

Rule Change Notice Removal of Resource Plans and Dispatchable Loads (RC_2014_06)

This notice is given under clause 2.5.7 of the Wholesale Electricity Market Rules (Market Rules).

Submitter: Allan Dawson, Independent Market Operator

Date submitted: 28 January 2015

The Rule Change Proposal

The IMO proposes to make a number of amendments to the Market Rules to:

- remove the requirement for Market Participants to submit Resource Plans;
- address a number of secondary issues caused by the proposed removal of Resource Plans;
- remove the Dispatchable Load Facility Class;
- extend the STEM Submission window by one hour;
- remove the requirement for Market Participants to access their STEM Auction results within 15 minutes of their release, and for the IMO to contact a participant if it becomes aware it has not accessed its STEM Auction results within this period;
- remove the requirement for the IMO to provide System Management with Fuel Declarations derived from STEM Submissions;
- remove the requirement for System Management and Synergy to meet monthly regarding the scheduling and dispatch of the Balancing Portfolio;
- allow forecast output quantities in Non-Scheduled Generator Balancing Submissions to be updated after Balancing Gate Closure; and
- address a number of outstanding issues affecting related areas of the Market Rules.

Appendix 1 contains the Rule Change Proposal and gives complete information about:

- the proposed amendments to the Market Rules;
- relevant references to clauses of the Market Rules and any proposed specific amendments to those clauses; and

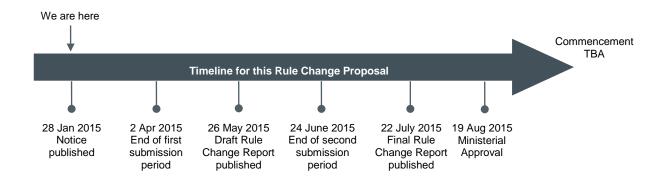
• the submitter's description of how the proposed amendments would allow the Market Rules to better address the Wholesale Market Objectives.

Decision to progress the Rule Change Proposal

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

Timeline

The projected timelines for progressing this proposal are:



The IMO considers that the standard timeframes for the Standard Rule Change Process may be insufficient given the complexity of the Rule Change Proposal. Accordingly:

- the first submission period has been extended by 15 Business Days beyond the usual 30 Business Days (to 45 Business Days) to provide stakeholders with sufficient time to consider the proposal; and
- the period for the preparation of the Draft Rule Change Report has been extended by 15 Business Days beyond the usual 20 Business Days (to 35 Business Days) to allow the IMO sufficient time to consider the submissions received in the first submission period and prepare its Draft Rule Change Report.

All other dates have been adjusted accordingly.

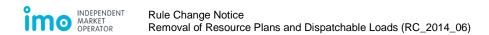
Call for submissions

The IMO invites interested stakeholders to make submissions on this Rule Change Proposal. The submission period is 45 Business Days from the Rule Change Notice publication date. Submissions must be delivered to the IMO by **5:00 PM** on **Thursday 2 April 2015**.

The IMO prefers to receive submissions by email, using the submission form available at: <u>http://www.imowa.com.au/rule-changes</u> sent to <u>market.development@imowa.com.au</u>.

Submissions may also be sent to the IMO by post, addressed to:

Independent Market Operator Attn: Group Manager, Development and Capacity PO Box 7096 Cloisters Square, PERTH, WA 6850





Wholesale Electricity Market Rule Change Proposal

Rule Change Proposal ID: RC_2014_06 Date received: 28 January 2015

Change requested by:

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| Date submitted: | 28 January 2015 |
| Urgency: | Medium |
| Rule Change Proposal title: | Removal of Resource Plans and Dispatchable Loads |
| Clauses affected: | **Numerous** |

Introduction

Clause 2.5.1 of the Wholesale Electricity Market (WEM) Rules (Market Rules) provides that any person (including the IMO) may make a Rule Change Proposal by completing a Rule Change Proposal Form that must be submitted to the IMO.

This Rule Change Proposal can be posted or emailed to:

Independent Market Operator Attn: Group Manager, Development and Capacity PO Box 7096 Cloisters Square, Perth, WA 6850 Fax: (08) 9254 4339 Email: market.development@imowa.com.au

The IMO will assess the proposal and, within five Business Days of receiving this Rule Change Proposal form, will notify the submitter whether the Rule Change Proposal will be further progressed.



In order for the proposal to be progressed, all fields below must be completed and the change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the Wholesale Market Objectives.

The objectives of the market are:

- (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- (b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- to avoid discrimination in that market against particular energy options and (C) technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- to encourage the taking of measures to manage the amount of electricity used (e) and when it is used.

Details of the Proposed Rule Change

1. Describe the concern with the existing Market Rules that is to be addressed by the proposed Market Rule change:

Background

The Market Rules Evolution Plan: 2013-2016 (MREP)¹ is a list of the most important Market Rules evolution issues to be addressed over the 2013-2016 period.

The MREP is the third to be developed by the IMO. The MREPs assist the IMO to set work priorities for the next phase of market development and assist the IMO and System Management in developing their Allowable Revenue submissions for each three year Review Period.

To develop the MREP, candidate issues were identified through review of the previous MREP (for 2009-2013) and direct consultation with industry stakeholders. The list of candidate issues was then prioritised by the Market Advisory Committee (MAC) using a ballot process. The final plan was published on the Market Web Site in November 2012.

The MREP was most recently reviewed by the MAC at its 9 October 2013 meeting². During

² See http://www.imowa.com.au/MAC 65. The IMO presented an update on the MREP at the 3 December 2015 MAC meeting (see http://www.imowa.com.au/MAC_77), but discussion was deferred pending the outcomes of the Electricity Market Review.



¹ Available at: <u>http://www.imowa.com.au/home/electricity/rules/market-rules-evolution-plan.</u>

the discussion the MAC confirmed the top priority of the following issues³:

- MREP Issue 1: Additional Improvements to the Balancing Mechanism (including the removal of the requirement to submit Resource Plans and the investigation of various suggested enhancements to the Bilateral Submission and Short Term Energy Market (STEM) processes); and
- MREP Issue 3: Transition to half hour Balancing Gate Closure, which was expanded to also include the reduction of LFAS Gate Closure timeframes.

MAC members also gave general support for the splitting of MREP Issue 1 into two components:

- the removal of Resource Plans, which could be progressed relatively quickly; and
- consideration of changes to the Bilateral Submission and STEM processes, which would require more consideration and was likely to be impacted by the (then) upcoming Synergy/Verve Energy merger.

Following the October 2013 meeting the IMO engaged Mr Jim Truesdale to prepare a discussion paper for the MAC, addressing MREP Issues 1 and 3 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 meeting⁴.

Mr Truesdale discussed the proposal to remove the requirement to submit Resource Plans and replace the information currently provided by them with an earlier Balancing Forecast. There was general support from MAC members for this proposal.

Mr Truesdale also outlined a proposal to move to a half-hour rolling Balancing Gate Closure and a 2.5-hour rolling LFAS Gate Closure. MAC members were generally supportive of the proposal, subject to System Management's reservations about moving to a half-hour gate closure immediately.

Following the December 2013 meeting the IMO developed the Pre Rule Change Proposal: Improvements to the Energy Market (PRC_2014_01). Consistent with the previous MAC discussions, PRC_2014_01 proposed the removal of Resource Plans and the reduction of gate closure times, as well as several other changes to address outstanding issues in related areas of the Market Rules.

PRC_2014_01 was presented at the 19 March 2014⁵ and 14 May 2014⁶ MAC meetings, with the IMO noting at the latter meeting its intention to submit the proposal into the formal rule change process. However, on 19 May 2014 the Minister for Energy notified the IMO of his decision to not approve two Rule Change Proposals, Incentives to Improve Availability of Scheduled Generators (RC_2013_09) and Harmonisation of Supply-Side and Demand-Side

⁶ See <u>http://www.imowa.com.au/MAC_71.</u>



³ Note there was general agreement from MAC members at the meeting that Issue 2 (the development of an Emissions Intensity Index) was no longer a high priority issue.

⁴ See <u>http://www.imowa.com.au/MAC_67.</u>

⁵ See http://www.imowa.com.au/MAC_69.

Capacity Resources (RC_2013_10)⁷. 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".

At the MAC meeting on 25 June 2014, the IMO informed MAC members that, given the context of the Electricity Market Review 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 PRC_2014_01.

This Rule Change Proposal comprises the remaining, lower cost components of PRC 2014 01.

Three additional changes have been included in the proposal.

- During the 19 March 2014 MAC meeting Mr Andrew Stevens proposed modifying the Bilateral and STEM Submission windows so that Market Participants had longer to make Bilateral and STEM Submissions⁸. After several discussions, the MAC supported the proposal to extend the STEM Submission window and to delay the STEM Auction and related processes by one hour, leaving the other submission timelines unchanged⁹.
- During the 3 December 2014 MAC meeting¹⁰ MAC members supported the inclusion of amendments to:
 - remove unnecessary obligations on Market Participants and the IMO around accessing STEM Auction results in clauses 6.4.4 and 6.4.5; and
 - improve the accuracy of Balancing Forecasts by allowing Market Participants to update Balancing Submission quantities for Non-Scheduled Generators after Balancing Gate Closure.

Issues and proposed solutions

In this Rule Change Proposal the IMO seeks to:

- remove the requirement to submit Resource Plans from the Market Rules;
- address a number of secondary issues caused by the proposed removal of Resource Plans:
- remove the Dispatchable Load Facility Class from the Market Rules;
- extend the STEM Submission window by one hour;
- remove the requirement for Market Participants to access their STEM Auction results within 15 minutes of their release, and for the IMO to contact a participant if it

¹⁰ See <u>http://www.imowa.com.au/MAC_77.</u>



⁷ See <u>http://www.imowa.com.au/RC_2013_09</u> and <u>http://www.imowa.com.au/RC_2013_10.</u>

⁸ See <u>http://www.imowa.com.au/MAC_69.</u>

⁹ See http://www.imowa.com.au/MAC_75.

becomes aware it has not accessed its STEM Auction results within this period;

- remove the requirement for the IMO to provide System Management with Fuel Declarations derived from STEM Submissions:
- remove the requirement for System Management and Synergy to meet monthly regarding the scheduling and dispatch of the Balancing Portfolio;
- allow forecast output quantities in Non-Scheduled Generator Balancing Submissions to be updated after Balancing Gate Closure; and
- address a number of outstanding issues affecting related areas of the Market Rules. •

In the following discussion, the IMO has sought to present issues in an order that reflects their relative impact and dependencies.

Issue 1: Resource Plans

The primary purpose of Resource Plans was, prior to the implementation of the Balancing Market, to determine the dispatch of Independent Power Producer (IPP) Facilities. However, the Balancing Market operates as a gross dispatch pool and so Resource Plans are no longer used for that purpose. The requirement to submit valid Resource Plans for each Trading Day places a significant and unnecessary administrative burden on Market Generators. Further, the support of the Resource Plan process contributes to the IMO's operational and IT costs, which are passed through to Market Participants.

While Resource Plans are no longer required for the earlier primary purpose of dispatch, they are still used for a number of secondary purposes, including:

- provision of information for System Management planning;
- preparation of System Management forecasts for Synergy and the IMO;
- definition of Reserve Capacity Obligations and the calculation of Net STEM Shortfall;
- definition of restrictions placed on Balancing Facilities not meeting the Balancing Facility Requirements;
- specification of the conditions under which System Management may refuse permission for a Scheduled Generator to synchronise or desynchronise; and
- determination of consumption baselines for Dispatchable Loads.

Proposed solution:

The IMO proposes to remove Resource Plans completely from the Market Rules, by deleting the Resource Plan, Resource Plan Submission and Standing Resource Plan Glossary definitions, clauses 2.34.14(a)(iB) and 10.5.1(h)(iii) and sections 6.5, 6.5C, 6.11 and 7.4, as well removing any references to Resource Plans in other clauses. The IMO proposes to address the six points covered above as follows.

Information required for System Management planning: System Management



currently receives the Resource Plans for a Trading Day shortly after 1:00 pm on the Scheduling Day. System Management uses the Resource Plan information to assess likely Facility commitment decisions, check network load flow implications and develop the initial Synergy Dispatch Plan.

The information provided is of limited value following the commencement of the Balancing Market as the Resource Plans are no longer binding and do not necessarily show how the IPP Facilities intend to operate.

While a Forecast Balancing Merit Order (BMO) would provide System Management with the information it needs, the first Forecast BMO is not produced until just after 6:00 pm, when the Balancing Horizon is extended to cover the next Trading Day. During the discussion at the December 2013 MAC meeting, MAC members supported the concept of extending the Balancing Horizon at 1:00 pm each day rather than 6:00 pm, so that the first Forecast BMO for a Trading Day was available to System Management around the same time it now receives the Resource Plans.

Proposed Solution:

The IMO proposes to change the time at which the Balancing Horizon is extended from 6:00 pm to 1:00 pm, by amending the Glossary definition of Balancing Horizon and clauses 7A.2.9(d)(i) and 7B.2.3. This means that System Management will receive the first Forecast BMO for a Trading Day shortly after 1:00 pm on the Scheduling Day.

- System Management forecasts for Synergy and the IMO: The Market Rules also require System Management to use Resource Plan data to provide the following information for a Trading Day by 4:00 pm on the Scheduling Day:
 - o under clause 7.6A.2(c)(i), to Synergy, a forecast of the energy requirements for the Balancing Portfolio; and
 - under clause 7.6A.2(e), to the IMO, the aggregate forecast output of all non-Balancing Portfolio Non-Scheduled Generators, for publication on the Market Web Site.

Synergy has advised the IMO that it does not require the Resource Plan information provided under clause 7.6A.2(c)(i) to form its initial Balancing Submissions.

Similarly, the IMO considers that the non-scheduled generation forecasts provided under clause 7.6A.2(e) and published under clause 7A.3.21(c) are of little use to Market Participants, as the Balancing Forecasts published by the IMO for each Trading Interval contain a much more up-to-date non-scheduled generation forecast, derived from the Forecast BMO.

Proposed Solution:

The IMO proposes to:

o remove the obligation on System Management to provide information to Synergy and the IMO under clauses 7.6A.2(c)(i) and 7.6A.2(e);



- remove the obligation under clause 7A.3.21(c) for the IMO to publish a non-scheduled generation forecast provided by System Management under clause 7.6A.2(e); and
- clarify in the Balancing Forecast Market Procedure that the non-scheduled 0 generation forecast component of a Balancing Forecast is calculated from the MW quantities in the Forecast BMO associated with Balancing Facilities that are Non-Scheduled Generators.
- **Reserve Capacity Obligations and Net STEM Shortfall:** Clause 4.12.1 of the Market Rules sets out the Reserve Capacity Obligations of a Market Participant holding Capacity Credits, while clause 4.26.2 gives details of the Net STEM Shortfall calculation. For IPPs both clauses refer to two quantities provided in a Resource Plan: the shortfall relative to the Market Participant's Net Contract Position provided under clause 6.11.1(e) and, where a STEM Submission does not exist, the demand quantity provided under clause 6.11.1(d).

As IPPs are no longer required to comply with their Resource Plans the shortfall quantity is no longer an appropriate indicator of whether a Market Generator has met its Reserve Capacity Obligations, and so does not need to be included in the Net STEM Shortfall calculations. Further, while STEM Submissions are not mandatory, in practice Market Generators ensure that they satisfy their obligations under clause 4.12.1 and avoid a Net STEM Shortfall under clause 4.26.2 by including their entire available capacity in their Portfolio Supply Curves.

Clauses 4.12.1 and 4.26.2 contain separate provisions for Synergy, which are very similar to the IPP provisions apart from not involving any Resource Plan quantities. The IMO considers that these provisions could also now be used for IPPs.

Proposed Solution:

The IMO proposes to amend clauses 4.12.1 and 4.26.2 to make the Reserve Capacity Obligation provisions currently applicable to STEM Submissions made by Synergy applicable to all Market Generators. While in theory this places a new obligation on IPPs to make STEM Submissions covering their own demand (to avoid breaching clause 4.12.1 and incurring a Net STEM Shortfall), in practice this is already the approach taken by IPPs.

Restrictions on Balancing Facilities not meeting the Balancing Facility **Requirements:** Clause 7A.1.11 of the Market Rules allows the IMO to impose conditions on the Balancing Market participation of Balancing Facilities not meeting the Balancing Facility Requirements. These conditions are published in the Market Procedure: Balancing Facility Requirements, and currently require such Facilities to bid their Resource Plan quantities at the Minimum STEM Price and their remaining capacity at the Maximum STEM Price or the Alternative Maximum STEM Price as applicable.

System Management has indicated in discussions with the IMO that it sees no problem in allowing Market Participants with Balancing Facilities that do not meet the Balancing Facility Requirements to amend their Balancing Submissions up to Balancing Gate Closure, provided that the prices offered in the submissions are



restricted to the relevant Price Caps.

Proposed Solution:

While no change needs to be made to the Market Rules, the IMO proposes to amend the Market Procedure: Balancing Facility Requirements, to remove the requirement for Balancing Submissions for these Facilities to be consistent with their Resource Plan quantities. Market Participants would be able to make and update Balancing Submissions for these Facilities subject to the same rules as for other Balancing Facilities, except that the prices offered in the submissions would be restricted to the relevant Price Caps, to reduce uncertainty around how the Facilities would be dispatched.

Commitment: Section 7.9 of the Market Rules outlines the processes that Market Participants and System Management must follow for synchronisation and desynchronisation of Scheduled Generators. For IPPs, clause 7.9.4 allows System Management to refuse permission to synchronise if this synchronisation is not in accordance with the relevant Resource Plan, Dispatch Instruction or Operating Instruction, while clause 7.9.8 does likewise for desynchronisation. Since the commencement of the Balancing Market the references in these clauses to Resource Plans have been unnecessary; even if a Scheduled Generator is expected to follow its Resource Plan, System Management must still send a Dispatch Instruction for each scheduled change in output.

Proposed Solution:

The IMO proposes to amend clauses 7.9.4 and 7.9.8 to remove references to Resource Plans.

Baseline for Dispatchable Loads: Market Customers with Dispatchable Loads are required to submit Resource Plans, in order to provide a consumption baseline for settlement in the event that a Dispatchable Load receives a Dispatch Instruction. While it would be possible to develop alternative arrangements for the provision of these baselines, for a number of reasons the IMO proposes instead to remove Dispatchable Loads as a Facility Class in the Market Rules. Please refer to Issue 2 for further details.

Issue 2: Dispatchable Loads

Over recent years the IMO has identified a number of issues around the treatment of Dispatchable Loads in the Market Rules. For example:

- the consumption baseline used to calculate Non-Balancing Facility Dispatch • Instruction Payments for Dispatchable Loads is provided by the Market Participant for each Trading Interval through its Resource Plan. However, since the implementation of the Balancing Market there is no requirement under the Market Rules for a Dispatchable Load to adhere to its Resource Plan consumption levels, rendering them effectively useless as a baseline;
- the Required Level of a Dispatchable Load is not defined in the Market Rules, although the purported quantity is used in the Reserve Capacity Security and



Reserve Capacity Testing provisions for this Facility Class; and

• there are no provisions in the Market Rules to calculate Capacity Cost Refunds for a Dispatchable Load.

These issues mean that the Dispatchable Load provisions are not only confusing for stakeholders and potentially open to gaming, but are likely to prove unworkable in practice. However, the cost of addressing the issues would be significant.

Concerns have also been raised around the usefulness of the Dispatchable Load Facility Class in meeting the Wholesale Market Objectives. While to date no Dispatchable Load has been registered in the WEM, from preliminary discussions it seems likely that such a facility would incorporate some kind of energy storage. A facility of this type would be able to not only reduce its consumption in peak times but to actually provide energy to the SWIS, actively participating in the Balancing Market and being dispatched through the BMO, as well as potentially providing Ancillary Services.

The Dispatchable Load Facility Class does not currently account for a facility of this nature and would require extensive modifications to do so. After investigation of the IT implications the IMO has concluded 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, rather than attempt to modify the current Dispatchable Load Facility Class.

Finally, the existence of Dispatchable Loads in the Market Rules generates ongoing IT system costs (due to testing and compliance requirements), which are difficult to justify if the Facility Class is not expected to fulfill a useful function in the market.

Proposed solution:

The IMO proposes to remove the Dispatchable Load Facility Class and any requirements that only relate to Dispatchable Loads from the Market Rules. This involves the deletion of clauses 2.27.1(a)(iv), 2.27.5(d)(iv), 2.29.1A(e), 2.29.5(c), 2.29.8, 3.9.6(b), 4.12.1(a)(iiA), 4.26.2(d)(iiA), 6.12.1(c), 6.12.1(e), 6.17.6(a), 6.17.6(b), 6.17.6A, 9.3.3(c) and 9.3.4(c), the Glossary definitions of Dispatchable Load and Consumption Increase Price and Appendix 1(i), as well as the removal of references to Dispatchable Loads in various other clauses.

In light of recent technological advances in the storage of electrical energy, the IMO anticipates the need to consider the introduction of a new Facility Class for energy storage in the future, once sufficient information is available to demonstrate the usefulness of such facilities and identify their key performance characteristics.

Issue 3: STEM Submission window

The STEM Submission window is currently open for 50 minutes from 9:00 am to 9:50 am. This can leave little time to correct errors if a Market Participant experiences an IT system failure or has a STEM Submission rejected.

With the proposed removal of Resource Plans, there is no need for the STEM Auction results to be published in time for Market Participants to make Resource Plan Submissions at 11:00 am. Although the IMO proposes that Market Participants make their initial Balancing



Submissions by 1:00 pm, the first affected Trading Interval does not start until 8:00 am the following day and Market Participants would be able to revise their Balancing Submissions for this Trading Interval up until 4:00 am for Synergy and 6:00 am for IPPs.

Proposed solution:

The IMO proposes to amend clause 6.3B.1 and section 6.4 of the Market Rules so that the STEM Submission window closes at 10:50 am rather than 9:50 am. The timelines for the associated STEM Auction processes will be delayed by one hour to reflect the extension of the submission window.

Issue 4: Update of STEM Submission parameters

Under clause 6.3A.3 of the Market Rules the IMO must by 9:05 am each 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 have already been submitted by the Market Participant and accepted by the IMO for the Trading Day. Clause 6.3A.4 requires the IMO to provide Market Participants with updated versions of these parameters by 9:30 am. In practice, whenever a STEM Submission is accepted the parameters are immediately recalculated and made available to the relevant Market Participant.

Proposed solution:

The IMO proposes to amend clause 6.3A.4 to clarify that the parameters provided to Market Participants under clause 6.3A.3 are updated whenever a STEM Submission is accepted.

Issue 5: Obligations to access STEM Auction results

Clause 6.4.3 of the Market Rules requires the IMO to make available to Market Participants their STEM Auction results, including Net Contract Positions, by 10:30 am on the relevant Scheduling Day (which will be extended to 11:30 am under the proposed amendments). Clause 6.4.4 requires Market Participants to access this information by 10:45 am. Clause 6.4.5 requires the IMO, if it becomes aware that a Market Participant has been unable to access its STEM results by 10:45 am, to use reasonable endeavours to contact the affected Market Participant to ensure that it is provided with at least the details needed to prepare its Resource Plan.

The IMO considers that the obligation under clause 6.4.4 is no longer needed now that the time pressures previously associated with Resource Plan submission no longer apply. Further if a Market Participant is experiencing IT issues the IMO, as a matter of course, will provide any necessary assistance, including providing key market data by an alternative method. A clause in the Market Rules that prescribes this assistance for STEM Auction results only is unnecessary and potentially confusing.

Proposed solution:

The IMO proposes to remove clauses 6.4.4 and 6.4.5 from the Market Rules.



Issue 6: Fuel Declarations

Section 7.5 of the Market Rules imposes various obligations on the IMO, System Management and Market Participants around the provision to System Management of Fuel Declarations derived from STEM Submissions.

System Management has advised that IMO that it no longer requires these declarations, as it receives the fuel use information it needs through the BMO.

Proposed solution:

The IMO proposes to amend section 7.5 to remove all references to the provision of Fuel Declarations and updates to Market Participants' proposed fuel use to System Management.

It should be noted that Market Participants will still need to provide Fuel Declaration information in their STEM Submissions, as the information is still required by the IMO for compliance monitoring.

It should also be noted that no change is proposed to the requirement to provide System Management with fuel use information, via Balancing Submissions, in the BMO.

Issue 7: Interaction between forecast and final BMOs and LFAS Merit Orders

Section 7A.3 of the Market Rules describes the determination of BMOs and Forecast BMOs, while section 7B.3 describes the determination of LFAS Merit Orders and Forecast LFAS Merit Orders. In both cases, the requirements for producing forecast merit orders are virtually the same as those for producing final merit orders, apart from a few minor variations.

In practice, the IMO uses the same IT processes to produce both forecast and final merit orders and their related outputs. This means that where variations exist in the requirements under the Market Rules, the IMO meets the more stringent requirement for both the forecast and final versions. For example, the IMO provides Market Participants with forecast EOI Quantities for their Balancing Facilities whenever it generates a BMO or a Forecast BMO, even though the Market Rules only require this for Forecast BMOs.

However, the current drafting of sections 7A.3 and 7B.3 is unnecessarily complex, with repetitions and inconsequential variations that make it difficult for a reader to understand how the process works and what information is provided.

Proposed solution:

The IMO proposes to restructure sections 7A.3 and 7B.3, to clarify the processes for the provision of merit orders and related information, and to remove unnecessary inconsistencies between the requirements for forecast merit orders and the requirements for final merit orders.

Issue 8: Requirement for System Management and Synergy to meet monthly

Clause 7.6A.5 of the Market Rules requires representatives of System Management and Synergy to meet at least once per month, to review the procedures operating under section 7.6A of the Market Rules for the scheduling and dispatch of the Balancing Portfolio. Both System Management and Synergy have advised the IMO that they do not find it



necessary to meet each month and so the requirement is creating an unnecessary administrative overhead for both parties.

Proposed solution:

The IMO proposes to amend clause 7.6A.5(a) to remove the requirement for mandatory monthly meetings when both System Management and Synergy agree that they are not required.

Issue 9: Clarification of Balancing Submission quantities

Currently some ambiguity exists in the Market Rules around how available and unavailable capacity is shown in a Balancing Submission. While various clauses (e.g. clauses 7A.2.8(b), 7A.2.9(a)(ii), 7A.2.10(a) and 7A.2.10(b)) of the Market Rules imply that a Balancing Submission must indicate how much of a Balancing Facility's Sent Out Capacity is unavailable for dispatch, clause 7A.2.4 and the Glossary definition of the term 'Balancing Submission' do not explain how this is to be done. Further, the Glossary definition suggests that for a Scheduled Generator the Balancing Price-Quantity Pairs should cover the full Sent Out Capacity of the Facility, regardless of whether any of that capacity is unavailable for dispatch.

Proposed solution:

The IMO proposes to amend the Glossary definition of a Balancing Submission and the requirements for a Balancing Submission in clause 7A.2.4, and include new clauses 7A.2.4A, 7A.2.4B and 7A.2.4C, to clarify how 'available' capacity and 'unavailable' capacity are to be included in a Balancing Submission.

Issue 10: Update of Balancing Submissions for Non-Scheduled Generators after Balancing Gate Closure

Under section 7A.3 of the Market Rules the IMO must provide a Forecast BMO for each future Trading Interval in the Balancing Horizon, and provide to each Market Participant the quantity expected to be provided by that Market Participant. This is done by the IMO using the most recent and accurate information available to it.

Currently, to calculate the Forecast BMOs for a certain Trading Interval after Balancing Gate Closure the IMO uses the latest Balancing Submissions, which have been made before Balancing Gate Closure. In the case of Non-Scheduled Generators (e.g. wind farms) the quantities submitted by the Market Participant are based on forecast generation quantities which have been calculated at least two hours before the start of the Trading Interval. The time lag between the calculation of the forecast and the start of the Trading Interval can result in considerable deviations between the forecasted and actual generation.

Proposed solution:

The accuracy of non-scheduled generation forecasts improves significantly the closer the time of forecasting is to the start of the Trading Interval. Therefore, the IMO proposes to amend clause 7A.2.10 of the Market Rules to allow, but not require, a Non-Scheduled Generator to update these quantities after Balancing Gate Closure, to better reflect its latest estimate of the output of its Facility at the end of the Trading Interval.



Other Changes

The IMO has also proposed a number of other minor amendments to the Market Rules to improve the clarity and integrity of the drafting, including:

- update of the Glossary definition of Balancing Market, to clarify its role in the dispatch • of generation in the WEM;
- removal of the obsolete transitional provisions in sections 1.10 and 1.11 and in clause 3.13.3AB, and their associated Glossary definitions;
- 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);
- inclusion of a Glossary definition for the term 'Balancing Settlement'; •
- removal of the Glossary definitions: •
 - 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 the term is no longer required;
 - 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:
 - Balancing Quantity, as the term is only used in clause 2.16.2(hC) and, as discussed above, this reference is incorrect and proposed to be removed; and
 - 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';
- 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;
- 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;
- improvements to the consistency of the names used for various LFAS quantities and constrained on and off payments;
- 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;



- 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;
- 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);
- clarification of the requirement in clause 10.5.1(iA)(ii) to publish full Balancing Submission details after seven days; and
- correction of minor and typographical errors.

Impact on the WEM Regulations and Protected Provisions

Reviewable Decisions

No Reviewable Decisions are affected by the proposal and no new Reviewable Decisions are proposed.

Civil Penalties

The proposed Amending Rules include amendments to a number of civil penalty provisions.

The following civil penalty provisions are proposed to be amended; however the IMO considers the proposed changes do not alter the general intent of the provisions (although in some cases they reduce the range of persons that may be subject to the penalty) and so no changes to the current civil penalties are required.

- Clause 2.27.1: Obligation for a Network Operator to provide Loss Factors to the IMO (category A) – the only change proposed to this clause is to remove the reference to Dispatchable Loads. It should be noted that the Public Utilities Office (PUO) is currently considering which clauses, if any, in section 2.27 (including clause 2.27.1) should be subject to civil penalties, following the commencement of the Amending Rules in the Rule Change Proposal: Loss Factor Determination (RC_2012_07).
- Clause 2.34.3: Requirement to notify the IMO of changes to Standing Data (category B) – the only changes proposed are the removal of a reference to Standing Resource Plans and the replacement of the word 'clauses' with 'sections'.
- Clause 2.35.1: Requirement to maintain communications systems to support dispatch (category A) – the only change proposed is to remove the reference to Dispatchable Loads.
- Clause 2.37.5: Factors the IMO must take into account when determining a Market Participant's Credit Limit (category B) – the only change proposed to the clause is to use the new defined term 'Balancing Settlement'. It should be noted that this clause was substantially altered by the Amending Rules for the Rule Change Proposal: Prudential Requirements (RC_2012_23)¹¹. The clause is no longer an appropriate civil penalty provision as it now relates to factors for the IMO to consider, rather than

¹¹ See http://www.imowa.com.au/RC_2012_23 for further details. The Amending Rules for RC_2012_23 commenced on 1 May 2014.



an obligation on a Market Participant. The PUO is currently seeking to delete the clause from the WEM Regulations and replace it with a category B civil penalty on clause 2.37.8(a).

- Clause 7.6A.3: Requirement for Synergy to notify System Management of its non-compliance with an Operating Instruction or instruction to deviate from the Dispatch Plan (category C) – the only change proposed is to replace 'LFAS Backup Enablement' with 'Backup LFAS Enablement' in the opening text of clause 7.6A.3 (note that only clause 7.6A.3(c) is subject to civil penalties).
- Clause 7.6A.5(e): Requirement for Synergy and System Management to make records about the dispatch of Synergy Facilities created under section 7.6A available to the IMO if requested (category B) – the only change proposed is the replacement of the word 'clause' with 'section'.
- Clause 7A.2.8: Details what a Balancing Submission must accurately reflect (category C) – the changes proposed are to:
 - clarify that the clause does not apply to the Balancing Portfolio (which is subject to equivalent obligations under clause 7A.2.9);
 - clarify the ongoing nature of the requirement;
 - update a clause reference; and
 - replace the term 'Balancing' with 'Balancing Market'.
- Clause 7A.2.9: Details Balancing Submission requirements for the Balancing Portfolio (category C) – the changes proposed are to:
 - clarify the ongoing nature of the requirement while recognising the submission timing limits imposed on Synergy under clauses 7A.2.9(d) to 7A.2.9(f);
 - avoid the use of the term 'Balancing Portfolio Supply Curve';
 - replace the term 'Balancing' with 'Balancing Market';
 - replace 'Facilities which are likely to provide LFAS' with 'which Facilities are likely to provide LFAS';
 - clarify that Balancing Submissions are updated by providing a new, updated Balancing Submission;
 - reflect the proposed change to the time the Balancing Horizon is extended from 6:00 pm to 1:00 pm; and
 - remove a redundant phrase.
- Clause 7A.2.13: Requirement to make Balancing Submissions in good faith (category C) – the only change proposed is to replace "clause 7A.2" with "section 7A.2".



 Clause 7B.2.10: Requirement to ensure LFAS Submissions are accurate (category C)

 the only changes proposed are to make the requirement subject to clause 7B.2.4 (to acknowledge the earlier LFAS Submission deadline for the Balancing Portfolio) and to clarify its ongoing nature.

The following civil penalty provisions are proposed to be deleted, and should therefore be deleted from the WEM Regulations.

- Clause 2.29.8: Rule Participant requirements in relation to a Dispatchable Load (category B).
- Clause 6.5.1A: Requirement to submit Resource Plans (category B).
- Clause 7.5.5: Market Participant requirements in relation to notifications of a change of fuel (category C).

The IMO considers that no new civil penalty provisions are required in relation to this Rule Change Proposal, as no new obligations are being created. The IMO proposes to work with the PUO to progress the necessary amendments to the WEM Regulations to remove clauses 2.29.8, 6.5.1A and 7.5.5 as civil penalty provisions.

Protected Provisions

The IMO notes that clauses 2.13.6L, 2.16.2, 2.16.4, 2.16.12, 2.22.1, 2.34.1 and 2.36.1 are Protected Provisions. Under clause 2.8.3 of the Market Rules, amendments to a Protected Provision require the Amending Rules in this Rule Change Proposal to be approved by the Minister.

2. Explain the reason for the degree of urgency:

The IMO proposes that the Rule Change Proposal be progressed via the Standard Rule Change Process.

3. Provide any proposed specific changes to particular Rules: (for clarity, please use the current wording of the Rules and place a strikethrough where words are deleted and <u>underline</u> words added)

TABLE OF CONTENTS

- 1.10. Specific Transition Provisions Balancing and Load Following Services[Blank]
- 1.11. Specific Transition Provisions Electricity Generation and Retail Corporation[Blank]
- 6.5. Resource Plan Submission Timetable and Process[Blank]



- 6.5A. [Blank]
- 6.5B. [Blank]
- 6.5C. Standing Resource Plan Submission Timetable and Process

•••

Resource Plans

- 6.11. Format of Resource Plans[Blank]
- ...

Balancing Pricing Prices and Quantities

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

...

Data used in the Non-Balancing Dispatch Process

- 7.1. Data Used in the Non-Balancing and Out of Merit Dispatch Process
- 7.4. Resource Plans[Blank]
- 7.5. Non-Balancing Dispatch Merit Orders and Fuel Declarations
- 7.6A. Scheduling and Dispatch of Balancing Portfolio and Stand Alone Facilities (for certain Ancillary Services) and the Balancing Portfolio
- 7A.3. Forecast BMO and Pricing BMO

•••

Dispatch Advisories, Balancing Suspension and Reporting Status Reports

- 7B.3. LFAS Merit Orders and LFAS Prices
- 7B.4. Synergy Back Up Backup LFAS Provider
- •••

1.10. Specific Transition Provisions – Balancing and Load Following Services[Blank]

1.10.1. In this clause 1.10:

Balancing Final Rule Change Report: Means the IMO's Final Rule Change Report for the Rule Change Proposal: Competitive Balancing and Load Following Market (RC_2011_10).

Pre-Amended Rules: Means the Market Rules as in force immediately before the amendments made by the Balancing Final Rule Change Report come into effect (and if the amendments come into effect on more than one date, the last date on which the balance of the amendments come into effect).

Post-Amended Rules: Means the Market Rules as in force immediately after the amendments made by the Balancing Final Rule Change Report come into effect (and if the amendments come into effect on more than one date, the last date on which some of the amendments come into effect).

1.10.2. Before 8:00 AM on the Balancing Market Commencement Day, notwithstanding that the Pre-Amended Rules continue to apply, each Rule Participant must perform all obligations imposed on that Rule Participant under the Post-Amended Rules, in



relation to the Balancing Market Commencement Day and subsequent Trading Days, that, if the Post-Amended Rules were in force, the Rule Participant would have been required to perform under the Post-Amended Rules. This includes but is not limited to obligations relating to:

- (a) updated Standing Data under clause 2.34;
- (b) information required to be shared between the IMO and System Management under Chapters 2 and 7, including:
 - i. Outage schedules under clause 7.3.4;
 - ii. Resource Plans under clause 7.4; and
 - iii. Fuel Declarations under clause 7.5.1;
- (c) certification of Reserve Capacity under clauses 4.10 and 4.11;
- (d) a submission, including:
 - i. a Bilateral Submission under clause 6.2;
 - ii. a STEM Submission under clause 6.3B;
 - iii. a Resource Plan Submission under clause 6.5;
 - iv. a Balancing Submission under clause 7A.2;
 - v. the Balancing Portfolio Supply Curve under clause 7A.2.9; and
 - vi. a LFAS Submission under clause 7B.2;
- (e) the STEM Auction under clause 6.4;
- (f) a Non-Balancing Dispatch Merit Order under clause 6.12;
- (g) Load Forecasts under clause 7.2.1;
- (h) a Dispatch Instruction, Dispatch Order and an Operating Instruction under Chapter 7;
- (i) information in relation to the Balancing Portfolio under clause 7.6A.2;
- (j) a Dispatch Advisory under clause 7.11;
- (k) a Forecast BMO under clause 7A.3.16;
- (I) an LFAS Quantity forecast under clause 7B.1.4; and
- (m) an LFAS Merit Order, a Forecast LFAS Merit Order or the LFAS Price under clause 7B.3.
- 1.10.3. On the Scheduling Day relating to the Trading Day that is also the Balancing Market Commencement Day set by the IMO under clause 7A.1.2, notwithstanding that the Pre-Amended Rules continue to apply, Rule Participants are not required to perform obligations under the following Pre-Amended Rules:
 - (a) Resource Plan data under clauses 6.5, 6.5C, 6.11 and 7.4;
 - (b) Balancing Data under clauses 6.5A and 6.11A;



- (c) the Dispatch Merit Order under clause 6.12;
- (d) Load Forecast and Ancillary Service Requirements under clause 7.2;
- (e) Outages under clause 7.3;
- (f) Dispatch Merit Orders and Fuel Declarations under clause 7.5;
- (g) Dispatch under clause 7.6;
- (h) Scheduling and Dispatch of Synergy under clause 7.6A; and
- (i) Dispatch Instructions under clauses 7.7 and 7.8,

but only to the extent that these obligations relate to the Trading Day that is also the Balancing Market Commencement Day or subsequent Trading Days.

- 1.10.4. After 8:00 AM on the Balancing Market Commencement Day, notwithstanding that the Post-Amended Rules apply, each Rule Participant must perform all obligations imposed on that Rule Participant under the Pre-Amended Rules, arising in relation to each Trading Day (or part of a Trading Day) up to but excluding the Balancing Market Commencement Day, that, if the Pre-Amended Rules were in force, the Rule Participant would have been required to perform under the Pre-Amended Rules. This includes, but is not limited to, obligations relating to:
 - (a) administration of the Market under Chapter 2;
 - (b) energy scheduling, including calculation of prices and quantities for Balancing and Ancillary Services under Chapter 6;
 - (c) Dispatch under Chapter 7;
 - (d) settlement under Chapter 9; and
 - (e) treatment of information under Chapter 10.

1.11. Specific Transition Provisions – Electricity Generation and Retail Corporation[Blank]

1.11.1. From 12:00 AM until 8:00 AM on 1 January 2014, notwithstanding the definitions of Verve Energy Balancing Portfolio and Non-Balancing Dispatch Merit Order in Chapter 11, the following definitions will apply for the purposes of these Market Rules:

Verve Energy Balancing Portfolio: Means all the Registered Facilities of the body corporate established by section 4(1)(a) of the Electricity Corporations Act, as renamed as the Electricity Generation and Retail Corporation under section 4(2A) of that Act, other than:

- (a) Stand Alone Facilities;
- (b) Demand Side Programmes;
- (c) Dispatchable Loads; and
- (d) Interruptible Loads.



Non-Balancing Dispatch Merit Order: An ordered list of Demand Side Programmes and Dispatchable Loads registered by Market Participants, as determined by the IMO in accordance with clause 6.12.1.

- 2.13.6L. System Management must, in the time, form and manner prescribed in the IMS Interface Market Procedure provide to the IMO, for each Scheduled Generator-or Dispatchable Load for which an applicable Tolerance Range or Facility Tolerance Range has been determined, the absolute value of the maximum MW boundary of the applicable Tolerance Range or Facility Tolerance Range.
- 2.16.2. The IMO 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. The IMO must undertake the following analysis of the data identified in the Market Surveillance Data Catalogue to calculate relevant summary statistics:
 - where applicable, calculation of the means and standard deviations of (a) 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 the IMO considers relevant and price movements; and
- such other analysis as the IMO considers appropriate or is requested of the IMO 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 the IMO and System Management in carrying out their 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;

...

- 2.22.1. For the purposes of this <u>clause section</u> 2.22, the services provided by the IMO are:
 - (a) market operation services, including the IMO's operation of the Reserve Capacity-market <u>Mechanism</u>, STEM-and, Balancing <u>Market and LFAS</u> <u>Market</u> and the IMO's settlement and information release functions;
 - •••
- 2.26.3. The Economic Regulation Authority must review the methodology for setting the Maximum 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:
 - • •
 - 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 the IMO 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 the IMO 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 <u>that</u> an Interruptible Load or Dispatchable Load registered by that Rule Participant is equipped with an interval meter.
- 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.
- 2.34.1. The IMO must:
 - (a) maintain a record of the Standing Data described in Appendix 1, including the date from which the data applies; and
 - (b) provide the Standing Data, excluding any Standing Data described in the following clauses of Appendix 1, and any revisions of that Standing Data, to System Management as soon as practicable:
 - i. [Blank]
 - ii. [Blank]
 - iii. clause (h)(vi);
 - iv. clause (i)(xA);[Blank]
 - v. clause (k)(i)(7);
 - vi. [Blank]
 - vii. clause (l)(iii)(4);
 - viii. clause (I)(iii)(5); and
 - ix. clause (m).
- 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, or 6.3C-or 6.5C, must notify the IMO 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, or 6.3C or 6.5C, the IMO 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 IMO makes a request under clause 2.34.6, the date on which the information requested is received by the IMO.
- 2.34.12. The IMO must consult with System Management before making a decision requiring a Rule Participant to provide updated Standing Data under clause 2.34.11, excluding any Standing Data described in the following clauses of Appendix 1:
 - (a) [Blank]
 - (b) [Blank]
 - (c) clause (h)(vi);
 - (d) clause (i)(xA);[Blank]
 - (e) clause (k)(i)(7);
 - (f) [Blank]
 - (g). clause (l)(iii)(4);
 - (h) clause (l)(iii)(5); and
 - (i) clause (m).
- 2.34.14. The IMO must commence using revised Standing Data from:
 - (a) 8:00 AM on the Scheduling Day following the IMO'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 and 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 the IMO 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 <u>1 one</u> year from the release date of the last results produced with that version;
 - ...
- 2.37.5. When determining a Market Participant's Credit Limit the IMO 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 by the IMO to The IMO is not liable to pay System Management for the use of Ancillary Services.
- 3.13.3A. Subject to clause 3.13.3AB, for <u>For</u> 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 the IMO 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 the IMO, 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 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 the IMO, 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 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, or Curtailable Loads or Dispatchable Loads commissioned after Energy Market Commencement; and
 - ...
- 4.10.1. Each Market Participant must ensure that information submitted to the IMO with an application for certification of Reserve Capacity pertains to the Reserve Capacity Cycle to which the certification relates, is supported by documented evidence and includes, where applicable, the following information:
 - . . .
 - (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:
 - 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;

•••

- (f) for Interruptible Loads, and Demand Side Programmes and Dispatchable Loads:
 - i. the Reserve Capacity <u>that</u> the Market Participant expects to make available from each of up to <u>3 three</u> blocks of capacity;
 - the maximum number of hours per year <u>that</u> the Interruptible Load, or Demand Side Programme or Dispatchable Load is will be available to provide Reserve Capacity, where this must be at least 24 hours;
 - iii. the maximum number of hours per day that the Interruptible Load, or Demand Side Programme or Dispatchable Load is will be available to provide Reserve Capacity if called, where this must be:
 - 1. not less than must be at least four hours; and
 - not more than must not exceed the maximum of the periods specified in clause 4.10.1(f)(vi);
 - iv. the maximum number of times that the Interruptible Load, or Demand Side Programme or Dispatchable Load can be called <u>dispatched</u> to provide Reserve Capacity during a 12 month period, where this must be at least six times;
 - the minimum notice period required for dispatch of the Interruptible Load, or Demand Side Programme or Dispatchable Load, where this must not be more than 4 exceed four hours; and



- vi. the periods when the Interruptible Load, or Demand Side Programme or Dispatchable Load can be dispatched, which must include the period between noon and 8:00 PM on all Business Days;
- 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, the IMO must indicate what Availability Class is applicable to that Certified Reserve Capacity where this Availability Class must reflect the maximum number of hours per year that the capacity will be available and must not be Availability Class 1.
- 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 the IMO 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 Market Participants Participant, less double the total MWh quantity to be provided as Ancillary Services as specified by the IMO for that Market Participant in accordance with clause 6.3A.2(e)(i).



- (b) Synergy must ensure that for each Trading Interval:
 - the aggregate MW equivalent of the quantity of Capacity Credits į. 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
 - the MW quantity calculated by doubling the total MWh quantity iii. covered by STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction determined by the IMO for Synergy clause 6.9 for that Trading Interval, corrected for loss factor adjustments so as to be a sent out quantity; plus
 - capacity expected to experience a Forced Outage at the time that iv. 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 the IMO 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 the IMO 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:
 - the identity of the Market Participant submitting the Reserve Capacity Offer; (a)
 - (b) the identify identity of the Market Participant's Facility covered by the Reserve Capacity Offer; and
 - for Interruptible Loads, and Demand Side Programmes and Dispatchable (c) 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 a Demand Side Programme-or Dispatchable Load, the Availability Class of that Price-Quantity Pair, as specified by the IMO in assigning Certified Reserve Capacity to that Facility in accordance with-clause_section 4.11.
- 4.25.2. The verification referred to in clause 4.25.1 can be achieved by the IMO<u>The IMO</u> may verify the matters specified in clause 4.25.1 by:
 - ...
 - (c) in the case of an Interruptible Load-or Dispatchable Load, requiring System Management, in accordance with clause 4.25.7, to test 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 the IMO under clause 4.25.2, the IMO must require System Management to 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 the IMO must, from the second Trading Day following the Scheduling Day on which the IMO 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. The IMO 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 of Trading Day d and Trading Month m as:

SF(p,m,d,t) = Max(RTFO(p,d,t), RCOQ(p,d,t) - A(p,d,t)) - RTFO(p,d,t)

Where:

A(p,d,t) = Min(RCOQ(p,d,t), CAPA(p,d,t));

RCOQ(p,d,t) for Market Participant p and Trading Interval t of Trading Day d is equal to:

 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,

CAPA(p,d,t)-is-for Market Participant p and Trading Interval t of Trading Day d is:

- (c) equal to RCOQ(p,d,t) for a Trading Interval where the STEM Auction has been suspended by the IMO in accordance with clause 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 the IMO for that Market Participant under-clause_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 the IMO 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,d,t) RTFO(p,d,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 the IMO for that Market Participant under clause 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 the IMO 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,d,t) RTFO(p,d,t)).

BSFO(p,d,t) is the total MW quantity of Forced Outage associated with Market Participant p before the STEM Auction for Trading Interval t of Trading Day d, 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 provided to the IMO by System Management in accordance with-clause_section 7.3; and

RTFO(p,d,t) is the total MW quantity of Forced Outage associated with Market Participant p in real-time for Trading Interval t of Trading Day d, 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 provided to the IMO by System Management in accordance with clause 7.13.1A(b).

4.26.2B. The IMO is to set the factor described in the definition of RCOQ(p,d,t)-and RCOQ(f,d,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 <u>Facility's</u> Loss Factor.

4.26.5. To support the calculation of the values of RCOQ(p,d,t) and RCOQ(f,d,t) required by clause 4.26.2:

•••

- 6.3A.2. By 9:00 AM on the Scheduling Day the IMO 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:
 - Iess an allowance for Outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6; and
 - 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, as provided to the IMO by System Management in accordance with clause 7.2.3B;

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 of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6;
- (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 of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6;



- (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 of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6; 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
 - 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),

as provided to the IMO by the System Management in accordance with clause 7.2.3B.

- 6.3A.4. By 9:30 AM on the Scheduling Day the IMO 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.<u>If the</u> IMO accepts a STEM Submission from a Market Participant after it has calculated and released the parameters required under clause 6.3A.3 for a Trading Day, then the IMO 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.1. A Market Participant may submit STEM Submission data for a Trading Day to the IMO between:
 - (a) 9:00 AM on the Scheduling Day; and
 - (b) 9:50 AM 10:50 AM on the Scheduling Day.
- 6.4.1. The IMO must undertake the process described in-<u>clause_section</u> 6.9 and determine the STEM Auction results for a Trading Day-no earlier than 10:00 AM <u>after 10:50 AM</u>, and no later than 10:30 AM <u>before 11:30 AM</u>, on the relevant Scheduling Day.
- 6.4.2. The IMO must-communicate to notify System Management of the total quantity of energy scheduled to be supplied under Bilateral Contracts and in the STEM Auction, by each Market Participant, and for each Trading Interval of a Trading Day by 10:30 AM 11:30 AM on the relevant Scheduling Day.



- 6.4.3. The IMO 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:
 - the Trading Intervals, if any, in which the STEM Auction was suspended; (a)
 - (b) the STEM Clearing Price in all Trading Intervals for which the STEM Auction was not suspended;
 - the guantities scheduled in respect of that Market Participant in the STEM (c) 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 the IMO 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 the IMO site or its supporting infrastructure, or any delay in receiving any of the information as described in clauses 7.2.3B or 7.3.4, which prevents the IMO from completing the relevant processes, the IMO may extend one or more of the timelines prescribed in clauses sections 6.2, 6.3A, 6.3B and this clause 6.4, subject to:
 - any such extension not resulting in more than a two hour two-hour delay to (a) any of the timelines prescribed in clauses sections 6.2, 6.3A, 6.3B and this clause 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 the IMO,

and the IMO must advise Rule Participants of any such extension as soon as practicable.

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

- Market Participants, including Synergy but only in respect of its Stand Alone 6.5.1. Facilities, may submit Resource Plan Submission data for a Trading Day to the IMO between:
 - (a) 11:00 AM on the Scheduling Day, with the exception that if the IMO has delayed any timelines in accordance with clause 6.4.6, the IMO 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 the IMO 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 the IMO of this failure by 12:30 PM on the Scheduling Day; or
 - iii. the opening time for Resource Plan Submissions was delayed,

the IMO 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 the IMO with a Resource Plan Submission by:
 - (a) submitting Resource Plan Submissions; or
 - (b) in accordance with clause 6.5.1B.
- 6.5.1B. Where the IMO 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 the IMO 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 the IMO 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 the IMO accepts the data as conforming to the requirements of clause 6.11.2. Where the IMO accepts the data then the IMO must revise the Resource Plan Submission to reflect that data.
- 6.5.3. Where the IMO has issued a Market Advisory concerning an IT systems failure at the IMO, the IMO 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 the IMO 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 the IMO 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) <u>3:50 PM</u>,

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

- 6.5C.2. When the IMO 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 the IMO accepts the received data as conforming to the requirements of clause 6.11.2; and
 - (b) where the IMO accepts the data then the IMO 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 the IMO for any Trading Interval of the Trading Day during the time interval specified in clause 6.5C.1.
- 6.5C.5. The IMO must confirm to the Market Participant any cancellation of Standing Resource Plan Submission data made in accordance with clause 6.5C.4. Where

INDEPENDENT Rule Change Proposal: MARKET OPERATOR RC_2014_06 such cancellation is made then the IMO 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 the IMO 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 the IMO on the Scheduling Day immediately prior to that Trading Day.

6.5C.7. [Blank]

6.6.9. A Market Generator may apply to the IMO 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 the IMO an application must be in a form specified by the IMO, 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 the IMO 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 the IMO 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) Target_{LFA} = (NCP + DQ - NonSchGen - Shortfall) \pm Tol

Where:

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

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_{LFA} = (NCP - NonSchGen - Shortfall) * 2+DQ ± Tol

Where:

Target MW_{LFA} = 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)).

6.12.1.

- (a) By 1:30 PM on the Scheduling Day (or within 40 minutes of a closing time extended in accordance with clause 6.5.1(b)) the IMO must determine the Non-Balancing Dispatch Merit Orders identified in clauses 6.12.1(b)-to 6.12.1(e) and 6.12.1(d). A Non-Balancing Dispatch Merit Order lists the order in which the Dispatchable Loads and Demand Side Programmes of Market Participants will be issued Dispatch Instructions by System Management under clause 7.6.1C(d) to increase or decrease consumption, as applicable.
- (b) A-<u>The IMO must determine 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) during Peak Trading Intervals. The IMO must take, taking into account the following principles-when determining this Non-Balancing Dispatch Merit Order:</u>
 - this Non-Balancing Dispatch Merit Order must list all Demand Side Programmes and Dispatchable Loads registered by Market Participants; and



- this Non-Balancing Dispatch Merit Order must be determined by ranking the <u>Registered Facilities</u> <u>Demand Side Programmes</u> referred to in clause 6.12.1(b)(i) in increasing order of the Consumption Decrease Price for Peak Trading Intervals.
- (c) A Non-Balancing Dispatch Merit Order for an increase in consumption relative to the quantities included in the applicable Resource Plan during Peak Trading Intervals. The IMO must take into account the following principles when determining this Non-Balancing Dispatch Merit Order:
 - i. this Non-Balancing Dispatch Merit Order must list all Dispatchable Loads registered by Market Participants;
 - ii. this Non-Balancing Dispatch Merit Order must be determined by ranking the Registered Facilities referred to in clause 6.12.1(c)(i) in increasing order of the Consumption Increase Price for Peak Trading Intervals;[Blank]
- (d) A-<u>The IMO must determine a</u> Non-Balancing Dispatch Merit Order for a decrease in consumption relative to-quantities included in the applicable Resource Plan (or the current operating level of a Facility-not included in a Resource Plan) during Off-Peak Trading Intervals. The IMO must take, taking into account the following principles when determining this Non-Balancing Dispatch Merit Order:
 - this Non-Balancing Dispatch Merit Order must list all Demand Side Programmes and Dispatchable Loads registered by Market Participants; and
 - this Non-Balancing Dispatch Merit Order must be determined by ranking the <u>Registered Facilities</u> <u>Demand Side Programmes</u> referred to in clause 6.12.1(d)(i) in increasing order of the Consumption Decrease Price for Off-Peak Trading Intervals;
- (e) A Non-Balancing Dispatch Merit Order for an increase in consumption relative to the quantities included in the applicable Resource Plan during Off-Peak Trading Intervals. The IMO must take into account the following principles when determining this Non-Balancing Dispatch Merit Order:
 - i. this Non-Balancing Dispatch Merit Order must list all Dispatchable Loads registered by Market Participants; and
 - ii. this Non-Balancing Dispatch Merit Order must be determined by ranking the Registered Facilities referred to in clause 6.12.1(e)(i) in increasing order of the Consumption Increase Price for Off-Peak Trading Intervals.[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, the IMO must rank a Registered Facility Demand Side Programme with a greater load registered in Standing Data in items item (h)(iii) or (i)(iii) of



Appendix 1 before a Registered Facility Demand Side Programme with a lesser load. In the event of a tie, the IMO will randomly assign priority to break the tie.

Balancing Pricing Prices and Quantities

6.13. Real Time Real-Time Dispatch Information

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

•••

- (c)- for the Balancing Portfolio:
 - 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 <u>Balancing Portfolio's</u> 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 <u>Balancing Portfolio's</u> 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:
 - 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 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 <u>Balancing Portfolio's</u> 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 <u>Balancing Portfolio's</u>



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

- 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.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:
 - System Management has provided a report to the IMO under clause 7.10.7 and the IMO determines 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:
 - 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:
 - System Management has provided a report to the IMO under clause 7.10.7 and the IMO determines 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;



- the Minimum Theoretical Energy Schedule less the Sent Out iii. Metered Schedule is less than the sum of:
 - any Downwards LFAS Enablement and, if the Facility is a 1. 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
- the Balancing Facility is a Non-Scheduled Generator and System iv. Management has not provided the IMO with a MWh quantity for the Facility and the Trading Interval under clause 7.13.1(eF).
- 6.16B.1. The Portfolio Upwards Out of Merit Generation in a Trading Interval for the Balancing Portfolio equals:
 - subject to clause 6.16B.1(b), the sum of any Sent Out Metered Schedules (a) for Facilities in the Balancing Portfolio less the Maximum Theoretical Energy Schedule for the Balancing Portfolio; or
 - (b) zero if:
 - i. System Management has provided a report to the IMO under clause 7.10.7 and the IMO determines that Synergy has not adequately or appropriately complied with a Dispatch Order in respect of the Balancing Portfolio; or
 - the sum of any Sent Out Metered Schedules for Facilities in the ii. 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
 - the Portfolio Settlement Tolerance. 4
- 6.16B.2. The Portfolio Downwards Out of Merit Generation in a Trading Interval for the Balancing Portfolio equals:
 - subject to clause 6.16B.2(b), the Minimum Theoretical Energy Schedule (a) less the sum of any Sent Out Metered Schedules for Facilities in the Balancing Portfolio; or



- zero if: (b)
 - System Management has provided a report to the IMO under clause i. 7.10.7 and the IMO determines 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 <u>Backup</u> 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. The IMO must determine for each Market Participant and each Trading Interval of each Trading Day:
 - the Metered Balancing Quantity; (a)
 - the Non-Balancing Facility Dispatch Instruction Payment; (b)
 - (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;
 - Loss Factor adjusted Portfolio Constrained On Balancing Portfolio (e) 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.

Constrained On Facility Balancing Quantities and Compensation Prices

6.17.3. Subject to clauses 6.17.5B and 6.17.5C, the IMO 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 <u>Backup</u> Upwards LFAS-<u>Backup</u> Enablement, which the Balancing Facility was instructed to provide by System Management;
- •••

Constrained Off Facility Balancing Quantities and Compensation Prices

- 6.17.4. Subject to clauses 6.17.5B and 6.17.5C, the IMO 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 <u>Backup</u> Downwards Backup LFAS Enablement, which the Balancing Facility was instructed to provide by System Management;

...

Portfolio Constrained On Balancing Portfolio Quantities and Compensation Prices

- 6.17.5. Subject to clause 6.17.5C, the IMO 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:
 - the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched from the <u>Balancing Portfolio's</u> Balancing Price-Quantity Pair N-in the <u>Balancing Portfolio Supply</u> 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) <u>Portfolio</u> Constrained On Compensation Price1 (PConP1) equals the Price N identified in clause 6.17.5(a) less the Balancing Price;
 - (c) 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<u>'s</u>-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. <u>Portfolio</u> Constrained On Compensation Price2 (PConP2) equals the Price N+1 identified in clause 6.17.5(c)(i) less the Balancing Price;
- (d) The IMO 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 <u>Portfolio</u> 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 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:
 - 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) The IMO 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 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, the IMO must attribute any Downwards Out of Merit Generation from the Balancing Portfolio in a Trading Interval as follows:



- (a) <u>Portfolio</u> Constrained Off-<u>Portfolio</u> Quantity1 (PCoffQ1) equals the lesser of:
 - the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched down from the Balancing <u>Portfolio's</u> 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:
 - 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);
- If the Portfolio Downwards Out of Merit Generation (in MWh) exceeds PCoffQ1 and a Balancing Price-Quantity Pair exists in for the Balancing Portfolio-Supply Curve with a price lower than Price N, then:
 - i. additional <u>Portfolio</u> Constrained Off-<u>Portfolio</u> Quantity2 (PCoffQ2) equals the lesser of:
 - the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched down from the Balancing Portfolio<u>'s Supply Curve</u> 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
 - Portfolio Constrained Off Compensation Price2 (PCoffP2) equals the Balancing Price less the Price N+1 identified in clause 6.17.5A(c)(i);
- (d) The IMO 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 <u>Portfolio</u> 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 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. <u>Backup</u> Downwards LFAS-Backup Enablement; and
 - iii. the Load Rejection Reserve Response Quantity;
- (f) 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) The IMO 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

...

- 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 product of:
 - (a) the quantity (in MWh) by which the Demand Side Programme reduced its consumption in response to a Dispatch Instruction, excluding any instructions given under a Network Control Service Contract, where this guantity is equal to the least of:
 - i. half of the Facility's Capacity Credits;
 - ii. the Dispatch Instruction amount provided by System Management in accordance with clause 7.13.1(eG); and
 - iii.the greater of zero and the difference between half of the RelevantDemand set in clause 4.26.2CA and the Demand Side ProgrammeLoad measured in the Trading Interval; and



- (b) the applicable Consumption Decrease Price for the Facility in Trading Interval t.
- (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 in the Dispatch Instruction provided to the IMO by System Management under clause 6.17.6A(a); 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:
 - the Loss Factor adjusted quantity in the Dispatch Instruction provided to the IMO by System Management under clause 6.17.6A(a); 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 product of:
 - the quantity (in MWh) by which the Demand Side Programme reduced its consumption in response to a Dispatch Instruction, excluding any instructions given under a Network Control Service Contract, where this quantity is equal to the least of:
 - 1. half of the Facility's Capacity Credits;
 - the Dispatch Instruction amount provided by System Management in accordance with clause 7.13.1(eG); or



- 3. the greater of zero and the difference between half of the Relevant Demand set in clause 4.26.2CA and the Demand Side Programme Load measured in the Trading Interval; and
- ii. the applicable Consumption Decrease Price for the Facility in Trading Interval t.
- 6.17.6A. System Management must:
 - (a) for each Trading Interval in which a Dispatchable Load was subject to a Dispatch Instruction, provide the IMO with 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; and
 - (b) provide the information in clause 6.17.6A(a) to the IMO as soon as reasonably practicable but in any event in time for the IMO to undertake settlement under Chapter 9.
- 6.17.7. The Consumption Decrease Price and Consumption Increase Price used in clauses 6.17.6(a)(ii), 6.17.6(b)(ii) and 6.17.6(c)(ii) clause 6.17.6(b) must be at the applicable Peak Trading Interval or Off-Peak Trading Interval price.
- 6.17.9. The IMO 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 provided by System Management to the IMO for the Facility under clause 2.13.6L, 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: <u>Sent Out Capacity divided by two to be</u> <u>expressed as MWh.</u>
 - 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.



- 6.21.2. The IMO 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;
 - 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 <u>prices</u> associated Portfolio Constrained Off <u>Compensation Prices</u> calculated in accordance with clause 6.17.5A; and
 - vi. the Non-Balancing Facility Dispatch Instruction Payment.

Data used in the Non-Balancing Dispatch Process

- 7.1.1. System Management must maintain and in accordance with <u>clause section</u> 7.6, use the following data set<u>-in giving when issuing</u> Dispatch Instructions to Non-Balancing Facilities <u>Demand Side Programmes</u>, when issuing Dispatch Instructions to Balancing Facilities dispatched Out of Merit, and <u>in when</u> providing Operating Instructions:
 - (a) Standing Data-on_for Registered Facilities determined in accordance with clause_section 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-<u>Network_network</u> 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 <u>Non-Scheduled Generation non-scheduled</u> <u>generation</u> by Trading Interval determined in accordance with <u>clause</u> <u>section</u> 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 clause section 3.19;
- (h) transmission Forced Outages and Consequential Outages by Trading Interval received from Network Operators in accordance with <u>clause section</u> 3.21;
- 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-clause section 3.21;
- (j) [Blank]
- (jA) the Fuel Declarations received from the IMO and notifications received from Market Participants in accordance with clause 7.5;
- (k) the Non-Balancing Dispatch Merit Order received from the IMO in accordance with <u>clause section</u> 7.5;
- (I) Supplementary Capacity Contract data, if any, received from the IMO in accordance with-clause_section 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.
- 7.2.2. The Load Forecasts for a Trading Day described in clause 7.2.1 must:
 - represent Non-Dispatchable Load and Interruptible Load net of forecast <u>Nnon-Ss</u>cheduled <u>Gg</u>eneration;
 - • •

7.4. Resource Plans[Blank]

- 7.4.1. The IMO must provide System Management with the Resource Plans for a Trading Day it has accepted from Market Participants by 1.30 PM, or by 3:30 PM where the time for submitting Resource Plans is extended by the IMO under clause 6.5.1(b), of the Scheduling Day.
- 7.4.2. Upon receipt of the Resource Plans for a Trading Day, System Management must within 5 minutes confirm to the IMO that it has received the Resource Plans.
- 7.4.3. In the event that the IMO does not receive confirmation of receipt of the Resource Plans for a Trading Day from System Management within five minutes of providing them under clause 7.4.1, the IMO must contact System Management by telephone. If System Management has not received the Resource Plans, then the IMO must make alternative arrangements to communicate the information.
- 7.4.4. At any time between the time that it receives the Resource Plans for a Trading Day from the IMO 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

- 7.5.1. The IMO must provide System Management with the Non-Balancing Dispatch Merit Orders-and Fuel Declarations for a Trading Day by 1:30 PM on the Scheduling Day.
- 7.5.2. Upon receipt of the Non-Balancing Dispatch Merit Orders and Fuel Declarations for a Trading Day, System Management must-within 5 minutes confirm to the IMO that it has received the Non-Balancing Dispatch Merit Orders-and Fuel Declarations for a Trading Day within five minutes after receiving them.
- 7.5.3. In the event that <u>If</u> the IMO does not receive confirmation of receipt-of the Non-Balancing Dispatch Merit Orders and Fuel Declarations for a Trading Day from System Management within 5 minutes of submission, then the IMO within five minutes after providing the Non-Balancing Dispatch Merit Orders for a Trading Day under clause 7.5.1, then it must contact System Management. If System Management has not received the Non-Balancing Dispatch Merit Orders and Fuel Declarations, then the IMO must make alternative arrangements to communicate the information.
- 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.
- 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:
 - ...
 - a Dispatch Instruction to a <u>Non-Balancing Facility Demand Side</u> <u>Programme</u> in accordance with the Non-Balancing Dispatch Merit Order, taking into account Standing Data limitations relevant to that <u>Facility</u> <u>Demand Side Programme</u>.
- 7.6.2B. A reference to a BMO in this clause 7.6 means, for a Trading Interval:
 - (a) the BMO provided by the IMO to System Management under clause 7A.3.6(b);
 - (b) if no such BMO is provided, the most recent Forecast BMO for that Trading Interval provided under clause 7A.3.17(b); and
 - (c) if no such Forecast BMO is provided, 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 <u>clause section</u> 7.6, this <u>clause section</u> 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;
 - 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]
 - 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
 - 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 provide to the IMO 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, 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.5. With respect to administration and reporting:
 - Representatives of System Management and Synergy must. <u>unless both</u> <u>parties agree otherwise</u>, meet at least once per month to review the procedures operating under this <u>clause section</u> 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 <u>clause section</u> 7.6A. Where agreement cannot be reached either party may seek arbitration by the IMO;
 - (c) System Management must report to the IMO any instance where it believes that Synergy has failed to meet its obligations under this <u>clause section</u> 7.6A;
 - (d) Synergy may report to the IMO any instance where it believes that System Management has failed to meet its obligations under this <u>clause section</u> 7.6A;
 - (e) Upon request by the IMO, Synergy and System Management must make available to the IMO records created because of the operation of this clause section 7.6A and procedures required by this clause section 7.6A.
- 7.7.2. Each Dispatch Instruction issued to a-Non-Balancing Facility Demand Side <u>Programme</u> or to a Balancing Facility Out of Merit under clause 7.6.1C(c) must:

...

- 7.7.4A. When selecting <u>Non-Balancing Facilities</u> <u>Demand Side Programmes</u> from the Non-Balancing Dispatch Merit Order, 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 <u>Non-Balancing Facilities</u> <u>Demand Side</u> <u>Programmes</u> based on size of the capacity, response time and availability; and



- (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.
- 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 2:00 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 2:00 PM on the Scheduling Day for the Trading Day on which the Trading Interval falls; or
 - after the end of the Trading Interval. (b)
- 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 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
 - System Management considers that it would not be able to meet the criteria (b) set out in clause 7.6.1-were if desynchronisation were to occur.

Dispatch Advisories, Balancing Suspension and Reporting **Status Reports**

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

. . .

fuel supply on the Trading Day is significantly more restricted than usual, or (e) 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
- • •
- 7.13.1. System Management must provide the IMO with 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 <u>Backup</u> Upwards LFAS <u>Backup</u> 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 <u>Backup</u> Downwards LFAS Backup Enablement that System Management activated by the end of each Trading Interval by that LFAS Facility;
 - •••
- 7A.1.3. The objectives of the Balancing Market are to:
 - (a) enable Balancing Facilities to participate in the Balancing Market;
 - (b) dispatch the <u>lowest cost lowest-cost</u> combination of Facilities made available for <u>Balancing dispatch in the Balancing Market;</u>
 - (c) establish a Balancing Price which is consistent with dispatch;
 - (d) seek to ensure timely and accurate-<u>Balancing energy</u> pricing and<u>dispatch</u> 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.2.1. A Market Participant must <u>at all times</u> ensure that<u>- it has made a Balancing</u> <u>Submission in accordance with clause 7A.2.4 for each Trading Interval in the</u> <u>Balancing Horizon for each of its Balancing Facilities.</u>
 - (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.2.3. 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 the IMO;
 - (b) constitute a declaration by an Authorised Officer;
 - (c) have Balancing Price-Quantity Pair prices within the Price Cap;
 - (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 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.2.8. <u>A Market Participant (other than Synergy in relation to the Balancing Portfolio)</u> <u>must ensure that, A Balancing Submission</u> 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 the IMO, the information provided by the IMO under clause <u>7A.3.17</u> <u>7A.3.1(c)</u> 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 <u>the</u> Balancing <u>Market</u>.
- 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 reflectsmust, subject to the extent that Synergy may submit a new, updated Balancing Submission for a Trading Interval under 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:
 - all information reasonably available to-it <u>Synergy</u>, including Balancing Forecasts published by the IMO and the latest information available to-it <u>Synergy</u> 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 the IMO:



- 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. <u>which</u> 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 the IMO in a manner and form prescribed by the IMO, 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 the IMO 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 make 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 the IMO immediately before <u>6:00 PM 1:00 PM</u>; or
 - ii. otherwise by submitting its updated Balancing Portfolio Supply Curve Submission to the IMO within one hour after LFAS Gate Closure;
- (e) may update its Balancing Portfolio Supply Curve make 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 may make 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. <u>A Market Participant (other than Synergy in relation to the Balancing Portfolio)</u> <u>must not make a new, updated Balancing Submission in respect of a Trading</u>



Interval for which Balancing Gate Closure has occurred except in accordance with this clause 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:

- if the inaccuracy is due to an Internal Constraint, must make a new, (a) 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
- if the inaccuracy is due to a variation of the availability of the intermittent (d) 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 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, as soon as reasonably practicable.
- 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 clauses it must, as soon as reasonably practicable, provide the IMO with written details of:
 - the nature of the Forced Outage; (a)
 - (b) when the Forced Outage occurred;
 - (c) the duration of the Forced Outage; and
 - information substantiating the commercial impact, if any, of the Forced (d) Outage.
- 7A.2.13. A Market Participant must:
 - (a) make a Balancing Submission under this clause section 7A.2 in good faith;
 - . . .



7A.3. Forecast BMO and Pricing BMO

- 7A.3.1. The IMO 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. The IMO 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 System Management provides 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 the IMO 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. The IMO 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 the IMO 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. The IMO 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 System Management provides 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. The IMO 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. The IMO 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 the IMO; 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 <u>Trading Interval in that LFAS Horizon, use its best endeavours to</u> 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, such that the following conditions hold:



- (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<u>the total quantity in Balancing Price-Quantity Pairs priced at the Alternative Maximum STEM</u> 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 Standing Data in item (b)(xiii) of Appendix 1 plus the Downwards LFAS Enablement for the Facility.
- 7A.3.6. The IMO must:[Blank]
 - (a) determine the BMO under clause 7A.3.2 for a Trading Interval using the most recent, valid Balancing Submissions available to it; and
 - (b) each time the IMO creates a BMO for a Trading Interval, provide this BMO to System Management between 15 to 30 minutes before the start of that Trading Interval.
- 7A.3.10. The IMO must-calculate use the Pricing BMO, subject to clause 7A.3.13, using the Provisional Pricing BMO determined under clause 7A.3.8(a), as revised under clause 7A.3.9, 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.3.13. If the IMO is unable to determine the Balancing Price under clause 7A.3.10 in time to publish it in accordance with clause 7A.3.11, including because it has not received the information required to be provided by System Management under clauses 7A.3.7 or 7A.3.9, then the IMO must determine the Balancing Price:
 - (a) where the Relevant Dispatch Quantity and/or Pricing BMO is not available, the IMO 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); and



- (b) where the Pricing BMO and the BMO are not available for the Trading Interval the IMO 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 the IMO 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 the IMO 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.

Forecast BMO

- 7A.3.16. The IMO must for each future Trading Interval in the Balancing Horizon determine a Forecast BMO.
- 7A.3.17. Where the IMO determines a Forecast BMO under clause 7A.3.16, the IMO must:
 - (a) 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; and
 - (b) provide to System Management the Forecast BMO.
- 7A.3.18. The IMO must provide the information required under clause 7A.3.17 at approximately the same time as the IMO publishes the Balancing Forecasts under clause 7A.3.21.

Balancing Forecast

- 7A.3.19. The IMO 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. The IMO 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 the IMO; 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. The IMO 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 received from System Management under clause 7.6A.2(e).
- 7B.1.4. System Management must, by 12:00 PM on the Scheduling Day, provide the IMO with System Management's forecast of 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 <u>forecast Forecast</u> LFAS <u>Quantity Quantities</u> provided under clause 7B.1.4 for a Trading Interval in the Balancing Horizon at any time until <u>60 minutes one hour</u> before the LFAS Gate Closure for that Trading Interval. System Management may update the <u>forecast Forecast</u> LFAS <u>Quantity</u> <u>Quantities</u> more than once..
- 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-<u>a new, an</u> updated LFAS Submission<u>in respect</u> 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 the IMO 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 the IMO in respect of the Balancing Portfolio:



- (a) in accordance with clauses 7B.2.5 7B.2.6 and 7B.2.7; and
- for one or more Trading Intervals in the Balancing Horizon; and (aA)
- (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.:
 - the sum of the MW quantities contained in the Upwards LFAS Price-(a) 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
 - the sum of the MW quantities contained in the Downwards LFAS Price-(b) 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.2.10. 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 recently submitted 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.2.16. In determining whether a Market Participant has made an LFAS Submission in accordance with its obligations under this Chapter 7B, the IMO may take into account:
 - historical LFAS Submissions and/or Balancing Submissions, including (a) 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;
 - any information as to whether a Facility was not able to provide LFAS and (b) the reasons for that failure; and



- (c) any other information that considered by the IMO considers to be relevant.
- 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 <u>A</u> Market Participant must, as soon as it becomes aware that the <u>an</u> LFAS Facility 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 the IMO and System Management, in the manner and form prescribed by the IMO and System Management respectively, 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 <u>A</u> Market Participant must, unless it has provided advice to the IMO and System Management under clause 7B.2.18, <u>ensure that its LFAS Facilities in the LFAS Enablement Schedule</u> provide-the 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. The IMO 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. The IMO 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 the IMO 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. The IMO 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:
 - 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) provide to System Management 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 the IMO 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. The IMO must, to the extent it is reasonably able:
 - (a) provide the information referred to in clause 7B.3.4(d) within 15 minutes of the LFAS Gate Closure to which the information relates; and
 - (b) 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. The IMO 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:

- determine using the most recent, valid LFAS Submissions available to it: (a)
 - the Forecast Upwards LFAS Merit Order in accordance with clause i. 7B.3.2(a);
 - the Forecast Downwards LFAS Merit Order in accordance with ii. clause 7B.3.2(b);
 - the Forecast Upwards LFAS Enablement Schedule in accordance iii. with clause 7B.3.3(a);
 - the Forecast Downwards LFAS Enablement Schedule in iv. accordance with clause 7B.3.3(b);
 - the Forecast Upwards LFAS Price in accordance with clause ٧. 7B.3.4(a); and
 - the Forecast Downwards LFAS Price in accordance with clause vi. 7B.3.4(b);
- provide System Management with the Forecast LFAS Enablement (b) 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 its LFAS Enablements; and
- (d) publish on the Market Web Site to each Market Participant:
 - the most recent Forecast LFAS Quantities provided by System İ. Management under clause 7B.1.4 or 7B.1.5;
 - the Forecast LFAS Merit Orders, determined under clauses ii. 7B.3.1(a)(i) and 7B.3.1(a)(ii), in the form of anonymous LFAS Price-Quantity Pairs:
 - the Forecast LFAS Prices, determined under clauses 7B.3.1(a)(v) iii. and 7B.3.1(a)(vi); and
 - the Forecast Backup LFAS Prices, determined from the most iv. recent, valid LFAS Submissions made in accordance with clause 7B.2.6.
- 7B.3.2. The IMO must:
 - subject to clause 7B.3.2(c), determine a Forecast Upwards LFAS Merit (a) 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;
 - subject to clause 7B.3.2(c), determine a Forecast Downwards LFAS Merit (b) 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

in circumstances where there is a tie in the ranking of LFAS Facilities under (c) 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.

The IMO intends to propose changes to the Balancing Forecast Market Procedure so that the random number used to break ties under clause 7A.3.3(c) would also be used to break ties under clause 7B.3.2(c).

7B.3.3. The IMO must:

- determine a Forecast Upwards LFAS Enablement Schedule for a Trading <u>(a)</u> 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:
 - the sum of the quantities in the selected Upwards LFAS Price-Quantity Pairs equals the Forecast Upwards LFAS Quantity; and
 - if only part of the quantity in the highest priced Upwards LFAS ii. 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
- determine a Forecast Downwards LFAS Enablement Schedule for a (b) 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:
 - the sum of the quantities in the selected Downwards LFAS Price-Quantity Pairs equals the Forecast Downwards LFAS Quantity; and
 - if only part of the quantity in the highest priced Downwards LFAS ii. 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. The IMO must:

- determine a Forecast Upwards LFAS Price for a Trading Interval for the (a) 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 the IMO is unable to publish 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 operate the SWIS in a reliable and safe manner.

LFAS Price

- The IMO must, at the time it makes the selection under clause 7B.3.4(b). 7B.3.9. 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. The IMO 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. The IMO must, by the end of a Trading Day, publish the LFAS Prices for each Trading Interval for that Trading Day.
- 7B.3.12. If the IMO is unable to determine an LEAS 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, the IMO must determine the that LFAS Price as follows:
 - if the IMO is determining an LFAS Price for a Trading Interval in a Business (a) 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 the IMO 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



<u>equivalent LFAS Price</u> for the equivalent Trading Interval in the most recent Trading Day in the past which is also not a Business Day.

Forecast LFAS Merit Order

- 7B.3.14. The IMO 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 the IMO determines the forecast LFAS Merit Order under clause 7B.3.14, the IMO 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 provided to the IMO 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. Where the IMO determines the forecast LFAS Merit Order under clause 7B.3.14, the IMO must, to the extent it is reasonably able, within a Trading Interval, provide to System Management the forecast LFAS Merit Order.

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 Standing Data in items (b)(iii), (b)(xiii) and (b)(xv) of Appendix 1; or
 - (b)- the quantity of <u>upwards or downwards</u> LFAS in a Trading Interval required by System Management is greater than the <u>most recent_Upwards</u> LFAS Quantity <u>or Downwards LFAS Quantity published under clause (b)</u> 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.

- 9.3.3. The IMO 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) Dispatachable 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 the IMO in accordance with <u>clause section</u> 8.4 or SCADA data received from System Management in accordance with clause 7.13.1(cA) where interval meter data is not available.

- 9.3.7. The IMO 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.

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

$$\begin{split} \mathsf{BSA}(\mathsf{p},\mathsf{d},\mathsf{t}) &= \mathsf{Balancing} \; \mathsf{Price} \; (\mathsf{d},\mathsf{t}) \; \times \; \mathsf{MBQ}(\mathsf{p},\mathsf{d},\mathsf{t}) + \mathsf{CONC}(\mathsf{p},\mathsf{d},\mathsf{t}) + \mathsf{COFFC}(\mathsf{p},\mathsf{d},\mathsf{t}) \\ &+ \; \mathsf{DIP}(\mathsf{p},\mathsf{d},\mathsf{t}). \end{split}$$

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 <u>clause_section</u> 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 x 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 x PCoffPN plus the sum of all CoffQN x CoffPN for each Stand Alone Facility for Trading Interval t, where CoffQN, CoffPN, PCoffQN and PCoffPN are calculated in accordance with <u>clause_section</u> 6.17; and

DIP(p,d,t) is the Non-Balancing Facility Dispatch Instruction Payment for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.6.

9.9.2. The following terms relate to Load Following Service and Spinning Reserve Service costs in Trading Month m:

•••

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<u>Backup</u> 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;

9.11.1. The Reconciliation Settlement amount for Market Participant p for Trading Month m is:

> $RSA(p,m) = (-1) \times Consumption_Share(p,m) \times$ $(Sum(q \in P, d \in D, t \in T, BSA(q, d, t)))$ + 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 the IMO 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.

9.13.1. The applicable Market Participant Fee settlement amount for Market Participant p for Trading Month m is:

. . .

Monthly Participant Load(p,m) = $(-1) \times \text{Sum}(d \in D, t \in T, Metered)$ 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

...

- 9.18.3. A Non-STEM Settlement Statement must contain the following information:
 - ...
 - (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;
 - • •
 - 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;
 - ...
- 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, the IMO 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:
 - the IMO may Draw Upon any Credit Support held by the IMO in relation to the Market Participant for the amount disgorged, repaid or paid ("Repaid Amount"); and



- (b) if the IMO is not able to recover all or part of the Repaid Amount by drawing upon Credit Support held by the IMO in relation to the Market Participant, then the IMO 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.
- 10.5.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Public and the IMO must make each item of information available from the Market Web Site after that item of information becomes available to the IMO:
 - ...
 - (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
 - 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 <u>latest Forecast</u> 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, <u>full details of the latest Balancing</u> <u>Submissions submitted for each Balancing Facility and for the</u> <u>Balancing Portfolio:</u>
 - 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 <u>Upwards</u> LFAS Price and the Downwards <u>LFAS Price;</u>
- •••
- (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 Price<u>s, and</u> the Backup Downwards LFAS Price<u>s</u> and the Backup Upwards LFAS Price;
 - ii. the Load Forecast prepared by 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;
- •••
- (v) summary information pertaining to the account maintained by the IMO for market settlement for the preceding 24 calendar months, including;
 - i. the end of month balance;
 - the total income received for transactions in each of the Reserve Capacity Mechanism, the STEM, Balancing <u>Settlement</u>, Market Fees, System Operation 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 <u>Settlement</u> and a single value for all other expenses; and
 - iv. Service Fee Settlement Amount paid to the IMO, System Management and the Economic Regulation Authority;



- 10.7.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Rule Participant <u>Market</u> Restricted Information and the IMO 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

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Backup Downwards LFAS Enablement: Means, for a Synergy LFAS Facility, the capacity in MW which System Management has activated under clause 7B.3.7 or 7B.4.1 in a Trading Interval to compensate for a shortfall in Downwards LFAS Enablement, and which has been notified to the IMO under clause 7B.4.2.

Backup Downwards LFAS Price: Means the cost referred to in clause 7B.2.6 for Synergy providing <u>Backup</u> Downwards LFAS-<u>Backup</u> 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 clause 7B.3.7 or 7B.4.1 in a Trading



Interval to compensate for a shortfall in Upwards LFAS Enablement, and which has been notified to the IMO under clause 7B.4.2.

Backup Upwards LFAS Price: Means the cost referred to in clause 7B.2.6 for Synergy providing <u>Backup</u> Upwards LFAS-<u>Backup</u> 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.

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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 <u>mandatory gross pool</u> 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.

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Balancing Merit Order or BMO: Means the ordered list of Balancing Facilities, and associated quantities, determined by the IMO 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: <u>a submission by a Market Participant to the IMO, for a</u> <u>Balancing Facility or the Balancing Portfolio, and for one or more Trading Intervals, that</u> <u>includes the information specified in clause 7A.2.4.</u>

- (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.

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Consumption Decrease Price: A price specified <u>in Standing Data</u> in items (h)(vi), (i)(xA)(3) or (i)(xA)(4) of Standing Data <u>of Appendix 1</u>, which must be not less than <u>greater than or</u> <u>equal to</u> the Minimum STEM Price and <u>not more than less than or equal to</u> the Alternative Maximum STEM Price to apply in forming the Non-Balancing Dispatch Merit Order for a Trading Interval for a <u>Dispatchable Load or</u> Demand Side Programme and in the calculation of the Non-Balancing Facility Dispatch Instruction Payment for that <u>Dispatchable Load or</u> Demand Side Programme for that Trading Interval, which varies for Peak Trading Intervals and Off-Peak Trading Intervals.

Consumption Increase Price: A price specified in items (i)(xA)(1) or (i)(xA)(2) of Standing Data, 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.

•••

Constrained Off Compensation Price: Has the meaning given in clause<u>s</u> 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 clause<u>s</u> 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.

...

Dispatch Plan: Means the schedule of <u>System Management's forecast of how it will use</u> <u>each Facility in the Balancing Portfolio to provide</u> 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 the IMO under clause 7B.4.2.

Downwards LFAS Enablement: Means, for <u>a Trading Interval and</u> 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 <u>LFAS</u> 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 the IMO 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 the IMO 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 the IMO 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 the IMO 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 the IMO 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 the IMO 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 the IMO in accordance with the Balancing Forecast Market Procedure.

•••

Forecast BMO: Means the ordered list of Balancing Facilities, and associated quantities, determined by the IMO 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 the IMO 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 the IMO 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 the IMO 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, provided by System Management to the IMO under clause 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 the IMO 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 the IMO 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 the IMO 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, provided by System Management to the IMO under clause 7B.1.4 or 7B.1.5.

. . .

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:

- the specified non-Loss Factor adjusted capacity, in MW, by which a Market (a) 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 Stand Alone Facility, or Scheduled Generator or Non-Scheduled (a) Generator registered to a Market Participant other than Synergy, for which:



- i. <u>which</u> the relevant Market Participant has indicated in Appendix 1(j)(i) of Standing Data in item (j)(i) of Appendix 1 is intended to participate in the LFAS Market; and
- ii. for which LFAS Standing Data has been accepted by the IMO; or
- (b) the Balancing Portfolio.

•••

LFAS Merit Order: Means the LFAS Downwards <u>LFAS</u> Merit Order and/or the LFAS Upwards <u>LFAS</u> 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 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 the IMO under clause 7B.3.15(b).

•••

LFAS Upwards Merit Order: Means the ranked list of LFAS Submissions determined by the IMO 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 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 <u>Backup</u> 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: An Means, for a Trading Interval, an ordered list of Demand Side Programmes and Dispatchable Loads registered by Market Participants, determined by the IMO 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
- Ancillary Services, other than LFAS but including LFAS Backup LFAS (e) 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.

•••

Pre-Amended Rules: Has the meaning given in clause 1.10.1.

Post-Amended Rules: Has the meaning given in clause 1.10.1.

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 Provisional Pricing BMO adjusted to take into account: in accordance with clause 7A.3.9 as appropriate.

(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 generated by the IMO for the Trading Interval, adjusted to take into account:

- (a) Balancing Submissions made after the IMO has generated the last Forecast BMO for the Trading Interval;
- (b) 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
- (c) for Balancing Facilities that are Non-Scheduled Generators, the EOI Quantity,

where the SOI Quantity and the EOI Quantity are the quantities provided by System Management under clause 7A.3.7.



• • •

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 the IMO 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 the IMO made in accordance with clause 6.5.

•••

Spinning Reserve: Supply capacity held in reserve from synchronised Scheduled Generators, <u>Dispatchable Loads</u> 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 <u>Backup</u> Upwards LFAS-<u>Backup</u> Enablement.

•••

Standing Resource Plan: A submission related in Resource Plans by a Market Generator to the IMO 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 the IMO under clause 7B.4.2.

Upwards LFAS Enablement: Means, for <u>a Trading Interval and</u> 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 <u>LFAS</u> 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 the IMO 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 the IMO under clause 7B.3.3(a) to determine the Upwards LFAS Enablement Schedule.

Upwards LFAS Price: Means, for a Trading Interval, the <u>price</u> Forecast Upwards LFAS Price for that Trading Interval determined by the IMO 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:
- (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 the IMO under clause 7B.3.3(a) to determine the Upwards LFAS Enablement Schedule.

•••

Appendix 1: Standing Data

- •••
- (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; | |
| | хА. | for a fa | acility that is registered to a Market Participant, data ising: | |
| | | 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; the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters; the point on the network at which the facility can connect; and | | |
| | xiii. | | | |
| | xiv. | | | |
| | xv. the short circuit capability of facility equipment. | | | |
| | | | | |

Appendix 3: Reserve Capacity Auction & Trade Methodology

All Certified Reserve Capacity associated with Interruptible Loads, or Demand Side Programmes or Dispatchable Loads is assigned an Availability Class according to the following table, where "Hours of Availability" is the maximum number of hours of availability per year specified for the relevant Facility under clause 4.10.1(f)(ii).



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4. Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

The IMO considers that the proposed amendments will better achieve Wholesale Market Objectives (a), (b) and (d), and are consistent with the other Wholesale Market Objectives.

The IMO's assessment is presented below:

Resource Plans (Issue 1)

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. The change will also reduce the burden of participation in the WEM and so facilitate the efficient entry of new competitors (Wholesale Market Objective (b)).

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

The removal of Resource Plans and the changes proposed to clauses 4.12.1 and 4.26.2 will also simplify the Market Rules and improve their readability.

Dispatchable Loads (Issue 2)

The proposed 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.

STEM Submission window (Issue 3)

The proposed 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.

Update of STEM Submission parameters (Issue 4), interaction between forecast and final BMOs and LFAS Merit Orders (Issue 7) and clarification of Balancing Submission quantities (Issue 9)

The proposed changes to the wording of clause 6.3A.4, section 7A.3 and section 7B.3 of the Market Rules and the clarification of how available and unavailable capacity is specified in a Balancing Submission will encourage competition in the market by improving the clarity of the Market Rules (Wholesale Market Objective (b)).

Obligations to access STEM Auction results (Issue 5), Fuel Declarations (Issue 6) and requirement for System Management and Synergy to meet monthly (Issue 8)

The proposed removal of the obligations around accessing STEM Auction results, the



provision of Fuel Declarations to System Management and the holding of monthly meetings between System Management and Synergy 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 Balancing Submissions 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.

5. Provide any identifiable costs and benefits of the change:

Costs:

Both System Management and the IMO will require IT system and internal process changes to implement the proposed amendments. The IMO will work with System Management during the first submission period to quantify the costs of these changes.

Some Market Participants are also likely to incur costs associated with IT system and process changes.

Benefits:

The benefits of these changes include:

- reducing the burden on Rule Participants of having to comply with unnecessary or redundant obligations;
- reducing the cost and burden of maintaining unnecessary system functionality;
- reducing the risk of failing to submit a STEM Submission;
- improving the quality of the information used for dispatch and pricing; and
- improving the clarity and integrity of the Market Rules.

6. Provide any identifiable issues with respect to the practicality of implementation:

The IMO notes that the proposed Amending Rules will require Ministerial approval as they include changes to Protected Provisions 2.13.6L, 2.16.2, 2.16.4, 2.16.12, 2.22.1, 2.34.1 and 2.36.1.

Amendments to the Schedule 1 of the WEM Regulations (civil penalty provisions and amounts) will also be required, to remove clauses 2.29.8, 6.5.1A and 7.5.5.



Minor changes will be required to a number of Market Procedures and PSOPs, including:

- Market Procedure: Balancing Facility Requirements;
- Balancing Forecast Market Procedure;
- Market Procedure: Data and IT Interface;
- Monitoring Protocol;
- IMS Interface Market Procedure;
- Market Procedure: Determining Loss Factors;
- Market Procedure: Settlement;
- Market Procedure: Certification of Reserve Capacity;
- Market Procedure: Reserve Capacity Testing;
- PSOP: Ancillary Services;
- PSOP: Communications and control systems;
- PSOP: Dispatch;
- PSOP: Monitoring and Reporting Protocol;
- 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 the IMO, including market design summaries and user guides.

