scheduled Generators and Non-Scheduled Generators for Trading Interval  $t$ . For Synergy,  $COFFC(p,d,t)$  is the sum of all  $PCoffQN \times PCoffPN$  plus the sum of all  $CoffQN \times CoffPN$  for each Stand Alone Facility for Trading Interval  $t$ , where  $CoffQN$ ,  $CoffPN$ ,  $PCoffQN$  and  $PCoffPN$  are calculated in accordance with ~~clause section~~ 6.17; and

$DIP(p,d,t)$  is the Non-Balancing Facility Dispatch Instruction Payment (minus any Tranche 2 DSM Dispatch Payments)<sup>10</sup> for Market Participant  $p$  for Trading Interval  $t$  of Trading Day  $d$  calculated in accordance with clause 6.17.6.

## 9.9. The Ancillary Service Settlement Calculations for a Trading Month

9.9.1. The Ancillary Service settlement amount for Market Participant  $p$  for Trading Month  $m$  is:

$$\begin{aligned}
 ASSA(p,m) = & \text{Synergy AS Provider Payment}(p,m) \\
 & + ASP\_Payment(p,m) \\
 & + LF\_Market\_Payment(p,m) \\
 & - LF\_Capacity\_Cost\_Share(p,m) \\
 & - LF\_Market\_Cost\_Share(p,m) \\
 & - SR\_Availability\_Cost\_Share(p,m) \\
 & - Consumption\_Share(p,m) \times Cost\_LRD(m)
 \end{aligned}$$

Where

the Synergy AS Provider Payment( $p,m$ ) =  
 0 if Market Participant  $p$  is not Synergy and  
 ( $SR\_Availability\_Payment(m) + Cost\_LRD(m)$   
 -  $ASP\_Balance\_Payment(m)$ ) otherwise;

$SR\_Availability\_Payment(m)$  is defined in clause 9.9.2(g);

$ASP\_Payment(p,m)$  is the total payment to Market Participant  $p$  for Contracted Ancillary Services in Trading Month  $m$ , determined in accordance with clause 9.9.3;

$ASP\_Balance\_Payment(m)$  is the amount determined in accordance with clause 9.9.3A for Trading Month  $m$ ;

$LF\_Market\_Payment(p,m)$  is defined in clause 9.9.2(d);

$LF\_Capacity\_Cost\_Share(p,m)$  is defined in clause 9.9.2(p);

$LF\_Market\_Cost\_Share(p,m)$  is defined in clause 9.9.2(n);

$SR\_Availability\_Cost\_Share(p,m)$  is defined in clause 9.9.2(l);

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<sup>10</sup> Tranche 2 DSM Dispatch Payments are deducted from the DIP, because they have already been paid under clause 9.7.1A.

Consumption\_Share(p,m) is the proportion of consumption associated with Market Participant p for Trading Month m determined by AEMO in accordance with clause 9.3.7; and

Cost\_LRD(m) is the total Load Rejection Reserve Service, System Restart Service and Dispatch Support Service payment cost for Trading Month m as specified by AEMO under clause 3.22.1(g).

9.9.1A. The Ancillary Service settlement amount for Trading Month m for Rule Participant i where Rule Participant i is not a Market Participant is ASP\_Payment(i,m), determined in accordance with clause 9.9.3.

9.9.2. The following terms relate to Load Following Service and Spinning Reserve Service costs in Trading Month m:

(a) the payment to Market Participant p for providing upwards LFAS in Trading Interval t:

$$\begin{aligned} \text{LF\_Up\_Market\_Payment}(p,t) = & \\ & \text{LF\_Up}(p,t) \times \text{LF\_Up\_Price}(t) \\ & + \text{LF\_Up\_Backup}(p,t) \times \text{LF\_Up\_Backup\_Price}(p,t) \end{aligned}$$

(b) the payment to Market Participant p for providing downwards LFAS in Trading Interval t:

$$\begin{aligned} \text{LF\_Down\_Market\_Payment}(p,t) = & \\ & \text{LF\_Down}(p,t) \times \text{LF\_Down\_Price}(t) \\ & + \text{LF\_Down\_Backup}(p,t) \times \text{LF\_Down\_Backup\_Price}(p,t) \end{aligned}$$

(c) the total payment to Market Participant p for Load Following Service in Trading Interval t:

$$\begin{aligned} \text{LF\_Market\_Payment}(p,t) = & \\ & \text{LF\_Up\_Market\_Payment}(p,t) + \text{LF\_Down\_Market\_Payment}(p,t) \end{aligned}$$

(d) the total payment to Market Participant p for Load Following Service in Trading Month m:

$$\begin{aligned} \text{LF\_Market\_Payment}(p,m) = & \\ & \text{Sum}(t \in T, \text{LF\_Market\_Payment}(p,t)) \end{aligned}$$

(e) the total payment to all Market Participants for Load Following Service in Trading Interval t:

$$\begin{aligned} \text{LF\_Market\_Payment}(t) = & \\ & \text{Sum}(p \in P, \text{LF\_Market\_Payment}(p,t)) \end{aligned}$$

(f) the total payment to all Market Participants for Spinning Reserve Service in Trading Interval t:

$$\begin{aligned} \text{SR\_Availability\_Payment}(t) = & \\ & 0.5 \times \text{Margin}(t) \times \text{Balancing\_Price}(t) \\ & \times \max(0, \text{SR\_Capacity}(t) - \text{LF\_Up\_Capacity}(t)) \\ & - \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t)) \\ & + \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRPayment}(c,m) / \text{TITM}) \end{aligned}$$

- (g) the total payment to Market Participants for Spinning Reserve Service in Trading Month m:

$$\text{SR\_Availability\_Payment}(m) = \text{Sum}(t \in T, \text{SR\_Availability\_Payment}(t))$$

- (h) the assumed total cost of Spinning Reserve Service if no Spinning Reserve was provided by Load Following plant and without the Ancillary Service cost saving, in Trading Interval t:

$$\begin{aligned} \text{SR\_NoLF\_Cost}(t) = & 0.5 \times \text{Margin}(t) \times \text{Balancing\_Price}(t) \\ & \times \max(0, \text{SR\_Capacity}(t) - \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t))) \\ & + \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRPayment}(c,m) / \text{TITM}) \end{aligned}$$

- (i) the Ancillary Service cost saving, derived through the dual use of plant to simultaneously provide Spinning Reserve Service and Load Following Service in Trading Interval t in Trading Month m:

$$\begin{aligned} \text{AS\_Cost\_Saving}(t) = & 0.5 \times \text{Margin}(t) \times \text{Balancing\_Price}(t) \\ & \times \min(\text{LF\_Up\_Capacity}(t), \\ & \text{SR\_Capacity}(t) - \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t))) \end{aligned}$$

- (j) the allocation factor for the Ancillary Service cost saving in Trading Interval t:

$$\begin{aligned} \text{AS\_Saving\_Factor}(t) = & \text{LF\_Market\_Payment}(t) / \\ & (\text{LF\_Market\_Payment}(t) + \text{SR\_NoLF\_cost}(t)) \end{aligned}$$

- (k) LF\_Up\_Capacity(t) is the capacity necessary to cover the requirement for providing upwards LFAS for Trading Interval t:

$$\text{LF\_Up\_Capacity}(t) = \text{Sum}(p \in P, \text{LF\_Up}(p,t) + \text{LF\_Up\_Backup}(p,t))$$

- (l) the Spinning Reserve availability cost share for Market Participant p, which is a Market Generator, for Trading Month m:

$$\begin{aligned} \text{SR\_Availability\_Cost\_Share}(p,m) = & \text{Sum}(t \in T, \text{SR\_Share}(p,t) \times \\ & ((0.5 \times \text{Margin}(t) \times \text{Balancing\_Price}(t) \\ & \times \max(0, \text{SR\_Capacity}(t) - \text{LF\_Up\_Capacity}(t) \\ & - \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t)))) \\ & + \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRPayment}(c,m) / \text{TITM}) \\ & + (\text{AS\_Saving\_Factor}(t) \times \text{AS\_Cost\_Saving}(t)))) \end{aligned}$$

- (m) the total Spinning Reserve availability cost for Trading Month m:

$$\text{SR\_Availability\_Cost}(m) = \text{Sum}(p \in P, \text{SR\_Availability\_Cost\_Share}(p,m))$$

- (n) the Load Following market cost share for Market Participant p for Trading Month m:

$$\begin{aligned} \text{LF\_Market\_Cost\_Share}(p,m) = & \\ & \text{Sum}(t \in T, \text{LF\_Share}(p,m) \\ & \times (\text{LF\_Market\_Payment}(t) \\ & - \text{AS\_Saving\_Factor}(t) \times \text{AS\_Cost\_Saving}(t))) \end{aligned}$$

- (o) the total Load Following market cost for Trading Month m:

$$\begin{aligned} \text{LF\_Market\_Cost}(m) = & \\ & \text{Sum}(p \in P, \text{LF\_Market\_Cost\_Share}(p,m)) \end{aligned}$$

- (p) the Load Following capacity cost share for Market Participant p for Trading Month m:

$$\begin{aligned} \text{LF\_Capacity\_Cost\_Share}(p,m) = & \\ & (\text{Monthly\_Reserve\_Capacity\_Price}(m) / \text{TITM}) \\ & \times \text{Sum}(t \in T, \text{LF\_Share}(p,m) \times \text{LF\_Up\_Capacity}(t)) \end{aligned}$$

- (q) the total Load Following capacity cost for Trading Month m:

$$\begin{aligned} \text{LF\_Capacity\_Cost}(m) = & \\ & \text{Sum}(p \in P, \text{LF\_Capacity\_Cost\_Share}(p,m)) \end{aligned}$$

Where

t denotes a Trading Interval in Trading Month m;

T is the set of Trading Intervals in Trading Month m;

LF\_Up(p,t) is the sum of any Ex-post Upwards LFAS Enablement quantities provided under clause 7.13.1(e) for LFAS Facilities registered to Market Participant p in Trading Interval t;

LF\_Up\_Price(t) is the Upwards LFAS Price for Trading Interval t;

LF\_Up\_Backup(p,t) is the sum of any Backup Upwards LFAS ~~Backup~~ Enablement quantities for Trading Interval t if Market Participant p is Synergy and 0 otherwise;

LF\_Up\_Backup\_Price(p,t) is the Backup Upwards LFAS Price for Trading Interval t if Market Participant p is Synergy and 0 otherwise;

LF\_Down(p,t) is the sum of any Ex-post Downwards LFAS Enablement quantities provided under clause 7.13.1(eC) for LFAS Facilities registered to Market Participant p in Trading Interval t;

LF\_Down\_Price(t) is the Downwards LFAS Price for Trading Interval t;

LF\_Down\_Backup(p,t) is the sum of any Backup Downwards LFAS ~~Backup~~ Enablement quantities for Trading Interval t if Market Participant p is Synergy and 0 otherwise;

LF\_Down\_Backup\_Price(p,t) is the Backup Downwards LFAS Price for Trading Interval t if Market Participant p is Synergy and 0 otherwise;

Balancing\_Price(t) is the greater of zero and the Balancing Price for Trading Interval t;

c denotes a Contracted Ancillary Service;

CAS\_SR is the set of Contracted Spinning Reserve Services;

P is the set of all Market Participants;

ASP\_SRQ(c,t) is the quantity determined by System Management for Contracted Spinning Reserve Service c in Trading Interval t multiplied by 2 to convert to units of MW;

ASP\_SRPayment(c,m) is defined in clause 9.9.4;

TITM is the number of Trading Intervals in Trading Month m (excluding any Trading Intervals prior to Energy Market Commencement);

SR\_Share(p,t) is the share of the Spinning Reserve Service payment costs allocated to Market Participant p in Trading Interval t, where this is to be determined by AEMO using the methodology described in clause 3.14.2;

LF\_Share(p,m) is the share of the Load Following Service costs allocated to Market Participant p in Trading Month m, where this is to be determined by AEMO using the methodology described in clause 3.14.1;

Margin(t) is Margin\_Peak(m), if Trading Interval t is a Peak Trading Interval and Margin\_Off-Peak(m), if Trading Interval t is a Off-Peak Trading Interval;

Margin\_Peak(m) is the reserve availability payment margin applying for Peak Trading Intervals for Trading Month m as specified by AEMO under clause 3.22.1(c);

Margin\_Off-Peak(m) is the reserve availability payment margin applying for Off-Peak Trading Intervals for Trading Month m as specified by AEMO under clause 3.22.1(d);

SR\_Capacity(t) is SR\_Capacity\_Peak(m), if Trading Interval t is a Peak Trading Interval; and SR\_Capacity\_Off-Peak(m) if Trading Interval t is an Off-Peak Trading Interval;

SR\_Capacity\_Peak(m), is the capacity necessary to cover the Ancillary Services Requirement for Spinning Reserve for Peak Trading Intervals for Trading Month m as specified by AEMO under clause 3.22.1(e);

SR\_Capacity\_Off-Peak(m), is the capacity necessary to cover the Ancillary Services Requirement for Spinning Reserve for Off-Peak Trading Intervals for Trading Month m as specified by AEMO under clause 3.22.1(f);

Ex-post\_Upwards\_LFAS\_Enablement(t) is the sum of the quantities provided under clause 7.13.1(e) for Trading Interval t; and

Upwards\_LFAS\_Backup\_Enablement(t) is any quantity provided under clause 7.13.1(eA) for Trading Interval t.

...

## **9.11. The Reconciliation of Settlement Calculations for a Trading Month**

9.11.1. The Reconciliation Settlement amount for Market Participant p for Trading Month m is:

$$\text{RSA}(p,m) = -(-1) \times \text{Consumption\_Share}(p,m) \times (\text{Sum}(q \in P, d \in D, t \in T, \text{BSA}(q,d,t)) + \text{Cost\_LR\_Shortfall}(m))$$

Where

Consumption\_Share(p,m) is the proportion of consumption associated with Market Participant p for Trading Month m determined by AEMO in accordance with clause 9.3.7;

BSA(q,d,t) is the Balancing Settlement ~~Amount~~ amount for Market Participant q for Trading Day d and Trading Interval t;

Cost\_LR\_Shortfall(m) is determined in accordance with clause 9.9.3B;

P is the set of all Market Participants, where “p” and “q” are both used to refer to a member of that set;

D is the set of all Trading Days in Trading Month m, where “d” is used to refer to a member of that set; and

T is the set of all Trading Intervals in Trading Day d, where “t” refers to a member of that set.

## 9.12. [Blank]

### 9.12.1. [Blank]

### 9.12.2. [Blank]

## 9.13. The Market Participant Fee Settlement Calculations for a Trading Month

### 9.13.1. The applicable Market Participant Fee settlement amount for Market Participant p for Trading Month m is:

$$\text{MPFSA}(p,m) = (-1) \times (\text{Market Fee rate} + \text{System Management Fee rate} + \text{Regulator Fee rate}) \times (\text{Monthly Participant Load}(p,m) + \text{Monthly Participant Generation}(p,m))$$

Where

Market Fee rate is the charge per MWh for AEMO’s services determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

System Management Fee rate is the charge per MWh for AEMO’s system management services determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

Regulator Fee rate is the charge per MWh for funding the Economic Regulation Authority’s and the Rule Change Panel’s activities with respect to the Wholesale Electricity Market and other functions under these Market Rules and the Regulations determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;



Monthly Participant Load(p,m) = (-1) × -Sum(d∈D,t∈T,Metered Load(p,d,t));

where

Metered Load(p,d,t) for a Market Participant p for a Trading Interval t is the sum of the mathematical absolute values of the Metered Schedules for the Non-Dispatchable Loads, ~~Dispatchable Loads~~ and Interruptible Loads, registered to the Market Participant for Trading Interval t; and

Monthly Participant Generation(p,m)  
= Sum(d∈D,t∈T, Metered Generation(p,d,t));

where

Metered Generation(p,d,t) for Market Participant p for Trading Interval t is the sum of the mathematical absolute values of the Metered Schedules for Scheduled Generators and Non-Scheduled Generators, registered to the Market Participant for Trading Interval t; and

D is the set of all Trading Days in Trading Month m, where “d” is used to refer to a member of that set;

T is the set of all Trading Intervals in Trading Day d, where “t” is used to refer to a member of that set.

...

## 9.18. Non-STEM Settlement Statements

9.18.1. AEMO must provide Non-STEM Settlement Statements to Market Participants in accordance with the settlement cycle timeline published under clause 9.16.2.

9.18.2. AEMO must provide a Non-STEM Settlement Statement to each:

- (a) Market Generator; and
- (b) Market Customer.

9.18.3. A Non-STEM Settlement Statement must contain the following information:

- (a) details of the Trading Days covered by the Non-STEM Settlement Statement;
- (b) the identity of the Market Participant to which the Non-STEM Settlement Statement relates;
- (c) for each Trading Interval of each Trading Day:
  - i. the Bilateral Contract quantities for that Market Participant;
  - ii. the Net Contract Position of the Market Participant;
  - iiA. the MWh quantity of energy scheduled from each of the Market Participants Facilities;

- iii. ~~the energy scheduled to be provided in accordance with a Resource Plan issued by, or applicable to, that Market Participant provided under clause 6.5;~~[Blank]
- iv. the Maximum Theoretical Energy Schedule and the Minimum Theoretical Energy Schedule data for each of the Market Participant's Registered Facilities;
- v. the meter reading for each Registered Facility associated with the Market Participant;
- vi. [Blank]
- vii. in the case of Synergy:
  - 1. Notional Wholesale Meter values; and
  - 2. the total quantity of energy deemed to have been supplied by its Registered Facilities;
- viii. the value of the Balancing Price; and
- viiiA. any ConQN, CoffQN, PConQN, PCoffQN, Non Qualifying Constrained On Generation and Non Qualifying Constrained Off Generation under Chapter 6;
- viiiB. details of any Non-Balancing Facility Dispatch Instruction Payment;
- viiiC. the Metered Balancing Quantity for the Market Participant;
- ix. details of amounts calculated for the Market Participant under ~~clauses~~ sections 9.7 to 9.14 with respect to:
  - 1. Reserve Capacity settlement;
  - 2. Balancing ~~settlement~~ Settlement;
  - 3. Ancillary Services settlement;
  - 4. Outage compensation settlement;
  - 5. Reconciliation settlement;
  - 6. [Blank]
  - 7. Fee settlement; and
  - 8. Net Monthly Non-STEM Settlement Amount;
- (cA) details of any Capacity Credits allocated to the Market Participant in a Capacity Credit Allocation Submission made by another Market Participant in accordance with clauses 9.4 and 9.5;
- (cB) details of any Capacity Credits allocated to another Market Participant in a Capacity Credit Allocation Submission made by the Market Participant in accordance with clauses 9.4 and 9.5;
- (cC) details of any reductions in payments in the preceding Trading Month under clause 9.24.3A as a result of a Market Participant being in default;

- (cD) details of any payments to the Market Participant as a result of AEMO recovering funds not paid to the Market Participant in previous Trading Months under clause 9.24.3A as a result of a Market Participant being in default;
- (cE) in regard to Default Levy re-allocations, as defined in accordance with clause 9.24.9:
  - i. the total amount of Default Levy paid by that Market Participant during the Financial Year, with supporting calculations;
  - ii. the adjusted allocation of those Default Levies to be paid by that Market Participant, with supporting calculations; and
  - iii. the net adjustment be made;
- (d) whether the statement is an adjusted Non-STEM Settlement Statement and replaces a previously issued Non-STEM Settlement Statement;
- (e) in the case of an adjusted Non-STEM Settlement Statement, details of all adjustments made relative to the first Non-STEM Settlement Statement issued for that Trading Month with an explanation of the reasons for the adjustments;
- (f) any interest applied in accordance with clause 9.1.3;
- (g) the net dollar amount owed by the Market Participant to AEMO for the billing period (i.e. the Trading Days covered by the Non-STEM Settlement Statement) where this may be a positive or negative amount; and
- (h) all applicable taxes.

9.18.4. A Market Participant may under clause 9.20 issue a Notice of Disagreement in respect of a Non-STEM Settlement Statement by the Non-STEM Settlement Disagreement Deadline.

...

- 9.24.2. If, under Part 5.7B of the Corporations Act or another law relating to insolvency or the protection of creditors or similar matters, AEMO is required to disgorge or repay an amount, or pay an amount equivalent to an amount, paid by a Market Participant under the Market Rules:
- (a) AEMO may Draw Upon any Credit Support held by AEMO in relation to the Market Participant for the amount disgorged, repaid or paid (“**Repaid Amount**”); and
  - (b) if AEMO is not able to recover all or part of the Repaid Amount by drawing upon Credit Support held by AEMO in relation to the Market Participant, then AEMO must take the Repaid Amount into account the next time it calculates the Reconciliation Settlement amount under clause 9.11.1 as if it was a positive Balancing Settlement ~~Amount~~ amount for a Market Participant for a Trading Day during the relevant Trading Month.

...

## Information to be Released via the Market Web Site

### 10.5. Public Information

10.5.1. AEMO must set the class of confidentiality status for the following information under clause 10.2.1 as Public and AEMO must make each item of information available from or via the Market Web Site after that item of information becomes available to AEMO:

...

(h) for each Trading Interval in each completed Trading Day in the previous 12 calendar months:

- i. the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Synergy; and
- ii. the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Market Participants other than Synergy; and
- ~~iii. the sum of the Resource Plan schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Market Participants other than Synergy;~~

...

(iA) the following Balancing Market summary information:

- i. for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
  1. where available, each Balancing Forecast;
  2. where available, the most recent Forecast BMO, excluding information that would identify specific Market Participants;
  3. where available, the Relevant Dispatch Quantity; and
  4. where available, the Balancing Price; and
- ii. for each Trading Interval in each completed Trading Day in the previous 12 calendar months, before the end of the seventh day from the start of the Trading Day; full details of the most recent Balancing Submissions submitted for each Balancing Facility and the Balancing Portfolio;
  - ~~1. the prices in Balancing Price-Quantity Pairs submitted in Balancing Submissions by Market Participant; and~~
  - ~~2. the Fuel Declaration, Availability Declaration and, if applicable, Ancillary Service Declaration made by Market Participant;~~

- (iB) the following LFAS summary information for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
- i. the ~~LFAS~~ Downwards LFAS Merit Order;
  - ii. the ~~LFAS~~ Upwards LFAS Merit Order;
  - iii. where available, the Upwards LFAS Quantity and the Downwards LFAS Quantity; and
  - iv. where available, the Upwards LFAS Price and the Downwards LFAS Price;

...

- (j) for each Trading Interval in each completed Trading Day in the previous 12 calendar months the following dispatch summary information:
- i. ~~the values of the Balancing Price, the LFAS Prices, and the Backup Downwards LFAS Prices and the Backup Upwards LFAS Price;~~
  - ii. the Load Forecast prepared by AEMO (in its capacity as System Management) in accordance with clause 7.2.1;
  - iii. the sum of the Metered Schedule load for all Non-Dispatchable Load, ~~Dispatchable Load~~ and Interruptible Load;
  - iv. estimates of the energy not served due to involuntary load curtailment; and
  - v. any shortfalls in Ancillary Services;

(jA)

- i. for each Trading Interval in each completed Trading Day in the previous 12 calendar months, before the end of the seventh day from the start of the Trading Day, any changes to a Facility's Consumption Decrease Price, ~~Consumption Increase Price~~ or Extra Consumption Decrease Price; and
- ii. the values of any Consumption Decrease Price, ~~Consumption Increase Price~~ or Extra Consumption Decrease Price of a Facility that has been dispatched pursuant to a Dispatch Instruction, as soon as practicable;

...

- (v) summary information pertaining to the account maintained by AEMO for market settlement for the preceding 24 calendar months, including:
- i. the end of month balance;
  - ii. the total income received for transactions in each of the Reserve Capacity Mechanism, the STEM, Balancing Settlement, Market Fees, System Management Fees, Regulator Fees and a single value for all other income;

- iii. the total outgoings paid for transactions in each of the Reserve Capacity Mechanism (excluding Supplementary Capacity Contracts), Supplementary Capacity Contracts, the STEM, Balancing Settlement and a single value for all other expenses; and
- iv. Service Fee Settlement Amount paid to AEMO and the Economic Regulation Authority;

...

...

10.7.1. AEMO must set the class of confidentiality status for the following information under clause 10.2.1, as Rule Participant Market Restricted Information and AEMO must make this information available from the Market Web Site:

- (a) all Reserve Capacity Offer information issued by that Market Participant and all details of Special Price Arrangements for that Market Participant prior to the publication of that information in accordance with clause 10.5.1(f);
- (b) Market Participant specific Reserve Capacity Obligations;
- (c) Market Customer specified Individual Reserve Capacity Requirements partitioned into those associated with Intermittent Loads and those not associated with Intermittent Loads;
- (d) for each completed Trading Day for the past 12 months:
  - i. Market Participant specific Bilateral Submissions and Resource Plan Submissions; and
  - ii. Market Participant specific STEM Submissions and Standing STEM Submissions used in the absence of a STEM Submission except that information published in accordance with clause 10.5.1(i); and
- (e) for the past 12 months:
  - i. Non-STEM Settlement Statements; and
  - ii. STEM Settlement Statements.

...

## 11. Glossary

...

**Backup Downwards LFAS Enablement:** Means, for a Synergy LFAS Facility, the capacity in MW which System Management has activated under clauses 7B.3.7 or 7B.4.1 in a Trading Interval to compensate for a shortfall in Downwards LFAS Enablement, and which has been recorded under clause 7B.4.2.

**Backup Downwards LFAS Price:** Means the cost referred to in clause 7B.2.6 for Synergy providing Backup Downwards LFAS Backup Enablement for a Trading Interval, determined from the most recent, valid LFAS Submissions made in accordance with clause 7B.2.6.

**Backup LFAS Enablement:** Means Backup Downwards LFAS Enablement and/or Backup Upwards LFAS Enablement, as applicable.

**Backup LFAS Price:** Means the Backup Downwards LFAS Price and/or the Backup Upwards LFAS Price, as applicable.

**Backup Upwards LFAS Enablement:** Means, for a Synergy LFAS Facility, the capacity in MW which System Management has activated under clauses 7B.3.7 or 7B.4.1 in a Trading Interval to compensate for a shortfall in Upwards LFAS Enablement, and which has been recorded under clause 7B.4.2.

**Backup Upwards LFAS Price:** Means the cost referred to in clause 7B.2.6 for Synergy providing Backup Upwards LFAS Backup Enablement for a Trading Interval, determined from the most recent, valid LFAS Submissions made in accordance with clause 7B.2.6.

**Balancing:** ~~The process for meeting supply and consumption deviations from contracted bilateral and STEM positions in each Trading Interval.~~

...

**Balancing Final Rule Change Report:** ~~Has the meaning given in clause 1.10.1.~~

...

**Balancing Forecast Market Procedure:** Means the Market Procedure developed under ~~clause 7A.3.20~~ clauses 7A.3.3 and 7A.3.4.

...

**Balancing Horizon:** Means:

- (a) ~~from 8:00 AM the day before the Balancing Market Commencement Day and to 6:00 PM on the Balancing Market Commencement Day, the 24 hour period occurring for the Trading Day (8:00 AM to 8:00 AM) of the Balancing Market Commencement Day; and~~
- (b) ~~from 6:00 PM on the Balancing Market Commencement Day, the 38 hour period from 6:00 PM on the Balancing Market Commencement Day to the end of the Trading Day after the end of the Balancing Market Commencement; and~~
- (c) ~~from 6:00 PM every day thereafter, the 38 hour period from 6:00 PM to the end of the next Trading Day at 8:00 AM.~~

**Balancing Horizon:** Means, from 1:00 PM each Trading Day, the 43-hour period from 1:00 PM to the end of the next Trading Day at 8:00 AM.

**Balancing Market:** Means the mandatory gross pool market operated under Chapter 7A in which Facilities, including the Balancing Portfolio as a single Facility, can manage their contractual positions and meet supply and consumption deviations from contracted bilateral and STEM positions in each Trading Interval, that determines the dispatch of Scheduled Generators and Non-Scheduled Generators in each Trading Interval based on submitted prices and quantities.

...

**Balancing Merit Order or BMO:** Means the ordered list of Balancing Facilities, and associated quantities, determined by AEMO under clause 7A.3.2.

**Balancing Merit Order:** Means, for a Trading Interval, the ordered list of Balancing Facilities, and associated quantities, used by System Management for issuing Dispatch Instructions for the Trading Interval, determined as:

- (a) the last Forecast BMO for the Trading Interval received by System Management under clause 7A.3.1(b); or
- (b) if no Forecast BMO is received, the Balancing Merit Order that was used by System Management for issuing Dispatch Instructions for the same Trading Interval on the most recent Business Day if the Trading Interval occurs on a Business Day, or the most recent non-Business Day if the Trading Interval occurs on a non-Business Day.

**Balancing Portfolio:** Means Synergy's Registered Facilities other than:

- (a) Stand Alone Facilities;
- (b) Demand Side Programmes; and
- (c) Dispatchable Loads; and [Blank]
- (d) Interruptible Loads.

**Balancing Portfolio Supply Curve:** Means a ranking of the Balancing Price-Quantity Pairs provided for the Balancing Portfolio.

...

**Balancing Quantity:** Means, in respect of a Trading Interval, the quantity, if any, calculated in accordance with the Market Procedure and published under clause 7A.3.17(a).

**Balancing Settlement:** Means the process for settling supply and consumption deviations from contracted bilateral and STEM positions in each Trading Interval.

**Balancing Submission:** Means: a submission by a Market Participant to AEMO, for a Balancing Facility or the Balancing Portfolio, for one or more Trading Intervals, that includes the information specified in clause 7A.2.4 and complies with clauses 7A.2.4A, 7A.2.4B and 7A.2.4C as applicable.

- (a) for a Balancing Facility, other than the Balancing Portfolio, that is:



- i. ~~a Scheduled Generator, for each Trading Interval or Trading Intervals, a ranking of Balancing Price-Quantity Pairs for each MW of its Sent Out Capacity from zero capacity to the maximum Sent Out Capacity, together with associated Ramp Rate Limit for each Trading Interval; and~~
  - ii. ~~a Non-Scheduled Generator, for each Trading Interval or Trading Intervals, the Market Generator's best estimate of the quantity for the Balancing Price-Quantity Pair, in MW, the Facility is able to reduce its output, together with the associated Ramp Rate Limit for each Trading Interval; and~~
- (b) ~~for the Balancing Portfolio, the Balancing Portfolio Supply Curve together with the Portfolio Ramp Rate Limit.~~

...

**BMO**: See Balancing Merit Order.

...

**Constrained Off Compensation Price**: Has the meaning given in clauses 6.17.4 and 6.17.4A.

**Constrained Off Quantity**: Has the meaning given in clauses 6.17.4 and 6.17.4A.

**~~Constrained Off Portfolio Quantity~~**: ~~Has the meaning given in clause 6.17.5A.~~

**Constrained On Compensation Price**: Has the meaning given in clauses 6.17.3, and 6.17.3A ~~or clause 6.17.5.~~

**Constrained On Quantity**: Has the meaning given in clauses 6.17.3 and 6.17.3A.

**Consumption Decrease Price**: A price specified in ~~items Appendix 1(h)(vi)(1) or Appendix 1(h)(vi)(2), (i)(xA)(3) or (i)(xA)(4) of Appendix 1~~, accepted by AEMO under section 6.11A, to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a ~~Dispatchable Load or Demand Side Programme~~ and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that ~~Dispatchable Load or Demand Side Programme~~ for that Trading Interval.

**~~Consumption Increase Price~~**: ~~A price specified in items (i)(xA)(1) or (i)(xA)(2) of Appendix 1, which must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a Dispatchable Load and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that Dispatchable Load for that Trading Interval, which varies for Peak Trading Intervals and Off-Peak Trading Intervals.~~

...

**Dispatch Advisory:** Means a communication by System Management to Market Participants and Network Operators that there has been, or is likely to be, an event that will require dispatch of ~~Non-Balancing Facilities~~ Demand Side Programmes or Facilities Out of Merit, or will restrict communication between System Management and any of the Market Participants or Network Operators.

...

**Dispatch Plan:** Means ~~the schedule of~~ System Management's forecast of how it will use each Facility in the Balancing Portfolio to provide energy and Ancillary Services ~~to be provided, or to be available to be provided on request, by the Facilities of Synergy in the Balancing Portfolio, during in each Trading Interval of~~ a Trading Day, where ~~these schedules~~ this forecast may be revised by System Management during the course of the corresponding Scheduling Day and the Trading Day.

...

**Dispatchable Load:** A Load, with a rated capacity of not less than 0.2 MW, through which electricity is consumed where such consumption can be increased or decreased to a specified level upon instruction to do so by System Management to the person managing the Load, and registered as such in accordance with ~~clause 2.29.5(c).~~

...

**Downwards LFAS Backup Enablement:** Means ~~for a Synergy LFAS Facility, the capacity in MW, which System Management has activated under clause 7B.4.1 in a Trading Interval to compensate for a shortfall in~~ Downwards LFAS Enablement and which has been notified to AEMO under clause 7B.4.2.

**Downwards LFAS Enablement:** Means, for a Trading Interval and an LFAS Facility, the ~~capacity total quantity, or that part of the capacity, in MW, in an LFAS Downwards Price-Quantity Pair selected under clause 7B.3.4(c) which is~~ associated with that LFAS Facility or with the Balancing Portfolio, as applicable in the Downwards LFAS Enablement Schedule for that Trading Interval.

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

**Downwards LFAS Merit Order:** Means, for a Trading Interval, the Forecast Downwards LFAS Merit Order for that Trading Interval used by AEMO under clause 7B.3.3(b) to determine the Downwards LFAS Enablement Schedule.

**Downwards LFAS Price:** Means, for a Trading Interval, the price Forecast Downwards LFAS Price for that Trading Interval determined by AEMO under clause 7B.3.10 or 7B.3.4(b) from the Downwards LFAS Enablement Schedule, subject to clause 7B.3.12, and published under clause 7B.3.11.

**Downwards LFAS Price-Quantity Pair:** Means for an LFAS Facility:

- (a) the specified non-Loss Factor adjusted capacity, in MW, by which a Market Participant is prepared to have its LFAS Facility activated downwards within a Trading Interval; and
- (b) the non-Loss Factor Adjusted Price, in \$/MW, the Market Participant wants to be paid to have that capacity available within that Trading Interval.

**Downwards LFAS Quantity:** Means ~~the capacity, in MW, of downwards Load Following Service required by System Management, for a Trading Interval,~~ the Forecast Downwards LFAS Quantity for that Trading Interval used by AEMO under clause 7B.3.3(b) to determine the Downwards LFAS Enablement Schedule.

...

**Forecast Backup Downwards LFAS Price:** Means the cost referred to in clause 7B.2.6 for Synergy providing Backup Downwards LFAS Enablement for a Trading Interval, determined from the most recent, valid LFAS Submissions made in accordance with clause 7B.2.6 at the time when that cost is published by AEMO under clause 7B.3.1(d)(iv).

**Forecast Backup LFAS Price:** Means the Forecast Backup Downwards LFAS Price and/or the Forecast Backup Upwards LFAS Price, as applicable.

**Forecast Backup Upwards LFAS Price:** Means the cost referred to in clause 7B.2.6 for Synergy providing Backup Upwards LFAS Enablement for a Trading Interval, determined from the most recent, valid LFAS Submissions made in accordance with clause 7B.2.6 at the time when that cost is published by AEMO under clause 7B.3.1(d)(iv).

**Forecast BMO:** Means ~~a forecast of the BMO for future Trading Intervals in the Balancing Horizon determined by AEMO in accordance with the Balancing Forecast Market Procedure.~~

**Forecast BMO:** Means the ordered list of Balancing Facilities, and associated quantities, determined by AEMO under clause 7A.3.1(a).

...

**Forecast Downwards LFAS Enablement Schedule:** Means, for a Trading Interval, a list of LFAS Facilities and associated quantities for that Trading Interval determined by AEMO under clause 7B.3.1(a)(iv).

**Forecast Downwards LFAS Merit Order:** Means, for a Trading Interval, a ranked list of Downwards LFAS Price-Quantity Pairs for that Trading Interval determined by AEMO under clause 7B.3.1(a)(ii).

**Forecast Downwards LFAS Price:** Means, for a Trading Interval, the highest price in a Downwards LFAS Price-Quantity Pair selected in a Forecast Downwards LFAS Enablement Schedule for that Trading Interval, determined by AEMO under clause 7B.3.1(a)(vi).

**Forecast Downwards LFAS Quantity:** Means System Management's estimate of the capacity, in MW, of downwards LFAS required by System Management for a Trading Interval, prepared by System Management under clauses 7B.1.4 or 7B.1.5.

**Forecast LFAS Enablement Schedule:** Means the Forecast Downwards LFAS Enablement Schedule and/or the Forecast Upwards LFAS Enablement Schedule, as applicable.

**Forecast LFAS Merit Order:** Means the Forecast Downwards LFAS Merit Order and/or the Forecast Upwards LFAS Merit Order, as applicable.

**Forecast LFAS Price:** Means the Forecast Downwards LFAS Price and/or the Forecast Upwards LFAS Price, as applicable.

**Forecast LFAS Quantity:** Means the Forecast Downwards LFAS Quantity and/or the Forecast Upwards LFAS Quantity, as applicable.

**Forecast Upwards LFAS Enablement Schedule:** Means, for a Trading Interval, a list of LFAS Facilities and associated quantities for that Trading Interval determined by AEMO under clause 7B.3.1(a)(iii).

**Forecast Upwards LFAS Merit Order:** Means, for a Trading Interval, a ranked list of Upwards LFAS Price-Quantity Pairs for that Trading Interval determined by AEMO under clause 7B.3.1(a)(i).

**Forecast Upwards LFAS Price:** Means, for a Trading Interval, the highest price in an Upwards LFAS Price-Quantity Pair selected in a Forecast Upwards LFAS Enablement Schedule for that Trading Interval, determined by AEMO under clause 7B.3.1(a)(v).

**Forecast Upwards LFAS Quantity:** Means System Management's estimate of the capacity, in MW, of upwards LFAS required by System Management for a Trading Interval, prepared by System Management under clauses 7B.1.4 or 7B.1.5.

...

**Increased LFAS Quantity:** Means the capacity, in MW, of LFAS which is the difference between the actual capacity of LFAS that was activated in a Trading Interval referred to in clause 7B.4.1(b) and the ~~most recent~~ LFAS Quantity ~~published under clause 7B.3.15(b) for that Trading Interval.~~

...

**Interruptible Load:** A Load through which electricity is consumed, where such consumption can be curtailed automatically in response to a change in system frequency, and registered as such in accordance with clause 2.29.5(a).

...

**LFAS:** See Load Following Service.

~~**LFAS Backup Enablement:** Means Upwards LFAS Backup Enablement and Downwards LFAS Backup Enablement.~~

~~**LFAS Downwards Merit Order:** Means the ranked list of LFAS Submissions determined by the IMO under clause 7B.3.2.~~

~~**LFAS Downwards Price-Quantity Pair:** Means for an LFAS Facility:~~

- ~~(a) — the specified non-Loss Factor adjusted capacity, in MW, by which a Market Participant is prepared to have its LFAS Facility activated downwards within a Trading Interval; and~~
- ~~(b) — the non-Loss Factor Adjusted Price, in \$/MW, the Market Participant wants to be paid to have that capacity available within that Trading Interval.~~

**LFAS Enablement:** Means the Downwards LFAS Enablement and/or the Upwards LFAS Enablement, as applicable.

**LFAS Enablement Schedule:** Means the Downwards LFAS Enablement Schedule and/or the Upwards LFAS Enablement Schedule, as applicable.

**LFAS Facility:** Means:

- (a) a Stand Alone Facility, or Scheduled Generator or Non-Scheduled Generator registered to a Market Participant other than Synergy, ~~for which:~~
  - i. which the relevant Market Participant has indicated in Appendix 1(j)(i) ~~of Standing Data~~ is intended to participate in the LFAS Market; and
  - ii. for which LFAS Standing Data has been accepted by AEMO; or
- (b) the Balancing Portfolio.

...

~~**LFAS Merit Order:** Means the LFAS Downwards LFAS Merit Order and/or the LFAS Upwards LFAS Merit Order, as applicable.~~

~~**LFAS Price:** Means the Downwards LFAS Price and/or the Upwards LFAS Price, as applicable.~~

~~**LFAS Price-Quantity Pair:** Means an LFAS Upwards LFAS Price-Quantity Pair and/or an LFAS a Downwards LFAS Price-Quantity Pair, as applicable.~~

~~**LFAS Quantity:** Means: the Upwards LFAS Quantity and/or the Downwards LFAS Quantity, as applicable.~~

- ~~(a) — the Upwards LFAS Quantity; and~~
- ~~(b) — the Downwards LFAS Quantity.~~

**LFAS Quantity Balance:** Means the capacity, in MW, of LFAS Enablement referred to in clause 7B.4.1(a), which an LFAS Facility has failed to provide, or in clause 7B.4.1(aA), which an LFAS Facility is not available to provide.

~~**LFAS Requirement:** Means the most recent forecast LFAS Quantity published by AEMO under clause 7B.3.15(b).~~

...

~~**LFAS Upwards Merit Order:** Means the ranked list of LFAS Submissions determined by AEMO under clause 7B.3.1.~~

~~**LFAS Upwards Price-Quantity Pair:** Means for an LFAS Facility:~~

- ~~(a) — the specified non-Loss Factor adjusted capacity, in MW, by which a Market Participant is prepared to have its LFAS Facility activated upwards within a Trading Interval;~~
- ~~(b) — the non-Loss Factor Adjusted Price, in \$/MW, the Market Participant wants to be paid to have that capacity available within that Trading Interval.~~

**Load:** Has the meaning given in clause 2.29.1(d).

~~**Load Following Service or LFAS:** Has the meaning given in clause 3.9.1.~~

...

**Load Rejection Reserve Response Quantity:** Means, for a Trading Interval, the quantity of energy reduction, in MWh, provided by a Facility as a Load Rejection Reserve Response due to a Load Rejection Reserve Event, but excluding any such contribution that occurred because System Management had instructed the Facility to provide Downwards LFAS Enablement or Backup Downwards LFAS ~~Backup~~ Enablement.

...

~~**Metered Balancing Quantity:** Has the meaning given in clause 6.17.2.~~

...

**Meter Registry:** A registry maintained by a Metering Data Agent containing information about meters and the persons with which those meters are associated including the information listed in clause 8.3.1.

**Metered Balancing Quantity:** Has the meaning given in clause 6.17.2.

...

~~**Non-Balancing Dispatch Merit Order:** Means, for a Trading Interval, an ordered list of Demand Side Programmes ~~and Dispatchable Loads~~ registered by Market Participants, determined by AEMO in accordance with clause 6.12.1.~~

~~Non-Balancing Facility: Means a Registered Facility that is not a Balancing Facility.~~

...

**Non-Dispatchable Load:** A Load which is not ~~a Dispatchable Load~~ or an Interruptible Load.

...

**Operating Instruction:** Means an instruction issued by System Management requiring a Facility to increase or decrease its output or decrease its consumption to meet the requirements of:

- (a) a Network Control Service Contract;
- (b) an Ancillary Service Contract;
- (c) a Test under these Market Rules;
- (d) a Supplementary Capacity Contract; or
- (e) Ancillary Services, other than LFAS but including ~~LFAS~~ Backup LFAS Enablement, to be provided by Facilities other than Facilities in the Balancing Portfolio.

...

Portfolio Constrained Off Quantity: Has the meaning given in clause 6.17.5A.

Portfolio Constrained On Compensation Price: Has the meaning given in clause 6.17.5.

...

**Price Cap:** Means:

- (a) a maximum price ~~of that is:~~
  - i. for a Balancing Facility to run on Non-Liquid Fuel, the Maximum STEM Price; or
  - ii. for a Balancing Facility to run on Liquid Fuel, the Alternative Maximum STEM Price; and
- (b) a minimum price ~~of that is~~ the Minimum STEM Price.

...

**Pricing BMO:** Means the ~~Balancing Merit Order~~ Pricing BMO determined by AEMO in accordance with clause 7A.3.9. ~~adjusted to take into account:~~

- ~~(a) the associated Ramp Rate Limits to reflect the physically achievable capacity of the Balancing Facility given the SOI Quantity; and~~
- ~~(b) for Non-Scheduled Generators, the EOI Quantity.~~

...

**Provisional Pricing BMO:** Means, for a Trading Interval, the provisional Pricing BMO determined under clause 7A.3.8(a), last Forecast BMO as adjusted by AEMO for the Trading Interval under clause 7A.3.8(a).

...

**Resource Plan:** ~~A detailed schedule for all Trading Intervals in a relevant Trading Day, based on a Resource Plan Submission containing the information in clause 6.11 accepted by AEMO under clause 6.5.2 (as part of an accepted Resource Plan Submission) or set in accordance with clause 6.5.4 (in the case of a default Resource Plan).~~

**Resource Plan Submission:** ~~A submission by a Market Participant to AEMO made in accordance with clause 6.5.~~

...

**Spinning Reserve:** Supply capacity held in reserve from synchronised Scheduled Generators, ~~Dispatchable Loads~~ or Interruptible Loads, so as to be available to support the system frequency in the event of an outage of a generating works or transmission equipment or to be dispatched to provide energy as allowed under these Market Rules.

...

**Spinning Reserve Response Quantity:** Means, for a Trading Interval, the quantity of additional energy, in MWh, provided by a Facility as a Spinning Reserve Response due to a Spinning Reserve Event, but excluding any such contribution that occurred because System Management had instructed the Facility to provide Upwards LFAS Enablement or Backup Upwards LFAS ~~Backup~~ Enablement.

...

**Standing Resource Plan:** ~~A submission related in Resource Plans by a Market Generator to AEMO made in accordance with clause 6.5C.~~

...

**Upwards LFAS Backup Enablement:** ~~Means for a Synergy LFAS Facility, the capacity in MW, which System Management has activated under clause 7B.4.1 in a Trading Interval to compensate for a shortfall in Upwards LFAS Enablement, and which has been notified to AEMO under clause 7B.4.2.~~

**Upwards LFAS Enablement:** Means, for a Trading Interval and an LFAS Facility, the capacity total quantity, or that part of the capacity, in MW, in an LFAS Upwards Price-Quantity Pair selected under clause 7B.3.4(b) which is associated with that LFAS Facility or with the Balancing Portfolio, as applicable in the Upwards LFAS Enablement Schedule for that Trading Interval.



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

**Upwards LFAS Merit Order:** Means, for a Trading Interval, the Forecast Upwards LFAS Merit Order for that Trading Interval used by AEMO under clause 7B.3.3(a) to determine the Upwards LFAS Enablement Schedule.

**Upwards LFAS Price:** Means, for a Trading Interval, the price Forecast Upwards LFAS Price for that Trading Interval determined by AEMO under clause 7B.3.9 or 7B.3.4(a) from the Upwards LFAS Enablement Schedule, subject to clause 7B.3.12, and published under clause 7B.3.11.

**Upwards LFAS Price-Quantity Pair:** Means for an LFAS Facility:

- (a) the specified non-Loss Factor adjusted capacity, in MW, by which a Market Participant is prepared to have its LFAS Facility activated upwards within a Trading Interval; and
- (b) the non-Loss Factor Adjusted Price, in \$/MW, the Market Participant wants to be paid to have that capacity available within that Trading Interval.

**Upwards LFAS Quantity:** Means ~~the capacity, in MW, of upwards Load Following Service required by System Management for a Trading Interval.~~, for a Trading Interval, the Forecast Upwards LFAS Quantity for that Trading Interval used by AEMO under clause 7B.3.3(a) to determine the Upwards LFAS Enablement Schedule.

...

## Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by AEMO for use by AEMO in market processes and by System Management in dispatch processes.

Standing Data required to be provided as a pre-condition of Facility Registration and which Rule Participants are to update as necessary, is described in clauses (a) to ~~(i)~~(h).

...

...

- ~~(i) for a Dispatchable Load:~~[Blank]
  - ~~i. the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval;~~
  - ~~ii. evidence that the communication and control systems required by clause 2.36 are in place and operational;~~

- iii. ~~the dispatchable capacity of the load, expressed in MW;~~
- iv. ~~the normal ramp up and ramp down rates as a function of output level;~~
- v. ~~emergency ramp up and ramp down rates;~~
- vi. ~~the AGC capabilities of the facility;~~
- vii. ~~details of any potential Energy Limits of the facility;~~
- viii. ~~the minimum dispatchable load level of the facility, expressed in MW;~~
- ix. ~~the maximum dispatchable load level of the facility, expressed in MW;~~
- x. ~~the capability to provide each of the following Ancillary Services, including information on trade-off functions when more than one other type of Ancillary Service and/or energy is provided simultaneously:~~
  - 1. ~~Load Following;~~
  - 2. ~~Spinning Reserve; and~~
  - 3. ~~[Blank]~~
  - 4. ~~Load Rejection Reserve;~~
- xA. ~~for a facility that is registered to a Market Participant, data comprising:~~
  - 1. ~~a Consumption Increase Price for Peak Trading Intervals;~~
  - 2. ~~a Consumption Increase Price for Off-Peak Trading Intervals;~~
  - 3. ~~a Consumption Decrease Price for Peak Trading Intervals; and~~
  - 4. ~~a Consumption Decrease Price for Off-Peak Trading Intervals,~~

~~where these prices must be expressed in units of \$/MWh to a precision of \$0.01/MWh;~~
- xi. ~~the minimum response time before the facility can begin to respond to an instruction from System Management to change its output;~~
- xii. ~~the Metering Data Agent for the facility;~~
- xiii. ~~the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;~~
- xiv. ~~the point on the network at which the facility can connect; and~~
- xv. ~~the short circuit capability of facility equipment.~~

...

...

## Appendix 3: Reserve Capacity Auction and Trade Methodology

...

## Appendix 9: Relevant Level Determination

...

Step 7: Determine for each Trading Interval in each 12 month period identified in step 1(b) the Existing Facility Load for Scheduled Generation (in MWh) as:

$(\text{Total\_Generation} + \text{DSP\_Reduction} + \text{Interruptible\_Reduction} + \text{Involuntary\_Reduction}) - \text{CF\_Generation}$

where

Total\_Generation is the total sent out generation of all Facilities, as determined from Meter Data Submissions;

DSP\_Reduction is the total quantity of Deemed DSM Dispatch for all Demand Side Programmes for that Trading Interval ~~quantity by which all Demand Side Programmes reduced their consumption in response to a Dispatch Instruction, as determined under clause 6.17.6(c)(i);~~

Interruptible\_Reduction is the total quantity by which all Interruptible Loads reduced their consumption in accordance with the terms of an Ancillary Service Contract, as recorded by System Management under clause 7.13.1C(c);

Involuntary\_Reduction is the total quantity of energy not served due to involuntary load shedding (manual and automatic), as recorded by System Management under clause 7.13.1C(b); and

CF\_Generation is the total sent out generation of all Candidate Facilities, as determined in step 2 or estimated in steps 4, 5 or 6 as applicable.

...

## Appendix A. Details of MAC Consultation by the IMO before the Formal Submission of the Proposal and key effects of the EMR on RC\_2014\_06

### 9 October 2013 MAC Meeting

The MAC discussed the MREP with the following points relevant for RC\_2014\_06 also discussed:

- Ms Jenny Laidlaw (of the IMO) suggested that MREP issue 1 (Additional Improvements to the Balancing Mechanism)<sup>11</sup> could be split into two components. The first component, the removal of Resource Plans, could be progressed relatively quickly, while consideration of changes to the Bilateral Submission and STEM processes would require more consideration and was likely to be impacted by the Synergy/Verve Energy merger.<sup>12</sup>
- Mr Geoff Gaston considered that the current STEM arrangements were of greater concern than the requirement to submit Resource Plans. Mr Andrew Stevens disagreed, considering that Resource Plans were now completely superfluous and should be removed as a priority. The Chair suggested that both components should be assigned a high priority but that the removal of Resource Plans could be regarded as “low hanging fruit” and progressed first. There was some discussion about opening the Balancing Horizon for a Trading Day earlier on the afternoon of the Scheduling Day, to provide System Management with a replacement for the information it currently receives through Resource Plans.
- Mr Shane Cremin queried when the Resource Plan component of issue 1 could be addressed. Ms Kate Ryan considered that the IMO may be able to present a Concept Paper or Pre-Rule Change Proposal to the December 2013 MAC meeting, depending on how much complexity was involved.

The MAC confirmed that MREP Issue 1 should be among the issues that should be progressed with the highest priority.

### 11 December 2013 MAC Meeting

Following the October 2013 meeting the IMO engaged Mr Jim Truesdale (Concept Consulting) to prepare a discussion paper for the MAC, addressing MREP Issues 1 and 3<sup>13</sup> as well as the possibility of Verve Energy (now Synergy) facility-based participation in the Balancing and LFAS Markets. Mr Truesdale presented his discussion paper ‘Enhancements to the Energy and LFAS Markets’ (**Discussion Paper**) at the 11 December 2013 MAC meeting. The following points relevant for RC\_2014\_06 were discussed:

- Mr Truesdale requested the views of MAC members on the proposal to remove the requirement to submit Resource Plans and to replace the information currently provided by Resource Plans with an earlier Balancing Market forecast. There was general support from MAC members for the proposal.
- Mr Dean Sharafi considered that the change would be workable for System Management if the opening of the Balancing Horizon for a Trading Day was brought forward to 1:00 PM

<sup>11</sup> All components included in MREP Issue 1 are outlined in the Market Rules Evolution Plan 2013-2016 which is available on the Rule Change Panel's website at <https://www.erawa.com.au/rule-change-panel/market-advisory-committee/wholesale-electricity-market-rules-evolution-plan>.

<sup>12</sup> On 10 April 2013, the Government of Western Australia announced a merger of the State-owned electricity retailer, the Electricity Retail Corporation (trading as 'Synergy') and electricity generator, the Electricity Generation Corporation (trading as 'Verve Energy'). The merger took effect on 1 January 2014 to create the Electricity Generation and Retail Corporation (trading as 'Synergy').

<sup>13</sup> MREP Issue 3 – Transition to half hour gate closure.

on the Scheduling Day (i.e. around the current deadline for Resource Plan submission), with the first BMO generated shortly afterwards. MAC members raised no objections to moving the deadline for initial Balancing Submissions from 6:00 PM to 1:00 PM on the Scheduling Day. It was also agreed that it should be possible for the submissions to be made earlier, e.g. as soon as Market Participants were aware of their Net Contract Positions.

## **6 March 2014**

The then Government launched the EMR.

## **19 March 2014 MAC Meeting**

Ms Laidlaw presented the Pre-Rule Change Proposal – Improvements to the Energy Market (RC\_2014\_01).

Ms Laidlaw explained that the Pre-Rule Change Proposal followed on from the discussion paper that Mr Jim Truesdale had presented at the December 2013 MAC meeting and was primarily aimed at removing Resource Plans and reducing gate closure times for the Balancing and LFAS Markets. Ms Laidlaw invited MAC members to ask questions or provide comments on either the discussion points or the remainder of the Pre-Rule Change Proposal. The following key points that are relevant for RC\_2014\_06 were discussed:

- Mr Stevens asked if the IMO had given any consideration to moving the opening of the STEM Submission window to 8:00 AM, so that Bilateral and STEM Submissions could be made at the same time. Although Mr Stevens could see that, as with Mr Andrew Sutherland's proposal,<sup>14</sup> this would fit more naturally with the proposed redesign of the STEM, he considered that if it was a simple change then there was no reason not to implement it immediately. The Chair indicated that the IMO would investigate whether the change could be easily incorporated into this Pre-Rule Change Proposal.
- The Chair provided a brief summary of the other issues addressed in the Pre-Rule Change Proposal and asked MAC members to contact Ms Laidlaw directly to discuss any concerns they had with the proposal.

## **19 March 2014**

The Minister for Energy notified the IMO of his decision to not approve two Rule Change Proposals containing Protected Provisions.<sup>15</sup> The Minister advised that, in making his assessment, he had “taken into account that the costs to implement the amendments may not be recovered in light of possible reforms emanating from the Electricity Market Review”.<sup>16</sup>

## **14 May 2014 MAC Meeting**

Ms Laidlaw presented the revised Pre-Rule Change Proposal (RC\_2014\_01).

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<sup>14</sup> During the discussion Mr Sutherland had proposed that Market Customers should be able to make bilateral nominations, particularly given that, following its merger with Verve Energy, Synergy was now able to do so. Mr Ryan replied that it may be more appropriate to consider this as part of the proposed redesign of the STEM.

<sup>15</sup> The Rule Change Proposals requiring Ministerial approval were:

- Incentives to Improve Availability of Scheduled Generators (RC\_2013\_09); and
- Harmonisation of Supply-Side and Demand-Side Capacity Resources (RC\_2013\_10).

<sup>16</sup> See the notices of rejection by the Minister for RC\_2013\_09 and RC\_2013\_10, available at [https://www.erawa.com.au/rule-change-panel/market-rule-changes/rule-change-rc\\_2013\\_09](https://www.erawa.com.au/rule-change-panel/market-rule-changes/rule-change-rc_2013_09) and [https://www.erawa.com.au/rule-change-panel/market-rule-changes/rule-change-rc\\_2013\\_10](https://www.erawa.com.au/rule-change-panel/market-rule-changes/rule-change-rc_2013_10).

Ms Laidlaw noted that this Pre-Rule Change Proposal had been presented at the March 2014 MAC meeting and summarised the further amendments made to the proposal since that meeting. Ms Laidlaw informed MAC members that, subject to the MAC discussion, the IMO intended to submit the Rule Change Proposal into the formal process within the next month. She added that the IMO intended to extend the first submission period and other deadlines accordingly because of the size and complexity of the proposal. The extensions would also ensure that the IMO would only make its final decision after the outcomes of the EMR are understood. The Chair noted that the IMO was attempting to balance the resolution of current issues that had a commercial impact, with the need to avoid any overlap with or duplication of issues addressed in the EMR.

The following key points that are relevant for RC\_2014\_06 were discussed:

- Mr Simon Middleton agreed with the Chair that the proposal appeared to be concerned with operational matters and was unlikely to overlap significantly with items considered as part of the EMR. He asked whether Resource Plans were required by System Management to perform its functions. Ms Laidlaw replied that it was a non-binding estimate of how IPPs would run their Facilities to meet their Net Contract Position and their own consumption needs, and that System Management had indicated that opening the Balancing Horizon earlier was likely to give a more accurate picture. Mr Gaston observed that, from a Market Participant's perspective, Resource Plans were an unnecessary cost to the market in that they were no longer required but would nevertheless cost Market Participants money in the event of errors or failure of submission.
- Mr Gaston made an observation related to Net STEM Shortfall refunds. He stated that the proposed amendments placed a new obligation on Market Participants and noted that potential non-compliance with this obligation could be costly. He noted that this posed an unnecessary risk on Market Participants. His view was that participation in the STEM should be optional. Ms Laidlaw replied that changes to the STEM were scheduled for consideration in a different piece of work. Ms Ryan added that previous discussions had concluded that moving Reserve Capacity Obligations from the STEM to the Balancing Market constituted a bigger piece of work which should be considered as part of the redesign of the STEM. Ms Laidlaw also noted that there were differing views as to whether the STEM should be optional for Market Participants. Mr Andrew Stevens agreed with Mr Gaston that Net STEM Shortfall refunds should be removed because Market Participants could bid themselves out of the STEM effectively making it optional, and it was a daily risk for no benefit to the market. Ms Ryan asked if a Standing STEM Submission could be used to mitigate the risk. Mr Stevens conceded that that was the case and on that basis agreed that no change was needed at this time. Mr Gaston reiterated that his position had not changed.
- Mr Stevens asked if Fuel Declarations would still be part of a STEM Submission. Ms Laidlaw replied that they would, as they were still needed by the IMO for compliance purposes, even though they were no longer needed by System Management.
- Mr Sharafi asked if it would be easier to break each element of the proposal into a separate Rule Change Proposal. The Chair replied that the various issues were interconnected and that breaking the Rule Change Proposal up would cause problems.

## **25 June 2014 MAC Meeting**

The IMO informed MAC members that, given the context of the EMR and the reasons provided by the Minister for his rejection of the two Rule Change Proposals, the IMO had revised its 2014-15 work plan to avoid any changes that were likely to have significant implementation costs, such as the gate closure changes proposed in RC\_2014\_01.

Dr Bryn Garrod (of the IMO) presented the discussion paper Modifying the Bilateral and Short Term Energy Market Submission Timetables and requested feedback from MAC members. The following points were noted:

- Mr Sharafi noted that by 8:30 AM each Trading Day, System Management provides the IMO with Outage and Ancillary Services data which are required before the STEM Submission window can be opened. Ms Laidlaw noted that it would be beneficial for System Management to provide the most up to date data available, and agreed that if the timeframes were extended this may also enable the deadlines for System Management to provide this data to be extended.
- Several MAC members supported a longer STEM window but noted associated issues, including the impact it could have on employees (particularly on weekends and for those based on the east coast) and the reduction in time for Market Participants to finalise gas nominations and initial Balancing Submissions.
- Ms Papps questioned the need for the Bilateral and STEM Submission windows to overlap and noted that Synergy waits for its net bilateral position before putting in its STEM Submission, therefore a STEM Submission could not be made until the Bilateral Submission window had closed.

MAC members generally agreed that there was no need to change the Bilateral Submission window but that extending the STEM Submission window may have merit. The Chair suggested that MAC members give further consideration to the operational impacts of extending the STEM Submission window before the next MAC.

## **24 September 2014 MAC Meeting**

Under agenda item 4 (actions arising), Ms Kate Ryan (of the IMO) noted that the feedback received from MAC members indicated support for extending the STEM Submission window by one hour but not the Bilateral Submission window. The IMO would progress the Rule Change Proposal on that basis.

## **3 December 2014 MAC Meeting**

Ms Laidlaw presented the Pre-Rule Change Proposal Removal of Resource Plans and Dispatchable Loads (RC\_2014\_06) to the MAC. The following key points were discussed:

- Mr Sharafi suggested that Dispatch Plans may no longer be necessary and asked whether the proposal could be extended to remove the requirement for System Management to prepare them. Ms Laidlaw indicated that the IMO would consider the change if it was supported by both System Management and Synergy and suggested that the IMO could meet with representatives from System Management and Synergy to discuss this suggestion.
- Mr Sharafi also suggested the inclusion of additional Standing Data requirements for generators serving Intermittent Loads. Ms Ryan considered that this issue was outside the scope of this proposal.

- Mr Andrew Stevens suggested that changes would be required to the format of STEM Submissions to remove references to Fuel Declarations and to some settlement files. Ms Laidlaw noted that the IMO's IT team was currently reviewing the proposal and would design any changes to minimise the impact on Market Participants. Mr Stevens considered it likely that the commencement date for the proposal may need to be extended to allow for these changes.
- Mr Shane Cremin sought clarification about the impact of the proposed changes to clauses 4.12.1 and 4.26.2. Ms Laidlaw explained that the proposed amendments would require Independent Power Producer (IPP) gentailers to make STEM Submissions that covered their own load to avoid incurring Net STEM Refunds. However in practice IPP gentailers already made STEM Submissions as a matter of course. Ms Laidlaw noted that an IPP with only Non-Scheduled Generators would still not need to provide STEM Submissions as its Reserve Capacity Obligation Quantity would remain zero.
- Mr Gaston raised a concern that a Market Participant who failed to make a STEM Submission would not only be liable for substantial Capacity Cost Refunds but would also be considered to have breached the Market Rules. Ms Laidlaw replied that this was not the IMO's intent and proposed to clarify the relevant clauses.
- Mr Gaston reiterated his view that participation in the STEM should not be mandatory. The Chair replied that a review of the STEM was included in the MREP but was waiting on the outcomes of the EMR.
- In response to a question from Mr Stevens, Ms Ryan and Ms Laidlaw confirmed that a Balancing Submission for a Facility undertaking a Commissioning Test under an Operating Instruction would still need to include the planned output quantity at the Minimum STEM Price. The proposed changes to clause 7A.2.3 were intended to cover other situations, for example where a Balancing Submission needed to offer some capacity at a maximum Price Cap to ensure it was not cleared for dispatch.

MAC Members agreed that the IMO should:

- liaise with System Management to arrange a meeting with Synergy to discuss System Management's suggestion to remove the requirement to prepare Dispatch Plans from the Market Rules; and
- review the proposed drafting of clauses 4.12.1 and 4.26.2 in the Rule Change Proposal: Removal of Resource Plans and Dispatchable Loads (RC\_2014\_06) to ensure that a failure to submit a STEM Submission is not a breach of the Market Rules.



## Appendix B. Details of MAC Consultation by the Rule Change Panel after the Close of the First Submission Period

### 16 August 2017 MAC Meeting

On 8 August 2017, RCP Support circulated a paper to the MAC outlining proposed urgency ratings for the remaining open Rule Change Proposals (that had not already been assigned an urgency rating of High), with a request for feedback by 14 August 2017.

Ms Laura Koziol (of RCP Support) noted that seven responses were received, supporting all of the proposed urgency ratings except for the ratings for RC\_2014\_06 and RC\_2017\_02 (Implementation of 30-Minute Balancing Gate Closure).

The following key points were discussed regarding RC\_2014\_06.

- Most responses suggested increasing the urgency rating for RC\_2014\_06 from Medium to High, due to the high risk associated with the penalty for breaching the obligation to submit a Resource Plan. In its response, AEMO had also noted that it was planning to develop system changes affecting the Scheduling Day processes in 2018, and so would prefer certainty about any changes to these processes.
- Mrs Jacinda Papps noted that Alinta Energy was also planning system changes that would be affected by the outcome of the Rule Change Proposal.
- The Chair explained that the Medium urgency rating for RC\_2014\_06 was based on the consideration that manifest errors with significant consequences for the market should be addressed before RC\_2014\_06. AEMO had indicated that it had identified some potential issues of this type affecting the Reserve Capacity Mechanism.
- The Chair noted that RC\_2014\_05 (Reduced Frequency of the Review of the Energy Price Limits and the Maximum Reserve Capacity Price), which was the first Medium rated proposal, was likely to be delayed while the ERA conducted its five-yearly review of the methodology for setting the Benchmark Reserve Capacity Price and the Energy Price Limits. This meant that RC\_2014\_06 would be next in line after the High rated proposals, followed by RC\_2017\_02.
- The Chair noted that the Medium rating only allowed for a delay of three months, which would still result in RC\_2014\_06 being processed in time to inform AEMO and Alinta Energy's system development plans.
- The Chair noted that, due to the significant changes to the Market Rules since the publication of the Rule Change Proposal for RC\_2014\_06, the Rule Change Panel would probably consult with the MAC and publish a call for further submissions before developing the Draft Rule Change Report.
- Mr Shane Cremin asked when the changes would be implemented if the proposal was approved. Mr Maticka replied that it would take around six months to implement the system changes. The Chair asked when AEMO would need to start the design and development of its new Scheduling Day systems. Mr Maticka replied that work would not start before early next year (being 2018).

### Additional Points Raised in the Feedback from MAC Members Regarding the Proposed Urgency Rating for RC\_2014\_06

Two of the submitters noted that providing for Resource Plan Submissions in their IT infrastructure would incur significant costs when they were upgrading their IT infrastructure.

One of these submitters also noted that the obligation to submit Resource Plans would lead to significant ongoing operational costs for its company.

### 13 December 2017 MAC Meeting

Ms Koziol gave a presentation on RC\_2014\_06. The presentation is available on the Rule Change Panel's website.<sup>17</sup>

The following points were discussed.

- In response to a question from Mr Ignatius Chin, Ms Koziol clarified that the reason for considering a reduction in the length of the STEM Submission window is that AEMO's bidding system in the National Electricity Market Dispatch Engine (**NEMDE**) assumed a 12:30 PM extension of the dispatch horizon. If NEMDE is implemented in the WEM in future, then using the same time would reduce implementation costs and maximise the potential re-use of third party supporting software.

Ms Koziol noted there were two questions for stakeholders:

- whether to future proof the WEM design by moving the Balancing Horizon extension time to 12:30 PM; and
- if the answer to the first question is yes, whether this should be accomplished by reducing the length of the STEM Submission window or reducing the period between the publication of the STEM Auction results and 12:30 PM.

There was some discussion about the pros and cons of each option.

- Ms Wendy Ng asked whether Synergy would still require Dispatch Plans if the proposed energy market reforms are implemented. Mr Sharafi replied that if Synergy moved to facility bidding, then it would operate like any other Market Generator and so would not require Dispatch Plans.
- Mr Peter Huxtable asked whether RCP Support was sure that the Minister's removal of AEMO's ability to delay Scheduling Day events due to problems with the daily Ancillary Service files was accidental rather than deliberate. Ms Koziol confirmed RCP Support was confident that the removal was accidental.
- Mr Huxtable asked whether there were any ring-fencing or similar arrangements within AEMO that would warrant the retention of System Management as a distinct entity in the Market Rules. Mr Sharafi replied that there were no such arrangements and AEMO's starting position was that the term 'System Management' should be removed from the Market Rules. However, Mr Sharafi noted that AEMO was uncertain about the implications of such a change and so this was not AEMO's final position.

Mrs Papps questioned whether the removal of the term 'System Management' should be included in the scope of RC\_2014\_06. Ms Jenny Laidlaw noted that the intent was not to include the removal of all instances of the term in the scope of RC\_2014\_06, but only those in the clauses directly affected by the Rule Change Proposal. Mrs Papps agreed that it would be sensible to review the use of the term in those clauses.

Mr Andrew Stevens, while not proposing that the term be retained, suggested two possible reasons for its retention:

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<sup>17</sup> The presentation is available at: <https://www.erawa.com.au/rule-change-panel/market-advisory-committee/market-advisory-committee-meetings>.

- it might help reduce confusion in the Market Rules by clarifying when AEMO was performing functions associated with its system operations role; and
- to future proof the Market Rules in case System Management's functions were ring-fenced again in future.

Mrs Papps noted that currently AEMO and System Management had separate representatives at the MAC. Ms Koziol considered it would be possible to retain separate market operations and system operations representatives from AEMO without retaining the term "System Management".

There was general agreement that the practical implications of removing the term need to be considered before making any changes to the Market Rules.

Ms Koziol asked MAC members and observers to respond to the questions raised in the presentation by 20 December 2017. Ms Koziol noted that RCP Support intended to publish a call for further submissions by the end of January 2018 and the Draft Rule Change Report by March/April 2018.

### **Feedback Received from MAC Members by 20 December 2017**

RCP Support received six emails with feedback.

In general the feedback was supportive of future proofing the Scheduling Day timeline with:

- two submitters explicitly supporting the future proofing;
- no submitters opposing the future proofing;
- two submitters supporting reducing the length of the STEM Submission window;
- one submitter supporting reducing the period between the publication of the STEM Auction results and the extension of the Balancing Horizon; and
- two submitters expressing general concerns about the implementation of NEMDE.

The feedback was strongly in support of reinstating AEMO's power to delay the STEM because of issues with the Ancillary Services data, and in support of AEMO being allowed to repeat relevant Scheduling Day steps to rectify any issues, and delay timeframes for such rectification. No specific restrictions beyond notification requirements and timelines were suggested for such repetition.

The feedback was generally ambivalent regarding the replacement of all references to System Management with references to AEMO. However, two submitters noted that in some instances it may be important to keep references to System Management, and one submitter noted that this additional change was not within the scope of RC\_2014\_06.

## Appendix C. Responses to Submissions Received in the Second Submission Period

Submitter	Comment / Issue Raised	Rule Change Panel's Response
Alinta Energy	<p>Alinta Energy is concerned that the drafting, which requires the quantities in the Balancing Price-Quantity Pairs and any unavailable capacity to equal the Scheduled Generator's Sent Out Capacity, will limit a generator's ability to bid higher than its Sent Out Capacity (for example for a Reserve Capacity Test).</p> <p>Alinta Energy understands that the intention of this clause is to clarify the quantities which must be included in a Balancing Submission. However, this clause should not limit a participant bidding above its Sent Out Capacity. Given this, Alinta Energy considers the reference to "equal to" in part (d) of the clause should be replaced with "not less than" or "at least".</p>	Please refer to section 6.2.9 of this report.
Alinta Energy	Alinta Energy notes that Non-Scheduled Generator forecasts may include high, medium or low scenarios. Alinta Energy is concerned that the proposed use of the term "best estimate of a Facility's output" in clause 7A.2.4B may be taken to read that the highest forecast should be used (i.e. high scenario) rather than a participant's best estimate of its output, which may overstate expected production. Alinta Energy considers that the term "most accurate" could be more appropriate.	The Rule Change Panel considers that it is clear that the term 'best estimate' refers to the estimate that the Market Participant considers most likely and not the estimate with the highest output. However, the Rule Change Panel has noted that the Market Rules use the terms 'estimate', 'best estimate' and 'reasonable estimate' when referring to estimates, but there is no difference in the legal interpretation of the three terms. The Rule Change Panel considers that the terms should be aligned throughout the Market Rules to avoid inadvertently setting different standards for different estimates by using different phrasing. However, at this stage of the process the required changes lay outside of the scope of this Rule Change Proposal.

Submitter	Comment / Issue Raised	Rule Change Panel's Response
Alinta Energy	Alinta Energy considers that the information included in the brackets in clause 4A.2.4B is somewhat confusing and the clause may be better without it.	The Rule Change Panel notes that the information in the brackets makes it explicit that the estimate of the Facility output must be based on the assumption that the Facility will not be constrained by a Dispatch Instruction. The Rule Change Panel considers that this information is necessary.
Perth Energy	Perth Energy notes that the Australian Energy Market Operator (AEMO) has not yet provided a cost estimate, or any discussion of the timeframe in which the Rule Change Proposal can be implemented to the Rule Change Panel.	AEMO's initial estimates of its costs to implement the proposed changes and the required implementation time were provided in section 5.7 of the Draft Rule Change Report.  AEMO's final estimates are provided in section 6.7 of this Final Rule Change Report.

## Appendix D. Amendments following the First and Further Submission Period

In the call for further submissions, the Rule Change Panel made some changes to the proposed drafting to account for the changes made to the Market Rules since the submission of the Rule Change Proposal. These changes are noted in comment boxes throughout the proposed Amending Rules in section 7 of the Draft Rule Change Report.

Following the call for further submissions, the Rule Change Panel has made some additional changes to the proposed Amending Rules. A summary of these changes is provided in the remainder of this section.

### D.1 Removal of the Dispatchable Load Facility Class (Issue 2)

Clause 2.30B.2(d) states that an Intermittent Load must either be an interruptible Load or a Non-Dispatchable Load. The Rule Change Panel deleted this clause because all Loads will either be Interruptible Loads or Non-Dispatchable Loads once the Dispatchable Load Facility Class is removed from the Market Rules, making the obligation meaningless.

### D.2 Reinstatement of AEMO's Power to Extend the STEM due to Issues with the Ancillary Services Data (Issue 11)

The Rule Change Panel made further amendments to clause 6.4.6 to reinstate AEMO's power to delay the STEM due to issues with the Ancillary Services data.

### D.3 Introduction of Provisions for AEMO to repeat Scheduling Day Steps to Rectify Errors (Issue 12)

The Rule Change Panel made further amendments to clause 6.4.6 and introduced new clauses 6.4.6A and 6.4.6B to allow AEMO to repeat Scheduling Day steps to correct errors in the Load Forecast, Ancillary Services and Outage data received from System Management.

### D.4 Administrative Changes

The Rule Change Panel made additional changes to the following clauses and defined terms to correct punctuation, typographical and grammatical errors and align with standard drafting conventions:

- clauses 2.16.12, 2.22A.1, 4.10.1, 4.11.4, 4.26.2, 6.3A.2, 6.4.6, 6.6.9, 6.12.1, 6.17.5, 6.17.5A, 6.17.6C, 7.1.1, 7.6.1C, 7.6A.2, 7.6A.5, 7.9.4, 7A.2.3, 7A.2.4, 7A.2.9, 7A.3.5, 7B.1.4, 7B.1.5, 7B.3.1, 7B.3.12, 7B.4.1, 10.5.1(iA); and
- the defined terms Backup Downwards LFAS Enablement, Backup Upwards LFAS Enablement, Consumption Decrease Price, Forecast Downwards LFAS Quantity, Forecast Upwards LFAS Quantity, LFAS Facility, Upwards LFAS Price-Quantity Pair.

The Rule Change Panel amended clause 2.13.9 to remove a reference to clause 7.5.5, which is proposed to be deleted.

The Rule Change Panel further amended clause 3.13.2 to reflect that system management function has been transferred to AEMO.

The Rule Change Panel further amended clause 4.1.26 to delete the reference to Curtailable Loads, to reflect that the defined term Curtailable Load no longer exists.

The Rule Change Panel further amended clause 6.3A.4 to remove an unnecessary reference to the defined term 'Trading Day'.

The Rule Change Panel amended:

- clause 6.17.6C, which currently has two subordinate clauses labelled '(b)', to change the label of the second of these clauses to '(c)'; and
- amend clause 6.17.7 to refer clauses 6.17.6C(b) and 6.1.7.6C(c).

The Rule Change Panel further amended clause 6.17.7 to include a missing reference to the Extra Consumption Decrease Price.

The Rule Change Panel further amended clause 7.1.1(l) to remove the reference to section 4.24 (Supplementary Capacity). The reference is unnecessary as Supplementary Capacity Contract is a defined term.

The Rule Change Panel amended clause 7A.1.6 to reflect the proposed removal of the defined term Balancing.

The Rule Change Panel further amended clauses 7.7.5, 7A.2.4C, 7A.2.9, 7A.2.12, 7B.1.4, 7B.1.5, 7B.2.10 and 7B.3.1 and the defined term Balancing Submissions to improve their clarity.

The Rule Change Panel moved the IMO's proposed clarification to clause 7A.2.10 (that Market Participants must not make new or updated Balancing submissions past Balancing Gate Closure except for the reasons outlined in clause 7A.2.10) to a new clause 7A.2.9A, to separate this provision from the list of reasons in clause 7A.2.10.

The Rule Change Panel further amended clause 7A.2.10(d) to remove the expression 'as soon as reasonably practical' as it is inappropriate given that update of Balancing Submissions under this clause will not be mandatory.

The Rule Change Panel amended clause 7A.3.8 to reflect that clause 7A.3.7 refers to System Management preparing information and not AEMO.

The Rule Change Panel:

- further amended clauses 7A.3.8, 7A.3.9 and 7A.3.10 and the defined terms Pricing BMO and Provisional Pricing BMO; and
- introduced new clause 7A.3.9A.

This is to move the instructions of how to derive the Pricing BMO from the Glossary to the main body of the Market Rules.

The Rule Change Panel amended the defined term Interruptible Load to reflect the amendments to clause 2.29.5, which delete clauses 2.29.5(a), 2.29.5(b) and 2.29.5(c) and move the contents of clause 2.29.5(a) into the main body of the clause.

The Rule Change Panel amended the defined term Increased LFAS Quantity in the Glossary to reflect the proposed deletion of clause 7B.3.15.

The Rule Change Panel further amended the introduction to Appendix 1 to reflect the proposed removal of Appendix 1(i).

## Appendix E. Further Amendments to the Proposed Amending Rules

The Rule Change Panel made some amendments to the proposed Amending Rules following the second and further submission periods. These changes are as follows (~~deleted text~~, added text, clauses that are included for context but not amended):

...

- 4.26.2. AEMO must determine the net STEM shortfall (“Net STEM Shortfall”) in Reserve Capacity supplied by each Market Participant  $p$  holding Capacity Credits associated with a generation system in each Trading Interval  $t$  ~~as:~~

$$SF(p, t) = \text{Max}(\text{RCDF}(p, t), \text{RCOQ}(p, t) - A(p, t)) - \text{RCDF}(p, t)$$

~~where:~~ Where—

$$A(p, t) = \text{Min}(\text{RCOQ}(p, t), \text{CAPA}(p, t));$$

$\text{RCOQ}(p, t)$  for Market Participant  $p$  and Trading Interval  $t$  is equal ~~to:~~

- (a) the total Reserve Capacity Obligation Quantity of Market Participant  $p$ 's unregistered facilities that have Reserve Capacity Obligations, excluding Loads that can be interrupted on request; plus
- (b) the sum of the product ~~of:~~
  - i. the factor described in clause 4.26.2B as it applies to Market Participant  $p$ 's Registered Facilities; and
  - ii. the Reserve Capacity Obligation Quantity for each Facility, for all Market Participant  $p$ 's Registered Facilities, excluding Demand Side Programmes,

$\text{CAPA}(p, t)$  ~~is~~ for Market Participant  $p$  and Trading Interval  $t$  ~~is:~~

- (c) equal to  $\text{RCOQ}(p, t)$  for a Trading Interval where the STEM Auction has been suspended by AEMO in accordance with section 6.10;
- (d) subject to clause 4.26.2(c), ~~for the case where Market Participant  $p$  is not Synergy~~, the sum ~~of:~~
  - i. the Reserve Capacity Obligation Quantities in Trading Interval  $t$  of that Market Participant's Interruptible Loads; plus
  - ii. the MW quantity calculated by doubling ~~the net MWh quantity of energy sent out by Facilities registered by that Market Participant's during that Trading Interval calculated as the Net Contract Position in MWh for Trading Interval  $t$ , corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A less the shortfall as indicated by the applicable Resource Plan;~~ plus
    - iiA. ~~if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh~~



~~quantity of energy to be consumed by that Market Participant including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus~~

- iii. the MW quantity calculated by doubling the total MWh quantity covered by the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by AEMO for that Market Participant under section 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
  - iv. double the total MWh quantity to be provided as Ancillary Services as specified by AEMO in accordance with clause 6.3A.2(e)(i) for that Market Participant corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus
  - v. the greater of zero and  $(BSFO(p,t) - RTFO(p,t))$ ; ~~and~~
- ~~(e) — subject to clause 4.26.2(c), for the case where Market Participant p is Synergy, the sum of —~~
- ~~i. — the sum of the Reserve Capacity Obligation Quantities in Trading Interval t of that Market Participant's Interruptible Loads; plus~~
  - ~~ii. — the MW quantity calculated by doubling the total MWh quantity of energy that Synergy is selling to other Market Participants as indicated by the Net Contract Position for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus~~
  - ~~iii. — the MW quantity calculated by doubling the total MWh quantity of the STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction, determined by AEMO for that Market Participant under section 6.9 for Trading Interval t, corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus~~
  - ~~iv. — double the total MWh quantity to be provided as Ancillary Services as specified by AEMO in accordance with clause 6.3A.2(e)(i) for Synergy corrected for Loss Factor adjustments so as to be a sent out quantity in accordance with clause 4.26.2A; plus~~
  - ~~v. — the greater of zero and  $(BSFO(p,t) - RTFO(p,t))$ .~~

$$RCDF(p, t) = RTFO(p, t) + RTNREPO(p, t);$$

$$\text{RTNREPO}(p, t) = \sum_{f \in F} \left( \text{Max}(0, \text{NREPO}(f, t) - \text{BSPO}(f, t)) \right);$$

NREPO(f,t) is the total MW quantity of Refund Payable Planned Outage associated with Facility f for Trading Interval t;

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

F is the set of Scheduled Generators registered to Market Participant p, and f is a Facility within that set;

BSFO(p,t) is the total MW quantity of Forced Outage associated with Market Participant p before the STEM Auction for Trading Interval t, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as recorded in accordance with section 7.3; and

RTFO(p,t) is the total MW quantity of Forced Outage associated with Market Participant p in real-time for Trading Interval t, where this is the sum over all the Market Participant's Registered Facilities of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as recorded in accordance with clause 7.13.1A(b).

...

7A.2.4A. A Balancing Submission for a Balancing Facility that is a Scheduled Generator must specify the following details for each Trading Interval covered in the Balancing Submission:

- (a) a ranking of Balancing Price-Quantity Pairs covering available capacity; and
- (b) a declaration of the MW quantity that will be unavailable for dispatch, where the sum of:
  - (c) the quantities in the Balancing Price-Quantity Pairs; and
  - (d) the declared MW quantity of unavailable capacity, ~~must be equal to the Scheduled Generator's Sent Out Capacity.~~

must be equal to the Scheduled Generator's Sent Out Capacity.

...

~~7A.2.9A. A Market Participant (other than Synergy in relation to the Balancing Portfolio) must not submit a new, updated Balancing Submission in respect of a Trading Interval for which Balancing Gate Closure has occurred except in accordance with clause 7A.2.10.~~

- 7A.2.10. A Market Participant (other than Synergy in relation to the Balancing Portfolio) as soon as it becomes aware that a Balancing Submission for a Trading Interval for which Balancing Gate Closure has occurred is inaccurate:
- (a) if the inaccuracy is due to an Internal Constraint, must make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the available Sent Out Capacity of that Facility and the Ramp Rate Limit is accurate but no prices are altered, in respect of that Trading Interval as soon as reasonably practicable;
  - (b) if the inaccuracy is due to an External Constraint, may make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the available Sent Out Capacity of that Facility and the Ramp Rate Limit is accurate but no prices are altered, in respect of that Trading Interval, as soon as reasonably practicable;
  - (c) if the inaccuracy is due to the Market Participant receiving an Operating Instruction, may make a new, accurate Balancing Submission that reflects the Operating Instruction; or
  - (d) if the inaccuracy is due to a variation of the availability of the intermittent energy source used by a Non-Scheduled Generator, may make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the Market Participant's best estimate of the Facility's output at the end of the Trading Interval and the Ramp Rate Limit is accurate but the price is not altered, in respect of that Trading Interval.

7A.2.10A. Market Participant (other than Synergy in relation to the Balancing Portfolio) must not submit a new, updated Balancing Submission in respect of a Trading Interval for which Balancing Gate Closure has occurred except in accordance with clause 7A.2.10.

...

- 7B.2.4. Subject to clause 7B.2.5, Synergy may submit an updated LFAS Submission in respect of the Balancing Portfolio:
- (a) in accordance with clauses 7B.2.6 and 7B.2.7;
  - (aA) for one or more Trading Intervals in the Balancing Horizon for which LFAS Gate Closure has not occurred; and
  - (b) at the time it makes an updated Balancing Submission under clause 7A.2.9(d).

...