

## RULE CHANGE NOTICE

### COMPETITIVE BALANCING AND LOAD FOLLOWING MARKET

(RC\_2011\_10)

This notice is given under clause 2.5.7 of the Market Rules.

**Date Submitted:** 23 September 2011

**Submitter:** Douglas Birnie, the Independent Market Operator (IMO)

#### **THE PROPOSAL**

The proposal seeks to establish new Balancing and Load Following Ancillary Services markets. The proposed amendments have been developed following feedback from Market Participants and the findings of the Verve Energy Review which both identified concerns with the current sole-provider balancing and load following ancillary service arrangements under the Wholesale Electricity Market (WEM). These new proposed markets will enable competition in the provision of both services and thereby improve the efficiency of the WEM and address the concerns previously raised. The proposed amendments have been developed in consultation with Rules Development Implementation Working Group which was constituted under the auspices of the Market Advisory Committee.

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

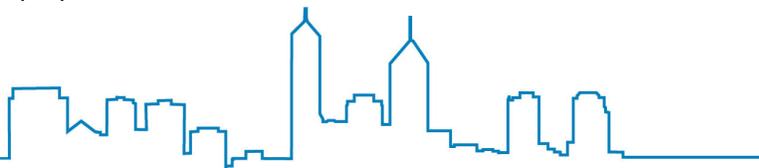
- the proposed amendments to the Market Rules;
- relevant references to clauses of the Market Rules and any proposed specific amendments to those clauses; and
- the submitter's description of how the proposed amendments would allow the Market Rules to better address the Wholesale Market Objectives.

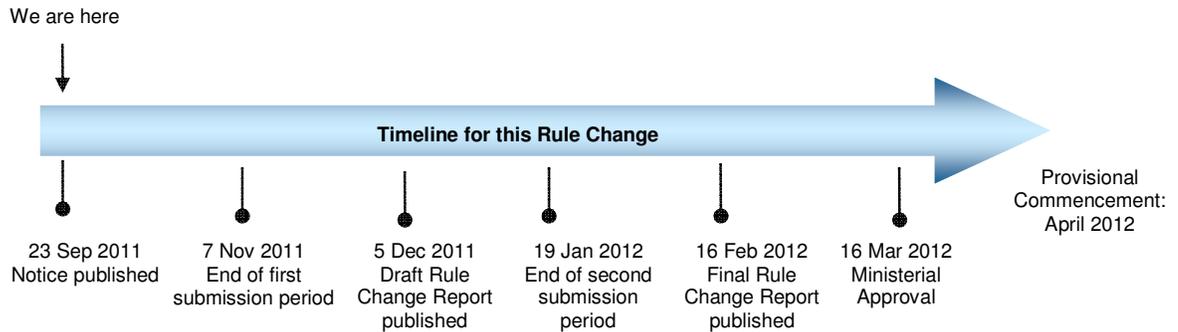
#### **DECISION TO PROGRESS THE RULE CHANGE**

The IMO has decided to progress the Rule Change Proposal on the basis that Rule Participants should be given an opportunity to provide submissions as part of the rule change process.

#### **TIMELINE**

The projected timelines for processing this proposal are:





Please note that the commencement date is provisional and may be subject to change in both the draft and final reports.

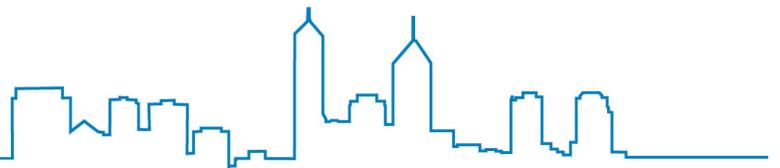
### **CALL FOR SUBMISSIONS**

The IMO is seeking submissions regarding this proposal. The submission period is 30 Business Days from the publication date of this Rule Change Notice. Submissions must be delivered to the IMO by 5:00pm on **Monday 7 November 2011**.

The IMO prefers to receive submissions by email to [market.development@imowa.com.au](mailto:market.development@imowa.com.au) using the submission form available on the IMO website: <http://www.imowa.com.au/rule-changes>.

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

Independent Market Operator  
Attn: General Manager, Development  
PO Box 7096  
Cloisters Square, Perth, WA 6850  
Fax: (08) 9254 4399



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## Appendix 1

### Wholesale Electricity Market Rule Change Proposal

### RC\_2011\_10: Competitive Balancing and Load Following Market

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**Change Proposal No:** RC\_2011\_10  
**Received Date:** 23 September 2011

**Change requested by:**

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<b>Date submitted:</b>	23 September
<b>Urgency:</b>	High
<b>Change Proposal title:</b>	Competitive Balancing and Load Following Market
<b>Market Rule(s) affected:</b>	**Numerous**

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### Introduction

Market Rule 2.5.1 of the Wholesale Electricity 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 Independent Market Operator.

This Change Proposal can be posted, faxed or emailed to:

**Independent Market Operator**

Attn: Manager Market Development

PO Box 7096

Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4339

Email: [market.development@imowa.com.au](mailto:market.development@imowa.com.au)

The Independent Market Operator will assess the proposal and, within 5 Business Days of receiving this Rule Change Proposal form, will notify you 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 electricity 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;
- (c) to avoid discrimination in that market against particular energy options and 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
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

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## **Details of the proposed Market Rule Change**

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

#### **Purpose**

The purpose of this Rule Change Proposal is to promote the economic efficiency of the Wholesale Electricity Market (WEM) by enabling greater Independent Power Producer (IPP) participation in the provision of balancing and the Load Following Ancillary Service (LFAS). This will be achieved via new market arrangements that will enable calculation of market-based prices for balancing and LFAS and will provide greater transparency of market information to improve the efficient operation of the WEM.

#### **Background**

Since the WEM was established in 2006, the opportunity for Market Participants to be engaged in the provision of energy beyond the Short Term Energy Market (STEM) has been limited. Verve Energy has had the role of default balancer, and the opportunity for IPPs to provide balancing energy has been restricted to occasions when Verve Energy runs out of non-liquid plant or when system security requirements cannot otherwise be maintained (as covered by clause 7.6 of the Market Rules).

In feedback gained during consultation undertaken by the Independent Market Operator (IMO), privately owned Market Participants expressed a need to improve the current balancing mechanism to allow the opportunity for IPPs to participate in the provision of balancing, while the current default balancer and others expressed concerns regarding the existing balancing pricing method. The Market Advisory Committee (MAC) was presented with a list of the issues of concern in relation to the WEM – and following a prioritisation

procedure – improving the balancing mechanism was identified as the top priority in August 2009<sup>1</sup>.

The Verve Energy Review - commissioned by the Government to assess why Verve Energy was in a loss-making position - critiqued the market similarly<sup>2</sup>. It identified issues around the lack of competition in aspects of the market caused by the current market design.

### **Development of this Rule Change Proposal**

Options for IPPs to participate in balancing, including alternative market design options were subsequently investigated by the Market Design Review Team (MDRT<sup>3</sup>). The IMO presented a range of options to stakeholders at workshops in May and June 2010<sup>4</sup>. In August 2010<sup>5</sup>, the MAC's advice to the IMO Board was that initial development work should assume the retention of the current fundamental market design, evolving the design as far as practicable, prior to considering exploration of further market design options. The IMO Board agreed with the MAC's advice but noted that if sustainable solutions were not identified then it would ask for an assessment of more fundamental market re-design options.

The Rules Development Implementation Working Group (RDIWG<sup>6</sup>) was established by the MAC in August 2010 to consider how to address a number of issues around balancing, reserve capacity refunds, operation of the STEM and ancillary services under the current design. The specific design issues and problems to be addressed by the RDIWG are available on the IMO website<sup>7</sup>.

### **Retention of the current market design**

This Rule Change Proposal has been developed through the RDIWG. It retains the current market design with Verve Energy continuing to be the default provider of ancillary services, and extends it as far as practical to require IPP participation in balancing and LFAS through price based competition. This avoids the cost and complexity of fundamental design changes and is consistent with longer term development options. It also provides opportunities for Verve Energy to separate facilities from its portfolio and bid them for balancing and LFAS on the same basis as IPPs.

Retention of the fundamental WEM design means:

- Bilateral contracts between Generators and Market Customers as the basis for commercial and physical participation in the WEM.

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<sup>1</sup> Refer to the Market Rules Evolution Plan: [www.imowa.com.au/market-rules](http://www.imowa.com.au/market-rules)

<sup>2</sup> Refer to [www.energy.wa.gov.au/.../Verve%20Energy%20Review%20Final%20Report%20August%202010](http://www.energy.wa.gov.au/.../Verve%20Energy%20Review%20Final%20Report%20August%202010)...

<sup>4</sup> Refer to the following webpage for further details: [http://www.imowa.com.au/design\\_review](http://www.imowa.com.au/design_review)

<sup>5</sup> Refer to the MAC Meeting 11 August 2010 for further details.

<sup>6</sup> Refer to the following webpage for further details: <http://www.imowa.com.au/RDIWG>.

<sup>7</sup> Refer to the following webpage for further details:

[http://www.imowa.com.au/f139,1323967/RDIWG\\_market\\_Design\\_issues\\_problems.pdf](http://www.imowa.com.au/f139,1323967/RDIWG_market_Design_issues_problems.pdf)

- Opportunities for Market Participants to adjust their bilateral positions through the STEM.
- Continuance of the System Management / Verve Energy relationship (portfolio based, gross dispatch).
- Energy supplied in the market determined by:
  - IPPs operating their facilities in accordance with Resource Plans, but subject to net dispatch by System Management; and
  - Verve Energy being dispatched on a portfolio basis.
- Verve Energy continuing to be the default provider of Ancillary Services (AS).

### **Overview of Proposed Arrangements**

Under the proposed arrangements, Verve Energy will remain the default provider of ancillary services and System Management will continue to dispatch the Verve Energy portfolio as a service to Verve Energy. However, under the proposal, IPPs will be able to submit price based bids to compete with the Verve portfolio in balancing and LFAS markets. Following the existing STEM process:

- IPPs will submit Resource Plans, as now but indicating MW levels and ramping rates at which they will operate their scheduled generation facilities to meet their contractual positions.
- Verve Energy will submit a series of price-quantity pairs for each Trading Interval for its available capacity. I.e. a Portfolio Supply Curve (PSC) for each interval. PSCs will be along the lines of Verve's current STEM submissions but expressed in MW for dispatch purposes.
- IPPs will make facility Balancing Submissions for each Trading Interval indicating the MW quantities and prices at which they are prepared to be dispatched above or below the facility Resource Plan. It will be a requirement that all available capacity be included in balancing submissions, consistent with current requirements but with flexibility to split capacity across multiple price-quantity pairs.
- Verve Energy will be able to separate facilities from its portfolio, subject to IMO approval taking account of System Management's views, and operate them on a standalone basis, submitting facility resource plans and balancing submissions on the same basis as IPPs.
- Verve Energy will be required to make LFAS submissions covering the full quantity of LFAS required by System Management. IPPs, and Verve for standalone facilities, may make facility LFAS up and or/down submissions. LFAS submissions will indicate MW up and down capability and associated enablement prices.
- The IMO will rank LFAS submissions in price order and select for service the necessary quantity to meet overall LFAS requirements specified by System Management.

- The IMO will create a Balancing Merit Order, ranking balancing submission quantities in price order. In forming the Balancing Merit Order, the IMO will take into account any capacity affected by the selection of LFAS.
- The IMO will provide the Balancing Merit Order to System Management (without prices) for planning and dispatch purposes.
- The IMO will prepare forecasts of expected IPP facility/ Verve Energy Stand Alone Facilities (VSAF) and Verve Energy Portfolio dispatch and balancing market prices for each Trading Interval, and publish forecast quantities to the relevant Market Participant and market prices to all Market Participants. LFAS quantities and prices will be included in forecasts on the same basis.
- System Management will review forecast generation dispatch and the Balancing Merit Order, plan for expected dispatch and prepare and update the Verve Energy Dispatch Plan for meeting expected Verve Energy Portfolio quantities and LFAS requirements.
- Market Participants will have opportunities to review and update their balancing and LFAS submissions in light of market forecasts and their facility/ fuel status.
- The above cycle will iterate towards dispatch until gate closure when submissions are locked in, except for bona fide physical reasons (e.g. Forced Outages).
- In each Trading Interval, System Management will instruct accepted LFAS enablement MW bands and dispatch IPP/VSAF facilities and the Verve Energy Portfolio in accordance with the Balancing Merit Order unless it is necessary to deviate in order to ensure system security requirements are met.
- IPPs and Verve individual facilities (outside of its portfolio) will operate to dispatch instructions from System Management based on the BMO as far as practicable. IPPs will have less “certainty” over their actual dispatch than they do now – consistent with participating in the provision of balancing - although their bidding will have a substantial influence on whether they are dispatched or not, noting the proposal to lower the negative cap to -\$1,000/MWh..
- The Balancing Price will be set from the final Balancing Merit Order and actual generation requirements. I.e. an ex post marginal price. Upward and downward LFAS prices will be set at the price of the marginal enablement tranches instructed by System Management.
- Variations from Net Contract Positions will be settled at the Balancing Price. There will be no DDAP/UDAP adjustments for IPP balancing payments so that IPPs will face actual balancing costs. Deviations as a result of not following dispatch instructions will be subject to sanction through the compliance regime.
- Market Participants will be eligible for constrained on or off compensation where quantity in a balancing submission is dispatched out of merit. For example if a quantity in a balancing submission with a price higher than the balancing price has been dispatched by System Management, the relevant Market Participant will be eligible for constrained on compensation at the price difference for the quantity involved.

A more detailed description of the new balancing and LFAS market arrangements can be found at [www.imowa.com.au/RDIWG/ New Balancing Market Proposal: Design Details](http://www.imowa.com.au/RDIWG/New_Balancing_Market_Proposal_Design_Details).

### **Key areas of focus with the new arrangements**

This Rule Change Proposal addresses a number of concerns about the existing arrangements identified during consultation with Market Participants, the MAC and the Verve Energy Review. Particular areas of focus are as follows.

#### ***Key focus 1: Increasing IPP Participation in Balancing***

This Rule Change Proposal enables all Market Generators to make price based submissions for balancing, update submissions in response to market forecasts and expected dispatch, and be dispatched with certainty about payments. It also provides opportunities for Verve Energy to move towards facility based bidding over time and be treated on the same basis as IPP facilities.

A range of options to facilitate increased IPP participation in balancing within the current hybrid market design were considered by the MRDT and subsequently shared with the RDIWG. This included contractual alternatives such as undertaking a second STEM run or multiple STEM style auctions. However, there was a strong preference for increasing participation in balancing through price based physical dispatch of balancing resources. A number of simpler options were also considered and discounted in favour of the proposed design. This included the possibility of the market facilitating balancing support contracts (BSCs) - given that the current Market Rules provide for System Management or Verve Energy to enter into a BSC but none have been since Market Start – and options suggested by a Market Participant and by System Management. None were considered to provide sufficient opportunity to enable IPPs to participate effectively in the provision of balancing as provided by the new market arrangements proposed in this paper.

#### ***Key focus 2: Consistency between the balancing price and dispatch***

At present, the balancing price (MCAP) for each Trading Interval is established from participants' STEM supply submissions, ranked in price order, and the actual level of supply and demand in the interval. There are a number of limitations with this approach. For example:

- The pricing curve includes all STEM supply submissions whereas at present Verve Energy is the default balancer and IPPs are generally not dispatched off resource plans. MCAP is therefore often inconsistent with dispatch and the cost of/ need for balancing.
- The aggregate quantity used to calculate MCAP (i.e. to determine the intersection with the MCAP price curve) includes some quantities which are not part of STEM submissions. This tends to result in MCAP being higher than it would be otherwise.

The above effects have been investigated in some detail. For example, see RDIWG meeting 5 papers<sup>8</sup>.

This Rule Change Proposal addresses these issues by retaining the concept of marginal pricing but with IPPs able to compete on price for dispatch and the market setting a clean price reflecting actual dispatch outcomes to the extent practical. The methodology is explained in more detail in Appendix One.

A clean balancing price will more accurately signal the need for and value of balancing support/ supply flexibility. This will assist in addressing concerns over the need for increasing flexibility, for example overnight in low load/ high wind scenarios, and in providing longer term signals to generation investors about the need for and value of flexibility in the WEM.

Where differences between the balancing price and actual dispatch do occur, Market Participants will not be financially disadvantaged if they were following dispatch instructions. This will be achieved through constrained on or off compensation. This can occur if a Market Participant has been dispatched out of merit to satisfy system security requirements or because pricing is set on a half hourly basis and dispatch is a real time activity.

### ***Key focus 3: The role of DDAP and UDAP***

The existing Downwards Deviation Administration Price (DDAP) and Upwards Deviation Administrative Price (UDAP) penalties are intended to incentivise compliance with Resource Plans. However, this means that Market Participants are not exposed to actual balancing costs (even if a clean balancing price is introduced) and are exposed to the same penalties whether the balancing requirement arose through unavoidable circumstances or inappropriate behaviour. Incentives to avoid the risk of DDAP and UDAP penalties can also create distortions through conservative behaviour (for example, bringing a facility into service before it is actually needed) which could cause difficulties for system security.

Under this Rule Change Proposal, the removal of DDAP and UDAP and calculation of a clean price will mean that Market Participants face the marginal costs of balancing and it will be the responsibility of the compliance regime to target inappropriate behaviour with sanctions determined on a case by case basis.

### ***Key focus 4: LFAS Market***

Full LFAS requirements are currently provided by Verve Energy under an administered pricing regime<sup>9</sup>. The proposal provides opportunities for IPPs to compete with Verve Energy to supply LFAS requirements and sets market based LFAS prices.

As for balancing, Market Participants will be able to revise LFAS submissions in response to market forecasts/ conditions, trading off balancing and LFAS costs where capacity is mutually exclusive and adjusting relevant submissions accordingly. Final balancing submissions are able to be made after LFAS selections. Providing forecasts and flexibility to Market Participants means that the LFAS selection process will be relatively straightforward,

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<sup>8</sup> [http://www.imowa.com.au/f139,1324064/Combined\\_RDIWG\\_Mtg\\_5\\_Papers.pdf](http://www.imowa.com.au/f139,1324064/Combined_RDIWG_Mtg_5_Papers.pdf)

<sup>9</sup> Margin peak and off peak pricing based on estimated opportunity costs.

based on LFAS prices only, compared to market-based co-optimisation methods which select balancing and LFAS simultaneously (although in time more complex methods/ systems could be introduced).

Verve Energy will remain the default LFAS provider as it is likely, at least initially, that alternatives will be limited relative to overall requirements. As default provider Verve Energy will also submit a price for providing back-up LFAS in the event of a facility failure.

***Key focus 5: Flexibility/efficiency***

The current MCAP pricing curve is established approximately 24 hours before the Trading Day starts and 48 hours before it ends. Uncertainties over this time frame compound the inconsistencies between pricing and dispatch noted above. For example, Verve Energy submits its supply curve before Market Participants' net contract positions and IPP Resource Plans are confirmed; demand and intermittent generation can vary significantly from day-ahead forecasts; Forced Outages can occur.

Further, opportunities to respond to changing market requirements (e.g. due to changing demand and wind forecasts, Forced Outages etc) and/ or to vary from contractual positions where economically viable, are currently limited.

STEM is a one shot contractual process. Its efficiency is limited because Market Participants risk being locked into contractual positions which they may not be able to match efficiently or even feasibly with Resource Plans. For example: due to risks of being cleared, or not, in consecutive Trading Intervals.

This Rule Change Proposal addresses these issues by:

- Breaking the direct link between STEM submissions and balancing/ dispatch (except for settlement quantities);
- Enabling all Market Generators to participate in the balancing and LFAS markets and to make initial submissions after STEM outcomes are known;
- Providing regular balancing and LFAS market forecasts to Market Participants; and
- Enabling Market Participants to update their submissions in response to market forecasts and/or changes in their own circumstances, including interactions between balancing and LFAS selections.

### ***Key focus 6: Surveillance and Compliance***

As noted above in relation to the removal of DDAP and UDAP, there will be a stronger emphasis on compliance monitoring to detect and sanction inappropriate behaviour. This philosophy is reflected through the proposed amendments and will require a more proactive approach to compliance. For example, the proposed Amending Rules impose obligations of acting in good faith on Market Participants. Accordingly, the IMO plans to expand its compliance team, with a greater emphasis on data analysis including automated monitoring of participant activity.

An important focus of compliance monitoring will be to identify behaviour that attempts to manipulate the accuracy of the market forecasts which Market Participants will rely on to make decisions. For example, IMO scrutiny could be triggered by significant changes in bidding behaviour, especially closer to gate closure, late declarations of Forced Outages or inability to follow dispatch instructions.

### ***Key focus 7: Generation component of net STEM shortfall***

At present, a facility which operates below its Resource Plan level by more than its settlement tolerance (of 3 percent) is exposed to Net STEM Shortfall payments for any shortfall relative to its full accredited capacity irrespective of the cause. This has the potential to overstate the impact and/or distort Market Participant decisions. On the other hand, it is important to know that capacity receiving Capacity Credits is actually available if needed.

Under this Rule Change Proposal, this 'generation level' component of the Net STEM Shortfall calculation will be removed. Instead if a facility is considered by the IMO to be at risk of not meeting its physical obligations in relation to the WEM, then the IMO may request it to undertake a test to ascertain whether it is indeed meeting its obligations if it is not satisfied with the Market Participant's responses to questioning.

### ***Key focus 8: System Management's authority***

This Rule Change Proposal preserves System Management's authority for coordinating system security, including intervention if necessary to avoid the system entering a high risk state. All capacity will continue to be available to System Management for dispatch but with increased flexibility through opportunities for economic dispatch of IPPs via the Balancing Merit Order. Market Participants' ability to update Balancing Submissions will however be limited initially by a facility Gate Closure of a greater number of hours.

### ***Key focus 9: Confidentiality provisions***

Given the increasing importance of market-related information to the operation of the balancing market in particular, the opportunity has also been taken to propose a rationalisation of the current confidentiality-related treatment of market information in Chapter 10 of the Market Rules.

Currently there are several classifications in relation to the treatment of information and its confidentiality. The proposed amendments seek to simplify these classifications and to

establish a default preference for the transparency of information unless the IMO – following consultation – deems confidentiality in a particular circumstance is justified. The proposed amendments set out the IMO’s decision making rights, its obligation to consult before deeming certain information to be confidential, the rights of those who have access to the confidential information, and to specify certain information that must be made available. Better transparency of information will be a critical factor in the efficient operation of the balancing market in particular but will also provide benefits to the operation of the STEM and LFAS markets.

**Supplementary focus: Additional changes**

Given the extent of the changes proposed to the Market Rules, the opportunity has also been taken to:

- Address a number of minor and typographical errors identified in the course of reviewing the Market Rules for the balancing and LFAS market and new confidentiality arrangements;
- Adopt a more output/outcome based approach in the drafting of the proposed Amending Rules to remove unnecessary prescription and complexity and encourage alternatives/innovation where this is appropriate.

The IMO considers that these changes will improve the effectiveness and efficiency of the operation of the Market Rules.

**Civil penalty clauses, reviewable decisions and protected provisions**

A number of changes are proposed to the civil penalty provisions, reviewable and protected provisions. The IMO is proposing to have the following changes reflected in the list of civil penalty provisions in the Electricity Industry (Wholesale Electricity Market) Regulations 2004:

PROVISION TYPE	CLAUSE	PENALTY		
		Category	1st Breach	Subsequent breaches
New civil penalty and related clause	2.13.13A	C	\$50,000	\$100,000
	7.10.3A	C	\$50,000	\$100,000
	7A.2.8	C	\$50,000	\$100,000
	7A.2.9	C	\$50,000	\$100,000
	7A.2.13	C	\$50,000	\$100,000
	7A.2.16	C	\$50,000	\$100,000
	7B.2.10	C	\$50,000	\$100,000
	7B.2.13	C	\$50,000	\$100,000
Existing civil penalty clause with only wording to be amended	3.11.7A	C	\$50,000	\$100,000

	7.7.9(b)	C	\$30,000	\$60,000
	7.9.1	C	\$30,000	\$60,000
	7.10.1	C	\$50,000	\$100,000
	7.10.3	C	\$30,000	\$60,000
	7.10.6 (refers to amended clause 7.10.5)	C	\$35,000	\$70,000
	7.10.6A	C	\$30,000	\$60,000

The following clauses are proposed to be reviewable decisions: 2.10.2A, 2.34.7A, 2.34.7A(c), 2.34.7C, 7A.1.8(iii) and the existing reviewable decision in 10.2.1 amended.

The following clauses are proposed to be protected provisions: 2.10.1A, 2.10.17, 2.10.18, 2.10.19, and 2.13.13A and the existing protected provision clauses to be amended: 2.1.2, 2.16.2, 2.16.4, 2.16.7, 2.16.9, 2.16.9A, 2.16.9B, 2.16.12, 10.2.1, and 10.4.1.

The IMO seeks feedback on these changes from Market Participants as part of this Rule Change proposal.

**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 underline words added)

See the Attachment.

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

The IMO considers the proposed changes will have the following impact on the Wholesale Market Objectives:

Impact	Market Objectives
Allow the Market Rules to better address the objective.	a, b, c, d
Consistent with objective.	e
Inconsistent with objective.	

### **Impact on Market Objective (a)**

*to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;*

The new balancing and LFAS market proposal will enable more facilities to be made available for balancing and LFAS, reducing overall dispatch costs and enhancing system flexibility and security.

The balancing and LFAS market proposal preserves System Management's rights and obligations in relation to system security, including intervention if necessary to avoid the system entering a high risk state.

The new confidentiality provisions will improve the effectiveness of the operation of the balancing, LFAS and STEM markets by providing greater information to Market Participants upon which they can prepare bids, for example, than would otherwise be the case.

### **Impact on Market Objective (b)**

*to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;*

The balancing and LFAS market proposal will enable IPPs to compete with Verve Energy in the balancing and LFAS markets.

The balancing and LFAS market proposal is likely to make the overall market more attractive to new entrants through:

- More opportunity to participate in balancing and LFAS, without financial disadvantage if dispatched out of merit (for any reason).
- Increased ability to manage exposures to balancing and potentially inefficient STEM/ Resource Plan outcomes.

The balancing and LFAS market proposal and new confidentiality provisions should also likely make the overall market more attractive to new entrants through increased transparency and availability of market information.

By more accurately signalling the need for and value of balancing, the proposal should promote efficient investment (e.g. in relation to the need for and value of flexibility).

### **Impact on Market Objective (c)**

*to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;*

The balancing and LFAS market proposal and new confidentiality arrangements will create a more level playing field for all generation options and technologies by more clearly signalling the value and cost of balancing and LFAS and system flexibility requirements.

While demand side management technologies will not be able to bid into the market (at least in its initial phase) given the desire to minimise the complexity of the initial balancing market arrangements, demand-side responses will be able to influence balancing quantities and prices.

#### **Impact on Market Objective (d)**

*to minimise the long-term cost of electricity supplied to customers from the South West interconnected system*

By increasing transparency of information and competition between Market Generators in the balancing and LFAS markets, the balancing and LFAS market proposal and new confidentiality arrangements are likely to drive down balancing and LFAS costs in the short to medium term.

In the longer term, clean cost reflective prices should help to minimise overall system costs by encouraging participants to factor the value of flexibility and/or their actual cost impacts into their investment decisions.

#### **Impact on Market Objective (e)**

*to encourage the taking of measures to manage the amount of electricity used and when it is used.*

The balancing and LFAS market proposal and new confidentiality arrangements may indirectly assist this Market Objective. Providing regular market price forecasts to market customers may facilitate more active demand side response. To the extent this occurs, more cost reflective balancing prices will lead to more efficient trade-offs.

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

The IMO commissioned the Sapere Research Group (Sapere) to undertake an independent study of the likely costs and benefits of the balancing market proposal earlier this year based on estimates at that time. The study, led by Kieran Murray, quantified a small number of direct benefits of the proposal and compared these benefits with the estimated costs of implementing and operating the proposed arrangements. Estimates were based on optimistic, medium and pessimistic scenarios and were tested for sensitivity to variations in key assumptions. Personnel and systems cost estimates, establishment and ongoing, for all

stakeholders were established in consultation with the IMO, System Management and participants. (Note: The costs and benefits of the LFAS market proposal were not separately identified as there was general agreement that both the balancing and LFAS markets should be developed (but not necessarily implemented) as a package and the balancing components represented the most significant components of that package.)

Key conclusions from the study that was finished in April were that:

- The proposal would yield net benefits to the economy ranging from \$16.8m in the optimistic scenario to \$ 2.1m in the pessimistic scenario;

**Table 1: Summary of Sapere Benefit-Cost Study**

	High	Medium	Low
Direct Benefits	\$32.48m	\$27.92m	\$24.92m
Costs	\$15.72m	\$19.27m	\$22.83m
Net Benefits	\$16.76m	\$8.65m	\$2.09m
Payback	2.07	1.45	1.09

- Net positive benefits would occur under all but extreme scenarios (e.g. reducing the study horizon from 7 to just 3 years or increasing the discount rate to 33%);
- Actual net benefits are likely to be greater, and may be more significant, than the direct benefits quantified, for example over a longer time-frame and/or indirect benefits (e.g. investment incentives, confidence levels, longer-term transitional impacts and price signalling impacts).

The full Sapere report is available at [http://www.imowa.com.au/MAC\\_37](http://www.imowa.com.au/MAC_37). Since that time there has been some change in the forecast costs (eg for SM system upgrades) but these are not considered to be so material as to alter the conclusions of the CBA (while the costs have risen so will have some of the benefits).

There are few material costs arising from the change in the confidentiality provisions and these seem likely to be welfare enhancing as more accurate information will likely improve bidding behaviour in the STEM, and new balancing and LFAS markets over time.

***EXTRACT OF PROPOSED AMENDMENTS TO  
THE WHOLESALE ELECTRICITY MARKET  
RULES***

**23 September 2011**

**Proposed balancing and load following ancillary service changes in red  
underline and strikethrough**

## **Disclaimer**

This unofficial extract of the Wholesale Electricity Market Rules reflects the rules as amended and published in the Government Gazette up to 15 December 2006 and amending changes made by the IMO up to 1 October 2011 together with proposed balancing and load following service amendments in mark up. This unofficial extract is provided for information and has no legal standing. The Independent Market Operator disclaims any responsibility for any liability arising from any act done or omission made in reliance on this unofficial extract of the Wholesale Electricity Market Rules.

For the version of the Wholesale Electricity Market Rules that is currently in force under the *Electricity Industry (Wholesale Electricity Market) Market Rules 2004* please refer to the *Wholesale Electricity Market Rules (September 2006)* as Gazetted on 19 September 2006 and any subsequent amendments gazetted in the Western Australia Government Gazette or approved and published by the IMO on the IMO web site.

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- 2.1.2. The functions of the IMO are:
- (a) to administer these Market Rules;
  - (b) to operate the Reserve Capacity Mechanism, the Short Term Energy Market, ~~the LFAS Market, and the Balancing Market and the Balancing process~~;
  - (c) to settle such transactions as it is required to under these Market Rules;
  - (d) to carry out a Long Term PASA study and to publish the Statement of Opportunities Report;
  - (e) ~~Blank~~ to provide information to interested parties on the operation of the Market Rules;
  - (f) to process applications for participation, and for the registration, de-registration and transfer of facilities;
  - (g) to release information required to be released by these Market Rules;
  - (h) to publish information required to be published by these Market Rules;
  - (i) to develop amendments to these Market Rules and replacements for them;
  - (j) to develop Market Procedures, and amendments and replacements for them, where required by these Market Rules;
  - (k) to make available copies of the Market Rules and Market Procedures, as are in force at the relevant time;
  - (l) to monitor other Rule Participants' compliance with the Market Rules, to investigate potential breaches of the Market Rules, and if thought appropriate, initiate enforcement action under the Regulations and these Market Rules;
  - (m) to support the Economic Regulation Authority in its market surveillance role, including providing any market related information required by the Economic Regulation Authority;
  - (n) to support the Economic Regulation Authority in its role of monitoring market effectiveness, including providing any market related information required by the Economic Regulation Authority; and
  - (o) to carry out any other functions conferred, and perform any obligations imposed, on it under these Market Rules.
- 2.10.1. The IMO or System Management, as applicable, may initiate the Procedure Change Process by developing a Procedure Change Proposal.
- 2.10.2. Rule Participants may notify the IMO or System Management, as applicable, where they consider an amendment or replacement of a Market Procedure would be appropriate.

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2.10.2A. Where the IMO or System Management has decided not to amend or replace a Market Procedure following a notification under clause 2.10.2, the IMO or System Management, as applicable, must publish reasons for that decision on the Market Web Site.

2.10.3. If an Amending Rule requires the IMO or System Management to develop new Market Procedures or to amend or replace existing Market Procedures, then the IMO or System Management, as applicable, is responsible for the development of, amendment of or replacement for, Market Procedures so as to comply with the Amending Rule.

2.10.17 The IMO may, at any time after publishing a Procedure Change Proposal, decide to extend the normal timeframe for processing the Procedure Change Proposal. If the IMO decides to do so, then it may modify the times and time periods under clauses 2.10.7 or 2.10.14 in respect of the Procedure Change Proposal and publish details of the modified times and time periods.

2.10.18 The IMO must publish a notice of an extension determined in accordance with 2.10.17 and must update any information already published in accordance with clause 2.10.7 or 2.10.15.

2.10.19 A notice of extension under clause 2.10.18 must include:

- (a) the reasons for the proposed extension;
- (b) the views of any Rule Participant consulted on the extension; and
- (c) the proposed length of any extension.

2.13.10. If the IMO becomes aware of an alleged breach of the Market Rules or Market Procedures, then:

- (a) it must record the alleged breach;
- (b) it must investigate the alleged breach;
- (c) it must record the results of each investigation;
- (d) where it reasonably believes a breach of the Market Rules or Market Procedures has taken place, it may issue a warning to the Rule Participant to rectify the alleged breach. The warning must:

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- i. identify the clause or clauses of the Market Rules or the Market Procedures that the IMO believes has been, or are being, breached;
    - ii. describe the behaviour that comprises the alleged breach;
    - iii. request an explanation; and
    - iv. request that the alleged breach be rectified and a time (which the IMO considers reasonable) by which the alleged breach should be rectified; and
  - (e) it must record the response of the Rule Participant to any warning issued under clause 2.13.10(d).
- 2.13.11. If the IMO becomes aware of an alleged breach of the Market Rules or the Market Procedures, then it may meet with the relevant Rule Participant on one or more occasions to discuss the alleged breach and possible actions to rectify the alleged breach.
- 2.13.12. As part of an investigation into alleged breaches of the Market Rules or Market Procedures, the IMO may:
- (a) require information and records from Rule Participants; and
  - (b) conduct an inspection of a Rule Participant's equipment.
- 2.13.13. Rule Participants must cooperate with an investigation into an alleged breach of the Market Rules or Market Procedures, including:
- (a) providing the IMO with information requested under clause 2.13.12 relating to the alleged breach in a timely manner; and
  - (b) allowing reasonable access to equipment for the purpose of an inspection carried on under clause 2.13.12.
- 2.13.13A. A Rule Participant must not engage in conduct under clause 2.13.13 that is false or misleading in a material particular.
- 2.13.14. Where a Rule Participant does not comply with clause 2.13.13, the IMO may appoint a person to investigate the matter and provide a report or such other documentation as the IMO may require. If the IMO does so, then:
- (a) the Rule Participant must assist the person to undertake the investigation and prepare the report or other documentation; and
  - (b) the cost of the investigation and the preparation the report or other documentation must be met by the Rule Participant unless the IMO determines otherwise.

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- 2.13.15. Where the alleged breach relates to a Category A Market Rule (as determined in accordance with the Regulations) and the IMO is not the Rule Participant that is alleged to have breached the Market Rules, the IMO must make a decision as to whether a breach has occurred.
- 2.13.16. The IMO may:
- (a) decide a breach has taken place in which case the IMO may issue a penalty notice in accordance with the Regulations; or
  - (b) decide a breach has not taken place and notify:
    - i. the Rule Participant that is alleged to have breached the Market Rules; and
    - ii. where a Rule Participant notified the IMO in accordance with clause 2.13.4, that Rule Participant, of its decision.
- 2.13.17. Where the IMO issues a penalty notice under clause 2.13.16(a), the Rule Participants that received the penalty notice may seek a review of that decision by the Electricity Review Board in accordance with the Regulations.
- 2.13.18. Where:
- (a) the alleged breach relates to a Category B or Category C Market Rule (as determined in accordance with the Regulations); and
  - (b) following the investigation referred to in clause 2.13.10(b), the IMO reasonably believes that a breach of the Market Rules has taken place,
- the IMO may bring proceedings before the Electricity Review Board.
- 2.13.19. Where the person referred to in clause 2.13.1 receives notice of an alleged breach by the IMO in accordance with clause 2.13.5, the person referred to in clause 2.13.1 must investigate the alleged breach of the Market Rules or Market Procedures, and may require information and records from the IMO.

### **2.16. Monitoring the Effectiveness of the Market**

- 2.16.1. The IMO is responsible for collection and primary analysis of data in accordance with this clause 2.16. The IMO must:
- (a) compile the data identified in the Market Surveillance Data Catalogue and provide that data to the Economic Regulation Authority; and
  - (b) analyse the compiled data in accordance with clause 2.16.4 and provide the results of the analysis to the Economic Regulation Authority.

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- 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:
- (a) the number of Market Generators and Market Customers in the market;
  - (b) the number of participants in each Reserve Capacity Auction;
  - (c) clearing prices in each Reserve Capacity Auction and STEM Auctions;
  - (d) ~~LFAS Submissions; Balancing Data prices and other Standing Data prices used in Balancing;~~
  - (dA) all Reserve Capacity Auction offers;
  - (e) all bilateral quantities scheduled with the IMO;
  - (f) all STEM Offers and STEM Bids, including both quantity and price terms;
  - (g) ~~[Blank] Balancing Submissions, including associated Offers, Bids and Ramp Rate Limits;~~
  - (gA) all Fuel Declarations;
  - (gB) all Availability Declarations;
  - (gC) all Ancillary Service Declarations;
  - (h) any substantial variations in STEM Offer and STEM Bid prices or quantities relative to recent past behaviour;
  - (hA) any evidence that a Market Customer has significantly over-stated its consumption as indicated by its Net Contract Position with a regularity that cannot be explained by a reasonable allowance for forecast uncertainty or the impact of Loss Factors;
  - ~~(hB) the information in clause 7A.2.17(c);~~
  - (i) the capacity available through Balancing from ~~Balancing Facilities Generators and Non-Scheduled Generators and Dispatchable Loads;~~
  - (j) the frequency and nature of Dispatch Instructions ~~and Operating Instructions~~ to Market Participants ~~other than the Electricity Generation Corporation;~~
  - (k) the number and frequency of outages of Scheduled Generators and Non-Scheduled Generators, and Market Participants' compliance with the outage scheduling process;
  - (l) the performance of Market Participants with Reserve Capacity Obligations in meeting their obligations;
  - (m) details of Ancillary Service Contracts ~~and Balancing Support Contracts~~ that System Management enters into;
  - (n) [Blank]

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- (o) the number of Rule Change Proposals received, and details of Rule Change Proposals that the IMO has decided not to progress under clause 2.5.6; and
  - (p) such other items of information as the IMO considers relevant to the functions of the IMO and the Economic Regulation Authority under this clause 2.16.
- 2.16.3. The IMO must publish the Market Surveillance Data Catalogue, and must republish this document whenever it changes.
- 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:
- (a) where applicable, calculation of the means and standard deviations of values in the Market Surveillance Data Catalogue;
  - (b) monthly, quarterly and annual moving averages of prices for the STEM Auctions, the Balancing Market and the LFAS Market;
  - (c) statistical analysis of the volatility of prices in the STEM Auctions and Balancing;
  - (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 are at each Energy Price Limit;
  - (e) correlation between capacity offered into the STEM Auctions and the incidence of high prices;
  - (f) correlation between capacity offered into and made available in the Balancing Market and the incidence of high prices; ~~and~~
  - (fA) correlation between capacity offered into and made available in the LFAS Market and the incidence of high prices;
  - (g) exploration of the key determinants for high prices in the STEM and Balancing, including determining correlations or other statistical analysis between explanatory factors that the IMO considers relevant and price movements; and
  - (h) such other analysis as the IMO considers appropriate or is requested of the IMO by the Economic Regulation Authority.
- 2.16.5. The IMO must, on request from the Economic Regulation Authority, and in any event at least once each month, provide the Economic Regulation Authority with the data identified in the Market Surveillance Data Catalogue and the results of the analysis on that data referred to in clause 2.16.4.

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- 2.16.6. Where the Economic Regulation Authority considers that it is necessary or desirable for the performance of its functions or the functions of the IMO under this clause 2.16, the Economic Regulation Authority may collect additional information from Rule Participants as follows:
- (a) the Economic Regulation Authority may issue a notice to one or more Rule Participants requiring them to provide specified data to the Economic Regulation Authority by a date (which the Economic Regulation Authority considers to be reasonable);
  - (b) Market Participants must provide any information requested by the Economic Regulation Authority by the date specified in the notice; and
  - (c) the Economic Regulation Authority must provide this information to the IMO where the Economic Regulation Authority considers that it is necessary or desirable for the performance of the IMO's functions under this clause 2.16.
- 2.16.7. Without limitation, additional information that can be collected by the Economic Regulation Authority includes:
- (a) cost data for ~~the Electricity Generation Corporation~~Verve Energy, including actual fuel costs by Trading Interval;
  - (b) System Management's operational records, including SCADA records, of the level of utilisation and fuel related data for each of ~~the Electricity Generation Corporation~~Verve Energy's Registered Facilities by Trading Interval; and
  - (c) the terms of Bilateral Contracts entered into by ~~the Electricity Generation Corporation~~Verve Energy and ~~the Electricity Retail Corporation~~Synergy.
- 2.16.8. Rule Participants may notify the IMO or the Economic Regulation Authority of behaviour that they consider reduces the effectiveness of the market, including behaviour related to market power, and the Economic Regulation Authority, with the assistance of the IMO, must investigate the behaviour identified in each relevant notification.
- 2.16.9. The Economic Regulation Authority is responsible for monitoring the effectiveness of the market in meeting the Wholesale Market Objectives and must investigate any market behaviour if it considers that the behaviour has resulted in the market not functioning effectively. The Economic Regulation Authority, with the assistance of the IMO, must monitor:
- (a) Ancillary Service Contracts ~~and Balancing Support Contracts~~ that System Management enters into and the criteria and process that System Management uses to procure Ancillary Services ~~and balancing support services~~ from other persons;

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- (b) inappropriate and anomalous market behaviour, including behaviour related to -market power and the exploitation of shortcomings in the Market Rules or Market Procedures by Rule Participants including, but not limited to:
- i. prices offered by a Market Generator in its Portfolio Supply Curve that do not reflect the Market Generator's reasonable expectation of the short run marginal cost of generating the relevant electricity;
  - ii. ~~Blank~~ prices offered by a Market Generator in its Balancing Submission that exceed the Market Generator's reasonable expectation of the short run marginal cost of generating the relevant electricity;
  - iii. prices offered by a Market Generator in its LFAS Submission that exceed the Market Generator's reasonable expectation of the incremental cost incurred by the LFAS Facility in providing the relevant LFAS; ~~Balancing Data price changes, and changes in other Standing Data prices used in Balancing, that cannot be justified by an underlying change in cost~~
  - iv. Availability Declarations that may not reflect the reasonable expectation of a ~~f~~Facility's availability, beyond outages of which System Management has been notified;
  - v. Ancillary Service Declarations that may not reflect the reasonable expectation of the ancillary services to be provided by a facility; and
  - vi. Fuel Declarations that may not reflect the reasonable expectation of the fuel that a facility will be run on in real-time.
- (c) market design problems or inefficiencies; and
- (d) problems with the structure of the market.

2.16.9A. The IMO must assist the monitoring activities identified in clauses ~~s~~ 2.16.9(b)(i), (ii) and (iii) by examining prices in relevant STEM Ssubmissions, including ~~S~~standing ~~STEM S~~submissions, used in forming the relevant bids and offers STEM Bids and STEM Offers and prices in price-quantity pairs against information collected from Rule Participants in accordance with clauses 2.16.6 and 2.16.7.

2.16.9B. Where the IMO concludes that prices offered by a Market Generator in its:

- (a) Portfolio Supply Curve or its Balancing Submission may not reflect the Market Generator's reasonable expectation of the short run marginal cost of generating the relevant electricity; or
- (b) LFAS Submission may exceed the Market Generator's reasonable expectation of the incremental cost incurred by the LFAS Facility in providing the relevant LFAS,

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and the IMO considers that the behaviour relates to market power the IMO must:

- (ac) as soon as practicable, request an explanation from the Market Participant which has made the relevant STEM Submission, [Balancing Submission](#) or [LFAS Submission](#); and
- (ad) advise the Economic Regulation Authority of its conclusions. The IMO advice must outline the reasons for the IMO's conclusions.

- 2.16.9C. The Market Participant must submit the explanation requested under clause 2.16.9B within 2 Business Days from receiving the request.
- 2.16.9D. The IMO must publish the explanation submitted under clause 2.16.9C on the Market Web Site as soon as practicable.
- 2.16.9E. Where the Economic Regulation Authority receives an advice from the IMO under clause 2.16.9B(b) or receives a notification from a Rule Participant under clause 2.16.8, the Economic Regulation Authority must investigate the identified behaviour. Without limitation, for this purpose the Economic Regulation Authority must examine the IMO advice, any explanation received under clause 2.16.9C, any data already in the possession of the Economic Regulation Authority or additional data it requests from the relevant Market Participant under clause 2.16.6 to assist in the investigations.
- 2.16.9F. Subject to clause 2.16.9FA, the Economic Regulation Authority must publish the results of its investigations within six months from receiving the IMO advice under clause 2.16.9B(b) or from receiving a notification from a Rule Participant under clause 2.16.8. If that day is not a Business Day, then the next Business Day following that six month period will apply.
- 2.16.9FA. Subject to clause 2.16.9FB, the Economic Regulation Authority may extend the timeframe for an investigation under clause 2.16.9E for a period of up to six months, to the nearest Business Day following that six month extension period. Where the Economic Regulatory Authority makes such an extension it must notify the IMO and the IMO must publish a notice of the extension on the Market Web Site within one Business Day of receiving the notification. The Economic Regulation Authority may extend the timeframe for an investigation more than once.
- 2.16.9FB For investigations of matters notified under clause 2.16.8, a notice of extension must not include any information identifying the Market Participant under investigation.
- 2.16.9G Where the Economic Regulation Authority determines that prices in the Portfolio Supply Curve, subject to the investigation, did not reflect the Market Generator's reasonable expectation of the short run marginal cost of generating the relevant

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electricity, the Economic Regulation Authority must request that the IMO applies to the Electricity Review Board for an order for contravention of clause 6.6.3.

- 2.16.9H. Where the IMO receives a request under clause 2.16.9G the IMO must refer the relevant matter to the Electricity Review Board requesting that a civil penalty be imposed on the relevant Market Participant.
- 2.16.10. The Economic Regulation Authority must also review:
- (a) the effectiveness of the Market Rule change process and Procedure change process;
  - (b) the effectiveness of the compliance monitoring and enforcement measures in the Market Rules and Regulations;
  - (c) the effectiveness of the IMO in carrying out its functions under the Regulations, the Market Rules and Market Procedures; and
  - (d) the effectiveness of System Management in carrying out its functions under the Regulations, the Market Rules and Market Procedures.
- 2.16.11. The Economic Regulation Authority must provide to the Minister a report on the effectiveness of the market and dealing with the matters identified in clauses 2.16.9 and 2.16.10:
- (a) at least annually; and
  - (b) more frequently where the Economic Regulation Authority considers that the market is not effectively meeting the Wholesale Market Objectives.
- 2.16.12. A report referred to in clause 2.16.11 must contain but is not limited to the following:
- (a) a summary of the information and data compiled by the IMO and the Economic Regulation Authority under clause 2.16.1;
  - (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;
    - ii. the market for bilateral contracts for capacity and energy;
    - iii. the STEM;
    - iv. Balancing;
    - v. the dispatch process;
    - vi. planning processes; and
    - vii. the administration of the market, including the Market Rule change process; and

### viii. Ancillary Services.

- (c) an assessment of any specific events, behaviour or matters that impacted on the effectiveness of the market; and
- (d) any recommended measures to increase the effectiveness of the market in meeting the Wholesale Market Objectives to be considered by the Minister.

2.16.13. In carrying out its responsibilities under clause 2.16.9(b), the Economic Regulation Authority must:

- (a) estimate the prevalence of such behaviour;
- (b) estimate the cost to end users of such behaviour;
- (c) estimate the impact of such behaviour on the effectiveness of the market in meeting the market objectives;
- (d) consult with Market Participants on the impacts of such behaviour;
- (e) estimate the benefits and costs of any recommended measure to reduce such behaviour. The Economic Regulation Authority:
  - i. may use market simulation tools to estimate the benefits and costs;
  - ii. must give consideration to:
    - 1. the probability of success of the measure in reducing the behaviour;
    - 2. the implications on the efficiency of the market of implementing the measure; and
    - 3. the costs of compliance as a result of implementing the measure;
- (f) where the benefits of any change are estimated to exceed the cost, make recommendations to the Minister for implementing the measures in a report under clause 2.16.11; and
- (g) provide details of its findings in a report to the Minister under clause 2.16.11.

2.16.14. The Economic Regulation Authority must use any information collected under this clause 2.16, including information provided to it by the IMO, only for the purpose of carrying out its functions under this clause 2.16. The Economic Regulation Authority must treat information collected as confidential and must not publish any of that information other than in accordance with this clause 2.16. The IMO must use information provided to it by the Economic Regulation Authority under clause 2.16.6(c) only for the purpose of carrying out its functions under this clause 2.16. The IMO must treat information provided to it by the Economic Regulation Authority under clause 2.16.6(c) as confidential and must not publish any of that information other than in accordance with this clause 2.16.

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- 2.16.15. Where the Economic Regulation Authority provides a report to the Minister in accordance with clause 2.16.11, it must, after consultation with the Minister, publish a version of the report which has confidential or sensitive data aggregated or removed. An assessment of the results of the Economic Regulation Authority's monitoring under clause 2.16.9(b) must be included in the published version of the report.
- 2.16.16. In respect of any reports published under this clause 2.16, only aggregate or summary statistics of confidential data may be published. The aggregation must be at a level sufficient to ensure the underlying data cannot be identified. Where aggregated data is derived from confidential data collected from three or less Market Participants, then this data should not be published.
- 2.34.7. The IMO may reject a change:
- (a) in Standing Data related to prices and payments:
    - i. if the price or payment data submitted is inconsistent with any applicable limit on those values under these Market Rules; or
    - ii. if the IMO is not satisfied with evidence provided that the submitted data represents the reasonable costs of the Market Participant in the circumstances related to that price or payment; and
  - (b) in any other Standing Data if it considers that an inadequate explanation, including test results, was provided to justify the change in Standing Data.

### 2.34.7A. The IMO must:

- (a) refer a proposed change in LFAS Standing Data to System Management for advice on whether System Management is satisfied that the proposed changed LFAS Standing Data meets the LFAS Facility Requirements;
- (b) subject to clause 2.34.7B, if System Management advises the IMO within 5 Business Days that System Management is satisfied the proposed change meets the LFAS Facility Requirements, accept the proposed change, otherwise reject the proposed change; and
- (c) where the IMO rejects the proposed change, advise the Market Participant of the rejection together with any reasons provided by System Management.

2.34.7B System Management may, within 1 Business Day of receiving a referral under clause 2.34.7A(a), request the IMO to extend the time under clause 2.34.7A(b) for a further period of 5 Business Days. The IMO must advise System Management within 1 Business Day of receiving a request under this clause whether the IMO agrees to extend the time and, if the IMO so advises, the time under clause 2.34.7A(b) is extended to 10 Business Days.

### 2.34.7C System Management must:

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- (a) within the time specified in clause 2.34.7A(b), as extended under clause 2.34.7B, if applicable, consider whether the proposed change to LFAS Standing Data meets the LFAS Facility Requirements;
- (b) advise the IMO whether it should accept the proposed change or reject it on the basis the proposed changed LFAS Standing Data will not meet the LFAS Facility Requirements;
- (c) advise the IMO of any enablement and/or quantity restrictions that are to apply to the Facility for LFAS Submissions if the proposed changes to the LFAS Standing Data are accepted; and
- (d) provide the IMO with System Management's reasons for accepting or rejecting the proposed change to LFAS Standing Data.

2.34.10. Where System Management becomes aware that a Rule Participant's Standing Data is currently inaccurate, or will become inaccurate as of a date in the future, it must, as soon as practicable, notify the IMO of the item that it considers to be inaccurate or which will become inaccurate, as the case may be.

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; and
  - ii. ~~[blank][commitment and decommitment cost data] and Standing Balancing Data; 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.

2.34.15. System Management must commence using the Standing Data or revised Standing Data, as soon as it is received from the IMO.

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- 2.36.6. The IMO may require Market Rule Participants to submit information to the IMO using software systems that the IMO specifies, and may reject information submitted by another method.
- 2.36.7. System Management must, as soon as practicable, provide to the IMO any information the IMO reasonably requires to perform its functions under these Market Rules.
- 2.36.8. The IMO must, as soon as practicable, provide to System Management any information System Management reasonably requires to perform its functions under these Market Rules.
- 2.36.9 The IMO is to determine IMS Interface Document Procedures from time to time prescribing reasonable parameters which System Management and the IMO must, subject to clause 2.36.10, use when providing each other information under these Market Rules, including:
- (a) the format, form and manner in which that information must be provided; and
  - (b) where the Market Rules do not provide a timeframe for the provision of the information the time by which such information is to be provided.
- 2.36.10. Where the IMS Interface Document Procedures are inadequate to enable either the IMO or System Management to comply with an obligation to provide information to the other under these Market Rules, and such information is required in a timely manner for the efficient performance of the IMO's or System Management's functions, then the following procedure applies until such time as the IMS Interface Procedures are amended to correct the inadequacy:
- (a) a senior manager from each of the IMO and System Management must meet as soon as possible after the inadequacy in the IMS Interface Document Procedures is identified and seek to agree an amendment to those Procedures that addresses the inadequacy and which is consistent with these Market Rules;
  - (b) if agreement can be reached under clause 2.36.10(a), then the IMO and System Management must seek to amend the IMS Interface Document Procedures accordingly and, in the interim, act in accordance with that agreement;
  - (c) if no agreement can be reached under clause 2.36.10(a) within 5 Business Days of the first meeting, then an Authorised Officer of the IMO and of System Management must meet as soon as possible and seek to agree an amendment to the IMS Interface Document Procedures that addresses the inadequacy and which is consistent with these Market Rules;
  - (d) if agreement can be reached under clause 2.36.10(c), then the IMO and System Management must seek to amend the IMS Interface Document

Procedures accordingly and, in the interim, act in accordance with that agreement;

- (e) if no agreement can be reached under clause 2.36.10(c) within 5 Business Days of the first meeting of the Authorised Officers, then the IMO must, acting reasonably, draft a Procedure Change Proposal seeking an amendment the IMS Interface Document Procedures that addresses the inadequacy and which is consistent with these Market Rules; and
- (f) the IMO must develop and publish the Procedure Change Proposal under clause 2.36.10(e) in accordance with clause 2.10 as soon as possible and the IMO and System Management must act in accordance with the amendment to the IMS Interface Document Procedures proposed in the Procedure Change Proposal until the Proposal is either accepted or rejected.

2.37.4. The Credit Limit for each Market Participant is the dollar amount determined by the IMO as being equal to the maximum net amount that the Market Participant is expected to owe the IMO over any 70 day period where this amount is not expected to be exceeded more than once in a 48 month period. When determining the Credit Limit for a Market Participant the IMO must take into account:

- (a) the average level and volatility of the MCAP Balancing Price and the STEM Clearing Price for the previous 48 months, or such shorter time period as data is available for;
  - (b) the metered quantity data for the Market Participant, or an estimate of their expected generation and consumption where no meter data is available;
  - (c) the correlation between the metered amounts of electricity and MCAP Balancing Price;
  - (d) the length of the settlement cycle and the process set out in clauses 9.23, 9.24 and 2.32;
  - (e) a reduction in the Credit Limit reflecting applicable bilateral contract purchase quantities, where these quantities are the historical bilateral contract submissions, or an estimate of the Market Participant's expected bilateral contract levels where no historical bilateral contract submission data is available;
  - (f) the historical STEM sales and purchases, or an estimate of the Market Participant's expected STEM sales and purchases where no historical STEM sale and purchase data is available;
- (fa) the historical, and estimated expected, level of payments under clause 9.8.1;

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- (g) the expected level of aAncillary sService payments;
- (h) the statistical distribution of the accrued amounts that may be owed to the IMO;
- (i) the degree of confidence that the Credit Limit will be large enough to meet large defaults; and
- (j) any past breach of the Regulations or these Market Rules by r the Market Participant or a related entity of the Market Participant.

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- 3.4.4 System Management may take any other actions as it considers are required, consistent with good electricity industry practice, to return the SWIS to a Normal Operating State provided it acts with as little disruption to electricity supply and ~~to the implementation of Resource Plans that it has received from the IMO seeks to return to issuing Dispatch Instructions in the priority set out in clause 7.6.1B as soon as is reasonably practicable in the circumstances.~~
- 3.5.5 When the SWIS is in an Emergency Operating State, System Management may:
- (a) direct any Rule Participant to provide Ancillary Services, whether that Rule Participant has an Ancillary Services Contract in relation to the relevant Facility or not;
  - (b) utilise the overload capacity of Scheduled Generators (as indicated by Standing Data);
  - (c) cancel or defer Planned Outages, require the return to service in accordance with the relevant Outage Contingency Plan of Registered Facilities undergoing Planned Outages or take other measures contained in the relevant Outage Contingency Plans;
  - (d) issue directions to Rule Participants to operate their Registered Facilities in specific ways; and
  - (e) take such other actions as it considers are required, consistent with good electricity industry practice, to restore the SWIS to a Normal Operating State, or to restore the SWIS to a High Risk Operating State where a Normal Operating State is not immediately achievable.
- 3.5.7 Subject to clause 3.5.6, while operating under an Emergency Operating State System Management must attempt to operate the SWIS in such a way as to, first minimise the disruption to electricity supply, and then, ~~minimise the disruption to the implementation of Resource Plans, to seek to return to issuing Dispatch Instructions in the priority set out in clause 7.6.1B,~~ to the extent that is reasonably practicable to do so in the circumstances.
- 3.9.1. Load Following Service is the service of frequently adjusting:
- (a) the output of one or more Scheduled Generators; or
  - (b) the output of one or more Non-Scheduled Generators, ~~;~~ ~~or~~
  - ~~(c) — the consumption of one or more Loads~~
- within a Trading Interval so as to match total system generation to total system load in real time in order to correct any SWIS frequency variations.
- 3.11.7. System Management must make an annual Ancillary Services plan describing how it will ensure that the Ancillary Service Requirements are met. ~~The Ancillary Services plan must only include:~~

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- ~~(a) — the Electricity Generation Corporation's Registered Facilities; and~~
- ~~(b) — facilities under the control of Rule Participants, where System Management has an Ancillary Services Contract with each of these Rule Participants.~~
- 3.11.8. System Management may enter into an Ancillary Service Contract with a Rule Participant other than ~~the Electricity Generation Corporation~~Verve Energy, for Spinning Reserve ~~and Load Following~~ Ancillary Services, where:
- (a) it does not consider that it can meet the Ancillary Service Requirements with ~~the Electricity Generation's Corporation~~Verve Energy's Registered Facilities; or
  - (b) the Ancillary Service Contract provides a less expensive alternative to Ancillary Services provided by ~~the Electricity Generation Corporation~~Verve Energy's Registered Facilities.
- 3.11.7A. ~~The Electricity Generation Corporation~~Verve Energy must make its capacity to provide Ancillary Services from its ~~f~~facilities in the Verve Energy Balancing Portfolio available to System Management to a standard sufficient to enable System Management to meet its obligations in accordance with these Market Rules. Nothing in this clause prevents System Management and Verve Energy from entering into an Ancillary Service Contract in respect of a Stand Alone Facility.
- 3.13.1. The total payments by the IMO on behalf of System Management for Ancillary Services in accordance with Chapter 9 comprise:
- (a) [Blank];
  - (aA) for Load Following Service for each Trading Month:
    - i. a capacity payment Capacity\_LF calculated as:
      - 1. the Monthly Reserve Capacity Price in that Trading Month;
      - 2. multiplied by LFR, the capacity necessary to meet the Ancillary Service Requirement for Load Following in that month;
    - ii. an availability payment Availability\_Cost\_LF(m) calculated in accordance with clause 9.9.2(d) for that Trading Month;
  - (b) an amount Availability\_Cost\_R(m) for Spinning Reserve for each Trading Month, which is calculated in accordance with clause 9.9.2(c) for that Trading Month; and
  - (c) Cost\_LRD, the monthly amount for Load Rejection Reserve and System Restart, determined in accordance with the process described in clause 3.13.3B and 3.13.3C; and Dispatch Support service determined in accordance with clause 3.11.8B.

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- 3.13.3. The parameters Margin\_Peak and Margin\_Off-Peak to be used in the settlement calculation described in clause 9.9.2 are:
- (a) where the Economic Regulation Authority has not completed its first assessment in accordance with clause 3.13.3A:
    - i. 15 % for Margin\_Peak; and
    - ii. 12% for Margin\_Off-Peak; and
  - (b) determined by the Economic Regulation Authority, where the Economic Regulation Authority has completed its first assessment in accordance with clause 3.13.3A.
- 3.13.3A Subject to clause 3.13.3AB, For each Financial Year, by 31 March prior to the start of that Financial Year, the Economic Regulation Authority must determine values for the parameters Margin\_Peak and Margin\_Off-Peak, taking into account the Wholesale Market Objectives and in accordance with the following:
- (a) by 30 November prior to the start of the Financial Year, the IMO must submit a proposal for the Financial Year to the Economic Regulation Authority:
    - i. for the reserve availability payment margin applying for Peak Trading Intervals, Margin\_Peak, the IMO must take account of:
      - 1. the margin ~~the Electricity Generation Corporation~~Verve Energy could reasonably have been expected to earn on energy sales forgone due to the supply of Spinning Reserve during Peak Trading Intervals;
      - 2. the loss in efficiency of the ~~Electricity Generation Corporation~~Verve Energy Registered Facilities 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;
    - ii. for the reserve availability payment margin applying for Off-Peak Trading Intervals, Margin\_Off-Peak, the IMO must take account of:
      - 1. the margin ~~the Electricity Generation Corporation~~Verve Energy could reasonably have been expected to earn on energy sales forgone due to the supply of Spinning Reserve during Off-Peak Trading Intervals;
      - 2. the loss in efficiency of the ~~Electricity Generation Corporation~~Verve Energy Registered Facilities that System Management has scheduled to provide Spinning Reserve during

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Off-Peak Trading Intervals that could reasonably be expected due to the scheduling of those reserves;

- (b) the Economic Regulation Authority must undertake a public consultation process, which must include publishing an issues paper and issuing an invitation for public submissions.

### 3.13.3AB During the period:

(a) 8:00AM on the Balancing Market Commencement Day to 8:00AM 1 July 2012:

i. the Margin Peak value is the value determined by the IMO consistently with this clause 3.13, and published on the Market Web Site; and

ii. the Margin-Off-Peak value is the value determined by the IMO consistently with this clause 3.13, and published on the Market Web Site;

and

(b) 8:00AM 1 July 2012 to 8:00AM 1 July 2013:

i. the Margin Peak value is the value determined by the IMO consistently with this clause 3.13, and published on the Market Web Site; and

ii. the Margin-Off-Peak value is the value determined by the IMO consistently with this clause 3.13, and published on the Market Web Site.

3.14.1. Market Participant p's share of the Load Following Service payment cost in each Trading Month m is  $\text{Load\_Following\_Share}(p,m)$  which equals :

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

where a Market Participant's contributing quantity for Trading Month m is the sum of:

- i. the absolute value of the sum of the Metered Schedules for the Non-Dispatchable Loads, ~~and~~ Interruptible Loads, ~~Curtailed Loads~~ registered by the Market Participant for all Trading Intervals during Trading Month m; and  
ii. the sum of the Metered Schedules for Non-Scheduled Generators registered by the Market Participant for all Trading Intervals during Trading Month m.

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iii. [Blank].

3.21A.13. If a Market Participant conducting a Commissioning Test cannot conform to the test plan approved by System Management then it must inform System Management as soon as practicable and must obtain System Management's approval under this clause 3.21A for a new Commissioning Test.

3.22.1. The IMO must provide the following information to the Settlement System for each Trading Month:

- (a) Capacity\_LF as described in clause 3.13.1(aA);
- (b) [Blank]
- (c) Margin\_Peak as described in clause 3.13.3A;
- (d) Margin\_Off-Peak as described in clause 3.13.3A;
- (e) Capacity\_R\_Peak, the requirement for Spinning Reserve for Peak Trading Intervals assumed in forming Margin\_Peak;
- (f) Capacity\_R\_Off-Peak, the requirement for Spinning Reserve for Off-Peak Trading Intervals assumed in forming Margin\_Off-Peak;
- (fA) LFR as described in clause 3.13.1(aA)(i)(2);
- (g) Cost\_LRD as the sum of:
  - i. Cost\_LR (as described in clause 3.13.3B and 3.13.3C) divided by 12 as a monthly amount; and
  - ii. the monthly amount for Dispatch Support service as advised in accordance with clause 3.22.3(b); and
- (h) the compensation due to changed outage plans to be paid to a Market Participant for that Trading Month as determined in accordance with clause 3.19.12(e).

3.22.2. When System Management has entered into an Ancillary Service Contract with a Rule Participant, System Management must as soon as practicable and not less than 20 Business Days prior to the Ancillary Service Contract taking effect, provide the IMO with:

- (a) the identity of the Rule Participant;
- (b) for each Contracted Ancillary Service the Ancillary Service contracted to be provided by the Rule Participant under the Ancillary Service Contract;
  - i. a unique identifier for the Contracted Ancillary Service;
  - ii. the type of Ancillary Service where this can be one of:
    - 1. Spinning Reserve Service;
    - 2. Load Rejection Reserve Service;

3. System Restart Service; or

4. Dispatch Support Service;

and

iii. the form of settlement data that System Management will provide to the IMO for the Contracted Ancillary Service provided by the Rule Participant, where this data must be one of the formats allowed by clause 3.22.3.

~~(c) a unique identifier for the Ancillary Service Contract;~~

~~(d) the form of settlement data that System Management will provide to the IMO for the Contracted Ancillary Service provided by the Rule Participant, where this data must be one of the formats allowed by clause 3.22.3.~~

3.22.3. System Management must provide the following information to the IMO for each Rule Participant holding an Ancillary Service Contract for a Trading Month by the date specified in clause 9.16.2(a):

(a) the identity of the Rule Participant;

(b) for each Contracted Ancillary Service provided under an Ancillary Service Contract held by the Rule Participant:

i. the type of Ancillary Service where this can be one of:

1. Spinning Reserve Service;

~~2. Load Following;~~

~~3. Load Rejection~~ Reserve Service;

~~4. System Restart~~ Service; or

~~5. Dispatch Support~~ Service;

ii. for each Trading Interval of the Trading Month the quantity of Ancillary Service to a precision of 0.001 units ~~(where no specific unit of measure will be assumed)~~, where the unit of measure is:

~~1. MWh for Spinning Reserve~~ Service;

~~2. MWh for Load Rejection~~ Reserve Service;

~~3. as determined by System Management for System Restart~~ Service; or

~~4. as determined by System Management for Dispatch Support~~ Service; and

iii. either:

1. a total monthly payment for the Ancillary Service in dollars and whole cents; or

2. a price in dollars and whole cents per unit of the quantity described in (ii) per Trading Interval.

### 4.10. Information Required for the Certification of Reserve Capacity

4.10.1.<sup>1</sup> ~~The~~ Each Market Participant must ensure that information ~~to be~~ submitted to the IMO with an application for certification of Reserve Capacity ~~must~~ pertains to the Reserve Capacity Cycle to which the certification relates, ~~must be~~ is supported by documented evidence and ~~must~~ includes, where applicable, the following information:

- (a) the identity of the Facility;
- (b) the Reserve Capacity Cycle to which the application relates;
- (c) if the Facility, or part of the facility, is yet to enter service:
  - i. with the exception of applications for Conditional Certified Reserve Capacity, a letter from the relevant Network Operator indicating that it has made an Access Offer in respect of the Facility and that the Facility will be entitled to have access from a specified date occurring prior to the date specified in clause 4.10.1(c)(iii)(7);
  - 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);
  - iii. the Key Project Dates occurring after the date the request is submitted ~~to the IMO~~, including, as if applicable, but not limited to:
    1. when all approvals will be finalised or, in the case of Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes, 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 ~~Curtailable Loads~~ Demand Side Programmes, all required control equipment will be in place;

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<sup>1</sup> The IMO notes that it has reflected the final changes approved in the Rule Change Proposal: Certification of Reserve Capacity (RC\_2010\_14). For further details refer to the following webpage: [http://www.imowa.com.au/RC\\_2010\\_14](http://www.imowa.com.au/RC_2010_14)

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;
- (d) if the Facility is a Registered Facility that will be decommissioned prior to the date specified in clause 4.1.30(a) for the Reserve Capacity Cycle to which the application relates, the planned decommissioning date;
- (e) for a generation system other than an Intermittent Generator:
- i. the capacity of the Facility and the temperature dependence of that capacity;
  - ii. the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic Loads, that can be guaranteed to be available for supply to the relevant Network from the Facility when it is operated normally at an ambient temperature of 41°C;
  - iii. the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic Loads, beyond the capacity described in (ii), that can be made available for supply to the relevant Network from the Facility at an ambient temperature of 41°C and any restrictions on the availability of that capacity, including limitations on duration;
  - iv. at the option of the applicant, the method to be used to measure the ambient temperature at the site of the Facility for the purpose of defining the Reserve Capacity Obligation Quantity, where the method specified may be either:
    1. a publicly available daily maximum temperature at a location representative of the conditions at the site of the Facility as reported daily by a meteorological service; or
    2. a daily maximum temperature measured at the site of the generator by the SCADA system operated by System Management;
- (Where no method is specified, a temperature of 41°C will be assumed);
- v. subject to clause 4.10.2, details of primary and any alternative fuels, including details and evidence of both firm and non-firm fuel supplies and the factors that determine restrictions on fuel availability that could prevent the Facility operating at its full capacity;
  - vi. the expected forced and unforced outage rate based on manufacturer data; and

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- vii. for Facilities that have operated for at least 12 months, the forced and unforced outage rate of the Facility;
- (f) for Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads, ~~details for each of up to three blocks of capacity of:~~
  - i. ~~either~~
    - 1. ~~the Reserve Capacity expected to be the Market Participant expects to make available from each of up to 3 blocks of capacity; or~~
    - 2. ~~the Stipulated Default Load;~~
  - ii. the maximum number of hours per year the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity, where this must be ~~not less than~~ at least 24 hours;
  - iii. the maximum number of hours per day that the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity if called, where this must be ~~not:~~
    - 1. ~~not less than~~ four hours; and
    - 2. not more than the maximum of the periods specified in sub-clause (vi);
  - iv. the maximum number of times the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load can be called to provide Reserve Capacity during a 12 month period, where this must be at least six times;
  - v. the minimum notice period required for dispatch of the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load, where this must not be more than 4 hours; and
  - vi. the periods when the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load can be dispatched, which must include the period between noon and 8:00~~pm~~ PM on all Business Days;
- (g) for all Facilities:
  - i. any restrictions on the availability of the Facility due to staffing constraints; and
  - ii. any other restrictions on the availability of the Facility;
- (h) whether the application relates to confirmation of Conditional Certified Reserve Capacity;
- (i) whether the applicant wishes to nominate the use of the methodology described in clause 4.11.2(b), in place of that described in clause

4.11.1(a), in assigning the Certified Reserve Capacity or Conditional Certified Reserve Capacity to apply to a Scheduled Generator or a Non-Scheduled Generator; ~~and~~

(j) whether the Facility will be subject to a Network Control Service contract; ~~and~~

~~(k) for a Balancing Facility, evidence of the extent to which the Facility will meet the applicable Balancing Facility Requirements.~~

4.10.2. For the purpose of clause 4.10.1(e)(v), an applicant may not claim that a Facility has an alternative fuel unless the Facility has on-site storage, or uninterrupted supply of that fuel, sufficient to maintain 12 hours of operation at the level of capacity specified in clause 4.10.1(e)(ii).

### 4.11. Setting Certified Reserve Capacity

4.11.1.<sup>2</sup> Subject to clause 4.11.7 ~~and clause 4.11.12~~, the IMO must apply the following principles in assigning a quantity of Certified Reserve Capacity to a Facility for the Reserve Capacity Cycle for which an application for Certified Reserve Capacity has been submitted in accordance with section 4.10:

(a) subject to clause 4.11.2, the Certified Reserve Capacity for a Scheduled Generator for a Reserve Capacity Cycle ~~is not to~~ must not exceed the IMO's reasonable expectation ~~as to~~ of the amount of capacity likely to be available, after netting off capacity required to serve Intermittent Loads, embedded loads and Parasitic Loads, for Peak Trading Intervals on Business Days in the period from the:

- i start of December for Reserve Capacity Cycles up to and including 2009; or
- ii trading day starting on 1 October for Reserve Capacity Cycles from 2010 onwards

in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41°C;

(b) where the Facility is a generation system (other than an Intermittent Generator), the Certified Reserve Capacity must not exceed the sum of the capacities specified in clauses 4.10.1(e)(ii) and 4.10.1(e)(iii);

(c) the IMO must not assign Certified Reserve Capacity to a Facility for a Reserve Capacity Cycle if:

- i for Reserve Capacity Cycles up to and including 2009 that Facility is not operational or is not scheduled to commence operation for

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<sup>2</sup> The IMO notes that it has reflected the final changes approved in the Rule Change Proposal: Certification of Reserve Capacity (RC\_2010\_14). For further details refer to the following webpage: [http://www.imowa.com.au/RC\\_2010\\_14](http://www.imowa.com.au/RC_2010_14)

- the first time so as to meet its Reserve Capacity Obligations by 30 November of Year 3 of that Reserve Capacity Cycle;
  - ii. for Reserve Capacity Cycles from 2010 onwards that Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 1 October of Year 3 of that Reserve Capacity Cycle; or
  - iii. that Facility will cease operation permanently, and hence cease to meet Reserve Capacity Obligations, from a time earlier than 1 August of Year 4 of that Reserve Capacity Cycle;
  - iv. that Facility already has Capacity Credits assigned to it under Clause 4.28C for the Reserve Capacity Cycle; or
  - v. that Facility is an Interruptible Load and, based on applications accepted under clauses 2.29.5D and 2.29.5K (as applicable), the Facility will be associated with a Demand Side Programme for any period when Reserve Capacity Obligations would apply for the Facility for the Reserve Capacity Cycle;
- (d) [blank]
- (e) [blank]
- (f) the IMO must not assign Certified Reserve Capacity to a Facility that is not expected to be Registered Facility by the time its Reserve Capacity Obligations for the Reserve Capacity Cycle would take effect;
- (g) in respect of a Facility that will be subject to a Network Control Service contract, the IMO must not assign Certified Reserve Capacity in excess of the capacity that the IMO believes that Facility can usefully contribute given its location and any network constraints that are likely to occur;
- (h) the IMO may decide not to assign Certified Reserve Capacity to a Facility if:
  - i. the Facility has operated for at least 36 months and has had a Forced Outage rate of greater than 15% or a combined Planned Outage rate, Forced Outage rate and Equipment Test rate of greater than 30% over the preceding 36 months; or
  - ii. the Facility has operated for less than 36 months, or is yet to commence operation, and the IMO has cause to believe that over a period of 36 months the Facility is likely to have a Forced Outage rate of greater than 15% or a combined Planned Outage rate, Forced Outage rate and Equipment Test rate of greater than 30%,where the Planned Outage rate, the Forced Outage rate and Equipment Test rate for a Facility for a period will be calculated in accordance with the Power System Operation Procedure. (The IMO may consult with System

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Management in deciding whether or not to refuse to grant Certified Reserve Capacity under this paragraph);

- (i) the Certified Reserve Capacity assigned to a Facility is to be expressed to a precision of 0.001 MW-; and
- (j) the Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle must not exceed the IMO's reasonable expectation of the amount of capacity likely to be available from that Facility during the periods specified in clause 4.10.1 (f)(vi), after netting off capacity required to serve minimum loads, from the Trading Day starting on 1 October in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle.

4.11.2. Where an applicant submits an application for Certified Reserve Capacity, in accordance with section 4.10, and nominates under clause 4.10.1(i) to have the IMO use the methodology described in clause 4.11.2(b) to apply to a Scheduled Generator or a Non-Scheduled Generator, the IMO:

- (a) may reject the nomination if the IMO reasonably believes that the capacity of the Facility has permanently declined, or is anticipated to permanently decline prior to or during the Reserve Capacity Cycle to which the Certified Reserve Capacity relates. If the IMO rejects such a nomination it must process the application as it would if no nomination to use the method described in clause 4.11.2(b) had been made; and
- (b) subject to clause 4.11.12, if it has not rejected the nomination under paragraph (a), must assign a quantity of Certified Reserve Capacity to the relevant Facility for the Reserve Capacity Cycle equal to the Relevant Level determined in accordance with clause 4.11.3A, but subject to clauses 4.11.1(b), 4.11.1(c), 4.11.1(f), 4.11.1(g), 4.11.1(h) and 4.11.1(i).

4.11.3. [Blank]

4.11.4. Subject to clause 4.11.12, when assigning Certified Reserve Capacity to an Interruptible Load, Demand Side Programme or Dispatchable Load, the IMO must indicate what Availability Class is applicable to that 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.

4.11.4A. [Blank]

4.11.5. In assigning Certified Reserve Capacity to a Facility, the IMO may:

- (a) require Network Operators to confirm that the data and information related to clause 4.10.1(bA) provided to the IMO by or on behalf of an applicant for Certified Reserve Capacity is complete, accurate and up to date; and

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- (b) request that a Network Operator provide the IMO within a reasonable timeframe with any other information held by the Network Operator that the Network Operator reasonably considers is relevant to the application.

and Network Operators must use their best endeavours to cooperate with such requests and provide the information requested within the timeframe specified by the IMO in the request.

- 4.11.6. The IMO must accredit not less than two independent experts at any time to prepare reports on the estimated Reserve Capacity of Intermittent Generators that are yet to commence operation, at the expense of the applicant. The IMO:
  - (a) must publish the contact details of these accredited independent experts on the Market Web Site;
  - (b) must ensure that any expert it accredits is familiar with the meaning of the value to be estimated; and
  - (c) can remove accreditation of an expert at any time, but must allow the expert to complete any work in progress as an accredited expert at the time accreditation is removed.
- 4.11.7. Subject to clause 4.11.9 for the first Reserve Capacity Cycle, the Certified Reserve Capacity assigned to all Western Power generation systems is 3,224 MW. This amount is not to be allocated to individual generation systems, but is instead to be associated with Western Power's portfolio of Scheduled Generators and Unscheduled Generators.
- 4.11.8. Western Power must notify the IMO of the quantity of Certified Reserve Capacity it considers it has available for the period from the Trading Day commencing on 1 November 2007 and until the Trading Day ending on 1 August 2008 ("**relevant period**") by the date and time specified in clause 4.1.11, including supporting evidence, where that quantity:
  - (a) must only include capacity provided by Facilities that are committed to be available during the relevant period; and
  - (b) must include any capacity that Western Power has procured under contracts with third parties that give Western Power the right to dispatch the capacity during the relevant period.
- 4.11.9. The IMO must review the information provided by Western Power in accordance with clause 4.11.8 and if the IMO, taking into account the information provided by Western Power under clause 4.11.8, considers that the capacity available to Western Power during the relevant period will be different to the Certified Reserve Capacity assigned to Western Power's generation systems under clause 4.11.7, then the IMO may review that value.

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4.11.12. The IMO must not assign Certified Reserve Capacity to a Balancing Facility unless the IMO is satisfied the Facility is likely to be able to meet the Balancing Facility Requirements or those requirements as modified by the conditions or suspensions imposed by the IMO under clause 7A.1.8.

4.25.9. In conducting a test, System Management must:

- (a) subject to paragraphs (b), (c) and (d), endeavour to conduct the test without warning;
- (b) allow sufficient time for the Market Participant to schedule fuel that it is not required under these Market Rules to be stored on-site;
- (c) allow sufficient time for switching a Facility from one fuel to an alternative fuel if operation using the alternative fuel is being tested;
- (d) in the case of an Interruptible Load or a Demand Side Programme, give at least as much notice as is specified under clause 4.10.1(f)(v) to allow for arrangements to be made for the Facility to be triggered;
- (e) report to the IMO whether the test was successfully performed;
- (f) maintain adequate records of the test to allow independent verification of the test results; ~~and~~
- (g) conduct the test in the time interval specified by the IMO in accordance with clause 4.25.7(c) unless System Management has notified the IMO of an alternative time interval in accordance with clause 4.25.8, in which case, System Management must conduct the test in the time interval specified in accordance with clause 4.25.8(b); ~~and~~
- (h) issue an Operating Instruction to increase the Facility's output or decrease its consumption to a level specified by the Operating Instruction.

~~4.25.10. [Blank]Where a Facility, excluding a Demand Side Programme, is tested in accordance with this clause 4.25, the Dispatch Schedule for that Facility during the period of the test is to reflect the energy scheduled in the test.~~

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:

$$SF(p,m,d,t) = \text{Max}(\text{RTFO}(p,d,t), \text{RCOQ}(p,d,t) - A(p,d,t)) \text{ ~~+Max(0, B(p,d,t) - C(p,d,t) - RTFO(p,d,t))~~}$$

Where:

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

$$B(p,d,t) = \text{Min}(\text{RCOQ}(p,d,t) - \text{RTFO}(p,d,t), \text{DSQ}(p,d,t));$$

$$C(p,d,t) = \text{Min}(\text{DSQ}(p,d,t), \text{MSQ}(p,d,t));$$

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

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

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

- (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 6.10;
- (d) subject to paragraph (c), for the case where Market Participant p is not ~~the Electricity Generation Corporation~~ Verve Energy, 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 net MWh quantity of energy sent out by Facilities registered by that Market Participant during that Trading Interval calculated as the Net Contract Position 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 ~~Curtailable Load or~~ 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 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 paragraph (c), for the case where Market Participant  $p$  is ~~the Electricity Generation Corporation~~Verve Energy, 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 the Net Contract Position quantity of that Market Participant 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 ~~the Electricity Generation Corporation~~Verve Energy 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 7.3;

$RTFO(p,d,t)$  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):

~~$DSQ(p,d,t)$  is a MW quantity calculated by doubling the MWh value of the sum over all of the Facilities registered by Market Participant  $p$  of each Facility's Dispatch Schedule for Trading Interval  $t$  of Trading Day  $d$ ;~~

~~$MSQ(p,d,t)$  is a MW quantity calculated by doubling the MWh value of the sum over all of the Facilities registered by Market Participant  $p$  of the greater of zero and each Facility's Metered Schedule for Trading Interval  $t$  of Trading Day  $d$  corrected for Loss Factor adjustments applicable to that Facility so as to be a sent out quantity.~~

### 5.7. Network Control Service Dispatch

- 5.7.1. [Blank].
- 5.7.2. System Management may call upon the relevant Facility to provide services under a Network Control Services Contract in accordance with the terms of the contract, as advised to it by the Network Operator in accordance with clause 5.3A.3 and amended in accordance with clause 5.3A.4.
- 5.7.3. [Blank].
- 5.7.4. System Management must issue an Operating Instruction in order to document the procedure it will follow in call on Registered Facilities to provide services under Network Control Service Contracts, in the Power System Operation Procedure, and System Management must follow that documented Market Procedure when calling on Registered Facilities to provide services under Network Control Service Contracts.
- 5.9.3. The information provided by the IMO to a Network Operator under clause 5.9.2 must include, for each relevant Facility and Trading Interval:
- (a) the unique identifier of the Network Control Service Contract under which the Dispatch Instruction was issued;
  - (b) the MWh quantity by which the Facility was instructed by System Management to increase its output or reduce its consumption, as specified in clause 6.17.6(e)(i)7.13.1(cAA);
  - (c) the per MWh price paid by the IMO for the quantity dispatched under the Network Control Service Contract, as specified in clause 6.17.6(e)(ii); and
  - (d) the total amount paid by the IMO to the Market Participant for the quantity dispatched under the Network Control Service Contract, determined as the product of the values specified in clauses 5.9.3(b) and 5.9.3(c).

### 6. The Energy Market

#### 6.1. [Blank]

#### 6.2. Bilateral Submission Timetable and Process

6.2.4A. [Blank].

6.2.4B. A Market Generator may cancel Bilateral Submission data held by the IMO for any Trading Interval of the Trading Day during the time interval specified in clause 6.2.1.

6.2.4C. ~~[Blank]The IMO must confirm to the Market Generator any cancellation of Bilateral Submission data made in accordance with clause 6.2.4B. Where such cancellation is made then the IMO must remove the relevant data from the Bilateral Submission.~~

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 sections 6.2\_6.3A, 6.3B and this section 6.4, subject to:

- (a) any such extension not resulting in more than a two hour delay to any of the timelines prescribed in sections 6.2 6.3A, 6.3B and this section 6.4; and
- (b) any such extension maintaining a 50 minute window between the timelines prescribed in 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

6.5.1. Market Participants with Scheduled Generators, including other than the Electricity Generation Corporation Verve Energy but only in respect of those of its Stand Alone Facilities which are Scheduled Generators, 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

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- 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 that are not undergoing a Commissioning Test, except those with only Intermittent Non-Scheduled Generators, or Market Customers with Dispatchable Loads must provide the IMO with a Resource Plan Submission, either via submitting Resource Plan Submissions or 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).
- ~~6.5.1C. Market Generators with only Intermittent Generators may provide the IMO with a Resource Plan Submission, unless undergoing a Commissioning Test, either via submitting Resource Plan Submissions or in accordance with clause 6.5.1B.~~
- 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 ~~or a Market Participant covered by clause 6.5.1C~~, then ~~it~~ 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 Verve Energy:
  - 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) all Stand Alone Facilities which are Scheduled Generators having a scheduled output of zero.
- (c)

### 6.5A. [Blank]Balancing Data Submission Timetable and Process

~~6.5A.1.—Market Participants other than the Electricity Generation Corporation that are Market Generators or that are Market Customers with Dispatchable Loads or Curtailable Loads may submit Balancing Data 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 or its supporting infrastructure has prevented any Rule Participant from submitting a Balancing Data Submission; or~~
    - ~~ii. —a software system failure at a Rule Participant site or its supporting infrastructure has prevented that Rule Participant from submitting a Balancing Data Submission and that Rule 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 to up to 3:00 PM on the Scheduling Day.~~

~~6.5A.1A.—Where the IMO holds Standing Balancing Data for a Market Participant as at the time specified in clause 6.5A.1(a), where that Standing Balancing Data is applicable to the Trading Day to which clause 6.5A.1 relates and where that Standing Balancing Data conforms to the requirements of clause 6.11A.2, the IMO must make it the Balancing Data Submission with respect to the Trading Day as at the time specified in clause 6.5A.1(a).~~

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~~6.5A.2. When the IMO receives Balancing Data Submission data from a Market Participant during the time interval described in clause 6.5A.1, or a Balancing Data Submission is derived from Standing Balancing Data in accordance with clause 6.5A.1A, 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 6.11A.2. Where the IMO accepts the data then the IMO must revise the Balancing Data Submission to reflect that data.~~

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

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

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

- (a) 1:00 PM; and
- (b) 3:50 PM;

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

6.5C.2. When the IMO receives Standing STEM Resource Plan data from a Market Participant during the time interval described in clause 6.5C.1, it must as soon as practicable 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 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 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 supply or consumption as indicated by its Standing Resource Plan Submission then that Market Participant must either:

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- (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 supply or consumption capabilities, submit valid Resource Plan Submission data to the IMO on the Scheduling Day immediately prior to that Trading Day.

### 6.5C.7. A Market Participant, other than Verve Energy, must ensure that either:

(a)

$$\text{Target} * \text{LF} = (\text{NCP} + \text{DQ} - \text{NonSchGen} - \text{Shortfall}) \pm \text{Tol}$$

Where:

Target = the sum of the targets provided by the Market Participants under clause 6.11.1(b)(iii)

LF = the applicable Loss Factor

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 under clause 6.11.1(f)

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

(b)

$$\text{Target MW} * \text{LF} = (\text{NCP} + \text{DQ} - \text{NonSchGen} - \text{Shortfall}) * 2 \pm \text{Tol}$$

Where:

Target MW = the sum of the targets provided by the Market Participant under clause 6.11.1(b)(v)

LF = applicable Loss Factor

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 under clause 6.11.1(a)

Shortfall = the amount under clause 6.11.1(e)

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

~~If on a Scheduling Day at the time described in clause 6.5.1(a), a Market Participant's Standing Resource Plan Submission applicable to any Trading Interval of the corresponding Trading Day is inconsistent with its Net Contract Position for that Trading Interval then that Market Participant must submit valid~~

~~Resource Plan Submission data to the IMO for that Trading Interval in accordance with clause 6.5.1.~~

### The STEM Auction Process

#### 6.9. The STEM Auction

- 6.9.4. Where the IMO has recorded in accordance with clause 6.3B.8 that a Market Participant has not made a STEM Submission for a Trading Interval the IMO must not determine STEM Offers or STEM Bids ~~or MCAP Price Curves~~ for that Market Participant in that Trading Interval.

### Resource Plans ~~and Balancing Data~~

#### 6.11. Format of Resource Plans

- 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~~the identity of the Market Participant making the submission;
  - (aA) ~~[blank]in the case of:~~
    - i ~~Resource Plan Submission data, the Trading Day to which the submission relates; and~~
    - ii ~~Standing Resource Plan Submission data, the day of the week to which the submission relates, where data provided for a day of the week relates to the Trading Day commencing on that day;~~
  - (b) ~~in respect of~~ each Scheduled Generator and Dispatchable Load registered by the Market Participant:
    - i. ~~[blank]the name of the Facility;~~
    - ii. ~~[blank]for a Scheduled Generator, the intended times of synchronisation and de-synchronisation, expressed to the nearest minute, during the Trading Day;~~
    - iii. the energy to be sent-out or consumed during each Trading Interval of the Trading Day ~~included in the submission, where this amount:~~
      - 1. ~~must be expressed in units of MWh;~~
      - 2. ~~must be expressed to a precision of 0.001 MWh;~~
      - 3. ~~must be zero if the Facility is expected not to operate during the Trading Interval; and~~



- (c) it must ~~not~~ include only Scheduled Generators or Dispatchable Loads Interruptible Loads or Demand Side Programmes; and
- (d) it must meet the requirements of clause 6.5C.7 ~~the net energy scheduled in the Resource Plan Submission data (or Resource Plan Submission data derived from Standing Resource Plan Submission data), after Loss Factor adjusting the Scheduled Generator, Non-Scheduled Generator, and Dispatchable Load energy, and taking into account shortfalls indicated in accordance with clause 6.11.1(e), for each Trading Interval included in the submission must equal the Net Contract Position of the Market Participant for that Trading Interval.~~

### **6.11A. Format of Balancing Data**

~~6.11A.1. A Market Participant submitting Balancing Data Submission data must include in the submission:~~

- ~~(a) the identity of the Market Participant making the submission;~~
- ~~(b) for each Scheduled Generator registered by the Market Participant:
  - ~~i. the name of the Facility;~~
  - ~~ii. if the Facility is registered as being capable of running on Non-Liquid Fuel, the following prices to apply for the Trading Day:
    - ~~1. a Non-Liquid Supply Increase Price for Peak Trading Intervals;~~
    - ~~2. a Non-Liquid Supply Decrease Price for Peak Trading Intervals, where this price must be not greater than that in (1);~~
    - ~~3. a Non-Liquid Supply Increase Price for Off-Peak Trading Intervals; and~~
    - ~~4. a Non-Liquid Supply Decrease Price for Off-Peak Trading Intervals, where this price must be not greater than that in (3);~~where these prices must be not less than the Minimum STEM Price, not more than the Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh; and~~
  - ~~iii. if the Facility is registered as being capable of running on Liquid Fuel, the following prices to apply for the Trading Day:
    - ~~1. a Liquid Supply Increase Price for Peak Trading Intervals;~~
    - ~~2. a Liquid Supply Decrease Price for Peak Trading Intervals, where this price must be not greater than that in (1);~~~~~~

- ~~3. a Liquid Supply Increase Price for Off-Peak Trading Intervals; and~~
- ~~4. a Liquid Supply Decrease Price for Off-Peak Trading Intervals, where this price must be not greater than that in (3);~~

~~where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh~~

~~(c) for each Dispatchable Load registered by the Market Participant:~~

- ~~i. the name of the Facility;~~
- ~~ii. the following prices to apply for the Trading Day:~~
  - ~~1. a Consumption Increase Price for Peak Trading Intervals;~~
  - ~~2. a Consumption Decrease Price for Peak Trading Intervals, where this price must be not less than that in (1);~~
  - ~~3. a Consumption Increase Price for Off-Peak Trading Intervals; and~~
  - ~~4. a Consumption Decrease Price for Off-Peak Trading Intervals, where this price must be not less than that in (3);~~

~~where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh; and~~

~~(d) for each Curtailable Load registered by the Market Participant:~~

- ~~i. the name of the Facility;~~
- ~~ii. the following prices to apply for the Trading Day:~~
  - ~~1. A Consumption Decrease Price for Peak Trading Intervals;~~
  - ~~2. A Consumption Decrease Price for Off-Peak Trading Intervals,~~

~~where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh.~~

~~6.11A.2. For Balancing Data Submission data to be valid:~~

- ~~(a) it must conform to the format specified in clause 6.11A.1; and~~
- ~~(b) it must only include Facilities registered by the submitting Market Participant.~~

## The Non-Balancing Dispatch Merit Order

### 6.12. The Non-Balancing Dispatch Merit Order

#### 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)-or clause 6.5A.1(b))~~ the IMO must determine the Non-Balancing Dispatch Merit Orders identified in paragraphs (b) to (g). A Non-Balancing Dispatch Merit Order lists the order in which the ~~Scheduled Generators and Dispatchable Loads~~ and Demand Side Programmes of Market Participants other than ~~the Electricity Generation Corporation Verve Energy~~ will, ~~in the absence of transmission limitations or limitations necessary to maintain Power System Security,~~ be issued Dispatch Instructions by System Management under clause 7.6.1B(d) to increase or decrease output.
- (b) A Non-Balancing Dispatch Merit Order for ~~an increase in generation or 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 into account the following principles when determining this Non-Balancing Dispatch Merit Order:
- i. this Non-Balancing Dispatch Merit Order must list all ~~Scheduled Generators, Demand Side Programmes~~ and Dispatchable Loads registered by Market Participants other than ~~the Electricity Generation Corporation Verve Energy~~; and
  - ii. this Non-Balancing Dispatch Merit Order must be determined ~~applying the Market Participant Balancing Data applicable to the Trading Day~~ by ranking the Registered Facilities referred to in (i) in increasing order of the:
    1. ~~Non-Liquid Supply Increase Price for Peak Trading Intervals;~~
    2. ~~Liquid Supply Increase Price for Peak Trading Intervals; or~~
    3. ~~Consumption Decrease Price for Peak Trading Intervals,~~  
~~as applicable;~~
  - iii. ~~dual fuelled Facilities must appear in the position determined by the prices referred to in paragraph (ii) when the Facility is not running on Liquid Fuel and again in the position determined by those prices when the Facility is running on Liquid Fuel; and~~
  - iv. ~~Liquid Fuelled Facilities, including dual fuelled Facilities running on Liquid Fuel, must be indicated with a flag.~~

- (c) A Non-Balancing Dispatch Merit Order for an ~~n decrease in generation or~~ increase 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 into account the following principles when determining this Non-Balancing Dispatch Merit Order:
- i. this Non-Balancing Dispatch Merit Order must list all ~~Scheduled Generators, Non-Scheduled Generators and~~ Dispatchable Loads and Demand Side Programmes registered by Market Participants other than ~~the Electricity Generation Corporation~~ Verve Energy;
  - ii. this Non-Balancing Dispatch Merit Order must be determined ~~applying the Market Participant Balancing Data applicable to the Trading Day~~ by ranking the Registered Facilities referred to in paragraph (i) in decreasing order of the:
    1. ~~Non-Liquid Supply Decrease Price for Peak Trading Intervals;~~
    2. ~~Liquid Supply Decrease Price for Peak Trading Intervals;~~ or
    3. ~~Consumption Increase Price for Peak Trading Intervals;~~ as applicable.
  - iii. ~~dual fuelled Facilities must appear in the position determined by the prices referred to in paragraph (ii) when the Facility is not running on Liquid Fuel and again in the position determined by those prices when the Facility is running on Liquid Fuel; and~~
  - iv. ~~Liquid Fuelled Facilities, including dual fuelled Facilities running on Liquid Fuel, must be indicated with a flag;~~
- ~~(d) A Dispatch Merit Order for decommitment of Scheduled Generators relative to the unit commitment indicated by the applicable Resource Plan during Peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:~~
- i. ~~this Dispatch Merit Order must list all Scheduled Generators registered by Market Participants other than the Electricity Generation Corporation;~~
  - ii. ~~this Dispatch Merit Order must be determined applying the Standing Data described in Appendix 1(c)(i)(2) by ranking the Registered Facilities referred to in paragraph (i) in increasing order of the dollar amount paid to the Market Participant for a decommitment of the Facility.~~
- (de) A Non-Balancing Dispatch Merit Order for a ~~n increase in generation or~~ 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 into account the following principles when determining this Non-Balancing Dispatch Merit Order:

- i. this Non-Balancing Dispatch Merit Order must list all ~~Scheduled Generators, Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads registered by Market Participants other than ~~the Electricity Generation Corporation~~ Verve Energy;
- ii. this Non-Balancing Dispatch Merit Order must be determined ~~applying the Market Participant Balancing Data applicable to the Trading Day~~ by ranking the Registered Facilities referred to in paragraph (i) in increasing order of the:
  1. ~~Non-Liquid Supply Increase Price for Off-Peak Trading Intervals;~~
  2. ~~Liquid Supply Increase Price for Off-Peak Trading Intervals;~~  
or
  3. ~~Consumption Decrease Price for Off-Peak Trading Intervals, as applicable;~~
- iii. ~~dual fuelled facilities must appear in the position determined by the prices referred to in paragraph (ii) when the Facility is not running on Liquid Fuel and again in a position determined by those prices when the Facility is running on Liquid Fuel; and~~
- iv. ~~Liquid Fuelled Facilities, including dual fuelled Facilities running on Liquid Fuel, must be indicated with a flag.~~

(ef) A Non-Balancing Dispatch Merit Order for an ~~increase or~~ increase in consumption relative to the quantities included in the applicable Resource Plan (or zero where the quantity was not included in a Resource Plan Submission) 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 ~~Scheduled Generators, Non-Scheduled Generators and~~ Dispatchable Loads registered by Market Participants other than ~~the Electricity Generation Corporation~~ Verve Energy;
- ii. this Non-Balancing Dispatch Merit Order must be determined ~~applying the Market Participant Balancing Data applicable to the Trading Day~~ by ranking the Registered Facilities referred to in paragraph (i) in decreasing order of the:
  1. ~~Non-Liquid Supply Decrease Price for Off-Peak Trading Intervals;~~

- ~~2. Liquid Supply Decrease Price for Off-Peak Trading Intervals;  
or~~
- ~~3. Consumption Increase Price for Off-Peak Trading Intervals;  
as applicable.~~
- ~~iii. dual fuelled Facilities must appear in the position determined by the prices referred to in paragraph (ii) when the Facility is not running on Liquid Fuel and again in a position determined by those prices when the Facility is running on Liquid Fuel; and~~
- ~~iv. Liquid Fuelled Facilities, including dual fuelled Facilities running on Liquid Fuel, must be indicated with a flag.~~
- ~~(g) A Dispatch Merit Order for decommitment of Scheduled Generators relative to the unit commitment indicated by the applicable Resource Plan during Off-Peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:~~
  - ~~i. this Dispatch Merit Order must list all Scheduled Generators registered by Market Participants other than the Electricity Generation Corporation;~~
  - ~~ii. this Dispatch Merit Order must be determined applying the Standing Data described in Appendix 1(c)(i)(2) by ranking the Registered Facilities referred to in paragraph (i) in increasing order of the dollar amount paid to the Market Participant for a decommitment of the Facility during Off-Peak Trading Intervals.~~
- ~~(h) Where the prices in Balancing Data or payments described in Standing Data, as applicable, for two or more Registered FacilitiesMarket Participants are equal, then, for the purpose of determining the ranking in any Non-Balancing Dispatch Merit Order, other than those for decommitment, the IMO must rank a Registered Facility with a greater load registered in Standing Data in items (h)(iii) or (i)(iii) of Appendix 1 before a Registered Facility with a lesser load. In the event of a tie, the IMO is to randomly assign priority to break the tie. sent out capacity registered in Standing Data before a Registered Facility with a lesser sent out capacity. For a Dispatch Merit Order for decommitment, the IMO must rank a Registered Facility with a greater name plate capacity registered in Standing Data before a Registered Facility with a lesser name plate capacity.~~

## Balancing Pricing and Quantities

### 6.13. Real Time Dispatch Information

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

### **6.14. Calculation of MCAP, UDAP and DDAP[blank]**

~~6.14.1.— Subject to clause 6.14.1A, by 3 PM on the first Business Day following the end of a Trading Day, the IMO must calculate and publish for each Trading Interval on the Trading Day:~~

- ~~(a) — the Marginal Cost Administered Price (MCAP);~~
  - ~~(b) — the Upward Deviation Administered Price (UDAP); and~~
  - ~~(c) — the Downward Deviation Administered Price (DDAP);~~
- ~~in accordance with this clause 6.14.~~

~~6.14.1A.— If System Management advises the IMO that it has been prevented from completing the relevant processes that enable the provision of the data described in clause 7.13.1, the IMO may extend the timeline prescribed in clause 6.14.1, subject to any such extension not resulting in a delay of that timeline of more than two business days, and must advise Rule Participants of any such extension as soon as practicable.~~

~~6.14.2. The value of MCAP for a Trading Interval is calculated as follows: (a) — If the STEM Auction was suspended for the Trading Interval under clause 6.10.1, and the process described in clause 6.9 cannot subsequently be completed by the time MCAP must be published under clause 6.14.1, the IMO must determine MCAP for the Trading Interval to be the value of MCAP for the equivalent Trading Interval:~~

- ~~i. — if the IMO is determining MCAP for a Business Day, MCAP will be the value for the most recent Trading Day in the past which is a Business Day and commenced on the same day of the week;~~
- ~~ii. — if the IMO is determining MCAP for a day which is not a Business Day, MCAP will be the value for the most recent Trading Day in the past which is not a Business Day.~~

~~(b) — If the STEM Auction was not suspended for the Trading Interval under clause 6.10.1, or was suspended but the process described in clause 6.9 can subsequently be completed for the purposes of this clause by the time MCAP must be published under clause 6.14.1, then MCAP must be calculated in accordance with clause 6.14.3.~~

~~6.14.3.— Where MCAP is to be calculated in accordance with this clause under clause 6.14.2(b):~~

~~6.14.4.— For the purposes of clause 6.14.3:~~

- ~~(a) — the “Operational System Load Estimate” for a Trading Interval is the estimate that the IMO receives from System Management of the total Loss Factor adjusted MWh consumption supplied via the SWIS during that Trading Interval. This estimate equals the total loss adjusted generator~~

~~sent out energy as estimated from generator operational meter data and the use of state estimator systems;~~

~~(b) [Blank]~~

~~(c) the “Scheduled System Load” for a Trading Interval is the sum of:~~

- ~~i. the sum over all Resource Plans for that Trading Interval of the total Loss Factor adjusted generation scheduled in each Resource Plan;~~
- ~~ii. the sum over all Resource Plans of the shortfall quantity for that Trading Interval as described in clause 6.11.1(e); and~~
- ~~iii. the Net Contract Position of the Electricity Generation Corporation for that Trading Interval.~~

~~(d) the “Relevant Quantity” equals:~~

- ~~i. the Operational System Load Estimate for the Trading Interval; plus~~
- ~~ii. IMO’s estimate of the total MWh demand curtailed during that Trading Interval (if any); minus~~
- ~~iii. the IMO’s estimate of the amount by which energy provided by Market Generators other than the Electricity Generation Corporation deviates from the relevant Resource Plan quantities. This estimate equals:~~
  - ~~1. the Operational System Load Estimate for the Trading Interval; minus~~
  - ~~2. the total Loss Factor adjusted generator sent out energy of the Electricity Generation Corporation based on SCADA data for the Trading Interval; minus~~
  - ~~3. the sum over all Resource Plan Submissions of the total Loss Factor adjusted sent out energy included in each Resource Plan for the Trading Interval; minus~~
  - ~~4. the sum over all Resource Plan Submissions of the absolute value of each shortfall included in accordance with clause 6.11.1(e) for the Trading Interval~~

~~6.14.5. The value of UDAP for a Trading Interval equals:~~

- ~~(a) 0.5 x MCAP during Peak Trading Intervals; and~~
- ~~(b) zero during Off-Peak Trading Intervals.~~

~~6.14.6. The value of DDAP for a Trading Interval equals the lesser of:~~

- ~~(a) the Alternative Maximum STEM Price; and~~
- ~~(b) the greater of:~~
  - ~~i. the Minimum STEM Price; and~~

ii. ~~the price that is:~~

1. ~~1.3 x MCAP for Peak Trading Intervals; and~~

2. ~~1.1 x MCAP for Off-peak Trading Intervals.~~

6.14.7. ~~Once published under clause 6.14.1, MCAP, UDAP and DDAP cannot be altered, either through disagreement under clause 9.20.6, or through dispute under clause 9.21.~~

### **6.15 ~~The Dispatch Schedule~~**

6.15.1. ~~For a Market Participant other than the Electricity Generation Corporation, the Dispatch Schedule for a Trading Interval for a [Scheduled Generator (excluding those to which clauses 3.21.2, 3.21A.14 or 4.25.10 apply) or] Dispatchable Load is:~~

(a) ~~where no Dispatch Instructions were issued in respect of the Registered Facility for the Trading Interval, equal to the energy to be generated and sent out or consumed by the Registered Facility indicated in the applicable Resource Plan (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity of energy so that the result is measured at the Reference Node) for that Trading Interval plus;~~

i. ~~where the Metered Schedule for the Trading Interval is higher than or equal to the applicable Resource Plan value, the Facility's Facility Dispatch Tolerance as a positive value to the extent that the resulting Dispatch Schedule does not exceed the Metered Schedule or~~

ii. ~~where the Metered Schedule for the Trading Interval is lower than the applicable Resource Plan value, the Facility's Facility Dispatch Tolerance as a negative value to the extent that the resulting Dispatch Schedule is not lower than the Metered Schedule;~~

~~[(b) where one or more Dispatch Instructions that specified a target MW output level or an instruction under a Network Control Service Contract were issued to the Market Participant in respect of the Registered Facility for the Trading Interval, equal to:~~

i. ~~where:~~

1. ~~the Metered Schedule plus the Facility's Facility Dispatch Tolerance is greater than or equal to the amount calculated in accordance with Appendix 7 plus the quantities under a Network Control Service Contract instructions plus Balancing Support Contract energy dispatched (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the amount calculated in accordance with Appendix 7, to the Facility Dispatch Tolerance, to the~~

~~quantities under a Network Control Service Contract and to the quantities under a Balancing Support Contract so that in each case the result is measured at the Reference Node); and~~

~~2. the Metered Schedule less the Facility's Facility Dispatch Tolerance is less than or equal to the amount calculated in accordance with Appendix 7 plus the quantities under a Network Control Service Contract instructions plus Balancing Support Contract energy dispatched (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the amount calculated in accordance with Appendix 7, to the Facility Dispatch Tolerance, to the quantities under a Network Control Service Contract and to the quantities under a Balancing Support Contract so that in each case the result is measured at the Reference Node);~~

~~then the Metered Schedule; or~~

~~ii. otherwise, the amount calculated in accordance with Appendix 7 plus the quantities under a Network Control Service Contract instructions plus Balancing Support Contract (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the amount calculated in accordance with Appendix 7, to the quantities under a Network Control Service Contract and to the quantities under a Balancing Support Contract so that the result is measured at the Reference Node).]~~

~~6.15.2. The Dispatch Schedule for a Trading Interval for any of the following Facilities equals the corresponding Metered Schedule:~~

~~(a) a Non-Scheduled Generator;~~

~~(aA) a Scheduled Generator to which clauses 3.21.2, 3.21A.14 or 4.25.10 apply;~~

~~(b) a Non-Dispatchable Load;~~

~~(c) a Curtailable Load;~~

~~(d) an Interruptible Load;~~

~~(e) a Scheduled Generator or Dispatchable Load registered by the Electricity Generation Corporation; and~~

~~(f) a Scheduled Generator or Dispatchable Load registered by a Market Participant (other than the Electricity Generation Corporation) where a Dispatch Instruction of the type described in clause 7.7.3(d)(ii) was issued to the Market Participant in respect of the Facility.~~

### **6.15. Theoretical Energy Schedule**

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

- (a) for a Balancing Facility which is a Scheduled Generator, the amount which is the lesser of:
  - i. the maximum amount of sent out energy (in MWh) which could have been dispatched by the Balancing Facility operating at its Ramp Rate Limit in the Trading Interval. The amount must be derived from the Bids and Offers in respect of the Balancing Facility with a Loss Factor Adjusted Price less than or equal to the Balancing Price, taking into account the Ramp Rate Limit associated with the Bid or Offer and the Balancing Facility's SOI Quantity; and
  - ii. where the Balancing Facility is subject to a Planned Outage, a Forced Outage or a Consequential Outage - the maximum amount of sent out energy (in MWh) which could have been dispatched given the Available Capacity for that Trading Interval.
- (b) for a Balancing Facility which is a Non-Scheduled Generator:
  - i. if a Dispatch Instruction was issued to the Balancing Facility to decrease its output, System Management's estimate of the maximum amount of sent out energy (in MWh) which the Balancing Facility would have supplied in the Trading Interval had the Dispatch Instruction not been issued; and
  - ii. otherwise the Sent Out Metered Schedule for the Balancing Facility;

or

- (c) for the Verve Energy 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 the Balancing Portfolio Supply Curve with an associated price less than or equal to the Balancing Price, taking into account the Portfolio Ramp Rate Limit and sent out MW level at the start of the Trading Interval.

### **6.16. The Metered Schedule**

6.16.1. Subject to clause 9.3.3, the IMO must determine the Metered Schedule for a Trading Interval for a Registered Facility or Non-Dispatchable Load is determined by the IMO in accordance with clause 9.3.4.

6.16.1A. For the purposes of clauses 6.16A and 6.16B, Sent Out Metered Schedules for a Balancing Facility are to be calculated by the IMO.

6.16.2. The IMO must determine the Demand Side Programme Load for a Demand Side Programme for a Trading Interval as the total net MWh quantity of energy consumed by the Associated Loads of that Demand Side Programme during the

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Trading Interval, determined from Meter Data Submissions and expressed as a positive non-ILoss Factor adjusted value.

### **6.16A. Facility Out of Merit Generation**

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

(a) subject to 6.16A.1(b), the Sent Out Metered Schedule less the Theoretical Energy Schedule; or

(b) zero where:

- i. 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 or clause 7.7.1A;
- ii. the Facility was undergoing a Test or complying with an Operating Instruction; or
- iii. the Sent Out Metered Schedule less the Theoretical Energy Schedule is less than the sum of:
  - 1 if instructed by System Management to provide LFAS, the Upwards LFAS Enablement expressed in MWh; and
  - 2 the applicable Settlement ~~Facility Dispatch~~ Tolerance.

6.16A.2. For a Balancing Facility that is a Non-Scheduled Generator, in a Trading Interval, the Upwards Out of Merit Generation equals the Sent Out Metered Schedule less the Theoretical Energy Schedule.

6.16A.3. The Downwards Out of Merit Generation in a Trading Interval for a Balancing Facility equals:

(a) subject to clause 6.16A.3(b), the Theoretical Energy Schedule less the Sent Out Metered Schedule; or

(b) zero if:

- i. 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 or clause 7.7.1A;
- ii. the Facility was undergoing a Test or complying with an Operating Instruction; or
- iii. the Theoretical Energy Schedule less the Sent Out Metered Schedule is less than the sum of:
  - 1 if instructed by System Management to provide LFAS, the Downwards LFAS Enablement expressed in MWh; and

2 the applicable Settlement Tolerance.

### **6.16B. Portfolio Out of Merit Generation**

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

(a) subject to clause 6.16B.1(b) the sum of relevant facility Sent Out Metered Schedules less the Theoretical Energy Schedule for the Verve Energy 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 Verve Energy has not adequately or appropriately complied with a Dispatch Order in respect of the Verve Energy Balancing Portfolio; or
- ii. the sum of the relevant facility Sent Out Metered Schedules less the Theoretical Portfolio Dispatch Schedule is less than the sum of:
  - 1 any sent out energy dispatched on by System Management from a Network Control Service Contract associated with a Facility within the Verve Energy Balancing Portfolio; or
  - 2 if Facilities within the Verve Energy Balancing Portfolio were instructed by System Management to provide LFAS, the sum of Upwards LFAS Enablement and Upwards LFAS Backup Enablement expressed in MWh; and
  - 3 the Portfolio Settlement Tolerance.

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

(a) subject to clause 6.16B.2(b), the Theoretical Energy Schedule less the sum of relevant facility Metered Schedules; or

(b) zero if:

- i. System Management has provided a report to the IMO under clause 7.10.7 and the IMO determines that Verve Energy has not adequately or appropriately complied with a Dispatch Order; or
- ii. the Theoretical Energy Schedule of the Verve Energy Balancing Portfolio less the sum of the relevant facility Sent Out Metered Schedules is less than the sum of:
  - 1 any sent out energy dispatched by System Management from a Network Control Service Contract associated with a Facility within the Verve Energy Balancing Portfolio; and
  - 2 if Facilities within the Verve Energy Balancing Portfolio were instructed by System Management to provide LFAS, the

sum of the Downwards LFAS Enablement plus the Downwards LFAS Backup Enablement expressed in MWh; and

3 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:

(a) the Metered Balancing Quantity;

(b) the Non-Balancing Facility Dispatch Instruction Payment;

(c) Loss Factor adjusted Facility Constrained On Quantities and associated prices;

(d) Loss Factor adjusted Facility Constrained Off Quantities and associated prices;

(e) Loss Factor adjusted Constrained On Verve Energy Balancing Portfolio Quantities and associated prices; and

(f) Loss Factor adjusted Verve Energy Balancing Portfolio Constrained Off Verve Energy Balancing Portfolio Quantities and associated prices,

in accordance with this clause 6.17.

~~(ag) the Authorised Deviation Quantity;~~

~~(b) the Upward Unauthorised Deviation Quantity;~~

~~(c) the Downward Unauthorised Deviation Quantity; and~~

~~(d) [Blank]~~

~~(e) the Dispatch Instruction Payment,~~

~~in accordance with this clause 6.17.~~

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

(a) the net sum of all ~~Metered Schedules the Dispatch Schedules~~ for Trading Interval t for the Registered Facilities registered by Market Participant p and Non-Dispatchable Loads associated with Market Participant p as indicated in Standing Data,

(b) less, the Net Contract Position of Market Participant p in Trading Interval t;

(c) ~~[blank]less, the sum over all of Market Participant p's Facilities of the Balancing Support Contract energy dispatched from them in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) (where for the purpose of this calculation a Loss Factor~~

~~adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node);~~

- ~~(cA) less, the sum over all of Market Participant p's Facilities of the Network Control Service Contract energy dispatched from them in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node);~~
- ~~(d) plus, if the Market Participant is the Electricity Generation Corporation, the sum over all Market Participants (excluding the Electricity Generation Corporation) of the Balancing Support Contract energy dispatched from their Facilities in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node);~~

### **Constrained On Facility Balancing Quantities**

6.17.2A Clauses 6.17.3, 6.17.4 and 6.7.4B do not apply to Facilities in the Verve Energy Balancing Portfolio.

6.17.3. Subject to clause 6.17.2A, the IMO must attribute any Upwards Out of Merit Generation from a Balancing Facility that is a Scheduled Generator in a Trading Interval, to the Bids and Offers for that Balancing Facility as follows:

- (a) Constrained On Quantity1 (ConQ1) equals the lesser of:
- i. the maximum energy (in MWh) which could have been dispatched from the Balancing Facility's Bid or Offer N with a Loss Factor Adjusted Price higher than but closest to the Balancing Price, taking into account the actual SOI Quantity of the Balancing Facility and the applicable Ramp Rate Limit; and
  - ii. the Upwards Out of Merit Generation for the Balancing Facility.
- (b) Constrained on Compensation Price1 (ConP1) equals the Loss Factor Adjusted Price of Offer or Bid N identified in 6.17.3(a) less the Balancing Price.
- (c) If the Balancing Facility's Upwards Out of Merit Generation exceeds ConQ1, then additional Constrained On Quantity2 (ConQ2) equals the lesser of:
- i. the maximum energy (MWh) which could have been dispatched from Balancing Facility's Bid or Offer N+1 with a price higher than

- but closest to the price of Bid or Offer N, taking into account when the Balancing Facility's MW level reached the top of Bid or Offer N in this determination and the applicable Ramp Rate Limit; and
- ii. the Upwards Out of Merit Generation for the Balancing Facility less ConQ1.
- (d) The IMO must repeat the processes set out in paragraphs (a) to (c) above to identify, from the next highest priced Bid or Offer, N+1, any ConQN+1 and ConPN+1.
- (e) The Non-Qualifying Constrained On Generation for the Balancing Facility equals the sum of any sent out energy (in MWh) from a Network Control Service Contract dispatched on by System Management and any Upwards LFAS Enablement, expressed as sent out MWh, which the Balancing Facility was instructed to provide by System Management;
- (f) If the Non-Qualifying Constrained On Generation exceeds ConQ1, set ConQ1 to zero; otherwise reduce ConQ1 by the amount of Non-Qualifying Constrained On Generation.
- (g) The IMO must repeat the process set out in paragraph (f) above for each ConQN in ascending order until all Non-Qualifying Constrained On Generation has been deducted from ConQN.
- (h) For settlement purposes under Chapter 9, the IMO must Loss Factor adjust each ConQN calculated in paragraphs (a) to (f) above.

### **Constrained Off Facility Balancing Quantities**

6.17.4. Subject to clause 6.17.2A, the IMO must attribute any Downwards Out of Merit Generation from a Balancing Facility that is a Scheduled Generator, in a Trading Interval, excluding Facilities within the Verve Energy Balancing Portfolio, to the Bids and Offers for that Balancing Facility as follows:

- (a) Constrained Off Quantity1 (CoffQ1) equals the lesser of:
- i. the maximum energy (in MWh) which could have been dispatched down from the Balancing Facility's Bid or Offer N with a Loss Factor Adjusted Price lower than but closest to the Balancing Price, taking into account the actual SOI Quantity of the Balancing Facility and the applicable Ramp Rate Limit; and
- ii. the Downwards Out of Merit Generation for the Balancing Facility.

- (b) Constrained Off Compensation Price<sup>1</sup> (CoffP1) equals the Loss Factor Adjusted Price of Offer or Bid N identified in 6.17.4(a) less the Balancing Price less.
- (c) If the Balancing Facility Downwards Out of Merit Generation exceeds CoffQ1, then Constrained Off Quantity<sup>2</sup> (CoffQ2) equals the lesser of:

  - i. the maximum energy (in MWh) which could have been dispatched down from Balancing Facility's Bid or Offer N+1 with a price lower than but closest to the price of Bid or Offer N, taking into account when the Balancing Facility's MW level reached the bottom of Bid or Offer N in the calculation in 6.17.4(a)(i) and the Ramp Rate Limit; and
  - ii. the Downwards Out of Merit Generation for the Balancing Facility less CoffQ1.
- (d) The IMO must repeat the processes set out in paragraphs (a) to (c) above to identify, from the next lowest priced Bid or Offer N+1, any CoffQN+1 and CoffPN+1.
- (e) The Non-Qualifying Constrained Off Generation for the Balancing Facility equals the sum of any sent out energy (in MWh) on from a Network Control Service Contract dispatched off by System Management and any Downwards LFAS Enablement expressed as sent out MWh, which the Balancing Facility was instructed to provide by System Management.
- (f) If the Non-Qualifying Constrained Off Generation exceeds CoffQ1, set CoffQ1 to zero; otherwise reduce CoffQ1 by the amount of Non-Qualifying Constrained Off Generation.
- (g) The IMO must repeat the process set out in paragraph (f) above for each CoffQN in ascending order until all Non-Qualifying Constrained Off Generation has been deducted from CoffQN.
- (h) For settlement purposes under Chapter 9, the IMO must Loss Factor adjust each CoffQN calculated in paragraphs (a) to (f) above.

6.17.4B. Subject to clause 6.17.2A, for any Balancing Facility that is a Non-Scheduled Generator, in a Trading Interval, CoffQ1 equals Loss Factor adjusted Downwards Out of Merit Generation (in MWh) and CoffP1 equals the Balancing Facility's Bid price.

### **Constrained On Verve Energy Balancing Portfolio Quantities**

6.17.5. The IMO must attribute any Upwards Out of Merit Generation from the Verve Energy Balancing Portfolio in a Trading Interval to the Balancing Portfolio Supply Curve as follows:

- (a) Portfolio Constrained On Quantity1 (PConQ1) equals the lesser of:
  - i. the maximum energy (in MWh) which could have been dispatched from the quantity tranche N in the Balancing Portfolio Supply Curve with a price higher than but closest to the Balancing Price, taking into account the actual Verve Energy Balancing Portfolio SOI Quantity and the Portfolio Ramp Rate Limit; and
  - ii. the Upwards Out of Merit Generation for the Verve Energy Balancing Portfolio.
- (b) Constrained on Compensation Price1 (PConP1) equals the price of tranche N identified in 6.17.5(a) less the Balancing Price.
- (c) If the Portfolio Upwards Out of Merit Generation exceeds PConQ1, then Portfolio Constrained On Quantity2 (PConQ2) equals the lesser of:
  - i. the maximum energy (in MWh) which could have been dispatched from Balancing Portfolio Supply Curve tranche N+1 with a price higher than but closest to the price of tranche N, taking into account when the Verve Energy Balancing Portfolio MW level reached the top of tranche N in the calculation in 6.17.5(a)(i) and the Portfolio Ramp Rate Limit; and
  - ii. the Portfolio Upwards Out of Merit Generation less PConQ1.
- (d) The IMO must repeat the process set out in paragraph (c) above to identify, from the next highest priced tranche N+1, any PConQN+1 and PConPN+1.
- (e) The Non-Qualifying Constrained On Generation for the Verve Energy Balancing Portfolio equals the total Upwards LFAS Enablement plus the Upwards LFAS Backup Enablement (in MWh) which System Management instructed Verve Energy to provide from Facilities in the Verve Energy Balancing Portfolio;
- (f) If the Non-Qualifying Constrained On Generation exceeds PConQ1, set PConQ1 to zero; otherwise reduce PConQ1 by the amount of Non-Qualifying Constrained On Generation;
- (g) The IMO must repeat the process set out in paragraph (f) above for each PConQN in ascending order until all Non-Qualifying Constrained On Generation has been deducted from PConQN;

- (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.

### **Constrained Off Verve Energy Balancing Portfolio Quantities**

6.17.6A. The IMO must attribute any Downwards Out of Merit Generation from the Verve Energy Balancing Portfolio in a Trading Interval to the Balancing Portfolio Supply Curve as follows:

- (a) Constrained Off Verve Energy Balancing Portfolio Quantity1 (PCoffQ1) equals the lesser of:
- i. the maximum energy (in MWh) which could have been dispatched down from the Balancing Portfolio Supply Curve tranche N with a price lower than but closest to the Balancing Price, taking into account the actual Verve Energy Balancing Portfolio MW level at the start of the Trading Interval and the Portfolio Ramp Rate Limit; and
  - ii. the Portfolio Downwards Out of Merit Generation.
- (b) Portfolio Constrained Off Compensation Price1 (PCoffP1) equals the Balancing Price less the price of tranche N identified in 6.17.6A(a).
- (c) If the Portfolio Downwards Out of Merit Generation (in MWh) exceeds PCoffQ2, then Constrained Off Verve Energy Balancing Portfolio Quantity2 (PCoffQ2) equals the lesser of:
- i. the maximum energy (in MWh) which could have been dispatched down from Portfolio Supply Curve tranche N+1 with a price lower than but closest to tranche N, taking into account when the Verve Energy MW level reached the bottom of tranche N in the calculation in 6.17.6A(a)(i) and the Portfolio Ramp Rate Limit; and
  - ii. the Portfolio Downwards Out of Merit Generation less PCoffQ1;
- (d) The IMO must repeat the process set out in paragraph (c) above to identify, from the next lowest priced tranche N+1, any PCoffQN and PCoffPN.
- (e) The Non-Qualifying Constrained Off Generation for the Verve Energy Balancing Portfolio equals the total Downwards LFAS Enablement plus the Downwards LFAS Backup Enablement (in MWh) which System Management instructed Verve Energy to provide from Facilities in the Verve Energy Balancing Portfolio;

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- ~~(f) If the Non-Qualifying Constrained Off Generation exceeds PCoffG1, set PCoffG1 to zero; otherwise reduce PCoffG1 by the amount of Non-Qualifying Constrained On Generation;~~
- ~~(g) The IMO must repeat the process set out in paragraph (f) above for each PCoffQN in ascending order until all Non-Qualifying Constrained On Generation has been deducted from PCoffQN;~~
- ~~(h) For settlement purposes under chapter 9, each PCoffQN calculated in this clause 6.17.6A is to be Loss Factor adjusted by the Portfolio Loss Factor.~~

~~6.17.3. The Upward Unauthorised Deviation Quantity, UUDQ(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals the sum over all that Market Participant's Registered Facilities, other than those to which clauses 3.21A.14 or 4.25.10 apply, of the greater of:~~

- ~~(a) the quantity that is:
  - ~~i. the Facility's Metered Schedule for Trading Interval t; less~~
  - ~~ii. the Facility's Dispatch Schedule for Trading Interval t; and~~~~
- ~~(b) zero.~~

~~6.17.4. The Downward Unauthorised Deviation Quantity, DUDQ(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals the sum over all that Market Participant's Registered Facilities, other than those to which clauses 3.21A.14 or 4.25.10 apply, of the lesser of:~~

- ~~(a) the quantity that is:
  - ~~i. the Facility's Metered Schedule for Trading Interval t; less~~
  - ~~ii. the Facility's Dispatch Schedule for Trading Interval t; and~~~~
- ~~(b) zero.~~

~~6.17.5. [Blank]~~

~~6.17.6. The Dispatch Instruction Payment, DIP(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals the sum of:~~

- ~~(a) zero, if Market Participant p:
  - ~~i. is the Electricity Generation Corporation; or~~
  - ~~ii. was issued no Dispatch Instructions or was issued instructions described by either (c) or (d) for the Trading Interval;~~~~
- ~~(b) the sum over all Scheduled Generators and Dispatchable Loads registered by the Market Participant of the following amounts for Trading Interval t:
  - ~~i. if the Dispatch Schedule for the Registered Facility is set in accordance with clause 6.15.1(a) for Trading Interval t, the~~~~

- ~~Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dB) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node), the amount for the Registered Facility is zero;~~
- ~~iA. if clauses 3.21A.14 or 4.25.10 apply to the Registered Facility during the Trading Interval, the amount for the Registered Facility is zero;~~
- ~~ii. if neither paragraph (i) nor (iA) applies, the amount for the Registered Facility is the product of:~~
- ~~1. the qualifying quantity for Trading Interval t as calculated in accordance with clause 6.17.8, less the sum of the quantity indicated in the applicable Resource Plan (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity so that the result is measured at the Reference Node) for the Registered Facility for Trading Interval t and the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and~~
  - ~~2. the price defined as:~~
    - ~~i. the contracted price, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract for System Restart, Dispatch Support or Load Rejection;~~

- ~~ii. zero, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract other than for System Restart, Dispatch Support or Load Rejection; or~~
    - ~~iii. the applicable price as defined by clause 6.17.7 less MCAP for Trading Interval t.~~
- ~~(c) the sum over all Non-Scheduled Generators registered by the Market Participant of the amount that is the product of:~~
  - ~~i. the quantity, defined as a negative value, by which the Non-Scheduled Generator was instructed by System Management to reduce its output (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and~~
  - ~~ii. the Standing Data price defined in Appendix 1(e)(v) that was current at the time of the Trading Interval for the Non-Scheduled Generator for a decrease in generation, (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval) less MCAP for the Trading Interval;~~
- ~~(d) the sum over all Curtailable Loads registered by the Market Participant of the amount that is the product of:~~
  - ~~i. the quantity by which the Curtailable Load was instructed by System Management to reduce its consumption; and~~
  - ~~ii. the price defined in clause 6.11A.1(d)(ii) that was current at the time of the Trading Interval for the Curtailable Load (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval).~~
- ~~(e) if the participant is given an instruction under a Network Control Service Contract then the sum over all Network Control Service Contract facilities registered by the Market Participant of the amount that is the product of:~~
  - ~~i. the quantity by which the facility was instructed by System Management to increase its output as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) or reduce its consumption as specified by System Management in accordance with clause 7.13.1(dB); and~~
  - ~~ii. the price as applicable under the relevant Network Control Service Contract for the facility as specified in clause 5.9.1(b).~~

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The following rule will commence on 1 October 2011, for additional information please refer to RC\_2008\_20:

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 ~~either the sum of:~~

- (a) zero, if Market Participant p:
  - i. is ~~the Electricity Generation Corporation Verve Energy~~; or
  - ii. was issued no Dispatch Instructions ~~or was issued instructions described by either (c) or (d) for the~~ Trading Interval t;

or the sum of:

- (b) subject to clause 6.17.7, the sum amount determined using the following formula, where RP is the quantity in the Facility's Resource Plan under clause 6.11.1(b)(iii) and MS is the quantity in the Facility's Metered Schedule over all Scheduled Generators and Dispatchable Loads registered by the Market Participant of the following amounts for Trading Interval t,:

- i. if the Dispatch Instruction was to decrease load:

$\text{Min}(-\text{RP} \times \text{LF} + \text{Metered Schedule}, \text{No. In clause 6.17.6B}) \times \text{Consumption Decrease Price}$ ; or

~~if the Dispatch Schedule for the Registered Facility is set in accordance with clause 6.15.1(a) for Trading Interval t, the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dB) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node), the amount for the Registered Facility is zero;~~

~~iA. if clauses 3.21A.14 or 4.25.10 apply to the Registered Facility during the Trading Interval, the amount for the Registered Facility is zero;~~

- ii. if the Dispatch Instruction was to increase load:

$\text{Max}(-\text{RP} \times \text{LF} + \text{Metered Schedule}, \text{No. In clause 6.17.6B}) \times \text{Consumption Increase Price}$ ; and

~~if neither paragraph (i) nor (iA) applies, the amount for the Registered Facility is the product of:~~

~~1. the qualifying quantity for Trading Interval t as calculated in accordance with clause 6.17.8, less the sum of the quantity indicated in the applicable Resource Plan (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity so that the result is measured at the Reference Node) for the Registered Facility for Trading Interval t and the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and~~

~~2. the price defined as:~~

~~i. the contracted price, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract for System Restart, Dispatch Support or Load Rejection;~~

~~ii. zero, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract other than for System Restart, Dispatch Support or Load Rejection, or~~

~~iii. the applicable price as defined by clause 6.17.7 less MGAP the Balancing Price for Trading Interval t.~~

~~(c) the sum over all Non-Scheduled Generators registered by the Market Participant of the amount that is the product of:~~

~~i. the quantity, defined as a negative value, by which the Non-Scheduled Generator was instructed by System Management to reduce its output (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and~~

~~ii. the Standing Data price defined in Appendix 1(e)(v) that was current at the time of the Trading Interval for the Non-Scheduled Generator for a decrease in generation, (accounting for whether the~~

~~Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval) less MCAP for the Trading Interval;~~

- (dc) the sum over all Demand Side Programmes registered to the Market Participant of the amount that is the product of:
- i. 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 lesser of:
    1. half of the Facility's Capacity Credits;
    2. the Dispatch Instruction amount provided by System Management in accordance with clause 7.13.1(eD); 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 price defined in the Market Participant's Balancing Data Submission Consumption Decrease Price that was current at the time of the Trading Interval for the Demand Side Programme (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval).

~~(cd) — if the participant is given an instruction under a Network Control Service Contract then the sum over all Network Control Service Contract facilities registered by the Market Participant of the amount that is the product of:~~

- ~~i. — the quantity by which the facility was instructed by System Management to increase its output as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) or reduce its consumption as specified by System Management in accordance with clause 7.13.1(dB); and~~
- ~~ii. — the price as applicable under the relevant Network Control Service Contract for the facility as specified in clause 5.9.1(b).~~

6.17.6B. System Management must, for each Trading Interval in which a Dispatchable Load was subject to a Dispatch Instruction, provide the IMO with the quantity, in MWh, by which the Dispatchable Load was dispatched together with information regarding whether it was dispatched upwards or downwards from its Resource Plan. System Management must provide this information to the IMO as soon as reasonably practicable but in any event in time for the IMO to undertake settlement under Chapter 9.

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6.17.7. The Consumption Decrease Price and Consumption Increase Price used in clauses 6.17.6(b)(i) and (ii) must be at the applicable Peak Trading Interval or Off Peak Trading Interval price.:

~~For the purpose of clause 6.17.6~~

~~(a) — if the Dispatch Schedule for a Registered Facility for Trading Interval t is greater than the sum of the Resource Plan schedule for the Registered Facility (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity so that the result is measured at the Reference Node) for Trading Interval t and the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13(dA) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node), then the applicable price is the Balancing Data price or the price defined in Appendix 1(e)(v) (depending on the context) that was current at the time of Trading Interval t for the Registered Facility, based on Fuel Declarations as modified by data provided by System Management in accordance with clause 7.13.1(eA), for an increase in generation or decrease in consumption, accounting for:~~

~~i. — whether Trading Interval t is a Peak Trading Interval or an Off Peak Trading Interval; and~~

~~ii. — whether the Registered Facility was running on Liquid Fuel at any time during Trading Interval t.~~

~~(b) — if paragraph (a) does not apply, then the applicable price is the Balancing Price Balancing Data price that was current at the time of Trading Interval t for the Registered Facility, based on Fuel Declarations as modified by? data provided by System Management in accordance with clause 7.13.1(eA), for a decrease in generation or increase in consumption, accounting for:~~

~~i. — whether Trading Interval t is a Peak Trading Interval or an Off Peak Trading Interval; and~~

~~ii. — whether the Registered Facility was running on Liquid Fuel at any time during Trading Interval t.~~

6.17.8. ~~For the purpose of clause 6.17.6:~~

~~(a) — if the applicable Balancing Data or Standing Data price for a Registered Facility for Trading Interval t is greater than or equal to MCAP the Balancing Price, then the qualifying quantity is the lesser of:~~

~~i. — the Metered Schedule quantity for the Registered Facility for Trading Interval t; and~~

~~ii. the Dispatch Schedule quantity for the Registered Facility for Trading Interval t; and~~

~~(b) if paragraph (a) does not apply, then the qualifying quantity is the greater of:~~

~~i. the Metered Schedule quantity for the Registered Facility for Trading Interval t; and~~

~~ii. the Dispatch Schedule quantity for the Registered Facility for Trading Interval t.~~

6.17.9. The IMO must other than for the Electricity Generation Corporation Verve Energy, determine a Facility Dispatch Settlement Tolerance for each Scheduled Generator and Dispatchable Load, where this Facility Dispatch Settlement Tolerance is equal to the lesser of:

(a) 3 MWh; and

(b) the greater of:

i. 0.5 MWh; and

ii. 3% of the Facility's:

1. sent out capacity in the case of a Scheduled Generator; or
2. nominated maximum consumption quantity in the case of a Dispatchable Load,

as set out in Standing Data divided by 2 to be expressed as MWhs.

6.17.10. The Portfolio Settlement Tolerance equals the lesser of:

(a) 3 MWh; and

(b) 3% of the Sent Out Capacity of the Verve Energy Balancing Portfolio.

### **6.18. [Blank] Commitment Compensation**

~~6.18.1. Subject to clause 6.18.3, Commitment Compensation will be payable by the IMO to a Market Participant (other than the Electricity Generation Corporation) in the event that:~~

~~(a) the Market Participant is instructed by System Management to start up a Scheduled Generator registered by the Market Participant more times than indicated in the applicable Resource Plan for that Scheduled Generator.~~

~~6.18.2. Subject to clause 6.18.3, the Commitment Compensation equals the sum of for each additional start up required of a Scheduled Generator during a Peak Trading Interval or Off-Peak Trading Interval the dollar amount for a commitment of the Facility specified in Standing Data, as defined in Appendix 1(c)(i).~~

~~6.18.3. No Commitment Compensation will be payable:~~

- ~~(a) to the Electricity Generation Corporation;~~
- ~~(b) for the first start in the Trading Day of a Scheduled Generator if the relevant Market Participant has Reserve Capacity Obligations in respect of that Facility; or~~
- ~~(c) for any start-up instructed by System Management in connection with any Ancillary Services Contract, Balancing Support Contract or Network Control Service Contract.~~

## Market Advisories and Energy Price Limits

### 6.19. Market Advisories

- 6.19.1. A Market Advisory is a notification by the IMO to Market Participants, Network Operators and System Management of an event that the IMO reasonably considers will, or is likely to, significantly may impact on market operations.
- 6.19.2. The IMO must issue a Market Advisory for future potential events described in clause 6.19.1 if the IMO considers there to be a high probability that the event will occur within 48 hours of the time of issue.

### 6.20. Energy Price Limits

6.20.4. [Blank]

~~The Minimum STEM Price to apply at any time is to be the Maximum STEM Price multiplied by negative one.~~

## Settlement Data

### 6.21. Settlement Data

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

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

- (a) ~~MCAP the Balancing Price, UDAP and DDAP;~~ and
  - (b) for each Market Participant:
    - i. ~~the Metered Balancing Quantity;~~
    - ii. ~~the Facility Loss Factor adjusted Constrained On Quantities and Loss Factor adjusted prices calculated in accordance with 6.17.3;~~
    - ii. ~~the Facility Loss Factor adjusted Constrained Off Quantities and Loss Factor adjusted prices calculated in accordance with 6.17.4;~~
    - iii. ~~the Verve Energy Balancing Portfolio Loss Factor adjusted Constrained On Quantities and prices calculated in accordance with 6.17.5;~~
    - iv. ~~the Verve Energy Balancing Portfolio Loss Factor adjusted Constrained Off Quantities and prices calculated in accordance with 6.17.6A; and~~
    - v. the Non-Balancing Facility Dispatch Instruction Payment; ~~and~~
    - vi. ~~any Commitment Compensation due to the Market Participant.~~
- ÷
- i. ~~the Authorised Deviation Quantity;~~
  - ii. ~~the Upward Unauthorised Deviation Quantity;~~
  - iii. ~~the Downward Unauthorised Deviation Quantity;~~
  - iv. ~~[Blank]~~

## 7. Dispatch

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

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

- 7.1.1. System Management must ~~maintain, in accordance with clause 7.6, use~~ the following data set ~~in giving and must use this data set when determining which~~ Dispatch Instructions to Non-Balancing Facilities, Dispatch Instructions to Balancing Facilities dispatched Out of Merit and in providing Operating Instructions it will give:
- (a) Standing Data on Registered Facilities determined in accordance with clause 2.34;
  - (b) Loss Factors determined in accordance with clause 2.27;
  - (c) expected Scheduled Generator and Non-Scheduled Generator capacities by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
  - (d) transmission Network configuration and capacity by Trading Interval determined in accordance with clauses 3.17.5, 3.17.6 and 3.17.8;
  - (e) forecasts of load and Non-Scheduled Generation by Trading Interval determined in accordance with clause 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 3.19;
  - (h) transmission Forced Outages and Consequential Outages by Trading Interval received from Network Operators in accordance with clause 3.21;
  - (i) Scheduled Generator, Non-Scheduled Generator, Dispatchable Load, and Interruptible Load Forced Outages and Consequential Outages by Trading Interval received from Market Participants in accordance with clause 3.21;
  - (j) ~~[Blank]Resource Plans by Trading Interval received from the IMO in accordance with clause 7.4;~~
  - (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 clause 7.5;

- (l) Supplementary Capacity Contract data, if any, received from the IMO in accordance with clause 4.24; and
- (m) Network Control Service Contract data, if any, received from a Network Operator in accordance with clause 5.3A.3 and 5.3A.4.

### 7.3. Outages

- 7.3.1. ~~[Blank] System Management must take account of Planned Outages in determining Dispatch Instructions.~~
- 7.3.2. ~~[Blank] System Management must, from the time it is notified of a Forced Outage or Consequential Outage in accordance with clause 3.21.4, take account of the Forced Outage or Consequential Outage in determining Dispatch Instructions.~~
- 7.3.3. [Blank].
- 7.3.4. System Management must provide to the IMO ~~the following information:~~
  - ~~(a) — a schedule of Planned Outages, Forced Outages and Consequential Outages for each Registered Facility of which System Management is aware at that time where outages are calculated in accordance with clause 3.21.6;~~
  - ~~(b) — [Blank]~~for each Trading Interval of a Trading Day, between 8:00AM and 8:30AM on the Scheduling Day prior to the Trading Day.
- 7.3.5. [Blank].
- 7.5.7. ~~In employing the Dispatch Merit Orders, System Management must assume that a Facility is operating on the fuel indicated for that Facility in the applicable Fuel Declaration except for Trading Intervals where the most recent notification received in accordance with clause 7.5.4 implies an alternative fuel is being used.~~

## Dispatch Process

### 7.6. The Dispatch Criteria

- 7.6.1. ~~Subject to clause 7.6.1B, W~~when scheduling and ~~issuing d~~Dispatching ~~Instructions or Dispatch Orders to the~~ Registered Facilities ~~of the Electricity Generation Corporation and issuing Dispatch Instructions to other Market Participants,~~ System Management must seek to meet the following criteria, in descending order of priority:
  - (a) to enable operation of the SWIS within the Technical Envelope parameters appropriate for the applicable Operating State;
  - (b) to minimise involuntary load shedding on the SWIS; and

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

7.6.1A. ~~Notwithstanding clauses 7.6.21C and 7.6.3,~~ System Management must give priority to the dispatch of a Registered Facility under a Network Control Service Contract over the dispatch of a Registered Facility under any other arrangement, if the Network Control Service provided under that contract would assist System Management to meet the Dispatch Criteria in clause 7.6.1.

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

- (a) a Network Control Service Contract;
- (b) an Ancillary Service Contract;
- (c) these Market Rules in connection with a Test; or
- (d) a Supplementary Capacity Contract.

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

- (a) Dispatch Instructions to Balancing Facilities in the order and for the quantities they appear in the BMO, taking into account Ramp Rate Limits;
- (b) a Dispatch Instruction to a Balancing Facility Out of Merit but only to the next Facility or Facilities, and associated quantity in the BMO that System Management reasonably considers best meets the Dispatch Criteria, taking into account the associated Ramp Rate Limit;
- (c) a Dispatch Instruction to any Balancing Facility Out of Merit, taking into account the Ramp Rate Limit and non-ramp rate Standing Data limitations and any other relevant information available to System Management; and
- (d) a Dispatch Instruction to a Non-Balancing Facility in accordance with the Non-Balancing Dispatch Merit Order, taking into account Standing Data limitations.

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

- (a) clause 7.6.1B(b) in priority to clause 7.6.1B(a);
- (b) clause 7.6.1B(c) in priority to clause 7.6.1B(b); and
- (c) clause 7.6.1B(d) in priority to clause 7.6.1B(c),

where:

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- (d) System Management considers, on reasonable grounds, that it needs to do so in order to avoid going into or is in a High Risk Operating State or an Emergency Operating State; or
- (e) a Market Participant has not confirmed, in accordance with clause 7.7.6(b), that it will comply, or is deemed under clause 7.7.6A to have refused to comply, with a Dispatch Instruction.
- 7.6.2. For the purposes of clauses 7.6.1 and 7.6.1B, the Verve Energy Balancing Portfolio is to be treated as a Balancing Facility but the dispatch of any Facility within the Verve Energy Balancing Portfolio is to be under a Dispatch Order in accordance with clause 7.6A, which is deemed to meet the requirements to issue a Dispatch Instruction in respect of the Verve Energy Balancing Portfolio. Subject to clauses 7.6.1, 7.6.2A, 7.6.3, 7.6.4, 7.6.6, System Management must schedule and dispatch the Registered Facilities of the Electricity Generation Corporation and Registered Facilities covered by any Balancing Support Contract or Ancillary Service Contract in such a way as to allow the implementation of the Resource Plans that it has received from the IMO for Market Participants other than the Electricity Generation Corporation.
- 7.6.2AA A reference to a Balancing Merit Order in this clause 7.6 means, for a Trading Interval:

  - (a) the Balancing Merit Order provided by the IMO to System Management under clause 7A.3.5(b);
  - (b) if no such Balancing Merit Order is provided, the most recent Forecast BMO for that Trading Interval provided under clause 7A.3.16(b);
  - (c) if no such Forecast BMO is provided, the Forecast BMO used for same Trading Interval the previous day; or
  - (d) if there is no such Forecast BMO, the most recent Forecast BMO provided for the same Trading Interval for the previous day.
- 7.6.2A. Where the Dispatch Criteria requires System Management to alter the Dispatch Plan of ~~the Electricity Generation Corporation~~Verve Energy, subject to the limitations imposed by this clause 7.6, System Management must employ reasonable endeavours to minimise the change in the Dispatch Plan and to have regard for the merit order of ~~Electricity Generation Corporation~~Verve Energy Facilities in the Verve Energy Balancing Portfolio.
- 7.6.3. ~~[Blank]Where meeting the criteria in clause 7.6.1 would otherwise require the use of Liquid Fuelled Registered Facilities of the Electricity Generation Corporation or Liquid Fuelled Registered Facilities covered by any Balancing Support Contract, or Ancillary Service Contract, then System Management may issue Dispatch~~

~~Instructions to Market Participants other than the Electricity Generation Corporation that, if followed, will allow it to meet the criteria in clause 7.6.1, provided that in issuing such Dispatch Instructions System Management does not issue Dispatch Instructions with respect to a Facility that would result in that Facility using Liquid Fuel.~~

- 7.6.4. ~~[Blank]Where System Management cannot meet the criteria in clause 7.6.1 by scheduling and dispatching the Registered Facilities of the Electricity Generation Corporation and Registered Facilities covered by any Balancing Support Contract, or Ancillary Service Contract in such a way as to allow the implementation of the Resource Plans that it has received from the IMO for Market Participants other than the Electricity Generation Corporation, System Management must issue Dispatch Instructions to Market Participants other than the Electricity Generation Corporation that will allow it to meet the criteria in clause 7.6.1.~~
- 7.6.5. ~~[Blank]Where System Management has issued a Dispatch Instruction in accordance with clause 7.6.3 or clause 7.6.4, but subject to clause 7.6.5A circumstances have changed, and it would not be able to issue the Dispatch Instruction under the relevant clause in the changed circumstances, System Management must cancel the Dispatch Instruction and issue directions to the relevant Market Participant in respect of the relevant Registered Facility to return to its Resource Plan for the relevant Trading Interval.~~
- 7.6.5A. ~~[Blank]System Management must not issue a Dispatch Instruction solely because a Market Participant has notified it of a change in fuel in accordance with clause 7.5.4, with the exception that if a Market Participant notifies System Management of a change in fuel after System Management has issued a Dispatch Instruction then System Management may change that Dispatch Instruction accordingly.~~
- 7.6.6. ~~[Blank]]System Management may issue Dispatch Instructions to Market Participants other than the Electricity Generation Corporation:~~
- ~~(a) — in accordance with any Ancillary Service Contract;~~
  - ~~(b) — in accordance with any Balancing Support Contract;~~
  - ~~(c) — in accordance with the details of any Network Control Service Contract, as advised to System Management by a Network Operator in accordance with clause 5.3A.3 or updated by a Network Operator in accordance with clause 5.2A.4;~~
  - ~~(d) — in connection with any test of equipment allowed under these Market Rules; or~~
  - ~~(e) — under clause 7.6.3 or clause 7.6.4.~~
- 7.6.7. ~~[Blank]System Management and the Electricity Generation Corporation may each enter into Balancing Support Contracts with Market Participants other than the~~

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~~Electricity Generation Corporation to assist them in meeting their obligations under this Chapter 7.~~

- 7.6.8. ~~[Blank]Where it intends to enter into a Balancing Support Contract, System Management must:~~
- ~~(a) — seek to minimise the cost of meeting its obligations under clause 7.6.2; and~~
  - ~~(b) — give consideration to using a tender process, unless System Management considers that this would not meet the requirements of paragraph (a).~~
- 7.6.9. ~~[Blank]Where System Management has entered into a Balancing Support Contract, System Management must report the capacity contracted and the terms for calling on the capacity to the IMO.~~
- 7.6.10. Where a Market Participant has Capacity Credits granted in respect of a Demand Side Programme:
- (a) the IMO must provide System Management with the details of the Reserve Capacity Obligations to enable System Management to dispatch the Demand Side Programme; and
  - (b) any Dispatch Instructions issued by System Management ~~may issue directions~~ to the Demand Side Programme must be in accordance with those Reserve Capacity Obligations.
- 7.6.11. Where the IMO has entered into Supplementary Capacity Contracts:
- (a) the IMO must provide System Management with the details of the Supplementary Capacity Contract to enable System Management to dispatch the services provided under it. Despite this, the IMO must not provide System Management with the payments terms of the contracts, which must be kept confidential;
  - (b) System Management may by issuing an Operating Instruction, call upon the relevant resource to provide services under any Supplementary Capacity Contract in accordance with the terms of the contract.
- 7.6.12. System Management may give a direction to a Market Participant (other than ~~the Electricity Generation Corporation~~Verve Energy) in respect of a Scheduled Generator or Non-Scheduled Generator registered by the Market Participant with regard to the reactive power output of that Facility in accordance with any power factor required under the Technical Rules applying to the relevant Network.
- 7.6.13. System Management must document in the Power System Operation Procedure the procedure to be followed, and must follow that documented Market Procedure, when scheduling and issuing Operating Instructions to dispatching Registered Facilities covered by any ~~Balancing Support Contract or~~ Ancillary Service Contract in a form sufficient for audits and investigations under these Market Rules.

### 7.6A. **Scheduling and Dispatch of the Verve Energy Balancing Portfolio**~~Electricity Generation Corporation~~

7.6A.1. Subject to System Management's obligations under clause 7.6, ~~¶~~ this clause 7.6A describes the rules governing the relationship between System Management and ~~the Electricity Generation Corporation~~Verve Energy for the purpose of scheduling and dispatching the Stand Alone Facilities for Ancillary Services other than LFAS and for scheduling and dispatching Registered Facilities of the Electricity Generation Corporation in the Verve Energy Balancing Portfolio generally.

7.6A.2. With respect to the scheduling of ~~the Electricity Generation Corporation~~Stand Alone Facilities for Ancillary Services other than LFAS and the scheduling of Facilities in the Verve Energy Balancing Portfolio generally:

- (a) ~~A~~at least once every month, ~~the Electricity Generation Corporation~~Verve Energy 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 its Verve Energy Balancing Portfolio are to be called upon and any restrictions on the operations of such Facilities;
  - ii. A plan for which fuels will be used in each Facility in its Verve Energy Balancing Portfolio and guidance as to how that plan might be varied depending on circumstance; ~~and~~
  - iii. A description as to how Ancillary Services are to be provided from Facilities in its Verve Energy Balancing Portfolio; and
  - iv. a description as to how Ancillary Services other than LFAS 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 ~~the Electricity Generation Corporation~~Verve Energy by 8:30AM 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 ~~the Electricity Generation Corporation~~Verve Energy by ~~12:30 PM~~ 4:00PM on the Scheduling Day associated with a Trading Day:
- i. a forecast of the requirements for ~~the Electricity Generation Corporation~~Verve Energy energy in its Verve Energy Balancing Portfolio, being a forecast of the whole of system energy requirement less the aggregate Net Contract Positions of other

Market Participants and less the aggregate forecast output of other Market Participants' Intermittent Generators, for the Trading Day;

- ii. the Dispatch Plan for each Facility for the Trading Day; and
- iii. a forecast of the detailed Ancillary Services required from each Facility in the Verve Energy Balancing Portfolio and Ancillary Services other than LFAS 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 the Electricity Generation Corporation-Verve Energy in developing the information described in (c) and ~~the Electricity Generation Corporation-Verve Energy~~ must provide System Management with any information required by System Management in accordance with a procedure to support the preparation of the information in (c). In the event of any failure by ~~the Electricity Generation Corporation-Verve Energy~~ 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) ~~[Blank]By 2:30 PM on the Scheduling Day associated with a Trading Day System Management must either confirm the Dispatch Plan specified in (c) with the Electricity Generation Corporation or notify the Electricity Generation Corporation of changes to the Dispatch Plan and forecast fuel requirement to reflect any changes required to accommodate Resource Plans or any changes in conditions.~~
- (f) If after ~~2:30 PM~~ 4:00PM 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 it may make such change but must notify ~~the Electricity Generation Corporation-Verve Energy~~ of such change.
- (g) ~~The Electricity Generation Corporation-Verve Energy~~ 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. and the dispatch of Electricity Generation Corporation-Verve Energy Facilities in the Verve Energy Balancing Portfolio generally, during a Trading Day:

- (a) System Management may issue an Operating Instruction for Stand Alone Facilities, and instruct Facilities in the Verve Energy Balancing Portfolio, to deviate from the Dispatch Plan, or to change their commitment or output, in accordance with the Dispatch Criteria or in response to System Management's powers under a High Risk Operating State or an Emergency Operating State; and

- (b) System Management must provide adequate notice to ~~the Electricity Generation Corporation~~Verve Energy, based on Standing Data, before a Facility in its Verve Energy Balancing Portfolio is required to respond to an instruction given under (a); and
  - (c) ~~The Electricity Generation Corporation~~Verve Energy must notify System Management as soon as practicable if ~~it~~ Verve Energy becomes aware that it is unable to comply with an instruction given under (a).
- 7.6A.4. With respect to the dispatch compliance of ~~the Electricity Generation Corporation~~Verve Energy for Facilities in its Verve Energy Balancing Portfolio:
- (a) System Management may deem ~~the Electricity Generation Corporation~~Verve Energy to be in non-compliance for a Trading Interval if ~~the Electricity Generation Corporation~~Verve Energy fails to comply with the Dispatch Plan, its obligations to provide Ancillary Services, or an instruction given under clause 7.6A.3(a), to an extent that could endanger Power System Security;
  - (b) In determining whether or not to deem ~~the Electricity Generation Corporation~~Verve Energy to be in non-compliance, System Management must give due regard to any reasonable mitigating circumstances of which ~~the Electricity Generation Corporation~~Verve Energy has notified it in accordance with clause 7.6A.3(c);
  - (c) In determining whether or not to deem ~~the Electricity Generation Corporation~~Verve Energy to be in non-compliance, System Management may only consider a deviation by an individual ~~Electricity Generation Corporation~~Verve Energy facility from an output level specified in any instruction from System Management to be non-compliance if the deviation at any time exceeds 10 MW; and
  - (d) In the event that System Management deems ~~the Electricity Generation Corporation~~Verve Energy to be in non-compliance for a Trading Interval then System Management must determine a single MWh quantity describing the total non-compliance of ~~the Electricity Generation Corporation~~Verve Energy for that Trading Interval.

### 7.7. Dispatch Instructions

- 7.7.1. A Dispatch Instruction is an instruction issued by System Management to a Market Participant, other than ~~the Electricity Generation Corporation~~Verve Energy in respect of its Verve Energy Balancing Portfolio, directing that the Market Participant vary the output or consumption of one of its Registered Facilities ~~from the level indicated in its Resource Plan, or to vary the output of any Registered Facility holding Capacity Credits but not included in a Resource Plan,~~ for a specified Trading Intervals.

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7.7.1A. A Market Participant must comply with a Dispatch Instruction or an Operating Instruction until such time as it receives another Dispatch Instruction or an Operating Instruction requiring it to operate its Facility at a different level.

7.7.2. Each Dispatch Instruction issued to a Non-Balancing Facility or to a Balancing Facility Out of Merit must:

- (a) be consistent with the latest data described in clause 7.1.1 available to System Management at the time the Dispatch Instruction is determined;
- (b) be applicable to a specific Registered Facility; and
- (c) be issued at a time that takes into account the Standing Data minimum response time for the Registered Facility.

7.7.3. Each Dispatch Instruction must contain the following information:

- (a) the Registered Facility to which the Dispatch Instruction relates;
- (b) the time the Dispatch Instruction was issued;
- (c) the time by at which the response to the Dispatch Instruction is required to commence ~~(which must not be earlier than the time it was issued, except as contemplated by clause 7.7.7(b);~~
- (d) the required level of sent out generation or consumption which may be any one of the following:
  - i. a target MW output;
  - ii. ~~a minimum MW level~~[Blank]; or
  - iii. a required decrease in consumption (in MW) for a Demand Side Programme; and
- (e) the ramp-rate to maintain until the required level of sent out generation or consumption is reached, which must not exceed the Ramp Rate Limit.

7.7.3A. Each Operating Instruction must contain the following information:

- (a) the Registered Facility to which the Operating Instruction relates;
- (b) the time the Operating Instruction was issued;
- (c) the time at which the response to the Operating Instruction is required to commence; and
- (d) if applicable, the required level of sent out generation or consumption; and
- (e) whether the Operating Instruction relates to a Network Control Service Contract, an Ancillary Service Contract, a Test or a Supplementary Capacity Contract.

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7.7.4. ~~[Blank] System Management must determine which Facilities will be the subject of Dispatch Instructions by applying the Dispatch Merit Order relevant to the action required, except where:~~

~~(a) System Management believes it is not feasible to do so having regard to:~~

~~i. the Standing Data minimum response times; or~~

~~ii. transmission, ramping or other operational constraints; or~~

~~(b) the Dispatch Instruction is issued in connection with an Ancillary Service Contract, a Network Control Service Contract, a Balancing Support Contract or any test of equipment allowed under these Market Rules; or~~

~~(c) the Dispatch Balancing Merit Order would otherwise require that System Management curtail a Curtailable Load when, due to limitations on the availability of the Curtailable Load, such curtailment would prevent that Curtailable Load 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.~~

7.7.4A. When selecting Non-Balancing Facilities~~Curtailable Loads~~ from the Non-Balancing Dispatch Merit Order, System Management must select them in accordance with the Power System Operations Procedure, ~~where~~ the selection process specified in the Power System Operations Procedure must:

~~(a) only discriminate between Curtailable Loads~~Non-Balancing Facilities 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 Dispatch Instruction for a Balancing Facility Out of Merit and a Non-Balancing Facility for a Trading Interval must not be issued earlier than 2:00PM on the Scheduling Day for the Trading Day on which the Trading Interval falls or later than the end of the Trading Interval.

~~7.7.5A. For the purpose of determining the quantity described in clause 6.17.6(c)(i) for each Trading Interval the quantity is:~~

~~(a) where System Management has been provided with information in accordance with clause 7.7.5B, System Management's estimate of the MWh reduction in output, by Trading Interval, of the Non-Scheduled Generator as a result of System Management's Dispatch Instruction.; or~~

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~~(b) in the case of a Non-Scheduled Generator included in a Resource Plan, for which System Management has not been provided with information in accordance with clause 7.7.5B, the greater of zero and the MWh difference between the Resource Plan MWh quantity of the Non-Scheduled Generator less the MWh output of the Non-Scheduled generator over the Trading Interval implied by its Dispatch Instruction.~~

### 7.7.5A. System Management must:

- (a) determine the estimate in clause 6.15.1(b)(i) in accordance with the Power System Operation Procedure which may take into account the information provided under clause 7.7.5B; and
- (b) to provide the estimate to the IMO as soon as reasonably practicable but in any event in time for settlements under chapter 9.

7.7.5B. A Market Participant ~~may~~must provide System Management with information specified in the Power System Operation Procedure to support the calculation of the quantity described in clauses ~~7.7.5A(a) and 7.7.4E~~6.15.1(b)(i).

7.7.5C. The Power System Operation Procedure must specify that actual wind data for the site of a wind farm and the number of turbines operating, if made available by a Market Participant to System Management, are sufficient to allow System Management to determine what the output of a wind farm would have been had no Dispatch Instruction been issued.

~~7.7.5D For the purpose of determining the quantity described in clause 6.17.6(d)(i) for a Curtailable Load for each Trading Interval the quantity is the level of curtailment requested by System Management in its Dispatch Instructions.~~

*The following rule will commence on 1 October 2011, for additional information please refer to RC\_2008\_20:*

7.7.5D. [Blank]

7.7.6. Subject to clause 7.7.7:

- (a) and clause 7.7.7A, System Management must issue a Dispatch Instruction or an Operating Instruction by communicating it to the relevant Market Participant in accordance with the Power System Operation Procedure. The Power System Operational Procedure must prescribe a communication method or methods which ~~by telephone~~, allowing sufficient time for the Market Participant to confirm and to respond to that Dispatch Instruction; and
- (b) ~~when issued a Dispatch Instruction in accordance with (a)~~, a Market Participant must confirm receipt of the Dispatch Instruction or Operating

~~Instruction and advise if it cannot fully comply with the Dispatch Instruction or Operating Instruction. If the Market Participant advises that it cannot fully comply, then it must also advise the reduced extent, if any, to which the Market Participant can comply with the Dispatch Instruction or Operating Instructions. The advice and confirmation under this clause 7.7.6(a) must be made in the time and manner set out in the Power System Operation Procedure and as soon as practicable confirm its ability to comply with the Dispatch Instruction.~~

~~7.7.6A. Where System Management does not receive confirmation in accordance with clause 7.7.6(b) that a Market Participant has received the Dispatch Instruction, the Market Participant is deemed to have refused to comply with the Dispatch Instruction.~~

7.7.7. Clause 7.7.6 does not apply where:

~~(a)~~ System Management has operational control of the relevant Registered Facility in accordance with clause 7.8, in which case System Management may communicate the Dispatch Instruction or Operating Instruction at a later time and by a method agreed with the Market Participant; ~~or~~

~~7.7.7A(b)~~ ~~Clause 7.7.6 does not apply where the Dispatch-Operating~~ Instruction is deemed to have been issued in respect of a Registered Facility in accordance with an Ancillary Service Contract or Network Control Service Contract and relates to the automatic activation of the Ancillary Service or Network Control Service in which case System Management may communicate the ~~Dispatch Instruction-Operating Instruction~~ to the relevant Market Participant at a later time in accordance with the Ancillary Services contract or Network Control Service Contract.

7.7.8. System Management must record all Dispatch Instructions and Operating Instructions, including confirmations of receipt received from Market Participants, in a form sufficient for independent audit and for settlement purposes.

7.7.9. System Management must document the procedure System Management and Market Participants must follow in forming, issuing, recording, receiving and confirming Dispatch Instructions and Operating Instructions and in determining the quantities described in clause ~~6.15.1(b)(i)7.7.5A and 7.7.5D~~ in the Power System Operation Procedure, and:

(a) System Management must follow that documented Market Procedure when issuing, recording, and confirming a Dispatch Instruction and in determining the quantities described in clauses ~~7.7.5A6.15.1(b)(i) and 7.7.5D~~; and

(b) Market Participants must follow that documented Market Procedure when receiving and confirming a Dispatch Instruction and in providing information

to support the calculation of the quantity described in clause 7.7.5A6.15.1(b)(i).

- 7.7.10. When System Management has issued a ~~e~~Dispatch ~~i~~nstruction or an Operating Instruction to a Demand Side Programme to decrease its consumption, System Management ~~i~~t may issue a further Instruction terminating the requirement for the Demand Side Programme decrease its consumption, providing that:
- (a) the further instruction is issued at least four hours before it is to come into effect; and
  - (b) the minimum period for which the Demand Side Programme is instructed to decrease its consumption is not less than two hours.

### **7.8. Dispatch Instructions and Operating Instructions Implemented by System Management**

- 7.8.1. System Management may, by agreement with a Market Participant, maintain operational control over aspects of a Registered Facility, including, but not limited to:
- (a) the starting, loading and stopping of one or more of that Market Participant's Scheduled Generators; and/or
  - (b) limiting the output of one or more of that Market Participant's Non-Scheduled Generators.
- 7.8.2. The maintenance of operational control of a Registered Facility by System Management does not remove the obligation on System Management to produce Dispatch Instructions or Operating Instructions for those Registered Facilities.

### **7.9. Commitment**

- 7.9.1. Subject to clauses 7.9.1A and 7.9.2 ~~and 7.9.1A~~, if a Market Participant intends to synchronise a Scheduled Generator, then it must confirm with System Management the expected time of synchronisation:
- (a) at least one hour before the expected time of synchronisation; and
  - (b) must update this advice immediately if the time confirmed pursuant to clause 7.9.1(a) changes.
- 7.9.1A. Clause 7.9.1(a) does not apply, where a Market Participant intends to synchronise a Scheduled Generator within an hour of desynchronisation, in which case it must: ~~confirm with System Management the expected time of synchronisation~~:
- (a) confirm with System Management the expected time of synchronization immediately as it is known; and

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- (b) update this advice immediately if the time advised pursuant to clause 7.9.1A(a) changes.
- 7.9.2. Clause 7.9.1(a) does not apply where System Management has issued a Dispatch Instruction or an Operating Instruction, or an instruction given under clause 7.6A.3(a), to the Facility that requires synchronisation within one hour of the Dispatch Instruction, the Operating Instruction or an instruction given under clause 7.6A.3(a), being issued.
- 7.9.3. System Management may request that a Market Participant who has given a confirmation under clause 7.9.1 provide further notification to System Management immediately before synchronisation of the Facility, and the relevant Market Participant must comply with the request.
- 7.9.4. System Management must grant permission to synchronise unless:
- (a) the synchronisation is not in accordance with the relevant Resource Plan, ~~or~~ 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 synchronisation to occur; or
  - (c) in the case of a Facility that is undergoing Commissioning Tests, synchronisation is not in accordance with the Commissioning Test plan for the Facility approved by System Management pursuant to clause 3.21A.
- 7.9.5. Subject to clauses ~~7.9.6 and~~ 7.9.6A, if a Market Participant intends to desynchronise a Scheduled Generator, then it must confirm with System Management the expected time of desynchronisation:
- (a) at least one hour before the expected time of desynchronisation; and
  - (b) must update this advice immediately if the time confirmed pursuant to clause 7.9.5(a) changes.
- 7.9.6. ~~[blank]~~ Clauses 7.9.5(a) and 7.9.6A do not apply where System Management has issued a Dispatch Instruction, an Operating Instruction or an instruction given under clause 7.6A.3(a), to the Facility that requires desynchronisation within one hour of the Dispatch Instruction, the Operating Instruction or an instruction given under clause 7.6A.3(a), being issued.
- 7.9.6A. ~~If a~~ Market Participant may not intend to decommit a Facility to such an extent that it will not be available to be synchronised for four hours or more after the time of desynchronisation, unless then the Market Participant must have has been granted permission by System Management to do this in accordance with clause 3.21B.

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- 7.9.7. System Management may request that a Market Participant who has given a confirmation under clause 7.9.5 provide further notification to System Management immediately before desynchronisation of the Facility, and the relevant Market Participant must comply with the request.
- 7.9.8. System Management must grant permission to desynchronise unless:
- (a) the desynchronisation is not in accordance with the relevant Resource Plan or Dispatch Instruction, Operating Instruction or an instruction issued under clause 7.6A.3(a); or
  - (b) System Management considers that it would not be able to meet the criteria set out in clause 7.6.1 were desynchronisation to occur.
- 7.9.9. A Market Participant must comply with a decision of System Management under clause 7.9.4.
- 7.9.10. Subject to clause 7.9.11, a Market Participant must comply with a decision of System Management under clause 7.9.8.
- 7.9.11. A Market Participant is not required to comply with clause 7.9.5 or with clause 7.9.10 if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.
- 7.9.12. Where a Market Participant cannot comply with clause 7.9.5, in accordance with clause 7.9.11, or with a decision of System Management under clause 7.9.8:
- (a) the Market Participant must inform System Management as soon as practicable; and
  - (b) if System Management did not confirm the expected time of desynchronisation or refused to allow desynchronisation of a Facility but the Market Participant did desynchronise that Facility then System Management must record the desynchronisation as a Forced Outage.

## Dispatch Compliance

### 7.10. Compliance with ~~Resource Plans and~~ Dispatch Instructions and Operating Instructions

- 7.10.1. Subject to clause 7.10.2, a Market Participant ~~other than the Electricity Generation Corporation~~ must comply with:
- (a) ~~[Blank]subject to paragraph (b), its Resource Plan, if any except where it relates to Intermittent Generators;~~
  - (b) if a Dispatch Instruction, an Operating Instruction or a Dispatch Order has been issued for a Registered Facility for a Trading Interval, the most recently issued Dispatch Instruction, Operating Instruction or Dispatch Order applicable to the Registered Facility for the Trading Interval;~~and~~

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- (c) the requirements of clause 7.7.1A; and
- (d) a direction given to the Market Participant under clauses 7.6 or 7.10.7(a).

7.10.2A A Market Participant is not required to comply with a Dispatch Instruction where the Market Participant has advised System Management in accordance with clause 7.10.3 that it cannot comply with the Dispatch Instruction and the non compliance is due solely to a Forced Outage.

7.10.2. A Market Participant is not required to comply with clause 7.10.1 if such compliance would endanger the safety of any person, damage equipment, breach any applicable law, or is subject to an approved Equipment Test pursuant to clause 3.21AA.

7.10.3. Where a Market Participant cannot meet its Resource Plan, a Dispatch Instruction, an Operating Instruction or a direction given under clauses 7.6 or 7.10.7(a), as applicable, it must inform System Management as soon as practicable.

7.10.3A Where a Market Participant has advised System Management under clause 7.7.6(b) that it cannot fully comply with a Dispatch Instruction or an Operating Instruction and has also advised a reduced extent to which it can comply, the Market Participant must comply with the Dispatch Instruction but only to that reduced extent. A Market Participant's failure to fully comply with the Dispatch Instruction is not excused by this clause 7.10.3A.

7.10.4. System Management must monitor the behaviour of Market Participants with Registered Facilities to assess whether they are complying with clause 7.10.1 in accordance with its Monitoring and Reporting Protocol., ~~except where it relates to a Demand Side Programme.~~

7.10.5. ~~Subject to clause 7.10.5A, wW~~here System Management considers that a Market Participant has not complied with clause 7.10.1 in relation to any of its Registered Facilities in a manner that:

- ~~(a) threatens Power System Security or Power System Reliability; or~~
- ~~(b) would require System Management to issue instructions to the Registered Facilities of the Electricity Generation Corporation or Registered Facilities covered by any Balancing Support Contract or Ancillary Service Contract;~~  
~~or~~
- ~~(c) would require System Management to issue Dispatch Instructions to other Registered Facilities in accordance with clauses 7.6.3 or 7.6.4; and~~
- ~~(d) is outside:~~
  - i. the Tolerance Range determined in accordance with clause 2.13.6D;
  - or

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- ii. a Facility Tolerance Range determined in accordance with clause 2.13.6E; or, if applicable, varied in accordance with clause 2.13.6H;

System Management must as soon as reasonably practicable:

- (a) warn the Market Participant about the deviation and request an explanation for the deviation; and
- (b) where the behaviour has not stopped or has not otherwise been addressed by System Management under Market Rules, request immediate cessation of the behaviour ~~within a time that System Management considers reasonable.~~

~~7.10.5A. System Management is not required to follow the process in clause 7.10.5 where:~~

- ~~(a) it considers that a failure to comply with clause 7.10.1 does not threaten Power System Security or Power System Reliability;~~
- ~~(b) the Market Participant has notified System Management in advance that it expects to deviate from its Resource Plan:
  - ~~i in order to subject the relevant Facility to testing, to enable it to enter full commercial operation for the first time; or~~
  - ~~ii where System Management has approved an Equipment Test in accordance with clause 3.21AA for the Facility for the Trading Interval;~~~~
- ~~(c) the Market Participant has provided System Management with a testing plan;~~
- ~~(d) System Management has notified the Market Participant that it approves the plan; and~~
- ~~(e) the deviation is in System Management's opinion consistent with the activities detailed in the approved testing plan.~~

~~7.10.5B. Where clause 7.10.5 applies, it is deemed to apply for the entire Trading Interval.~~

7.10.6. A Market Participant must comply with a request under clause 7.10.5.

7.10.6A. A Market Participant that cannot comply with a request under clause 7.10.5 must notify System Management as soon as practicable and must include an explanation in that notification and must ensure it has complied with the requirements of Chapter 7A.

7.10.7. Where the Market Participant does not comply with the request referred to in clause 7.10.5, System Management:

- ~~(a)~~ — may issue directions to the Market Participant in respect of the output of that Registered Facility, without regard for the Dispatch Merit Order, with the objective of minimising the dispatch deviations of the Facility;
- ~~(b)~~ unless the deviation is within the Tolerance Range, must, in the time and form and manner prescribed by the IMO in the IMS Interface Document Procedures, report the failure to comply with the request referred to in clause 7.10.5, to the IMO. System Management must include in the report:
- i. the circumstances of the failure to comply with clause 7.10.1 and the request referred to in clause 7.10.5;
  - ii. any explanation offered by the Market Participant as provided in accordance with clause 7.10.6A;
  - iii. whether System Management issued instructions to the Registered Facilities of ~~the Electricity Generation Corporation Verve Energy~~ or Registered Facilities covered by any ~~Balancing Support Contract or Ancillary Service Contract~~ or issued Dispatch Instructions or Operating Instructions to other Registered Facilities as a result of the failure; and
  - iv. an assessment of whether the failure threatened Power System Security or Power System Reliability; and
- ~~(b)~~ if the deviation is within the Tolerance Range, may provide a report to the IMO containing the same information as specified in subclause ~~(a)~~.

## Advisories, Balancing Suspension and Reporting

### 7.11. Dispatch Advisories

- 7.11.1. A Dispatch Advisory is a communication by System Management to Market Participants, Network Operators and the IMO that there has been, or is likely to be, an event that will require a significant deviation from Resource Plans, dispatch of facilities Out of Merit or will restrict communication between System Management and any of the Market Participants, Network Operators, or the IMO.
- 7.11.2. System Management must issue a Dispatch Advisory for future potential events if it considers there to be a high probability that the event will occur within 48 hours of the time of issue.
- 7.11.3. Dispatch Advisories must be released as soon as practicable after System Management becomes aware of a situation requiring the release of a Dispatch Advisory.

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- 7.11.3A. For the avoidance of doubt, where System Management must respond to an unexpected and sudden event, System Management may issue a Dispatch Advisory after the event has occurred.
- 7.11.4. System Management must inform Market Participants, Network Operators and the IMO of the withdrawal of a Dispatch Advisory as soon as practicable once the situation that the Dispatch Advisory relates to has finished.
- 7.11.5. System Management must release a Dispatch Advisory in the event of, or in anticipation of situations where:
- (a) involuntary load shedding is occurring or expected to occur;
  - (b) committed generation at minimum loading is, or is expected to, exceed forecast load;
  - (c) Ancillary Service Requirements will not be fully met;
  - (d) significant outages of generation transmission or customer equipment are occurring or expected to occur;
  - (e) fuel supply on the Trading Day is significantly more restricted than usual, or if fuel supply limitations mean it is not possible for some Market Participants to supply in accordance with their Resource Plans;
  - (f) scheduling or communication systems required for the normal conduct of the scheduling and dispatch process are, or are expected to be, unavailable; ~~or~~
  - (g) System Management expects to issue a Dispatch Instruction Out of Merit, including, for the purpose of this clause, issuing an Operating Instruction to the Verve Energy Balancing Portfolio in accordance with clause 7.6.2; or;
  - (h) [Blank];
  - (i) the system is in, or is expected to be in, a High Risk Operating State or an Emergency Operating State.
- 7.11.6. Subject to 7.11.6AA, a A Dispatch Advisory must contain the following information:
- (a) [Blank];
  - (b) the date and time that the Dispatch Advisory is released;
  - (c) the time period for which the Dispatch Advisory is expected to apply;
  - (cA) the ~~e~~Operating ~~s~~State to be applicable, or expected to be applicable, at different times during the time period to which the Dispatch Advisory relates;
  - (d) details of the situation that the Dispatch Advisory relates to, including the location, extent and seriousness of the situation;

(dA) where System Management is to release a Dispatch Advisory under clause 7.11.5(g), details of the estimated variation from the quantities determined under clause 7A.5.13, reasons for the deviation from the BMO and all relevant information about the deviation;

- (e) any actions System Management plans to take in response to the situation;
- (f) any actions Market Participants and Network Operators are required to take in response to the situation; and
- (g) any actions Market Participants may voluntarily take in response to the situation.

7.11.6AA If any information that would otherwise be released under clauses 7.11.6(d), (dA), (e), (f) or (g) is Confidential, System Management must release that information to the IMO but ensure that the Dispatch Advisory contains information of only a general or aggregate nature so that the information publically released is not Confidential.

7.11.6A. If System Management must issue directions to a Market Participant or a Network Operator under a High Risk Operating State or an Emergency Operating State prior to issuing a Dispatch Advisory then System Management may issue such directions as if a Dispatch Advisory had been issued provided that it informs the relevant Market Participant or Network Operator of the applicable operating state as soon as practicable.

7.11.7. Subject to clause 7.11.8, Market Participants and Network Operators must comply with directions that System Management issues in any Dispatch Advisory under clause 7.11.6(f), or directly to the Market Participant or Network Operator under clause 7.11.6A.

7.11.8. A Market Participant or Network Operator is not required to comply with clause 7.11.7 if such compliance would endanger the safety of any person, damage equipment, or breach any applicable law.

7.11.9. Market Participants, Network Operators and the IMO must inform System Management as soon as practicable if they become aware of any circumstances that might reasonably be expected to result in System Management issuing a Dispatch Advisory.

### **7.12. Status Reports**

7.12.1. System Management must provide a report to the IMO once every three months on the performance of the market with respect to the dispatch process. This report must include details of:

- (a) the incidence and extent of issuance of Operating Instructions or Dispatch Instructions;

- (b) the incidence and extent of non-compliance with Operating Instructions or Dispatch Instructions;
- (bA) ~~the incidence and reasons for the issuance of Dispatch Instructions to Balancing Facilities Out of Merit~~;
- (c) the incidence and extent of transmission constraints;
- (d) the incidence and extent of shortfalls in Ancillary Services, involuntary curtailment of load, High Risk Operating States and Emergency Operating States, together with:
  - i. a summary of the circumstances that caused each such incident; and
  - ii. a summary of the actions that System Management took in response to the incident in each case; and
- (e) the incidence of any Equipment Test approved in accordance with clause 3.21AA, including the date the Equipment Test occurred and the Facility details.

7.12.2. The IMO must publish the report described in clause 7.12.1 after removing any information that cannot be made public under these Market Rules or which it considers should not be made public.

## Settlement and Monitoring Data

### 7.13. Settlement and Monitoring Data

- 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:
- (a) ~~[Blank]the Operational System Load Estimate in each Trading Interval in the Trading Day~~;
  - (b) Load Forecasts prepared by System Management in accordance with clause 7.2.1(b);
  - (c) a schedule of all of the Dispatch Instructions ~~other than instructions with respect to Registered Facilities to which clauses 3.21A.14 or 4.25.10 apply~~, that System Management issued for each Trading Interval in the Trading Day by Market Participant and Facility, including the information specified in clause 7.7.3, or as agreed between the IMO and System Management;
  - (cA) a schedule of the MWh output of each generating system monitored by System Management's SCADA system for each Trading Interval of the Trading Day;

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- (cB) the maximum daily ambient temperature at the site of each generating system monitored by System Management's SCADA system for the Trading Day;
- ~~(cC) a schedule of all the Operating Instructions that System Management issued for each Trading Interval in the Trading Day by Market Participant and Facility, including the information specified in clause 7.7.3A, or as agreed between the IMO and System Management, together with the reasons for the Operating Instruction;~~
- (d) a description of the reasons for ~~each Dispatch Instruction issued, including a flag indicating where a Dispatch Instruction was issued in connection with:~~
- ~~i. any Ancillary Service Contract;~~
  - ~~ii. any Balancing Support Contract;~~
  - ~~iii. any Network Control Service Contract;~~
  - ~~iv. any test of equipment allowed under these Market Rules; or~~
  - ~~v. any failure of an Electricity Generation Corporation a Verve Energy Facility to follow the scheduling and dispatch procedures relating to clause 7.6A;~~
- ~~The MWh energy dispatched under a Balancing Support Contract for each Trading Interval in the Trading Day by Facility;~~
- (dA)~~(dB)~~ the MWh quantity by which the Facility was instructed by System Management to increase its output or reduce its consumption under a Network Control Service Contract for each Trading Interval in the Trading Day by Facility;
- ~~(dB) the SOI Quantity, the EOI Quantity and the Relevant Dispatch Quantity for each Trading Interval;~~
- (e) ~~{Blank}~~~~the quantity of any Ex-Post Upwards LFAS Enablement, and Ex-Post Downwards LFAS Enablement that System Management activated by the end of the Trading Interval together with the LFAS Facility that provided it;~~
- ~~(eA) the quantity of any Upwards LFAS Backup Enablement and Downwards LFAS Backup Enablement that System Management activated by the end of the Trading Interval;~~
- (eAB) details of notifications received by System Management in accordance with clause 7.5.4;
- ~~(eCB) the maximum amount of sent out energy estimated decrease (in MWh) in the output of which each Non-Scheduled Generator, by Trading Interval, would have supplied in the Trading Interval had the Dispatch Instruction not been issued as a result of System Management Dispatch Instructions,~~

as determined in accordance with clause ~~7.7.5A 6.15.1(b)(i)~~, ~~where this is to be used in settlement as the quantity described in clause 6.17.6(c)(i)~~;

(eD) the required decrease, in MWh, in the consumption of each Demand Side Programme, by Trading Interval, as a result of ~~System Management an Operating Instruction or a~~ Dispatch Instructions, where this is to be used in settlement as the quantity described in clause 6.17.6(~~cd~~)(i);

(eE) in instances where System Management has not used an LFAS Facility which they would otherwise have been required to use under 7B.3.7, the reasons why it has not used the LFAS Facility.

(f) [Blank]

(g) details of the instructions provided to:

i. Demand Side Programmes that have Reserve Capacity Obligations; and

ii. providers of Supplementary Capacity;

on the Trading Day; and

(h) the identity of the Facilities which were subject to a Commissioning Test, a ~~test of~~ Reserve Capacity Test or an Equipment Test for each Trading Interval of the Trading Day.

7.13.1A. System Management must provide the IMO with the following data for a Trading Day by noon on the fifteenth Business Day following the day on which the Trading Day ends:

(a) the MWh quantity of non-compliance by ~~the Electricity Generation Corporation Verve Energy~~ by Trading Interval; and

(b) the schedule of all Planned Outages, Forced Outages and Consequential Outages relating to each Trading Interval in the Trading Day by Market Participant and Facility;

7.13.1B. If System Management advises the IMO that it has been prevented from completing the relevant processes that enable the provision of the data described in clause 7.13.1, the IMO may extend the timeline prescribed in clause 7.13.1, subject to any such extension not resulting in a delay of that timeline of more than two business days, and must advise System Management of any such extension as soon as practicable.

7.13.2. System Management must maintain systems capable of providing the data described in clause 10.5.1(y) to the Market Web Site as soon as practicable following the completion of a Trading Interval.

7.13.3 System Management must document in the Power System Operation Procedure the procedure to be followed in providing settlement and monitoring data to the

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IMO. System Management and Rule Participants must comply with that documented Market Procedure.

### 7A Balancing Market

#### 7A.1 Balancing Market

7A.1.1 The IMO is to operate the Balancing Market.

7A.1.1A The IMO is to determine the Balancing Market Commencement Day, which must be no earlier than 2 April 2012 and no later than 2 July 2012.

7A.1.2 The objectives of the Balancing Market are to:

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

7A.1.3 The Balancing Market Objectives support, but are subservient to, the Wholesale Market Objectives. To the extent that an application of the Balancing Market Objectives results in an inconsistency with the Wholesale Market Objectives, the latter prevails to the extent of the inconsistency.

7A.1.4 All Rule Participants must take into account the Balancing Market Objectives in undertaking their functions and obligations under this Chapter 7A.

7A.1.5 The IMO must create market procedures for Balancing Facility Requirements specifying technical and communication criteria that a Balancing Facility, or a type of Balancing Facility, must meet, including:

- (a) Facility quantity parameters and limits for participation in Balancing;
- (b) the manner and forms of communication to be used while participating in Balancing, including receiving Dispatch Instructions;

(c) the type of the restrictions the IMO may impose under clause 7A.1.8(b) and the manner and circumstances in which they may be imposed and lifted; and

(d) ramp rate limitations.

7A.1.6A The IMO must consult with System Management when creating and amending the Balancing Facility Requirements.

7A.1.6 A Market Participant must ensure that its Balancing Facilities meet the Balancing Facility Requirements.

7A.1.7 A Market Participant must, when required to do so by the IMO, provide in writing, all information reasonably required by the IMO in order to demonstrate that its Balancing Facilities meet the Balancing Facility Requirements.

7A.1.8 If a Balancing Facility does not meet the Balancing Facility Requirements, the IMO may:

(a) suspend the obligation of the Market Participant to ensure that its Balancing Facility meets some or all of the Balancing Facility Requirements; or

(b) impose conditions on the manner in which the Market Participant must participate in the Balancing Market under these Market Rules, including:

i. the price at which the Market Participant must submit a Balancing Submission;

ii. the manner and time in which a Balancing Submission must be submitted; or

iii. the entitlement to be issued Capacity Credits.

7A.1.9 Where a suspension granted by the IMO under clause 7A.1.8(a) or a condition imposed by the IMO under clause 7A.1.8(b) is inconsistent with another clause in the Market Rules the suspension and/or condition is to be given effect notwithstanding that inconsistency.

7A.1.10 The IMO must publish a decision under clause 7A.1.8 to grant a suspension or impose a condition together with the details of such suspension and condition.

7A.1.11 In making a determination under clause 7A.1.8, the IMO must consider whether the likely benefits to the operation of the Balancing Market would

be outweighed by the relative cost to a Market Participant in ensuring its Balancing Facility meets the Balancing Facility Requirements.

7A.1.12 For the purposes of this Chapter 7A only, unless otherwise indicated, the Verve Energy Balancing Portfolio is to be treated as a single Balancing Facility and references in this Chapter 7A to a Balancing Facility are to be read as including a reference to the Verve Energy Balancing Portfolio.

7A.1.13 Where this Chapter 7A imposes a timeframe of “as soon as reasonably practicable”, the IMO may prescribe the latest time by which this must be done.

7A.1.14 The IMO is to determine a point in time immediately before the commencement of a Trading Interval for the purpose of setting the Balancing Gate Closure. The point in time must be no shorter than 2 hours immediately before the commencement of a Trading Interval and no longer than 6 hours and must be published in the Market Web Site.

7A.1.15 The IMO may, from time to time, change the point in time determined under clause 7A.1.15 by publishing the new point in time on the Market Web Site and specifying the date from which the new point in time is to take effect, which shall be no earlier than 2 months from the date of publication.

### **7A.2 Balancing market submissions**

7A.2.1 A Market Participant must ensure that:

- (a) it has made a Balancing Submission in accordance with clause 7A.2.4 in respect of all of its Balancing Facilities, excluding Facilities in the Verve Energy Balancing Portfolio;
- (b) the Balancing Submission is for all Trading Intervals in the Balancing Horizon; and
- (c) the Balancing Submission is made before Balancing Gate Closure for those Trading Intervals.

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

- (a) the Balancing Submission may be for one or more Trading Intervals in the Balancing Horizon; and

- (b) the Balancing Submission must be made before Balancing Gate Closure for any Trading Interval in the submission.

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

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

must ensure that the price in the Balancing Price-Quantity Pair for a Balancing Submission submitted under this clause 7A.2 is at the Minimum STEM Price for the quantity 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 Verve Energy 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 in the Balancing Submission, whether the Balancing Facility is to use Liquid Fuel or Non-Liquid Fuel; and
- (e) specify, for each Trading Interval in the Balancing Submission, Ramp Rate Limits.

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

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

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

7A.2.8 A Balancing Submission for each Trading Interval in the Balancing Horizon for which Balancing Gate Closure has not occurred must accurately reflect:

- (a) all information reasonably available to it, including Balancing Forecasts published by the IMO, the information under clause 7A.3.16 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 Balancing.

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

- (a) must, subject to clause 7A.2.9(e), and clause 7A.2.9(f), ensure that its Balancing Portfolio Supply Curve accurately reflects:
  - i all information reasonably available to it, including Balancing Forecasts published by the IMO and the latest information available to it in relation to any Forced Outage for a Facility in the Verve Energy Balancing Portfolio;
  - ii Verve Energy's reasonable expectation of the capability of its Verve Energy Balancing Portfolio to be dispatched in the Balancing Market for that Trading Interval; and
  - iii the price at which Verve Energy intends to have the Verve Energy Balancing Portfolio participate in Balancing;
- (b) must indicate in a manner and form presented by the IMO:
  - i which quantities in the Balancing Portfolio Supply Curve it has priced at the Minimum STEM Price are for Facilities that are to provide LFAS; and
  - ii the facilities that are to provide LFAS.
- (c) must:

- i ensure that quantities in the Balancing Portfolio Supply Curve 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; and
  - ii advise the IMO in a manner and form prescribed by the IMO, which facilities are to provide the quantities in clause 7A.2.9(c)(i);
- (d) may update its Balancing Portfolio Supply Curve in relation to any Trading Interval in the Balancing Horizon for which Balancing Gate Closure has not occurred plus 2 hours by submitting it to the IMO:
  - i immediately before 4:00PM;
  - ii immediately before 6:00PM;
  - iii immediately before 10:00PM;
  - iv immediately before 4:00AM; or
  - v immediately before 10:00AM;
- (e) may update its Balancing Portfolio Supply Curve in relation to any Trading Interval in the Balancing Horizon for which Balancing Gate Closure has not occurred plus 2 hours if a Facility in the Verve Energy 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 to reflect the impact of any Forced Outage which, but for the Forced Outage, would have directly caused a Facility to run on Liquid Fuel in order to meet Verve Energy's Balancing obligations in relation to the Verve Energy Balancing Portfolio under this Chapter 7A.

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

- (a) if the inaccuracy is due to an Internal Constraint - must make a new, accurate Balancing Submission so that the quantity in the Balancing Submission reflects the available Sent Out Capacity

and the Ramp Rate Limit is accurate but the price is not altered, in respect of that Trading 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 and the Ramp Rate Limit is accurate but the price is not altered, in respect of that Trading Interval, as soon as reasonably practicable; or

(c) if due to the Market Participant being unable to conform with an approved Commissioning Test and the Market Participant has sought approval under clause 3.21A.13 for a new Commissioning Test – may make a new, accurate Balancing Submission that reflects the new Commissioning Test under clause 3.21A.13.

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

7A.2.12 Where Verve Energy has submitted an updated Balancing Portfolio Supply Curve in accordance with clause 7A.2.9(e) or 7A.2.9(f) because of a Forced Outage after the time specified in these clauses it must, as soon as reasonably practicable, provide the IMO with written details of:

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

7A.2.13 A Market Participant must:

- (a) make a Balancing Submission under this clause 7A.2 in good faith;
- (b) not act in a manner that:
  - i is intended to lead, or

ii the Market Participant should have reasonably known is likely to lead,

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

(c) not make a Balancing Submission containing prices that seek to influence the determination of the Constrained Off Competition Price, the Constrained Off Quantity, which Facility may provide the Constrained Off Quantity, the Constrained On Compensation Price, the Constrained On Quantity of which Facility may provide the Constrained On Quantity.

7A.2.14 A Balancing Submission is made in good faith under clause 7A.2.13 if, at the time it is made the Market Participant had a genuine intention to honour that Balancing Submission if the material conditions and circumstances upon which the Balancing Submission was based remained unchanged until the relevant Trading Interval.

7A.2.15 A Market Participant may be taken to have not made a Balancing Submission in good faith notwithstanding that, after all the evidence has been considered, the intention of the Market Participant is ascertainable only by inference from:

(a) the conduct of the Market Participant;

(b) the conduct of any other person; or

(c) the relevant circumstances.

7A.2.16 Subject to clauses 7A.2.3 and 7A.2.9(c), a Market Participant must not, for any Trading Interval, offer prices within its Balancing Submission in excess of the Market Participant's reasonable expectation of the short run marginal cost of the Balancing Facility, when such behaviour relates to market power.

7A.2.17 In determining whether a Market Participant has made a Balancing Submission in accordance with its obligations under this Chapter 7A, the IMO may take into account:

(a) historical Balancing Submissions, including changes made to Balancing Submissions in which a pattern of behaviour may indicate an intention to create a false impression in the Balancing Market;

- (b) the timeliness and accuracy of notification of Forced Outages, Internal Constraints, External Constraints and any information provided under clauses 7A.2.11 or 7A.2.12;
- (c) any information as to whether a Facility was not able to comply with a Dispatch Instruction from System Management and the reasons for that non compliance; and
- (d) any other information that considered by the IMO to be relevant.

7A.2.18 For the purpose of Regulation 37(a) of the *Electricity Industry (Wholesale Electricity Market) Regulations 2004*, where a civil penalty is imposed for a contravention of clause 7A.2.8, clause 7A.2.9, clause 7A.2.13 or clause 7A.2.16 the civil penalty amount should be distributed amongst all Market Participants in proportion to their Market Fees calculated over the previous full 12 months, or part thereof if Balancing Market Commencement Day was less than 12 months, prior to the date the civil penalty is received.

### **7A.3 Balancing Market**

#### **Balancing Merit Order 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 Verve Energy in respect of the Verve Energy Balancing Portfolio, into Loss Factor Adjusted Prices.

7A.3.2 The IMO must determine the Balancing Merit Order for a Trading Interval as the ranked list of Balancing Submissions which, subject to clause 7A.3.3 and clause 7A.3.4, is obtained by:

- (a) ranking Balancing Price Quantity Pairs for a Trading Interval and associated Balancing Facilities contained in Balancing Submissions in order of lowest to highest Loss Factor Adjusted Prices determined under clause 7A.3.1 and in the Balancing Portfolio Supply Curve; and
- (b) where System Management provides a Forecast of the EOI Quantity for a Non-Scheduled Generator under clause 7A.3.14 adjusted as if the Non-Scheduled Generator's Balancing Submission contained 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 is to break the tie in accordance with the 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.1.8(b);
- (c) a Balancing Facility that does not meet the Balancing Facility Requirements;
- (d) a Balancing Facility providing any other Ancillary Service;
- (e) a Balancing Facility providing LFAS; and
- (f) priority will be given to the highest number based on the daily random number generator assigned.

7A.3.4A A Balancing Facility assigned priority under clause 7A.3.4 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.3.4 The IMO must adjust the ranked list of Balancing Submissions, other than for the Verve Energy Balancing Portfolio, in the Balancing Merit Order in a Trading Interval as follows:

- (a) where an LFAS Price-Quantity Pair is selected under clause 7B.3.5(b) for the Trading Interval - so that the Balancing Facility associated with the selected LFAS Price-Quantity Pair is ranked as if the price 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 Upwards LFAS Enablement of the Facility for that Trading Interval, is at the Alternative Maximum STEM Price; and
- (b) where an LFAS Price-Quantity Pair is selected under clause 7B.3.5(c) for the Trading Interval - so that the Balancing Facility associated with the selected LFAS Price-Quantity Pair is ranked as if the price for the quantity of capacity equal to the Downwards LFAS Enablement of the Facility for that Trading Interval is at the Minimum STEM Price.

7A.3.5 The IMO must:

- (a) determine the Balancing Merit Order for a Trading Interval using the most recent, valid Balancing Submissions available to it; and

(b) each time the IMO creates a BMO, provide this BMO to System Management between 15 to 30 minutes before the start of the Trading Interval to which the BMO relates.

7A.3.6 System Management must, no later than 2 hours after the end of the Trading Day, provide the IMO with an estimate of:

(a) the SOI Quantity and the EOI Quantity for each Balancing Facility; and

(b) the sum of the EOI Quantities for each Balancing Facility needed for Balancing, in MW, at the end of a Trading Interval,

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

7A.3.7 The IMO must, by the end of a Trading Day where it has been provided with the information under clause 7A.3.6 for a Trading Interval:

(a) use that information to determine a provisional Pricing BMO for that Trading Interval;

(b) use the provisional Pricing BMO under clause 7A.3.7(a) to determine the provisional Balancing Price, being the Loss Factor Adjusted Price corresponding to the point where the estimated Relevant Dispatch Quantity intersects the provisional Pricing BMO; and

(c) publish that Price on the Market Web Site.

7A.3.8 System Management must, as soon as reasonably practicable but in any event no later than 24 hours after the time specified in clause 7A.3.6, provide the IMO with any updated adjustments to the information provided under clause 7A.3.6 and the IMO must use any such updated SOI Quantity and EOI Quantity information to revise the Pricing BMO accordingly.

7A.3.9 The IMO must, subject to clause 7A.3.12, use the provisional Pricing BMO determined under clause 7A.3.7(a), as revised under clause 7A.3.8, to determine the Balancing Price, being the Loss Factor Adjusted Price corresponding to the point where the Relevant Dispatch Quantity intersects the Pricing BMO. Where there is no change to the provisional Balancing Price determined under clause 7A.3.7(b), that price is deemed to be the Balancing Price.

- 7A.3.10 The IMO must publish the Balancing Price for each Trading Interval in a Trading Day no later than 12 hours after the time specified in clause 7A.3.8.
- 7A.3.11 If System Management advises the IMO that it has been prevented from completing the relevant processes that enable the provision of the information described in clauses 7A.3.6 or 7A.3.8, the IMO may extend the timeline prescribed in clause 7A.3.10. No such extension may be given that would result in a delay of that timeline of more than two business days, and must advise Rule Participants of any such extension as soon as practicable.
- 7A.3.12 If the IMO is unable to determine the Balancing Price under clause 7A.3.9 in time to publish it in accordance with clause 7A.3.10, including because it has not received the information required to be provided by System Management under clauses 7A.3.6 or 7A.3.8, the IMO is to determine the Balancing Price:
- (a) where the Relevant Dispatch Quantity and/or Pricing BMO is not available - by using the BMO and/or the Forecast Relevant Dispatch Quantity for the Trading Interval so that the Balancing Price is the point where the most Relevant Dispatch Quantity or most recent forecast of the Relevant Dispatch Quantity (as applicable) intersects the Pricing BMO or most recent BMO (as applicable);
  - (b) where the Pricing BMO and the BMO is not available for the Trading Interval the IMO is to use the most recent Forecast Pricing BMO in place of the BMO in (a);
  - (c) where the Pricing BMO, the BMO and the Forecast Pricing BMO is not available for the Trading Interval the IMO is to use the most recent Forecast BMO in place of the BMO in (a)(d) 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.

(d) 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.

7A.3.13 Once the IMO has published the Balancing Price under clause 7A.3.10 it cannot be altered either through disagreement under clause 9.20.6 or through disputes under clause 9.2.1.

### **Forecast BMO**

7A.3.14 System Management must, for each future Trading Interval in the Balancing Horizon, provide the IMO with System Management's forecast of the Relevant Dispatch Quantity, and may provide a forecast of the EOI Quantity for Non-Scheduled Generators, each determined in accordance with the Power System Operation Procedure. System Management must, each time it has new information on which to determine these quantities, update these forecasts and provide the update to the IMO, but is not required to do so more than once per Trading Interval.

7A.3.15 The IMO must, for each future Trading Interval in the Balancing Horizon determine:

- (a) a Forecast BMO; and
- (b) subject to receiving the information from System Management under clause 7A.3.14, determine a Forecast Pricing BMO.

7A.3.16 Where the IMO determines the Forecast BMO and Forecast Pricing BMO under clause 7A.3.15, the IMO must:

- (a) provide to each Market Participant:
  - (i) the Balancing quantities expected to be provided by that Market Participant for a Trading Interval in the

Balancing Horizon as indicated by the Forecast Pricing BMO; or

(ii) where the IMO is unable to provide the information in clause 7A.3.16(a) - the Balancing quantities expected to be provided for a Trading Interval in the Balancing Horizon as indicated by the most recent Forecast BMO; and

(b) provide to System Management the Forecast BMO and the Forecast Pricing BMO.

7A.3.17A The IMO must provide the information required under clause 7A.3.17A at the same time as the IMO publishes the Balancing Forecasts under clause 7A.3.19.

### **Balancing Forecast**

7A.3.17 The IMO must, if it has sufficient information available to it, determine and publish under clause 7A.3.19 the Balancing Forecasts for each Trading Interval in the Balancing Horizon in accordance with the Balancing Forecast Market Procedures.

7A.3.18 The IMO is to determine Balancing Forecast Market Procedures from time to time in accordance with the following principles:

(a) to the extent reasonably practicable, the Balancing Forecast, Forecast BMO and the Forecast Pricing BMO 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.3.19 The IMO must, to the extent it is reasonably able within the Trading Interval, commencing at 6:00PM on 1 April 2012:

(a) publish on the Market Web Site a Balancing Forecast for each Trading Interval during the Balancing Horizon; and

(b) by the end of every half hour thereafter, publish a Balancing Forecast for each future Trading Interval in the Balancing Horizon.

### Settlement

7A.3.20 The IMO will convert all Balancing Submissions used in the BMO (other than the Balancing Portfolio Supply Curve) into Bids and Offers in relation to a Market Participant's Resource Plan for the purposes of determining settlement under chapter 9.

### 7A.4 Verve Energy – Stand Alone Facilities

7A.4.1 Verve Energy may, at any time, nominate one of its Registered Facilities to be trialled as a Stand Alone Facility by providing notice to the IMO in the prescribed form.

7A.4.2 Subject to clause 7A.4.3, the IMO must, as soon as reasonably practicable after receiving the information specified in clause 7A.4.1:

- (a) request System Management to advise whether the Facility should be rejected as a Stand Alone Facility due to potential impacts on the performance of System Management's functions in relation to the SWIS if the Facility were to become a Stand Alone Facility;
- (b) if System Management advises within 5 days that the IMO should reject the Facility as a Stand Alone Facility, reject the nomination, otherwise accept the nomination; and
- (c) notify Verve Energy of the IMO's decision.

7A.4.3 The IMO may only trial a Facility as a Stand Alone Facility under this clause 7A.4 once.

7A.4.4 If the IMO notifies Verve Energy that it accepts the nomination of the Stand Alone Facility for a trial, then:

- (a) the IMO will notify Verve Energy of the Trading Day from which the trial of the nominated Stand Alone Facility will commence;
- (b) subject to clause 7A.4.4(d), Verve Energy may trial the nominated Stand Alone Facility for a period of one month for the purposes of participating in the Balancing Market in accordance with this chapter 7A;
- (c) 7 days before the end of that month Verve Energy must notify the IMO whether it wishes the nominated Stand Alone Facility to:

(i) cease being a Stand Alone Facility and to form part of the Verve Energy Balancing Portfolio; or

(ii) permanently become a Stand Alone Facility;

and

(d) the nominated Stand Alone Facility will be treated as a Stand Alone Facility until it either becomes a permanent Stand Alone Facility under clause 7A.4.9 or the trial ceases under clause 7A.4.8.

7A.4.5 If Verve Energy provides a notice under clause 7A.4.4(c)(i), then the IMO must notify Verve Energy of the time and date from which the nominated Stand Alone Facility will cease to be treated as a Stand Alone Facility.

7A.4.6 If Verve Energy provides a notice under clause 7A.4.4(c)(ii), then the IMO must:

(a) request System Management to provide updated views in light of the trial on any potential impacts on the performance of its functions in relation to the SWIS if the nominated Stand Alone Facility permanently becomes a Stand Alone Facility;

(b) if System Management advises within 5 days that the IMO should reject the nomination of the Stand Alone Facility, reject the nomination;

(c) otherwise accept the nominated Stand Alone Facility becoming a permanent Stand Alone Facility; and

(d) notify Verve Energy of the IMO's decision.

7A.4.7 System Management must, as soon as practicable after receiving a request by the IMO under clauses 7A.4.2(a) or 7A.4.6(a):

(a) consider all information reasonably available to it and advise the IMO of System Management's views on:

(i) the potential impacts on the performance of System Management's functions in relation to the SWIS (if the nomination of the Stand Alone Facility is accepted or rejected), including system constraint impacts; and

(ii) impacts on the provision of Ancillary Services; and

(b) advise the IMO whether to reject the nomination of the Stand Alone Facility together with reasons.

7A.4.8 If the IMO notifies Verve Energy that the nominated Stand Alone Facility is not to permanently become a Stand Alone Facility the nominated Stand Alone Facility will cease to be treated as a Stand Alone Facility from the time and date specified by the IMO in the notice to Verve Energy.

7A.4.9 The nominated Stand Alone Facility permanently becomes a Stand Alone Facility if the IMO notifies Verve Energy that it is to permanently become a Stand Alone Facility.

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

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

7B.1.1 The IMO is to operate the LFAS Market.

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

- (a) Facility quantity parameters and limits in providing LFAS;
- (b) the manner and forms of communication to be used in providing LFAS, including how LFAS Facilities are to be Non-Scheduled Generation Facilities activated;
- (c) the nature and type of enablement and quantity restrictions that will apply.

7B.1.3 A Market Participant must ensure that its LFAS Facility meets the LFAS Facility Requirements.

7B.1.4 System Management must, by 12:00 noon on the Scheduling Day, provide the IMO with System Management's forecast of the 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, for any Trading Interval in the Balancing Horizon for which LFAS Gate Closure, plus 60 minutes, has not occurred, update the forecast LFAS Quantity provided under clause 7B.1.4.

7B.1.6 For the purposes of this Chapter 7B only, unless otherwise indicated, the Verve Energy Balancing Portfolio is to be treated as a single LFAS Facility and references in this Chapter 7B to an LFAS Facility are to be read as including a reference to the Verve Energy Balancing Portfolio.

### **7B.2 LFAS Submissions**

7B.2.1 A Market Participant may submit an LFAS Submission:

- (a) in accordance with clause 7B.2.7 in respect of any of its LFAS Facilities, other than the Verve Energy Balancing Portfolio;
- (b) for any or all Trading Intervals in the LFAS Horizon; and
- (c) before LFAS Gate Closure for those Trading Intervals.

7B.2.2 A Market Participant may submit a new, updated LFAS Submission:

- (a) in accordance with clause 7B.2.7 in respect of any of its LFAS Facilities, other than the Verve Energy Balancing Portfolio;
- (b) for one or more Trading Intervals in the LFAS Horizon; and
- (c) before LFAS Gate Closure for those Trading Intervals.

7B.2.3 Subject to clause 7B.2.5, Verve Energy must immediately before 6:00PM] submit an 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:

- (a) in accordance with clause 7B.2.5; and
- (b) must, by 6.00PM make LFAS Submissions for each Trading Interval in the next Trading Day in which the sum of the MW Quantity contained in those LFAS Submissions equals at least the latest forecast LFAS Quantity for that Trading Interval published under clause 7B.3.16(b), if any.

7B.2.4 Subject to clause 7B.2.5, Verve Energy may submit or update an 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:

- (a) in accordance with clause 7B.2.7; and
- (b) at the time it submits an updated Balancing Price Supply Curve under 7A.2.9(d).

7B.2.5 Verve Energy must ensure that, for each Trading Interval, it has made LFAS Submissions under this clause 7B in which 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.3.16(b), if any.

7B.2.6 Verve Energy, in its LFAS Submission, must include a cost per MW for providing of Upwards LFAS Backup Enablement and for providing Downwards LFAS Backup Enablement for each Trading Interval in the Balancing Horizon.

7B.2.7 An LFAS Submission must:

- (a) be in the manner and form prescribed and published by the IMO;
- (b) constitute a declaration by an Authorised Officer; and

(c) reflect any limits specified by System Management under clause 2.34.7C(c) LFAS Standing Data.

7B.2.8 When the IMO accepts an LFAS Submission from a Market Participant that complies with clause 7B.2.7(a) then, for the purposes of clause 7B.2.7(b), the submission will be deemed to constitute a declaration by an Authorised Officer of the Market Participant.

7B.2.9 A subsequent LFAS Submission made under clause 7B.2.2 or clause 7B.2.4 in respect of the same LFAS Facility covering the same Trading Interval as an earlier LFAS Submission, overrides the earlier LFAS Submission for, and has effect in relation to, that Trading Interval.

7B.2.10 A Market Participant with an LFAS Facility, and Verve Energy in respect of the Verve Energy Balancing Portfolio, must ensure that any LFAS Submission for a Trading Interval in the LFAS Horizon for which LFAS Gate Closure has not occurred accurately reflects:

(a) all information reasonably available to it;

(b) the Market Participant's reasonable expectation of the capability of the LFAS Facility to provide the LFAS to the LFAS Market; and

(c) the price at which the Market Participant intends to have the LFAS Facility provide LFAS.

7B.2.11 A Market Participant must:

(a) make an LFAS Submission under this clause 7B.2 in good faith; and

(b) not act in a manner that:

i is intended to lead, or

ii the Market Participant should have reasonably known is likely to lead,

to another Rule Participant being misled or deceived as to the existence or non existence of a material fact in the LFAS Market.

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

- 7B.2.13 A Market Participant may be taken to have not made an LFAS Submission in good faith notwithstanding that, after all the evidence has been considered, the intention of the Market Participant is ascertainable only by inference from:
- (a) the conduct of the Market Participant;
  - (b) the conduct of any other person; or
  - (c) the relevant circumstances.
- 7B.2.14 A Market Participant must not, for any Trading Interval, offer prices within its LFAS Submission in excess of the Market Participant's reasonable expectation of the incremental cost incurred of the LFAS Facility providing LFAS when such behaviour relates to market power.
- 7B.2.15 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:
- (a) historical LFAS Submissions and/or Balancing Submissions, including changes made to LFAS Submissions and/or Balancing Submissions in which a pattern of behaviour may indicate an intention to create a false impression in the LFAS Market;
  - (b) any information as to whether a Facility was not able to provide LFAS and the reasons for that failure; and
  - (c) any other information that considered by the IMO to be relevant.
- 7B.2.16 For the purpose of Regulation 37(a) of the Electricity Industry (Wholesale Electricity Market) Regulations 2004, where a civil penalty is imposed for a contravention of clause 7B.2.10, clause 7B.2.11, clause 7B.2.13, clause 7B.2.14 or clause 7B.2.17 the civil penalty amount must be distributed amongst all Market Participants in proportion to their Market Fees calculated over the previous full 12 months, or part thereof if Balancing Market Commencement Day was less than 12 months, prior to the date the civil penalty is received.
- 7B.2.17 Where an LFAS Facility is selected under clauses 7B.3.5(b) or (c) to provide LFAS in a Trading Interval, then a Market Participant must, as soon as it becomes aware that the LFAS Facility is physically unable to provide some or all of the LFAS Quantity for which it has been selected, advise the IMO in the manner and form prescribed by the IMO, whether the LFAS Facility is physically able to provide any LFAS in that Trading Interval and if so, the quantity, in MW.

- 7B.2.18 Where an LFAS Facility is selected under clauses 7B.3.5(b) or (c) to provide LFAS in a Trading Interval, then a Market Participant must, unless it has provided advice to the IMO under clause 7B.2.16, provide the LFAS in the Trading Interval.
- 7B.2.19 Where the IMO has received advice under clause 7B.2.16, the IMO must, as soon as practicable, notify System Management the quantity of LFAS the LFAS Facility is able to provide in the Trading Interval according to the advice received by the IMO.

### **7B.3 LFAS Merit Order**

- 7B.3.1 The IMO must convert the prices for each Trading Interval in LFAS Price-Quantity Pairs in LFAS Submissions from Market Participants, other than Verve Energy in respect of the Verve Energy Balancing Portfolio, into Loss Factor Adjusted Prices.
- 7B.3.2 The IMO is to 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.3.4, 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 using the Loss Factor Adjusted Prices determined under clause 7B.3.1 and the prices in the Upwards LFAS Portfolio Supply Curve.
- 7B.3.3 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 7A.3.4, the list is obtained by ranking LFAS Downwards Price-Quantity Pairs for a Trading Interval contained in LFAS Submissions in order of highest to lowest price using the Loss Factor Adjusted Prices determined under clause 7B.3.1 and the prices in the Downwards LFAS Portfolio Supply Curve.
- 7B.3.4 In circumstances where there is a tie in the ranking of LFAS Facilities under clause 7B.3.2 or clause 7B.3.3 in the LFAS Merit Order the IMO is to assign priority to break the tie for the Trading Day of the Trading Interval in which the tie occurred priority will be given to the highest number based on the daily random number generator assigned.
- 7B.3.5 The IMO must to the extent that it is able:
- (a) determine the LFAS Merit Order for each Trading Interval in the 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) subject to clause 7B.3.6, select from the LFAS Merit Order derived under clause 7B.3.5(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 latest forecast quantity of any capacity published under clause 7B.3.16(b); and

(ii) if only part of the capacity in the lowest priced, or next lowest priced, LFAS Upwards Price-Quantity Pair is required to make up the latest forecast quantity of any capacity published under clause 7B.3.16(b), that LFAS Upwards Price-Quantity Pair is selected for that part of its capacity only.

(c) subject to clause 7B.3.6, select from the Downwards LFAS Merit Order derived under clause 7B.3.5(a) the lowest priced LFAS Downwards Price-Quantity Pair or Pairs, and associated LFAS Facility or Facilities, so that:

(i) the capacity in the lowest priced LFAS Downwards Price-Quantity Pair, or the sum of the capacity in the lowest priced LFAS Downwards Price-Quantity Pairs equals the latest forecast quantity of any capacity published under clause 7B.3.16(b); and

(ii) if only part of the capacity in the lowest priced, or next lowest priced, LFAS Downwards Price-Quantity Pair is required to make up the latest forecast quantity of any capacity published under clause 7B.3.16(b), 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 Upwards LFAS Facility or Facilities determined under clause 7B.3.5(b) and the associated LFAS Facility quantities and Trading Interval; and

(ii) the Downwards LFAS Facility or Downward LFAS Facilities determined under clause 7B.3.5(c) and the

associated LFAS Facility quantities and Trading Interval; and

(e) each time the IMO creates an LFAS Merit Order, publish it and the highest price selected under each of clause 7B.3.5(b) and (c) between one and a half to two hours before the start of the first Trading Interval in the LFAS Horizon to which the LFAS Merit Order relates.

7B.3.6 Where a selection under clauses 7B.3.5(b) or (c) requires an LFAS Facility to provide a quantity of LFAS less than the minimum permitted LFAS quantity, as determined by System Management and published by the IMO on the Market Web Site, the IMO may select the lowest priced LFAS Price-Quantity Pair that subject to any restrictions under clause 7B.1.2(c), is able to provide a quantity of LFAS equal to the minimum LFAS quantity.

7B.3.7 Subject to clause 7B.3.8, 7B.3.9 and clause 7B.4.1, System Management must use the LFAS Facilities referred to in clause 7B.3.5(d) for meeting LFAS requirements in the associated Trading Interval.

7B.3.8 Where the IMO is unable to publish an LFAS Merit Order for a Trading Interval in accordance with clause 7B.3.5(d), System Management must use the Facilities in the Verve Energy Balancing Portfolio to provide LFAS for that Trading Interval.

7B.3.9 Where System Management is the cause of an External Constraint affecting the Network, or the Network is not responding to frequency deviations, System Management may use the LFAS Facilities for meeting LFAS requirements other than in accordance with the LFAS Merit Order.

### **LFAS Price**

7B.3.10 The IMO must, at the time it makes the selection under 7B.3.5(b), determine the Upwards LFAS Price for a Trading Interval as the highest price in those LFAS Upwards Price-Quantity Pairs.

7B.3.11 The IMO must, at the time it makes the selection under 7B.3.5(c), determine the Downwards LFAS Price for a Trading Interval as the highest price in those LFAS Downward Price-Quantity Pairs.

7B.3.12 The IMO must, by the end of a Trading Day, publish the LFAS Price for each Trading Interval for that Trading Day.

7B.3.13 If the IMO is unable to determine an LFAS Price under clause 7B.3.10 or clause 7B.3.11 in time to publish it in accordance 7B.3.12, the IMO is to determine the LFAS Price as follows:

- (a) if the IMO is determining an LFAS Price for a Trading Interval in a Business Day, the LFAS 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
- (b) if the IMO is determining an LFAS Price for a Trading Interval in a day which is not a Business Day, the LFAS 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.

7B.3.14 Once the IMO has published an LFAS Price under clause 7B.3.12 it cannot be altered either through disagreement under clause 9.20.6 or through disputes under clause 9.2.1.

### **Forecast LFAS Merit Order**

7B.3.15 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.3.16 Where the IMO determines the forecast LFAS Merit Order under clause 7B.3.15, the IMO must, to the extent it is reasonably able, within a Trading Interval, publish on the Market Web Site, to each Market Participant and to System Management:

- (a) the LFAS Quantities expected to be provided by that Market Participant for a Trading Interval in the Balancing Horizon as indicated by the forecast LFAS Merit Order;
- (b) any quantities provided to the IMO by System Management under clause 7B.1.4 and clause 7B.1.5; and
- (c) a forecast LFAS Price based upon the forecast LFAS Merit Order.

### **7B.4 Verve Energy Back Up LFAS Provider**

7B.4.1 Where:

- (a) an LFAS Facility has failed to provide all of part of the LFAS when called upon to do so by System Management in accordance with clause 7B.3.7; or

(b) the quantity of LFAS in a Trading Interval is greater than the LFAS Quantity published under clause 7B.1.5 for that Trading Interval.

System Management must use the Verve Energy Balancing Portfolio to provide the LFAS Quantity Balance and/or Increased LFAS Quantity, as applicable.

7B.4.2 Where System Management has used the Verve Energy Balancing Portfolio to provide LFAS under clause 7B.3.8 or clause 7B.4.1 in a Trading Interval, it must, as soon as reasonably practicable, advise the IMO of:

(a) the quantity, in MW, by which the output of the Verve Energy Balancing Portfolio was increased in the Trading Interval; or

(b) the quantity, in MW, by which the output of the Verve Energy Balancing Portfolio was decreased in the Trading Interval.

## Chapter 9

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9.3.3. The IMO must determine the Metered Schedule for each of the following Facility Facility types and Non-Dispatchable Load for each Trading Interval in accordance with clause 9.3.4:

- (a) Non-Dispatchable Loads;
- (b) Interruptible Loads;
- (c) Dispatchable Loads;
- (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 a Facility Facilities or Non-Dispatchable Load;

- (a) Non-Dispatchable Loads, excluding those Non-Dispatchable Loads referred to in clause 9.3.4A;
- (b) Interruptible Loads;
- (c) Dispatchable Loads;
- (d) Scheduled Generators; and
- (e) Non-Scheduled Generators.

$\bar{r}$  is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility or Non-Dispatchable Load (as applicable) during that Trading Interval, Loss Factor adjusted to the Reference Node, and determined from Meter Data Submissions received by the IMO in accordance with clause 8.4 or SCADA data received from System Management in accordance with clause 7.13.1(cA) where interval meter data is not available.

9.3.4A. The IMO must determine a single Metered Schedule for a Trading Interval for those Non-Dispatchable Loads without interval meters or with meters not read as interval meters that are served by the Electricity Retail Corporation Synergy where:

- (a) the Metered Schedule equals the Notional Wholesale Meter value for that Trading Interval;
- (b) the Notional Wholesale Meter value for a Trading Interval equals negative one multiplied by:
  - i. the sum of the Metered Schedules with positive quantities for that Trading Interval; plus
  - ii. the sum of the Metered Schedules with negative quantities for that Trading Interval;

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

## Chapter 9

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

9.7.1. The Reserve Capacity settlement amount for Market Participant p for Trading Month m is:

$$\begin{aligned}
 \text{RCSA}(p,m) = & \text{Monthly Reserve Capacity Price}(m) \times (\text{CC\_NSPA}(p,m) \\
 & \quad - \text{Sum}(q \in P, \text{CC\_ANSPA}(p,q,m))) \\
 & + \text{Sum}(a \in A, \text{Monthly Special Price}(p,m,a) \times (\text{CC\_SPA}(p,m,a) \\
 & \quad - \text{Sum}(q \in P, \text{CC\_ASPA}(p,q,m,a)))) \\
 & - \text{Capacity Cost Refund}(p,m) \\
 & - \text{Intermittent Load Refund}(p,m) \\
 & + \text{Supplementary Capacity Payment}(p,m) \\
 & - \text{Targeted Reserve Capacity Cost}(m) \times \text{Shortfall Share}(p,m) \\
 & - \text{Shared Reserve Capacity Cost}(m) \times \text{Capacity Share}(p,m) \\
 & + \text{Capacity\_LF}(m) \times \text{Capacity Share}(p,m)
 \end{aligned}$$

Where:

$$\begin{aligned}
 \text{Shortfall Share}(p,m) = & 0, \text{ if } \text{Sum}(n \in P, (\text{IRCR}(n,m) - \text{Sum}(q \in P, \text{CC\_ANSPA}(q,n,m) \\
 & \quad + \text{Sum}(a \in A, \text{CC\_ASPA}(q,n,m,a)))))) = 0 \\
 & \text{otherwise,} \\
 & (\text{IRCR}(p,m) - \text{Sum}(q \in P, \text{CC\_ANSPA}(q,p,m) \\
 & \quad + \text{Sum}(a \in A, \text{CC\_ASPA}(q,p,m,a)))) / \\
 & \text{Sum}(n \in P, (\text{IRCR}(n,m) - \text{Sum}(q, \text{CC\_ANSPA}(q,n,m) \\
 & \quad + \text{Sum}(a \in A, \text{CC\_ASPA}(q,n,m,a))))))
 \end{aligned}$$

$$\text{Capacity Share}(p,m) = \text{IRCR}(p,m) / \text{Sum}(n \in P, \text{IRCR}(n,m))$$

Monthly Reserve Capacity Price(m) is the Monthly Reserve Capacity Price which applies for Trading Day d defined in accordance with clause 4.29.1;

CC\_NSPA(p,m) is the number of Capacity Credits held by Market Participant p in Trading Month m that are not covered by Special Price Arrangements;

CC\_ANSPA(p,q,m) is the number of Capacity Credits held by Market Participant p in Trading Month m that are not covered by Special Price Arrangements and which are allocated to another Market Participant q for Trading Month m under clauses 9.4 and 9.5;

A is the set of all Special Price Arrangements associated with a Facility where "a" is used to refer to a member of that set;

P is the set of all Market Participants, where "p", "n", and "q" are all used to refer to a member of that set;

Monthly Special Price(p,m,a) is the Monthly Special Reserve Capacity Price for Special Price Arrangement for Market Participant p defined in accordance with clause 4.29.2 which applies for Trading Day d;

CC\_SPA(p,m,a) is the number of Capacity Credits held by Market Participant p in Trading Month m that are covered by Special Price Arrangement a;

CC\_ASPA(p,q,m,a) is the number of Capacity Credits held by Market Participant p in Trading Month m that are covered by Special Price Arrangement a and which are allocated to Market Participant q for Trading Month m under clauses 9.4 and 9.5;

IRCR(p,m) is the Individual Reserve Capacity Requirement for Market Participant p and Trading Month m expressed in units of MW;

Capacity Cost Refund(p,m) is the Capacity Cost Refund payable to the IMO by Market Participant p in respect of that Market Participant's Capacity Credits for Trading Month m, as specified in clause 4.29.3(d)(vi);

Intermittent Load Refund(p,m) is the sum over all of Market Participant p's Intermittent Loads of the Intermittent Load Refund payable to the IMO by Market Participant p in respect of each of its Intermittent Loads for Trading Month m, as specified in clause 4.28A.1;

Supplementary Capacity Payment(p,m) is the net payment to be made by IMO under a Supplementary Capacity Contract to Market Participant p for Trading Month m, as specified by the IMO in accordance with clause 4.29.3(e)(i);

Targeted Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst those Market Customers who have not had sufficient Capacity Credits allocated to them for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(b);

Shared Reserve Capacity Cost(m) is the cost of Reserve Capacity to be shared amongst all Market Customers for Trading Month m where this cost is specified for Trading Month m under clause 4.29.3(c);

Capacity\_LF(m) is the total Load Following service capacity payment cost for Trading Month m as specified by IMO under clause 3.22.1(a)

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

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

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

Where:

MBP(d,t) is the Balancing Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.2;

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 6.14.2;

CONC(p,d,t) is the Constrained On Compensation for a Trading Interval for Market Participant p for Trading Interval t of Trading Day d. For a participant other than Verve Energy, CONC(p,d,t) is the sum of all ConGN x ConPN for each of the Market Participant's Scheduled Generation Facilities and Non-Scheduled Generation Facilities for that Trading Interval. For Verve Energy, CONC(p,d,t) is the sum of all PConGN x PConPN plus the sum of all ConGN x ConPN for each VSAF.

COFFC(p,d,t) is the Constrained Off Compensation for a Trading Interval for Market Participant p for Trading Interval t of Trading Day d. For a participant other than Verve Energy, COFFC(p,d,t) is the sum of all CoffGN x CoffPN for each of the Market Participant's Scheduled Generation Facilities Non-Scheduled Generation Facilities for that Trading Interval. For Verve Energy, COFFC(p,d,t) is the sum of all PCoffGN x PCoffPN plus the sum of all CoffGN x CoffPN for each VSAF.

DIP(d,t) is 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.

ADQ(p,d,t), is the Authorised Deviation Quantity for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.2;

UUDQ(p,d,t) is the Upward Unauthorised Deviation Quantity for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.3;

DUDQ(p,d,t) is the Downward Unauthorised Deviation Quantity, for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.4;

Balancing Price (d,t) is the Balancing Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.2;

UDAP(d,t) is the Upward Deviation Administered Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.5;

DDAP(d,t) is the Downward Deviation Administered Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.6;

~~DIP(d,t) is the 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 The Ancillary Service Settlement Calculations for a Trading Month

9.9.1. The following terms relate to the Ancillary Service settlement amount:

(a) The Ancillary Service settlement amount for Market Participant p for Trading Month m is:

$$\begin{aligned}
 \text{ASSA}(p,m) = & \text{Electricity Generation Corporation Verve Energy AS Provider} \\
 & \text{Payment}(p,m) + d(p,i) \times \\
 & + \text{ASP\_Payment}(p,m) \\
 & \text{---} + \text{sum}(t \in T, \text{LF Market Payment}(p,t)) \\
 & - \text{Load\_Following\_Share}(p,m) \times \text{Capacity\_LF}(m) \\
 & - \text{LF Availability Cost Share}(p,m) \\
 & \times (\text{Capacity\_LF}(m) + \text{Availability\_Cost\_LF}(m)) \\
 & - \text{Reserve\_Cost\_Share}(p,m) \\
 & - \text{Consumption\_Share}(p,m) \times \text{Cost\_LRD}(m)
 \end{aligned}$$

Where:

Tt denotes a Trading Interval in Trading Month m;

T is the set of Trading Intervals in Trading Month m;

Peak is the set of Peak Trading Intervals in Trading Month m;

Off-Peak is the set of Off-Peak Trading Intervals in Trading Month m;~~the Electricity Generation Corporation AS Provider Payment(p,m) = 0 if Market Participant p is not the Electricity Generation Corporation and (Availability\_Cost\_R(m) + Availability\_Cost\_LF(m) + Cost\_LRD(m)) Sum(i ∈ I, ASP\_Payment(i,m)) otherwise.;~~

ASP\_Payment(p,m) is the total payment to Market Participant p for Contracted Ancillary Services in Trading Month m, determined in accordance with clause 9.9.3;

ASP\_Balance\_Payment(i,m) is determined in accordance with clause 9.9.3A for Trading Month m;

Load\_Following\_Share(p,m) is the share of the Cost\_LF(m) allocated to Market Participant p in Trading Month m, where this is to be determined by the IMO using the methodology described in clause 3.14.1;

Reserve\_Cost\_Share(p,m) is defined in clause 9.9.2(b);

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;

Capacity\_LF(m) is the total Load Following ~~service~~ Service capacity payment cost for Trading Month m as specified by the IMO under clause 3.22.1(a);

Availability\_Cost\_R(m) is the total Spinning Reserve availability payment costs, excluding Load Following costs, for Trading Month m, as calculated under clause 9.9.2(c);

Availability\_Cost\_LF(m) is the Load Following availability payment costs for Trading Month m, as calculated under clause 9.9.2(d); and

Cost\_LRD(m) is the total Load Rejection Reserve Service, System Restart Service, and Dispatch Support Service services payment costs for Trading Month m as specified by the IMO under clause 3.22.1(g);

LF UP Market Payment (p,t) = sum (Ex-post Upward LFAS Band(p,t)x Upwards LFAS Price(t) + Upwards LFAS Backup Enablement (p,t)x Backup Upwards LFAS price (p,t)

LF DOWN Market Payment(p,t) = sum (Ex-post Downward LFAS Band (p,t)x Downwards LFAS Price (t) + Downwards LFAS Backup Enablement (p,t)x Backup Downwards LFAS Price (p,t)

LF Market Payment (p,t) = (LF UP Market Payment (p,t) + LF DOWN Market Payment (P,t))

(b) Verve Energy Ancillary Service Provider Payment for Trading Month m is:

If Market Participant p is not Verve Energy:

Verve Energy AS Provider Payment (p,m) = 0

If Market Participant p is the Verve Energy:

Verve Energy As Provider Payment (p,m) =

0.5 x Margin Peak (m) x Sum (t∈ Peak, MCAP(t) x max(0,(Capacity R Peak(m) – Sum (c∈ CAS SR, ASP SRQ(c,t) – LFR(m))))  
+ 0.5 x Margin Off-Peak(m) x Sum (c∈ Off-Peak,MCAP(t) x max (0,(Capacity R Off-Peak(m) – Sum(c∈ CAS SR,ASP SRQ(c,t) – LFR(m))))  
+Sum (t∈ T,Sum(c∈ CAS SR, ASP SRPayment(c,m)/TITM))  
+Cost LRD(m)  
-ASP Balance Payment(m)

Where:

t denotes a Trading Interval in Trading Month m;

T is the set of Trading Intervals in Trading Month m;

Peak is the set of Peak Trading Intervals in Trading Month m;

Off-Peak is the set of Off-Peak Trading Intervals in Trading Month m;

ASP Payment(p,m) is the total payment to Market Participant p for Contracted Ancillary Services in Trading Month m, determined in accordance with clause 9.9.3;

ASP Balance Payment(m) is determined in accordance with clause 9.9.3A for Trading Month m;

Load Following Share(p,m) is the share of the Cost LF(m) allocated to Market Participant p in Trading Month m, where this is to be determined by the IMO using the methodology described in clause 3.14.1;

Reserve Cost Share(p,m) is defined in clause 9.9.2(b);

LF Market Payment (p,t) is the total payments to Market Participant p in Trading Interval t for the provision of LFAS in respect of the Adjusted Selected LFAS Quantity.

LF Market Payment calculation is:

LF UP Market Payment (p,t) = sum (Ex-post upward LFAS band(p,t)x Upwards LFAS Price(t) + Upwards LFAS Backup enablement (p,t)x Backup upwards LFAS price (p,t)

LF DOWN Market Payment(p,t) = sum (Ex-post downward LFAS Band (p,t)x downwards LFAS Price (t) + downwards LFAS Backup enablement (p,t)x Backup downwards LFAS price (p,t)

LF Market Payment (p,t) = (LF UP Market Payment (p,t) + LF DOWN Market Payment (P,t))

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;

Capacity LF(m) is the total Load Following Service capacity payment cost for Trading Month m as specified by the IMO under clause 3.22.1(a);

LF Availability Cost Share(p,m) is the Load Following availability cost share for Market Participant p for Trading Month m, as calculated under clause 9.9.2(bA);

Cost LRD(m) is the total Load Rejection Reserve Service, System Restart Service and Dispatch Support Service payment cost for Trading Month m as specified by the IMO under clause 3.22.1(g);

Margin Peak(m) is the reserve availability payment margin applying for Peak Trading Intervals for Trading Month m as specified by the IMO under clause 3.22.1(c);

Margin Off-Peak(m) is the reserve availability payment margin applying for Off-Peak Trading Intervals for Trading Month m as specified by the IMO under clause 3.22.1(d);

Capacity R Peak(m) is the capacity necessary to cover the Ancillary Services Requirement for Spinning Reserve for Peak Trading Intervals for Trading Month m as specified by the IMO under clause 3.22.1(e);

Capacity R Off-Peak(m) is the capacity necessary to cover the Ancillary Services Requirement for Spinning Reserve for Off-Peak Trading Intervals for Trading Month m as specified by the IMO under clause 3.22.1(f);

LRF(m) is the capacity necessary to cover the Ancillary Services Requirement for Load Following for Trading Month m in as specified by the IMO under clause 3.22.1(fA);

MCAP(t) is the greater of zero and the Marginal Cost Administered Price for Trading Interval t calculated in accordance with clause 6.14.2;

CAS SR is the set of Contracted Spinning Reserve Services;

C denotes a Contracted Ancillary Service;

ASP SRQ(c,t) is the quantity provided by System Management in accordance with clause 3.22.2(b)(ii) for Contracted Spinning Reserve Service c in Trading Interval t multiplied by 2, in units of MW;

ASP SRPayment (c,m) is defined in clause 9.9.4; and

TITM is the number of Trading Intervals in Trading Month m (excluding any Trading Intervals prior to Energy Market Commencement).

9.9.2 The following terms related to Ancillary Service availability costs:

(a) ~~the total availability cost for Trading Month m:~~

$$\begin{aligned}
 \text{Availability\_Cost}(m) = & \\
 & 0.5 \times (\text{Margin\_Peak}(m) \times \text{Sum}(d \in D, t \in \text{Peak}, \text{MCAP}(d,t) \\
 & \times (\text{Capacity\_R\_Peak}(m) - \text{Sum}(i \in I, \text{ASP\_SRQ}(i,t)))) \\
 & + 0.5 \times (\text{Margin\_Off-Peak}(m) \times \text{Sum}(d \in D, t \in \text{Off-Peak}, \text{MCAP}(d,t) \\
 & \times (\text{Capacity\_R\_Off-Peak}(m) - \text{Sum}(i \in I, \text{ASP\_SRQ}(i,t)))) \\
 & + \text{Sum}(i \in I, \text{ASP\_SRPayment}(i,m)) \\
 & + \text{Sum}(i \in I, \text{ASP\_LFPayment}(i,m))
 \end{aligned}$$

(b) the Spinning Reserve cost share for Market Participant p, which is a Market Generator, for Trading Month m:

$$\begin{aligned}
 \text{Reserve Cost Share}(p,m) = & \\
 & \frac{0.5 \times \text{Margin Peak}(m)}{\text{Sum}(t \in \text{Peak}, \text{MCAP}(t))} \\
 & \times \text{Reserve Share}(p,t) \\
 & \times \max(0, (\text{Capacity R Peak}(m) - \text{Sum}(c \in \text{CAS SR}, \text{ASP SRQ}(c,t)) - \\
 & \text{LFR}(m))) \\
 & + \frac{0.5 \times \text{Margin Off-Peak}(m)}{\text{Sum}(t \in \text{Off-Peak}, \text{MCAP}(t))} \\
 & \times \text{Reserve Share}(p,t) \\
 & \times \max(0, (\text{Capacity R Off-Peak}(m) - \text{Sum}(c \in \text{CAS SR}, \text{ASP SRQ}(c,t)) - \\
 & \text{LFR}(m)))
 \end{aligned}$$

$$\frac{\text{+ Sum}(t \in T, \text{Reserve Share}(p,t) \times \text{AS Saving Allocation}(t))}{\text{x AS Cost Saving}(t)}$$

$$\frac{\text{+ Sum}(t \in T, \text{Reserve Share}(p,t))}{\text{x Sum}(c \in \text{CAS SR, ASP SR Payment}(c,m) / \text{TITM})}$$

(bA) the Load Following availability cost share for Market Participant p for Trading Month m:

$$\text{LF Availability Cost Share}(p,m) = \frac{\text{Sum}(t \in T, \text{Load Following Share}(p,m) \times (\text{LF Total Market Payment}(t) - \text{AS Saving Allocation}(t) \text{ AS Cost Saving}(t)))}{\text{LF Total Market Payment}(t)}$$

(bB) the total Spinning Reserve Cost if no Spinning Reserve was provided by Load Following plant and without the Ancillary Service Cost Saving, in Trading Interval t:

$$\text{SR Cost}(t) = 0.5 \times \text{Margin}(m) \times \text{MCAP}(t) \times \max(0, \text{Capacity R}(m) - \text{Sum}(c \in \text{CAS SR, ASP SRQ}(c,t))) + \text{Sum}(c \in \text{CAS SR, ASP SR Payment}(c,m) / \text{TITM})$$

If Trading Interval t is a Peak Trading Interval, then:

Margin(m) is Margin Peak(m); and  
Capacity R(m) is Capacity R Peak(m).

If Trading Interval t is an Off-Peak Trading Interval, then:

Margin(m) is Margin Off-Peak(m); and  
Capacity R(m) is Capacity R Off-Peak(m).

(bC) the Ancillary Service Cost Saving, derived through the dual use of plant to simultaneously provide Spinning Reserve Service and Load Following Service in Trading Interval t:

$$\text{AS Cost Saving}(t) = 0.5 \times \text{Margin}(m) \times \text{MCAP}(t) \times \min(\text{LFR}(m), \text{Capacity R}(m))$$

If Trading Interval t is a Peak Trading Interval, then:

LFR(m) is LFR Peak(m); and  
Margin(m) is Margin Peak(m); and  
Capacity R(m) is Capacity R Peak(m).

If Trading Interval t is an Off-Peak Trading Interval, then:

LFR(m) is LFR Off-Peak(m); and  
Margin(m) is Margin Off-Peak(m); and  
Capacity R(m) is Capacity R Off-Peak(m).

(bD) the allocation factor for the Ancillary Service Cost Saving in Trading Interval t:

$$\text{AS Saving Allocation}(t) = \frac{\text{LF Total Market Payment}(t)}{\text{LF Total Market Payment}(t) + \text{SR Cost}(t)}$$

(bE) the total payments for Load Following Service in Trading Month m:

$$\frac{\text{LF Total Market Payment}(t)}{\text{Sum}(p \in P, \text{LF Market Payment}(p,t))}$$

Where:

LF UP Market Payment (p,t) = sum (Ex-post upward LFAS band(p,t)x Upwards LFAS Price(t) + Upwards LFAS Backup enablement (p,t)x Backup upwards LFAS price (p,t)

LF DOWN Market Payment(p,t) = sum (Ex-post downward LFAS Band (p,t)x downwards LFAS Price (t) + downwards LFAS Backup enablement (p,t)x Backup downwards LFAS price (p,t)

LF Market Payment (p,t) = (LF\_UP Market Payment (p,t) + LF\_DOWN Market Payment (P,t)) ~~Reserve\_Cost\_Share(p,m) =~~

$$0.5 \times (\text{Margin\_Peak}(m) \times \text{Sum}(d \in D, t \in \text{Peak}, \text{MCAP}, (d,t) \times \text{Reserve\_Share}(p,t) \times (\text{Capacity\_R\_Peak}(m) - \text{Sum}(i \in I, \text{ASP\_SRQ}(i,t) \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t)) - 0.5 \times \text{LFR}(m))))$$

$$+ 0.5 \times (\text{Margin\_Off\_Peak}(m) \times \text{Sum}(d \in D, t \in \text{Off\_Peak}, \text{MCAP}, (d,t) \times \text{Reserve\_Share}(p,t) \times (\text{Capacity\_R\_Off\_Peak}(m) - \text{Sum}(i \in I, \text{ASP\_SRQ}(i,t) \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t)) - 0.5 \times \text{LFR}(m))))$$

+ Sum(t ∈ Peak and Off\_Peak I, Reserve\_Share(p,t) × Sum(i ∈ I, ASP\_SRPayment(i,m) / TITM))

(c) the total Spinning Reserve availability cost for Trading Month m:

$$\frac{\text{Availability\_Cost\_LF}(m)}{\text{Availability\_Cost}(m) - \text{Availability\_Cost\_R}(m)}$$

Availability Cost R (m) =

$$\text{Sum}(p \in P, \text{LF Reserve Cost Share}(p,m))$$

(d) the total Load Following availability cost\_for Trading Month m:

$$\frac{\text{Availability\_Cost\_LF}(m)}{\text{Availability\_Cost}(m) - \text{Availability\_Cost\_R}(m)}$$

Availability Cost LF(m) =

$$\text{Sum}(p \in P, \text{LF Availability Cost Share}(p,m))$$

Where:

t denotes a Trading Interval in Trading Month m;

T is the set of Trading Intervals in Trading Month m;

c denotes a Contracted Ancillary Service;

CAS SR is the set of Contracted Spinning Reserve Services;

P is the set of all Market Participants;

ASP\_SRQ(i,t) ASP\_SRQ(c,t) is the quantity provided by System Management in accordance with clause 3.22.3(b)(ii) for Contracted

~~Spinning Reserve Service  $c$  of Spinning Reserve provided by Ancillary Service Provider  $i$  in Trading Interval  $t$  multiplied by 2, in units of MW (this being one of the quantities referred to in clause 9.9.3);~~

~~$ASP\_SRPayment(i,m) - ASP\_SRPayment(c,m)$  is defined in clause 9.9.4 9.9.3;~~

~~$ASP\_LFPayment(i,m) - ASP\_LFPayment(c,m)$  is defined in clause 9.9.4 9.9.3;~~

TITM is the number of Trading Intervals in ~~the~~ Trading Month  $m$  (excluding any Trading Intervals prior to Energy Market Commencement);

Reserve\_Share( $p,t$ ) is the share of the Spinning Reserve ~~service~~-Service payment costs allocated to Market Participant  $p$  in Trading Interval  $t$ , where this is to be determined by the IMO using the methodology described in clause 3.14.2;

Load Following Share ( $p,m$ ) is the share of the Frequency Keeping Service payment costs allocated to Market Participant  $p$  in Trading Interval  $t$ , where this is to be determined by the IMO using the methodology described in clause 3.14.1;

Margin\_Peak( $m$ ) is the reserve availability payment margin applying for Peak Trading Intervals for Trading Month  $m$  as specified by the IMO under clause 3.22.1(c);

Margin\_Off-Peak( $m$ ) is the reserve availability payment margin applying for Off-Peak Trading Intervals for Trading Month  $m$  as specified by the IMO under clause 3.22.1(d);

Capacity\_R\_Peak( $m$ ) is the capacity necessary to cover the Ancillary Services Requirement for Spinning Reserve for Peak Trading Intervals for Trading Month  $m$  as specified by the IMO under clause 3.22.1(e);

Capacity\_R\_Off-Peak( $m$ ) is the capacity necessary to cover the Ancillary Services Requirement for Spinning Reserve for Off-Peak Trading Intervals for Trading Month  $m$  as specified by the IMO under clause 3.22.1(f);

LFR( $m$ ) is the capacity necessary to cover the Ancillary Services Requirement for Load Following for Trading Month  $m$  as specified by the IMO under clause 3.22.1(fA);

~~MCAP( $d,t$ ) has the meaning given in clause 9.8.1 and = 0 if MCAP( $d,t$ ) < 0~~  
Balancing Price is the greater of zero and the Marginal Cost Administered Price for Trading Interval  $t$  calculated in accordance with clause 6.14.2;

~~Peak denotes the set of Trading Intervals occurring during Peak Trading Intervals, where "t" refers to a Trading Interval during a Trading Day;~~  
is the set of Peak Trading Intervals in Trading Month  $m$ ; and

~~Off-Peak denotes the set of Trading Intervals occurring during Off-Peak Trading Intervals, where “t” refers to a Trading Interval during a Trading Day; and is the set of Off-Peak Trading Intervals in Trading Month m.~~

~~LF Market Payment (p,t) is the total payments for LFAS in Trading Interval t to Market Participant p, in respect of the Adjusted Selected LFAS Quantity.~~

~~D denotes the set of Trading Days within Trading Month m, where “d” is used to refer to a member of that set.~~

9.9.3. The value of  $ASP\_Payment(i,m)$  for ~~Ancillary Service Provider~~i ~~Rule Participant~~i in Trading Month m is the sum of:

- (a) the sum over all ~~Ancillary Service Contracts for Spinning Reserve Contracted Spinning serve Services c~~ provided by ~~Rule Participant i~~i of  $ASP\_SRPayment(i,c,m)$ , the payment under that contract;
- ~~(b) the sum over all Ancillary Service Contracts for Load Following of~~  
~~ASP\_LFPayment(i,c,m), the payment under that contract;~~
- ~~(be) the sum over all Ancillary Service Contracts for Load Rejection Reserve Contracted Load Rejection Reserve Services c~~ provided by ~~Rule Participant i~~i of  $ASP\_LRPayment(i,c,m)$ , the payment under that contract;
- ~~(cd) the sum over all Ancillary Service Contracts for System Restart Contracted System Restart Services c~~ provided by ~~Rule Participant i~~i of  $ASP\_BSPayment(i,c,m)$ , the payment under that contract; and
- ~~(de) the sum over all Ancillary Service Contracts for Dispatch Support Contracted Dispatch Support Services c~~ provided by ~~Rule Participant i~~i of  $ASP\_DSPayment(i,c,m)$ , the payment under that contract

where each of the terms  $ASP\_SRPayment(i,c,m)$ ,  $ASP\_LFPayment(i,c,m)$ ,  $ASP\_LRPayment(i,c,m)$ ,  $ASP\_BSPayment(i,c,m)$  and  $ASP\_DSPayment(i,c,m)$  is determined in accordance with clause 9.9.4.

9.9.3A. The value of  $ASP\_Balance\_Payment(m)$  for Trading Month m is:

$$\begin{aligned}
 \underline{ASP\_Balance\_Payment(m)} = & \\
 & \underline{Sum(c \in CAS\_SR, ASP\_SRPayment(c,m))} \\
 & \underline{+ Min(Cost\_LR(m), Sum(c \in CAS\_LR, ASP\_LRPayment(c,m))} \\
 & \underline{+ Sum(c \in CAS\_BS, ASP\_BSPayment(c,m)))}, \\
 & \underline{+ Sum(c \in CAS\_DS, ASP\_DSPayment(c,m))}
 \end{aligned}$$

where

c denotes a Contracted Ancillary Service;

CAS SR is the set of Contracted Spinning Reserve Services;

CAS LR is the set of Contracted Load Rejection Reserve Services;

CAS BS is the set of Contracted System Restart Services;

CAS DS is the set of Contracted Dispatch Support Services;

~~Cost LR(m) is the amount specified by the IMO for Trading Month m under clause 3.22.1(g)(i) for Load Rejection Reserve Service and System Restart Service, and Dispatch Support Services except those provided through clause 3.11.8B, and~~

~~each of the terms ASP\_SRPayment(c,m), ASP\_LFPayment(c,m), ASP\_LRPayment(c,m), ASP\_BSPayment(c,m) and ASP\_DSPayment(c,m) is determined in accordance with clause 9.9.4.~~

9.9.4. For ~~each Ancillary Service Provider i and each Ancillary Service Contract Contracted Ancillary Service c~~, the payments ~~ASP\_SRPayment(i,c,m) for Spinning Reserve Service, ASP\_LFPayment(i,c,m) for Load Following Service, ASP\_LRPayment(i,c,m) for Load Rejection Reserve Service, ASP\_BSPayment(i,c,m) for System Restart Service and or ASP\_DSPayment(i,c,m) for Dispatch Support Service~~, as applicable, ~~are for Trading Month m is:~~

- (a) the applicable monthly dollar value specified by System Management for that Trading Month in accordance with clause 3.22.3(b)(iii)(1); ~~or, if no such value is specified,~~
- (b) ~~where no value is specified under clause 9.9.4(a),~~ the product of the applicable price specified in clause 3.22.3(b)(iii)(2) for that Trading Month and the sum over Trading Intervals in that Trading Month of the applicable quantities specified in clause 3.22.3(b)(ii).

9.10.1 The ~~Commitment and~~ Outage Compensation settlement amount for Market Participant p for Trading Month m is:

$$\text{COCSA}(p,m) = \text{Com\_Compensation}(p,m) + \text{Out\_Compensation}(p,m) - \text{Consumption\_Share}(p,m) \times \text{Out\_Compensation}(q,m)$$

Where

~~Com\_Compensation(x,m) is the sum over all Trading Days in the Trading Month of the Commitment Compensation calculated for Market Participant x (denoted by either p or q) under clause 6.18.1 of the Trading Month;~~

Out\_Compensation(x,m) is the Outage Compensation specified for Market Participant x (denoted by either p or q) for the Trading Month under clause 3.22(1)(h); and

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.

~~9.10A.1. The Non-Compliance Charge settlement amount for Market Participant p for Trading Interval t of Trading Day d is:~~

~~If Market Participant p is the Electricity Generation Corporation~~

$$\text{NCC}(p,m) = \text{Sum}(d \in D, t \in T, \text{CP}(d,t) \times \text{ABS}[\text{NCC}(p,d,t)])$$

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Otherwise

$$NCC(p,m) = 0$$

Where

~~CP(d,t), is the non-compliance cost applicable in Trading Interval t of Trading Day d as specified in clause 9.10A.2;~~

~~NCQ(p,d,t) is the MWh quantity of non-compliance for Market Participant p for Trading Interval t of Trading Day d as specified by System Management in accordance with clause 7.13.1(cG);~~

~~ABS[NCQ(p,d,t)] means the mathematical absolute value of NCQ(p,d,t);~~

~~D denotes the set of Trading Days within Trading Month m, where “d” is used to refer to a member of that set.~~

~~T denotes the set of all Trading Intervals in Trading Day d, where “t” is used to refer to a member of that set.~~

~~9.10A.2. The value of the non-compliance cost is to equal the Alternative Maximum STEM Price.~~

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

$$RSA(p,m) = (-1) \times \text{Consumption\_Share}(p,m) \times (\text{Sum}(q \in P, d \in D, t \in T, BSA(q,d,t) + NCC(q,m))$$

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 for Market Participant q for Trading Day d and Trading Interval t;

~~NCC(q,m) is the Non-Compliance Charge settlement amount for Market Participant q for Trading Month m;~~

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.

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- 9.18.3 A Non-STEM Settlement Statement must contain the following information:
- (a) details of the Trading Days covered by the Non-STEM Settlement Statement;
  - (b) the identity of the Market Participant to which the Non-STEM Settlement Statement relates;
  - (c) for each Trading Interval of each Trading Day:
    - i. the Bilateral Contract quantities for ~~each-that~~ Market Participant;
    - ii. the Net Contract Position of the Market Participant;
    - ii(A). 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;
    - iv. the ~~Theoretical Energy Schedule-Dispatch Schedule~~ data for each of the Market Participant's Registered Facilities;
    - v. the meter reading for each Registered Facility associated with the Market Participant and to which paragraph (vii) is not applicable;
    - vi. in the case of ~~the Electricity Generation Corporation~~Verve Energy, the total quantity of energy deemed to have been supplied by ~~the Electricity Generation Corporation~~Verve Energy's Registered Facilities;~~;~~
    - vii. in the case of ~~the Electricity Retail Corporation~~Synergy, Notional Wholesale Meter values;
    - viii. the values of ~~the~~ Balancing Price, ~~MCAP, UDAP, and DDAP~~; ~~and~~ any ConGN/CoffGN and PConGN/PCoffGN and non Qualifying Quantities ~~under chapter 6~~; ~~ete~~.
    - ~~viii(A) in the case of the Electricity Generation Corporation, the MWh quantity of non-compliance; and~~
    - ~~viii(A) details of any of the following for the Market Participant:~~
      - ~~1. Constrained On Quantities and associated Constrained On Compensation Prices;~~
      - ~~2. Constrained Off Quantities and associated Constrained Off Compensation Prices;~~
      - ~~3. Non Qualifying Constrained On Generation;~~
      - ~~4. Non Qualifying Constrained Off Generation;~~
      - ~~5. Non-Balancing Facility Dispatch Instruction Payment; and~~
    - ~~viii(B) the Metered Balancing Quantity for the Market Participant; and~~

- ix. details of amounts calculated for the Market Participant under clauses 9.7 to 9.14 with respect to:
  - 1. Reserve Capacity settlement;
  - 2. Balancing settlement;
  - 3. Ancillary Services settlement;
  - 4. Commitment and outage compensation settlement;
  - 4A. Non-Compliance Cost settlement;
  - 5. Reconciliation settlement;
  - 6. Blank];
  - 7. Fee settlement; and
  - 8. Net Monthly Non-STEM Settlement Amount;
- (cA) details of any Capacity Credits allocated to the Market Participant in a Capacity Credit Allocation Submission made by another Market Participant in accordance with clauses 9.4 and 9.5;
- (cB) details of any Capacity Credits allocated to another Market Participant in a Capacity Credit Allocation Submission made by the Market Participant in accordance with clauses 9.4 and 9.5;
- (cC) details of any reductions in payments in the preceding Trading Month under clause 9.24.3A as a result of a Market Participant being in default;
- (cD) details of any payments to the Market Participant as a result of the IMO recovering funds not paid to the Market Participant in previous Trading Months under clause 9.24.3A as a result of a Market Participant being in default;
- (cE) in regard to Default Levy re-allocations, as defined in accordance with clause 9.24.9:
  - i. the total amount of Default Levy paid by that Market Participant during the Financial Year, with supporting calculations;
  - ii. the adjusted allocation of those Default Levies to be paid by that Market Participant, with supporting calculations; and
  - iii. the net adjustment be made;
- (d) whether the statement is an adjusted Non-STEM Settlement Statement and replaces a previously issued Non-STEM Settlement Statement;
- (e) in the case of an adjusted Non-STEM Settlement Statement, details of all adjustments made relative to the first Non-STEM Settlement Statement issued for that Trading Month with an explanation of the reasons for the adjustments;

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- (f) any interest applied in accordance with clause 9.1.3;
  - (g) the net dollar amount owed by the Market Participant to the IMO for the billing period (i.e. the Trading Days covered by the Non-STEM Settlement Statement) where this may be a positive or negative amount; and
  - (h) all applicable taxes.
- 9.19.2. Subject to clause 9.19.3, an adjusted Settlement Statement must be in the same form as the original Settlement Statement, but where data is modified between the issuance of the original Settlement Statement and the adjusted Settlement Statement, the IMO must record adjusted settlement both-values in the adjusted Settlement Statement and provide an explanation of ~~the-any~~ changes on request.
- 9.22.6. If an Invoice indicates that a Rule Participant owes an amount greater than one dollar to the IMO, then the Rule Participant must pay the full amount to the IMO (in cleared funds) by 10 AM on the date specified in the Invoice in accordance with clause 9.16.1(b), 9.16.2(e) and 9.16.4(d) (as applicable), whether or not it disputes the amount indicated to be payable.
- 9.22.8. If an Invoice indicates that the IMO owes an amount greater than one dollar to a Rule Participant, then the IMO must pay-make available the full amount to the Rule Participant (in cleared funds) by 2 PM on the date specified in the Invoice in accordance with clause 9.16.1(b), 2.16.2(e) and 9.16.4(d) (as applicable), except as provided for in clause 9.24.

## 10 Market Information

### Information Policy

#### 10.1. Record Retention

- 10.1.1. The IMO must develop and publish a list of all information and documents that relate to the Wholesale Electricity Market activities that Rule Participants must retain.
- 10.1.2. Effective from the date that the IMO publishes a list containing the relevant information or document, Rule Participants must retain any information or documents of that kind for a period of seven years from the date it is created, or such longer period as may be required by law.

#### 10.2. Information Confidentiality Status

- 10.2.1. The IMO ~~may~~must in accordance with the Market Rules and Market Procedures set and publish the confidentiality status for each, determine the following for any type of market related information ~~and document produced or exchanged in accordance with the Market Rules or Market Procedures;~~

(a) whether any type of market related information is Confidential; and

(b) whether information submitted by a Market Participant under these Market Rules or the Market Procedure, or any part of it;

i. \_\_\_\_\_ is Confidential; and

ii. \_\_\_\_\_ if so, may be provided to a particular, or a limited category or number of, Rule Participant.

10.2.1A Where the IMO has determined under clause 10.2.1 that information is Confidential, the IMO may also determine whether there are any Rule Participants to whom that information, or a part of it, may be disclosed by the IMO.

10.2.2 The IMO may not determine that any of the information listed in clause 10.5 is Confidential. The classes of confidentiality status are:

~~(a) — Public, in which case the relevant information or documents may be made available to any person by any person;~~

~~(b) — SWIS Restricted, in which case the relevant information or documents may only be made available to:~~

~~i. — Rule Participants;~~

~~ii. — the Market Advisory Committee;~~

~~iii. — the IMO;~~

- ~~iv. — the Electricity Review Board;~~
  - ~~v. — the Economic Regulation Authority; and~~
  - ~~vi. — other Regulatory or Government Agencies in accord with applicable laws;~~
- ~~(c) — Rule Participant Market Restricted, in which case the relevant information or documents may only be made available to:~~
  - ~~i. — a specific Rule Participant;~~
  - ~~ii. — the IMO;~~
  - ~~iii. — the Electricity Review Board;~~
  - ~~iv. — the Economic Regulation Authority; and~~
  - ~~v. — other Regulatory or Government Agencies in accord with applicable laws;~~
- ~~(d) — Rule Participant Dispatch Restricted, in which case the relevant information or documents may only be made available to:~~
  - ~~i. — a specific Rule Participant;~~
  - ~~ii. — System Management~~
  - ~~iii. — the IMO;~~
  - ~~iv. — the Electricity Review Board;~~
  - ~~v. — the Economic Regulation Authority; and~~
  - ~~vi. — other Regulatory or Government Agencies in accord with applicable laws;~~
- ~~(e) — System Management Confidential, in which case the relevant information or documents may only be made available to:~~
  - ~~i. — System Management;~~
  - ~~ii. — the IMO;~~
  - ~~iii. — the Electricity Review Board;~~
  - ~~iv. — the Economic Regulation Authority; and~~
  - ~~v. — other Regulatory or Government Agencies in accord with applicable laws;~~
- ~~(f) — IMO Confidential, in which case the relevant information or documents may only be made available to:~~
  - ~~i. — the IMO; —~~
  - ~~ii. — the Electricity Review Board;~~
  - ~~iii. — the Economic Regulation Authority; and~~

- ~~iv. other Regulatory or Government Agencies in accord with applicable laws; and~~
- ~~(g) Rule Participant Network Restricted, in which case the relevant information or documents may only be made available to:~~
  - ~~i. a specific Rule Participant;~~
  - ~~ii. the relevant Network Operator;~~
  - ~~iii. System Management;~~
  - ~~iv. the IMO;~~
  - ~~v. the Electricity Review Board;~~
  - ~~vi. the Economic Regulation Authority; and~~
  - ~~vii. any other Regulatory or Government Agencies in accord with applicable laws.~~

10.2.3 In determining whether information is Confidential under clause 10.2.1 and in determining to whom such information may be disclosed, the IMO must act in accordance with the ~~n setting the confidentiality status of a type of market related information or document under clause 10.2.1, the IMO must have regard to the~~ following principles:

- (a) information that discloses the price of electricity, capacity or any related service or, equipment, or plant or commercially sensitive or potentially defamatory information pertaining to a Rule Participant is not made public or revealed to other Rule Participants except in accordance with legal requirements or requirements of these Market Rules;
- (b) subject to paragraph (a), Rule Participants are to have access to information pertaining to current and expected future conditions of the power system that may impact on their ability to trade, deliver, or consume energy;
- (c) the IMO ~~can~~may make available to a person information if the IMO is required to do so by law or these Market Rules;
- (d) the IMO ~~can~~may restrict the availability of information to a person where this is required by law, or these Market Rules;
- (e) the IMO ~~can~~may declare incomplete working documents to be ~~IMO~~ Confidential;
- (f) information that may be aggregated or provided in a form that does not disclose material that would otherwise be Confidential, is to be Public ~~the~~

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~~IMO can declare incomplete working documents of System Management to be System Management Confidential; and~~

- (g) ~~subject to this clause 10.2.3, a determination of the confidentiality status must seek to~~ maximise the number of parties that may view the information or document;
- ~~(h) information already in the public domain, other than by reason of a breach of existing confidentiality obligations, is not Confidential;~~
- ~~(i) information already known to a person, other than by reason of a breach of existing confidentiality obligations, is not Confidential;~~
- ~~(j) information that would otherwise be Confidential may be disclosed to the extent that the IMO is satisfied its disclosure is with the consent of the party to whom the information is confidential.~~

10.2.4. Information or documents determined as Confidential by the IMO may be made available only to Rule Participants specified in a determination under clause 10.2.1A or where required under these Market Rules.~~if the Market Rules require it.~~

10.2.4A. Notwithstanding clause 10.2.4, any type of information determined by the IMO to be Confidential can be disclosed:

- ~~(a) to the Economic Regulation Authority; and~~
- ~~(b) to the Electricity Review Board.~~

10.2.5 Clause 10.2.4 does not apply to information or documents:

- (a) that, other than as a result of a breach of confidentiality obligations, becomes available in the public domain after it is determined to be Confidential under clause 10.2.1;
- (b) that, other than as a result of a breach of confidentiality obligations, becomes already known to thea person after it is determined to be Confidential under clause 10.2.1~~receiving it;~~
- (c) required to be provided by law or a stock exchange having jurisdiction over the Rule Participant; or
- (d) required in connection with resolving a legal dispute;
- ~~(e) that would otherwise be Confidential where the IMO is satisfied disclosure is with the consent of the party to whom the information is confidential.~~

10.2.6 Information or documents that are not determined as Confidential are public and may be made available to any person by any person.

10.2.7 The IMO is to publish a list of information types that it has determined are Confidential under clause 10.2.1.

10.2.8 The IMO must publish reasons for a decision that information is or is not Confidential under clause 10.2.1, on request by a Rule Participant.

### **10.3. The Market Web Site**

- 10.3.1. The IMO must maintain a Market Web Site for the purpose of:
- (a) providing information on the nature and operation of the market;
  - (b) providing information on market performance; and
  - (c) disseminating reports and documents.
- 10.3.2. Subject to clause 10.4.2, the IMO must not require a fee for information or documents released by the IMO via the Market Web Site.
- 10.3.3. Where these Market Rules require System Management to provide information and documents to the IMO to be published on the Market Web Site, and the IMO is not required to approve or alter such information or documents, then, with System Management's agreement, the IMO may delegate to System Management the authority to directly post such information or documents on the Market Web Site. The IMO retains the right to cancel such delegation without consultation with System Management.
- 10.3.4. Where the IMO allows System Management to post information or documents on the Market Web Site in accordance with clause 10.3.3 the IMO's obligation under these Market Rules to publish such information or documents will transfer to System Management.
- 10.3.5. The IMO must document the protocols by which System Management and the IMO can change the Market Web Site in a Market Procedure and the IMO and System Management must comply with that documented Market Procedure in respect of changing the Market Web Site.

### **10.4. Information to be Released on Application**

- 10.4.1. The IMO must make information and documents that are not Confidential available on application by any person ~~subject to that person being a member of the class of persons able to receive information or documents in accordance with the relevant confidentiality status.~~
- 10.4.2. The IMO may charge a person a fee for providing information or documents provided in accordance with clause 10.4.1, where that fee may not exceed the IMO's costs, not otherwise included in the IMO's budget, of:
- (a) collating and transmission of information or documents; and
  - (b) preparing documents not otherwise required by the Market Rules, applicable law or regulation.

### **10.5 Information to be Released via the Market Web Site**

#### **10.5. Public Information**

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~~The IMO must make the following information available on the Market Web Site once the information becomes available to the IMO:

- (a) the following Market Rule and Market Procedure information and documents:
  - i. information on the records that must be maintained by Rule Participants;
  - ii. ~~any information that is required by the Market Rules to be published on the Web Site~~the list of the confidentiality status of information and documents pertaining to the Wholesale Electricity Market developed by the IMO in accordance with clause 10.2.1;
  - iii. the current version of the Market Rules;
  - iv. information on any Amending Market Rules that have been made in accordance with the Rule Change Process but are yet to commence or to be included in the current version of the Market Rules, including the date those Amending Rules will take affect;
  - v. any Rule Change Proposals that are open to public comment;
  - vi. the current version of Market Procedures;
  - vii. information on any changes to any Market Procedures that have been made in accordance with the Procedure Change Process but are yet to commence or to be included in the current version of the applicable Market Procedure, including the date those Market Procedure changes will take affect;
  - viii. any Procedure Change Proposals that are open to public comment; and
  - ix. a document summarising all Rule Change Proposals and Procedure Change Proposals that are no longer open to public comment and whether or not those proposals were accepted or rejected;
- (b) instructions as to how to initiate a Rule Change Process and Procedure Change Process;
- (c) details of all Rule Participants including:
  - i. name;
  - ii. mailing address, telephone and facsimile number;

- iii. the name and title of a contact person;
  - iv. details of applicable licenses held;
  - v. applicable Rule Participant classes;
  - vi. applicable Market Participant classes; and
  - vii. names and capacities of Registered Facilities;
- (d) the precise basis for determining the Bank Bill Rate;
- (e) details of bid, offer and clearing price limits as approved by the Economic Regulation Authority including:
- i. the Maximum Reserve Capacity Price;
  - ii. the Maximum STEM Price;
  - iii. the Alternative Maximum STEM Price; and
  - iv. the Minimum STEM Price,
- including rules that could cause different values to apply at different times;
- (f) the following Reserve Capacity information (if applicable):
- i. Requests for Expressions of Interest described in clause 4.2.3 for the previous five Reserve Capacity Cycles;
  - ii. the summary of Requests for Expressions of Interest described in clause 4.2.7 for the previous five Reserve Capacity Cycles;
  - iii. the Reserve Capacity Information Pack published in accordance with clause 4.7.2 for the previous five Reserve Capacity Cycles;
  - ...
  - vii. all Reserve Capacity Offer quantities and prices, including details of the bidder and facility, for a Reserve Capacity Auction, where this information is to be published by January 7th of the year following the Reserve Capacity Auction; and
  - viii. reports summarising ~~facility tests~~ the outcome of a Reserve Capacity Test and reasons for delays in those tests, as required by clause 4.25.11.
  - ix. The following annually calculated and monthly adjusted ratios:
    - 1. NTDL\_Ratio as calculated in accordance with Appendix 5, STEP 8;
    - 2. TDL\_Ratio as calculated in accordance with Appendix 5, STEP 8; and
    - 3. Total\_Ratio as calculated in accordance with Appendix 5, STEP 10.
- (g) the Ancillary Service report referred to in clause 3.11.11(b);...

- (iA) the following Balancing summary information:
- i for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
    - 1. each Balancing Forecast;
    - 2. the BMO excluding information that would identify specific Market Participants;
    - 3. where available, the total Relevant Dispatch Quantity; and
    - 4. where available, the Balancing Price;
- (iB) for each Trading Interval in each Trading Day during the 12 calendar months, before the end of the seventh day from the start of the Trading Day:
- 1. the Offers by Market Participant;
  - 2. the Bids by Market Participant; and
  - 3. the Fuel Declaration, Availability Declaration and, if applicable, Ancillary Service Declaration made by Market Participant;
- (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 Balancing Price, MCAP UDAP and DDAP;
  - ii. the Load Forecasts 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 and Curtailable Load;
  - iv. estimates of the energy not served due to involuntary load curtailment; and
  - v. any shortfalls in Ancillary Services; and
- ~~(vA) the non-compliance cost described in clause 9.10A.2;~~
- ~~(vC) reports providing the MWh quantities of energy dispatched under Balancing Support Contracts by Facility and Trading Interval, as specified by System Management in accordance with clause 7.13.1(dA), for each Trading Month which has been settled;~~
- (jA) reports providing the MWh quantities of energy dispatched under Network Control Service Contracts by Facility and Trading Interval, as specified by System Management in accordance with clause 7.13.1(dA), for each Trading Month which has been settled under Chapter 9;
- ...
- (x) for each Trading Interval of the current Trading Month for which balancing price results have been released to Market Participants;

- i. the values of ~~Balancing Price, MCAP UDAP and DDAP~~; and
- ii. the load forecast prepared by System Management in accordance with clause 7.2.1(b);~~;~~

(y) as soon as practicable after a Trading Interval:

- i. the total generation in that Trading Interval; ~~and~~
- ii. the total Spinning Reserve in that Trading Interval;
- ~~iii. an initial value of the Operational System Load Estimate, taken directly from System Management's EMS/SCADA system;;~~

where these values are to be available from the IMO Web Site for each Trading Interval in the previous 12 calendar months;

(z) as soon as practicable after real-time:

- i. the total generation; ~~and~~
- ii. the total Spinning Reserve;
- ~~iii. an initial value of the Operational System Load Estimate, taken directly from System Management's EMS/SCADA system;;~~

where these values are not required to be maintained on the IMO Web Site after their initial publication;

(zA) the current Tolerance Range determined by System Management in accordance with clause 2.13.6D, including the information provided to the IMO in accordance with clause 2.13.6D; ~~and~~

(zB) any Facility Tolerance Ranges determined by System Management in accordance with clause 2.13.6E, including the information provided to the IMO in accordance with clause 2.13.6E, and, if applicable, any Facility Tolerance Ranges which System Management has been directed to vary by the IMO in accordance with clause 2.13.6H;~~;~~

~~(zC) summary information on Disputes in progress that may impact other Rule Participants;~~

~~(zD) schedules of Planned Outages;~~

~~(zE) the current Dispatch Merit Order;~~

~~(zF) audit reports;~~

~~(zG) documentation of the functionality of:-~~

- ~~i. any software used to run the Reserve Capacity Auction;~~
- ~~ii. the STEM Auction software;~~
- ~~iii. the Settlement System software; and~~

~~(zH) information relating to Commissioning Tests which is supplied under clause 3.21A.16 by System Management.~~

### **10.6. SWIS Restricted Information**

- ~~10.6.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as SWIS Restricted Information and the IMO must make this information available from the Market Web Site:~~
- ~~(a) summary information on Disputes in progress that may impact other Rule Participants;~~
  - ~~(b) schedules of Planned Outages;~~
  - ~~(c) the current Dispatch Merit Order;~~
  - ~~(d) audit reports;~~
  - ~~(e) documentation of the functionality of :
    - ~~i. any software used to run the Reserve Capacity Auction;~~
    - ~~ii. the STEM Auction software; and~~
    - ~~iii. the Settlement System software; and~~~~
  - ~~(f) information relating to Commissioning Tests which is supplied under clause 3.21A.16 by System Management.~~

### **10.7. Rule Participant Market Restricted Information**

- ~~10.7.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Rule Participant 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, Resource Plan Submissions, Balancing Data Submissions and Standing Balancing Data submissions used in the absence of a Balancing Data Submission;~~
    - ~~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);~~~~

~~(e) — for the past 12 months:~~

- ~~i. — Non-STEM Settlement Statements; and~~
- ~~ii. — STEM Settlement Statements~~

### ~~10.8. — Rule Participant Dispatch Restricted Information~~

~~10.8.1. — The IMO must set the class of confidentiality status for a Market Participant Specific Dispatch Schedules under clause 10.2.1, as Rule Participant Dispatch Restricted Information and the IMO must make this information available from the Market Website for each Trading Interval in completed Trading Months for the past 12 Trading Months.~~

~~10.8.2. — The IMO must set the class of confidentiality status for all Electricity Generation Corporation information specified in clause 7.6A as Rule Participant Dispatch Restricted Information with the exception of information specified by the Electricity Generation Corporation under clauses 7.6A.2(g) and 7.6A.3(c).~~

# Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by the IMO for use by the IMO in market processes and by System Management in dispatch processes.

Standing Data required to be provided as a pre-condition ~~of for~~ Facility Registration, and which ~~Rule Participants are is to be updated by Rule Participants~~ as necessary, is described ~~by in~~ clauses (a) to (j).

Standing Data not required to be provided as a pre-condition ~~of for~~ Facility Registration but ~~that~~ which the IMO is required to ~~be maintained by the IMO, and which Rule Participants are to update as necessary~~ includes the data described in clauses (k) to (m) onwards.

- (b) for a Scheduled Generator:
  - i. evidence that the communication and control systems required by clause 2.36 are in place and operational;
  - ii. the name plate capacity of the generator, expressed in MW;
  - iiA. the minimum load at the connection point of the generator that will automatically trip off if the generator fails, expressed in MW;
  - iii. the sent out capacity of the generator, expressed in MW;
  - iiiA. the dependence of capacity on the type of fuel used by the facility for each fuel described in (xi);
  - iv. the dependence of capacity on temperature at the location of the facility;
  - v. the normal ramp up and ramp down rates as a function of output level;
  - vi. emergency ramp up and ramp down rates;
  - vii. the over-load capacity of the generator, if any, expressed in MW;
  - viii. the AGC capabilities of the facility;
  - ix. the Black Start capability of the facility;
  - 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;
    - 3. [Blank]; and
    - 4. Load Rejection Reserve;

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- xi. details of the fuel or fuels that the facility can use, including dual fuel capabilities and the process for changing fuels;
- xii. details of any potential energy limits of the facility;
- xiii. the minimum stable loading level of the generator, expressed in MW;
- xiv. the minimum dispatchable loading level of the generator, expressed in MW;
- xv. any output range between minimum dispatchable loading level and name plate capacity in which the facility is incapable of stable or safe operation;
- xvi. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the facility;
- xvii. the minimum time to synchronisation from each of the following states:
  - 1. cold;
  - 2. warm;
  - 3. hot;and the number of hours that must have elapsed since the facility last ran for it to be considered in each of these states;
- xviii. the minimum time before the facility can be restarted after it is shut down;
- xix. the Facility's minimum physical response time before the fFacility can begin to respond to an Dispatch Instruction or Operating iInstruction ~~from System Management to change its output~~;
- xx. the Metering Data Agent for the facility;
- xxi. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;
- xxii. the network nodes at which the facility can connect; and
- xxiii. the short circuit capability of facility equipment.

(c) ~~[Blank]for a Scheduled Generator not registered to the Electricity Generation Corporation:~~

- ~~i. a commitment and decommitment cost data comprising:~~
  - ~~1. a whole dollar amount representing the cost of committing the facility, where this amount must represent reasonable costs incurred in the typical start-up as justified by supporting evidence.~~
  - ~~2. a whole dollar amount representing the cost of de-committing the facility;~~

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- ii. ~~[Blank]~~
  - iii. ~~[Blank]~~
  - iv. ~~[Blank]~~
  - v. ~~Standing Balancing Data for Scheduled Generators registered as being capable of running on Non-Liquid Fuel comprising:~~
    - 1. ~~a Non-Liquid Supply Increase Price for Peak Trading Intervals;~~
    - 2. ~~a Non-Liquid Supply Increase Price for Off-Peak Trading Intervals;~~
    - 3. ~~a Non-Liquid Supply Decrease Price for Peak Trading Intervals;~~
    - 4. ~~a Non-Liquid Supply Decrease Price for Off-Peak Trading Intervals;~~

~~where these prices must be not less than the Minimum STEM Price, not more than the Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh; and~~
  - vi. ~~Standing Balancing Data for Scheduled Generators registered as being capable of running on Liquid Fuel comprising:~~
    - 1. ~~a Liquid Supply Increase Price for Peak Trading Intervals;~~
    - 2. ~~a Liquid Supply Increase Price for Off-Peak Trading Intervals;~~
    - 3. ~~a Liquid Supply Decrease Price for Peak Trading Intervals;~~
    - 4. ~~a Liquid Supply Decrease Price for Off-Peak Trading Intervals;~~

~~where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh;~~
- (d) [Blank]
- (e) for a Non Scheduled Generator:
- i. evidence that the communication and control systems required by clause 2.36 are in place and operational;
  - ii. the name plate capacity of the generator, expressed in MW;
  - iiA. the minimum load at the connection point of the generator that will automatically trip off if the generator fails, expressed in MW;
  - iii. the ramp down rates;
  - iiiA. sent out capacity of the generator, expressed in MW;

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- iv. the capability to provide Load Rejection Reserve, including information on trade-off functions when energy is provided simultaneously;
  - v. ~~for a facility not registered to the Electricity Generation Corporation a price between the Minimum STEM Price and the Maximum STEM Price in units of \$/MWh expressed to a precision of \$0.01/MWh to be the basis for payments by the Market Participant for decreases in generation in response to a Dispatch Instruction where a different price may be specified for Peak Trading Intervals and Off-Peak Trading Intervals;~~
  - vi. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output;
  - vii. the Metering Data Agent for the facility;
  - viii. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;
  - ix. the network nodes at which the facility can connect;
  - x. the short circuit capability of facility equipment; and
  - xi. sub-transient, transient and steady state impedances (positive, negative and zero sequence) for the facility;
- (h) for a Curtailable Load:
- 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 maximum amount of load that can be curtailed;
  - iv. the maximum duration of any single curtailment;
  - v. [Blank]
  - vi. for a facility that is registered to a Market Participant other than ~~the Electricity Generation Corporation~~ Verve Energy, Standing Balancing Data comprising:
    - 1. a Consumption Decrease Price for Peak Trading Intervals; and
    - 2. a Consumption Decrease Price for Off-Peak Trading Intervals;

where these prices must be ~~not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be~~ expressed in units of \$/MWh to a precision of \$0.01/MWh;

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- vii. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output;
  - viii. the Metering Data Agent for the facility;
  - ix. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;
  - x. the network nodes at which the facility can connect;
  - xi. the short circuit capability of facility equipment;
  - xii. whether the Curtailable Load is an Intermittent Load;
  - xiii. if the Curtailable Load is an Intermittent Load, the maximum allowed level of Intermittent Load, where this cannot exceed the quantity in (i);
  - xiv. if the Curtailable Load is an Intermittent Load, the maximum level of net consumption behind the meter associated with the Curtailable Load which is not separately metered and which is not Intermittent Load; and
  - xv. if the Curtailable Load is an Intermittent Load, the separately metered generating systems and loads behind that meter associated with the Curtailable Load which are not to be included in the definition of that Intermittent Load.
- (i) for a Dispatchable Load:
- 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:

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1. Load Following;
  2. Spinning Reserve;
  3. [Blank]; and
  4. Load Rejection Reserve;
- xA. for a facility that is registered to a Market Participant other than ~~the Electricity Generation Corporation Verve Energy, Standing Balancing D~~ data comprising:
1. a Consumption Increase Price for Peak Trading Intervals;
  2. a Consumption Increase Price for Off-Peak Trading Intervals;
  3. a Consumption Decrease Price for Peak Trading Intervals; and
  4. a Consumption Decrease Price for Off-Peak Trading Intervals.;
- where these prices must be ~~not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be~~ expressed in units of \$/MWh to a precision of \$0.01/MWh;
- xi. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output;
  - xii. the Metering Data Agent for the facility;
  - xiii. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;
  - xiv. the network nodes at which the facility can connect; ~~and~~
  - xv. the short circuit capability of facility equipment; ~~and~~.
- xA whether the Facility wishes to be considered for providing LFAS and if so to provide relevant information regarding how it will be able to meet LFAS requirements under this obligation.
- (j) ~~{Blank}~~ for a Scheduled Generator and a Non-Scheduled Generator:
- (i) whether the Market Participant intends the Facility to participate in the LFAS Market; and
  - (ii) for each Facility that a Market Participant intends to participate in the LFAS Market, evidence that the Facility meets the LFAS Requirements including any limitations on enablement and quantities.

## Appendix 7: ~~[Blank] Dispatch Schedule Calculation~~

The process in this appendix defines the Dispatch Schedule for a Market Participant, other than the Electricity Generation Corporation, that has received a Dispatch Instruction from System Management during a Trading Interval.

Where the IMO must calculate the Dispatch Schedule for a Market Participant's Scheduled Generator or Dispatchable Load under clause 6.15.1(b), it must use the following process:

Each Dispatch Instruction can be considered as having two ramp rates

- The ramp rate specified in the Dispatch Instruction that applies from the time when response to the Dispatch Instruction is required to commence until the time when the target output level is reached; and
- A ramp rate of zero once the target output level is reached.

For each Trading Interval, define a set of time intervals within the Trading Interval during which different ramp rates apply.

From  $n=0$  to  $n=N$ ,  $t(n)$  is the time in minutes from which Ramp Rate( $n$ ), in MW/minute applies

- $t(0) = 0$
- if a new Dispatch Instruction is issued its ramp rate applies from the time when response to the Dispatch Instruction is required to commence, overriding a previous Dispatch Instruction
- $t(N) = 30$

FOL(0) is the initial net output level in MW as at the start of the Trading Interval, where FOL(0) is positive valued for supply and negative valued for consumption.

FOL(0) is determined from either:

- the Resource Plan value, or
- where a Dispatch Instruction applied at the beginning of the Trading Interval, from the previous Trading Interval's FOL(N) calculation

$$FOL(n+1) = FOL(n) + Ramp\ Rate(n) \times (t(n+1) - t(n))$$

Then:

$$Dispatch\ Schedule = 0.5 \times \text{Sum}[n=1\ to\ N, (FOL(n-1) + FOL(n)) \times (t(n) - t(n-1)) / 60]$$



# **PROPOSED AMENDMENTS TO THE GLOSSARY OF THE WHOLESALE ELECTRICITY MARKET RULES**

**23 September 2011**

**Proposed balancing and load following ancillary service changes in red  
underline and strikethrough**

## **Disclaimer**

This unofficial extract of the Wholesale Electricity Market Rules reflects the rules as amended and published in the Government Gazette up to 15 December 2006 and amending changes made by the IMO up to 1 October 2011 together with proposed balancing amendments in mark up. This unofficial extract is provided for information and has no legal standing. The Independent Market Operator disclaims any responsibility for any liability arising from any act done or omission made in reliance on this unofficial extract of the Wholesale Electricity Market Rules.

For the version of the Wholesale Electricity Market Rules that is currently in force under the *Electricity Industry (Wholesale Electricity Market) Market Rules 2004* please refer to the *Wholesale Electricity Market Rules (September 2006)* as Gazetted on 19 September 2006 and any subsequent amendments gazetted in the Western Australia Government Gazette or approved and published by the IMO on the IMO web site.

# 11 Glossary

**Acceptable Credit Criteria:** The criteria set out in clause 2.38.6.

**Access Code:** The code established by the Minister under section 104 of the Electricity Industry Act 2004.

**Access Proposal:** Has the meaning given in clause 4.2.7(b)(ii)(1).

**Adjusted Selected LFAS Quantity:** Means, for a Trading Interval, the sum of the quantities of LFAS, in MW, selected under clauses 7B.3.5(b) and (c) for that Trading Interval less the sum of any LFAS quantities, in MW, notified under clause 7B.2.17 for that Trading Interval.

**Adjustment Process:** Has the meaning given in clause 9.16.3.

**Administration Procedure:** The Market Procedure developed by the IMO in accordance with clause 2.9.5.

**Allowable Revenue:** With respect to the IMO, the allowable revenue for the IMO in providing the services set out in clause 2.22.1 as approved by the Economic Regulation Authority in accordance with clause 2.22.12. With respect to System Management, the allowable revenue for System Management in providing the services set out in clause 2.23.1 as approved by the Economic Regulation Authority in accordance with clause 2.23.12.

**Alternative Maximum STEM Price:** The maximum price set in accordance with clause 6.20.3 that may be associated with a Portfolio Supply Curve for a portfolio including Facilities expected to run on Liquid Fuel or any Portfolio Demand Curve forming part of a STEM Submission or Standing STEM Submission.

**Amending Rules:** Has the meaning given in clause 2.4.1(c).

**Ancillary Service:** A service, including those described in clause 3.9, that is required to maintain Power System Security and Power System Reliability, facilitate orderly trading in electricity and ensure that electricity supplies are of acceptable quality.

**Ancillary Service Contract:** A contract between System Management and a Market Participant for the provision by that Market Participant of an Ancillary Service or Ancillary Services to System Management.

**Ancillary Service Declaration:** A declaration included with a STEM Submission or Standing STEM Submission made by a Market Participant which is a provider of Ancillary Services and which includes the information described in clause 6.6.2A(c).

**Ancillary Service Provider:** A Rule Participant registered as an Ancillary Service Provider under clause 2.28.11A.

**Ancillary Service Requirements:** Are as determined in accordance with clause 3.11.

**Application Fee:** A fee determined by the IMO under clause 2.24.2.

**Appointed Day:** Means the day fixed by the Minister by order published in the Government Gazette.

**Arrangement for Access:** When used in the context of a “covered network” (as that term is defined in the Access Code) means an “access contract” (as that term is defined in the Access Code). When used in the context of a network which is not a “covered network” (as that term is defined in the Access Code) means any commercial arrangement through which “access” (as that term is defined in the Access Code) to that network is obtained.

**Authorised Deviation Quantity (ADQ(p,d,t)):** For a Market Participant p for a given Trading Interval t, is as calculated under clause 6.17.2.

**Authorised Officer:** In respect of a Market Participant, means:

(a) “Officer” as defined in Section 9 of the Corporations Act; ~~or~~

(b) “executive officer” as defined in Section 3(1) of the Electricity Corporations Act 2005 (WA); ~~or;~~

(c) for a Market Participant that is not a body corporate, a person who is legally able to bind that Market Participant.

**Available Capacity:** Means, for a Trading Interval, the quantity of capacity resulting from the sum of the Capacity Credits for all Facilities of a Market Participant less the Capacity Credits subject to the Planned Outages, Forced Outages and Consequential Outages provided under clause 7.13.1A(b).

**Availability Class:** Any one of 4 classes of annual availability of Reserve Capacity set out in clause 4.5.12(c), where each class corresponds to Reserve Capacity being available from a Facility for not more than a specified number of hours per year.

**Availability Curve:** A curve developed by the IMO under clause 4.5.10(e).

**Availability Declaration:** A declaration included with a STEM Submission or Standing STEM Submission and which includes the information described in clause 6.6.2A(b).

**Balancing:** The process for meeting supply and consumption deviations from contracted bilateral and STEM positions in each Trading Interval.

~~**Balancing Data:** A set of prices to be used in forming Dispatch Merit Orders and in settling Balancing transactions for a Trading Day as provided by a Market Participant to the IMO in a Balancing Data Submission or as Standing Balancing Data.~~

~~**Balancing Data Submission:** A submission of Balancing Data to the IMO made in accordance with clause 6.5A.~~

**Balancing Support Contract:** ~~A contract between either the Electricity Generation Corporation or System Management and a Market Participant (other than the Electricity Generation Corporation), entered into pursuant to clause 7.6.7, that allows System Management to call upon the Facilities registered by the relevant Market Participant to assist System Management and the Electricity Generation Corporation in meeting their obligations under Chapter 7.~~

**Balancing Facility: Means:**

- (a) for a Market Generator other than Verve Energy:
  - i. each of its Scheduled Generators; and
  - ii. each of its Non-Scheduled Generators; and
- (b) each Stand Alone Facility.

**Balancing Facility Requirements:** Means the procedures determined under clause 7A.1.5, which are a subset of the Market Procedure.

**Balancing Forecast:** Means a forecast, determined by the IMO in accordance with the Balancing Forecast Market Procedures of the following:

- (a) the Relevant Dispatch Quantity for a Trading Interval in MW at the end of the Trading Interval;
- (b) the aggregate output of all Non-Scheduled Generators which are Balancing Facilities for a Trading Interval; and
- (c) the Balancing Prices for each Trading Interval during the Balancing Horizon.

**Balancing Forecast Market Procedures:** Means the procedures determined under clause 7A.3.18, which are a subset of the Market Procedure.

**Balancing Gate Closure:** For a Trading Interval means the point in time immediately before the commencement of the Trading Interval determined by the IMO under clause 7A.1.14.

**Balancing Horizon: Means:**

- (a) from 31 March 2012 and to 6:00PM on 1 April 2012, the 24 hour period occurring for the Trading Day (8:00AM to 8:00AM) of 1 April 2012; and
- (b) from 6:00PM on 1 April 2012, the 38 hour period from 6:00PM to the end of the next Trading Day, being 8:00AM on 2 April 2012; and
- (c) from 6:00PM every day thereafter, the 38 hour period from 6:00PM to the end of the next Trading Day at 8:00AM.

**Balancing Market:** Means the market operated under Chapter 7A in which Facilities, including the Verve Energy Balancing Portfolio as a single Facility, can better manage their contractual positions and meet supply and consumption deviations from contracted bilateral and STEM positions in each Trading Interval.

**Balancing Market Commencement Day:** Means the Trading Day determined by the IMO under clause 7A.1.1A.

**Balancing Market Objectives:** Means the objectives listed in clause 7A.1.2.

**BMO or Balancing Merit Order:** Means the ordered list of Balancing Facilities, and associated quantities, determined by the IMO under clause 7A.3.2.

**Balancing Price:** For a Trading Interval means the price determined under clause 7A.3.9.

**Balancing Price-Quantity Pair:** Means

- (a) for a Scheduled Generator, the specified non-Loss Factor adjusted MW quantity at which a Market Participant is prepared to operate a Balancing Facility as at the end of a Trading Interval and the non-Loss Factor Adjusted Price, in \$/MWh, the Market Participant wants to be paid to achieve that quantity by the end of that Trading Interval;
- (b) for a Non-Scheduled Generator the specified non-Loss Factor adjusted MW quantity at which a Market Participant is prepared to reduce its output as at the end of a Trading Interval and the non-Loss Factor Adjusted Price, in \$/MWh, the Market Participant wants to be paid to achieve that quantity by the end of that Trading Interval; and
- (c) for the Verve Energy Balancing Portfolio, the specified MW quantity at which Verve Energy is prepared to have the Verve Energy Balancing Portfolio dispatched at as at the end of a Trading Interval and the Loss Factor Adjusted Price, in \$/MWh, Verve Energy wants to be paid to achieve that quantity by the end of that Trading Interval from the sum of all of its Sent Out Capacity for each Facility in the Verve Energy Balancing Portfolio

**Balancing Portfolio Supply Curve:** Means a ranking of the Balancing Price Quantity Pairs provided for the Verve Energy Balancing Portfolio.

**Balancing Quantity:** Means, in respect of a Trading Interval, the quantity, if any, published to the Market Participant under clause 7A.3.16(a)(i).

**Balancing Submission:** Means:

- (a) for a Balancing Facility, other than the Verve Energy Balancing Portfolio, that is a:
  - i. Scheduled Generator, for a Trading Interval or Trading Intervals, a ranking of Balancing Price-Quantity Pairs for each MW of its Sent Out

Capacity from zero to the maximum and associated Ramp Rate Limit for each Trading Interval; and

- ii. Non-Scheduled Generator, for a 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 and associated Ramp Rate Limit for each Trading Interval; and

(b) for the Verve Energy Balancing Portfolio, the Balancing Portfolio Supply Curve together with the Portfolio Ramp Rate Limit.

~~**Balancing Data:** A set of prices to be used in forming Dispatch Merit Orders and in settling Balancing transactions for a Trading Day as provided by a Market Participant to the IMO in a Balancing Data Submission or as Standing Balancing Data.~~

~~**Balancing Data Submission:** A submission of Balancing Data to the IMO made in accordance with clause 6.5A.~~

~~**Balancing Support Contract:** A contract between either the Electricity Generation Corporation or System Management and a Market Participant (other than the Electricity Generation Corporation), entered into pursuant to clause 7.6.7, that allows System Management to call upon the Facilities registered by the relevant Market Participant to assist System Management and the Electricity Generation Corporation in meeting their obligations under Chapter 7.~~

**Bank Bill Rate:** The rate set by the IMO:

- (a) at approximately 10:00am on any given Business Day to apply for that day; or
- (b) if the relevant day is not a Business Day, or the IMO does not set a rate for that day, on the previous Business Day on which a rate was set under paragraph (a),

(based on an industry standard market indicator, details of which must be published by the IMO).

**Bid:** Means a specified MW range over which a Market Participant is prepared to have its Balancing Facility dispatched downwards from a Resource Plan for Balancing, subject to a specified Ramp Rate Limit, at or below a specified \$/MWh price.

**Bilateral Contract:** A contract formed between any two persons (excluding System Management) for the sale of electricity by one of those persons to the other.

**Bilateral Submission:** A submission by a Market Generator to the IMO made in accordance with clause 6.2.

**Business Day:** A day that is not a Saturday, Sunday, or a public holiday throughout Western Australia. For the purpose of clauses 9.16.1(b), 9.16.2(e) and 9.16.4(d), a Business Day is a

day that is not a Saturday, Sunday, or a public holiday (including a bank holiday) throughout Western Australia and/or Sydney (New South Wales).

**Capacity Cost Refund:** Has the meaning given in clause 4.26.3.

**Capacity Credit:** A notional unit of Reserve Capacity provided by a Facility during a Capacity Year. The total number of Capacity Credits provided by a Facility is determined in accordance with clause 4.20, clause 4.28B, or clause 4.28C. Each Capacity Credit is equivalent to 1MW of Reserve Capacity. The Capacity Credits to be provided by a Facility are held by the Market Participant registered in respect of that Facility. The number of Capacity Credits to be provided by a Facility may be reduced in certain circumstances under the Market Rules, including under clause 4.25.4 or adjusted under clause 4.25.6.

**Capacity Credit Allocation:** The number of Capacity Credits allocated to a Market Participant for settlement purposes through the allocation process in clauses 9.4 and 9.5.

**Capacity Credit Allocation Submission:** A submission from a Market Participant to the IMO in accordance with clause 9.4.1.

**Capacity Year:** A period of 12 months commencing at the start of the Trading Day which commences on 1 October and ending on the end of the Trading Day ending on 1 October of the following calendar year.

**Category A:** The class of Market Rules classified as Category A Market Rules in the Regulations for the purposes of the imposition of civil penalties under the Regulations.

**Category B:** The class of Market Rules classified as Category B Market Rules in the Regulations for the purposes of the imposition of civil penalties under the Regulations.

**Category C:** The class of Market Rules classified as Category C Market Rules in the Regulations for the purposes of the imposition of civil penalties under the Regulations.

**Certified Reserve Capacity:** For a Facility, and in respect of a Reserve Capacity Cycle, is the quantity of Reserve Capacity that the IMO has assigned to the Facility for the Reserve Capacity Cycle in accordance with clause 4.11 or clause 4.28B, as adjusted under these Market Rules including clause 4.14.8. Certified Reserve Capacity assigned to a Facility registered by a Market Participant is held by that Facility.

**Chief Executive Officer:** In respect of a Rule Participant other than System Management, the chief executive officer of the relevant Rule Participant, or if that Rule Participant has no chief executive officer, then the individual nominated by the Rule Participant and holding a similar position to that of chief executive officer of the Rule Participant. With respect to System Management, the most senior of the persons designated by the Board of ~~the Electricity Network Corporation Western Power~~ as having responsibility for the management of System Management.

**Co-ordinated Universal Time:** Co-ordinated Universal Time is determined by the International Bureau of Weights and Measures and maintained under section 8AA of the National Measurement Act 1960 of the Commonwealth.

**Cold Season:** The period commencing at the start of the Trading Day beginning on 1 April and ending at the end of the Trading Day finishing on the following 1 October.

**Commercial Operation:** The status determined by the IMO under clause 4.13.10B that a Facility is operating in the Wholesale Electricity Market.

**Commissioning Test:** Has the meaning given in clause 3.21A.1.

**Commissioning Test Period:** The proposed period during which Commissioning Tests will be conducted, as provided to System Management under clause 3.21A.3.

~~**Commitment Compensation:** The amount calculated in accordance with clauses 6.18.2.~~

**Conditional Certified Reserve Capacity:** Has the meaning given in clause 4.9.5.

**Confidential:** Any information or document determined to be confidential by the IMO under clause 10.2.1.

**Confidentiality Procedures:** Means the procedures determined under clause 10.2.3, which are a subset of the Market Procedures.

**Consequential Outage:** Has the meaning given in clause 3.21.2.

**Constrained Off Compensation Price:** Has the meaning given in clause 6.17.4(b).

**Constrained Off Quantity:** Has the meaning given in clause 6.17.4(a) or clause 6.17.4(c), as applicable.

**Constrained Off Verve Energy Balancing Portfolio Quantities:** Has the meaning given in clause 6.17.6A.

**Constrained On Compensation Price:** Has the meaning given in clause 6.17.3(b) or 6.17.5(b), as applicable.

**Constrained On Quantity:** Has the meaning given in clause 6.17.3(a) or clause 6.17.3(c), as applicable.

**Constrained On Verve Energy Balancing Portfolio Quantities:** Has the meaning given in clause 6.17.5.

**Consumption Decrease Price:** A price specified in items (h)(vi), (i)(xA).3 or (i)(xA).4 of Standing Data, which must be not less than the Minimum STEM Price and 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 or Demand Side Programme and in the

calculation of the Non-Balancing Facility Dispatch Instruction Payment for that Dispatchable Load or Demand Side Programme for that Trading Interval, which varies. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.

**Consumption Increase Price:** A price specified in items (h)(vi), (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. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.

**Contestable Customer:** A person that may purchase electrical energy from any retailer, including the Electricity Retail Corporation Synergy.

**Contracted Ancillary Service:** An Ancillary Service provided by a Rule Participant under an Ancillary Service Contract.

**Contracted Dispatch Support Service:** A Dispatch Support Service provided by a Rule Participant under an Ancillary Service Contract.

~~**Contracted Load Following Service:** A Load Following Service provided by a Rule Participant under an Ancillary Service Contract.~~

**Contracted Load Rejection Reserve Service:** A Load Rejection Reserve Service provided by a Rule Participant under an Ancillary Service Contract.

**Contracted Spinning Reserve Service:** A Spinning Reserve Service provided by a Rule Participant under an Ancillary Service Contract.

**Contracted System Restart Service:** A System Restart Service provided by a Rule Participant under an Ancillary Service Contract.

**Corporations Act:** The Corporations Act 2001 (Cwlth).

**Credit Limit:** In respect of a Market Participant, the amount determined by the IMO in accordance with clause 2.37.4.

**Credit Support:** Has the meaning given in clause 2.38.4.

**Cure Notice:** Has the meaning given in clause 9.23.4(a).

**Customer:** Means a person to whom electricity is sold for the purpose of consumption.

~~**Curtailable Load:** A Load through which electricity is consumed where such consumption can be curtailed at short notice by the party managing the Load or in response to a request from System Management to the party managing the Load, and registered as such in accordance with clause 2.29.5(b)~~

**Declared Market Project:** A major market development project declared by the IMO in accordance with clauses 2.22.13 and approved by the Economic Regulation Authority in accordance with clause 2.22.14.

**Default Levy:** The amount, in respect of a given Market Participant and in the circumstance of a particular Payment Default, determined by the IMO in accordance with clause 9.24.5.

**Demand Side Management:** A type of capacity held in respect of a Facility connected to the SWIS; specifically, the capability of a Facility connected to the SWIS to reduce its consumption of electricity through the SWIS, as measured at the connection point of the Facility to the SWIS.

**Demand Side Programme:** Means a Facility registered in accordance with clause 2.29.5A.

**Demand Side Programme Capacity Cost Refund:** Has the meaning given in clause 4.26.3A.

**Demand Side Programme Load:** Has the meaning given in clause 6.16.2.

**Derogation:** An exemption or modification to the Market Rules applicable to one or more Rule Participants set out in Chapter 11 of these Market Rules.

**Dispatch Advisory:** Has the meaning given in clause 7.11.1.

**Dispatch Criteria:** Means the criteria under clause 7.6.1.

**Dispatch Instruction:** Has the meaning given in clause 7.7.1.

**Dispatch Order:** Means an instruction by System Management under clause 7.6A for a Facility or Facilities in the Verve Energy Balancing Portfolio to comply with or deviate from the Dispatch Plan.

**Dispatch Plan:** Means the schedule of energy and Ancillary Services to be provided, or to be available to be provided on request, by the ~~Registered~~ Facilities of ~~the Electricity Generation Corporation~~ Verve Energy in the Verve Energy Balancing Portfolio, during a Trading Day, where ~~these~~ these ~~schedules~~ schedules may be revised by System Management during the course of the corresponding Scheduling Day and the Trading Day.

**~~Dispatch Schedule:~~** ~~Has the meaning given in clause 6.15.1 or 6.15.2, as applicable.~~

**Dispatch Support:** Has the meaning given in clause 3.9.9.

**Dispatch Support Service:** Has the meaning given in clause 3.9.9.

**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).

**Dispute Participants:** The parties to a relevant dispute described in clause 2.18.2.

~~**Downward Deviation Administered Price (DDAP):** The amount calculated under clause 6.14.6.~~

~~**Downwards LFAS Backup Enablement:** Means the quantity determined under clause 7B.4.2(b).~~

~~**Downwards LFAS Enablement:** Means, for a Scheduled Generator, a Non-Scheduled Generator and the Verve Energy Balancing Portfolio, the capacity, or that part of the capacity, in MW, in an LFAS Downwards Price-Quantity Pair selected under clause 7B.3.5(c) which is associated with that Facility or with the Verve Energy Balancing Portfolio, as applicable.~~

~~**Downwards LFAS Price:** Means the price determined under clause 7B.3.11.~~

~~**Downwards LFAS Quantity:** Means the quantity, in MW, by which the sum of the output of LFAS Facilities is reduced in a Trading Interval to provide LFAS.~~

~~**Downwards Out of Merit Generation:** Has the meaning given in clauses 6.16A.3 and 6.16B.2. as applicable.~~

~~**Downward Unauthorised Deviation Quantity:** Means the amount calculated in accordance with clause 6.17.4.~~

**Draft Rule Change Report:** The draft report published under clause 2.7.6(a) by the IMO in relation to a Rule Change Proposal.

**Draw Upon:** In relation to Credit Support or Reserve Capacity Security held by the IMO in relation to a Market Participant, means that the IMO:

- (a) in relation to a Security Deposit, applies the Security Deposit to satisfy amounts owing by the relevant Market Participant; or
- (b) in relation to other Credit Support, exercises its rights under the Credit Support, including by drawing or claiming an amount under it.

**Early Certified Reserve Capacity:** Reserve Capacity which is certified and assigned to a new Facility by the IMO for a future Reserve Capacity Cycle under clause 4.28C.

**Economic Regulation Authority:** The body established under section 4(1) of the Economic Regulation Authority Act, responsible under these Market Rules for market monitoring and surveillance.

**Electricity Corporations Act:** Electricity Corporations Act 2005 (WA).

**Electricity Industry Act:** Electricity Industry Act 2004 (WA).

~~**Electricity Generation Corporation:** Means the body established by section 4(1)(a) of the Electricity Corporations Act.~~

~~**Electricity Networks Corporation:** Means the body established by section 4(1)(b) of the Electricity Corporations Act.~~

~~**Electricity Retail Corporation:** Means the body established by section 4(1)(c) of the Electricity Corporations Act.~~

**Electricity Review Board:** The Board within the meaning of the Electricity Industry Act.

**Eligible Services:** Has the meaning given in clause 4.24.3.

**Emergency Operating State:** The state of the SWIS defined in clause 3.5.1.

**Energy Market Commencement:** The date and time at which the first Trading Day commences, as published by the Minister in the Government Gazette.

**Energy Price Limits:** The set of price limits comprising the Maximum STEM Price, the Alternative Maximum STEM Price and the Minimum STEM Price.

**Environmental Approval:** In respect of a Facility is a licence, consent, certificate, notification, declaration or other authorisation required under any law relating to the protection or conservation of the environment for the lawful construction of the Facility or the development of the site on which the Facility is to be constructed.

**EOI Quantity:** Means the quantity, in MW, at which a Non-Scheduled Generator was operating as at the end of a Trading Interval, which must equal the SOI Quantity for next Trading Interval.

**Equipment Limit:** Any limit on the operation of a Facility's equipment that is provided as Standing Data for the Facility to System Management by the IMO in accordance with clause 2.34.1(b).

**Equipment Test:** ~~H~~as the meaning given in clause 3.21AA.1.

**Ex-post Downwards LFAS Enablement:** Means, for the end of a Trading Interval, the sum of the downwards quantities of LFAS, in MW, provided under clauses 7.13.1(e) and (eA) in that Trading Interval, less the sum of any LFAS quantities, in MW, notified under clause 7B.2.17 for that Trading Interval.

**Ex-post Upwards LFAS Enablement:** Means, for the end of a Trading Interval, the sum of the upwards quantities of LFAS, in MW, provided under clauses 7.13.1(e) and (eA) in that Trading Interval, less the sum of any LFAS Quantities, in MW, notified under clause 7B.2.17 for that Trading Interval.

**External Constraint:** Means an event impacting the operation of the whole of the SWIS, or any significant part of it.

**Facility:** Any of the facilities described in clause 2.29.1.

**Facility Classes:** Any one of the classes of Facility specified in clause 2.29.1A.

~~**Facility Reserve Capacity Deficit Refund:** Has the meaning given in clause 4.26.1A.~~

~~**Facility Dispatch Tolerance:** The quantity by which the Metered Schedule of a Scheduled Generator registered by a Market Participant other than the Electricity Generation Corporation can deviate from the Dispatch Schedule for that Scheduled Generator before the Upward Deviation Administered Price (UDAP) or the Downward Deviation Administered Price (DDAP) will be applied to that deviation in settlement as determined under clause 6.17.9.~~

**Facility Forced Outage Refund:** Has the meaning given in clause 4.26.1A.

**Facility Reserve Capacity Deficit Refund:** Has the meaning given in clause 4.26.1A.

**Fast Track Rule Change Process:** The process for dealing with Rule Change Proposals set out in clause 2.6.

**Final Rule Change Report:** In respect of a Rule Change Proposal to which the Fast Track Rule Change Process applies, the report published by the IMO in accordance with clause 2.6.4. In respect of a Rule Change Proposal to which the Standard Rule Change Process applies, the report published by the IMO in accordance with clause 2.7.8.

**Financial Year:** A period of 12 months commencing on 1 July.

**Forecast BMO:** Means a forecast of the BMO determined by the IMO in accordance with the Balancing Forecast Market Procedures.

**Forecast Pricing BMO:** Means a forecast of the Pricing BMO determined by the IMO in accordance with the Balancing Forecast Market Procedures.

**Forced Outage:** Has the meaning given in clause 3.21.1.

**Fuel Declaration:** A declaration included with a STEM Submission or Standing STEM Submission and which includes the information described in clause 6.6.2A(a).

**Generation Capacity Cost Refund:** Has the meaning given in clause 4.26.3.

**Generation Reserve Capacity Deficit Refund:** Has the meaning given in clause 4.26.1B.

**High Risk Operating State:** The state of the SWIS described in clause 3.4.

**Hot Season:** The period commencing at the start of the Trading Day beginning on 1 December and ending at the end of the Trading Day finishing on the following 1 April.

**IMO:** The Independent Market Operator, established under the Regulations to administer and operate the Wholesale Electricity Market.

~~**IMO Confidential:** An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(f).~~

**IMO Deposit Rate:** A rate equal to the rate received by the IMO for the Security Deposit. (The IMO must use reasonable endeavours to obtain a rate which reflects reasonable commercial terms as regards to other deposit rates available at the time.)

**IMS Interface Document Procedures:** Means the procedures determined under clause 2.36.7, which are a subset of the Market Procedure.

**Increased LFAS Quantity:** Has the meaning given in clause 7B.4.1(b).

**Individual Reserve Capacity Requirement:** The MW quantity determined by the IMO in respect of a Market Customer, in accordance with clause 4.28.7 and, if applicable, as revised in accordance with clause 4.28.11.

**Initial Time:** Has the meaning given in clause 4.1.25.

**Intermediate Season:** The interval commencing at the start of the Trading Day beginning on 1 October and ending at the end of the Trading Day finishing on the following 1 December of the same year.

**Intermittent Generator:** A Non-Scheduled Generator that cannot be scheduled because its output level is dependent on factors beyond the control of its operator (e.g. wind).

**Intermittent Load:** A type of Load defined under clause 2.30B.1.

**Intermittent Load Refund:** Has the meaning given in clause 4.28A.1.

**Internal Constraint:** In relation to a Facility, means an event that is not an External Constraint and which adversely impacts the Sent Out Capacity of the Facility.

**Interruptible Load:** A Load through which electricity is consumed, where such consumption can be curtailed automatically in response to a change in system frequency, and registered as such in accordance with clause 2.29.5(a).

**Interval Meter Deadline:** The date determined in accordance with clause 9.16.2(a).

**Invoice:** An invoice requesting payment for transactions under these Market Rules issued under Chapter 9. An Invoice may relate to STEM Settlement Statements, Non-STEM Settlement Statements or adjusted Settlement Statements.

**Invoicing Date:** The Business Day, determined in accordance with clauses 9.16.1(a), 9.16.2(d) or 9.16.4(c), on which the IMO must release Invoices for STEM Settlement Statements for a Trading Week, Non-STEM Settlement Statements for a Trading Month and the Adjustment Process respectively.

**Key Project Dates:** Means the dates most recently provided to the IMO under clause 4.10.1(c)(iii) or in reports provided under clause 4.27.10.

**Liquid Fuel:** Means distillate, fuel oil, liquid petroleum gas, or liquefied natural gas.

~~**Liquid Supply Decrease Price:** A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Scheduled Generator declared to be operating on Liquid Fuel and in the calculation of the Dispatch Instruction Payment for that Scheduled Generator when declared to be operating on Liquid Fuel during that Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.~~

~~**Liquid Supply Increase Price:** A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Scheduled Generator declared to be operating on Liquid Fuel and in the calculation of the Dispatch Instruction Payment for that Scheduled Generator when declared to be operating on Liquid Fuel during that Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.~~

~~**LFAS Backup Enablement:** Means Upwards LFAS Backup Enablement and Downwards LFAS Backup Enablement.~~

~~**LFAS Downwards Merit Order:** Means the ordered list of LFAS Facilities determined by the IMO under clause 7B.3.3.~~

~~**LFAS Downwards Price-Quantity Pair:** Means for an LFAS Facility and for the Verve Energy Balancing Portfolio:~~

- ~~(a) the specified non-Loss Factor adjusted MW quantity by which a Market Participant is prepared to decrease the output of the LFAS Facility, or the Verve Energy Balancing Portfolio, as applicable, within a Trading Interval;~~
- ~~(b) the non-Loss Factor Adjusted Price, in \$/MW, the Market Participant wants to be paid to have that quantity available within that Trading Interval; and~~
- ~~(c) the Steady State LFAS Base Point of the LFAS Facility to achieve that quantity.~~

~~**LFAS Facility:** Means:~~

- ~~(a) a Facility that a Market Participant has indicated in Appendix 1(j)(i) of Standing Data is intended to participate in the LFAS Market; and~~
- ~~(b) for a Market Participant other than Verve Energy, each Scheduled Generator and Non-Scheduled Generator for which LFAS Standing Data has been accepted by the IMO; or and~~
- ~~(c) each Stand Alone Facility for which LFAS Standing Data has been accepted by the IMO.~~

**LFAS Facility Requirements:** Means the procedures determined under clause 7B.1.2, which are a subset of the Market Procedure.

**LFAS Gate Closure:** Means, for the 12 Trading Intervals in an LFAS Horizon, the point in time which is 2 hours immediately before the Balancing Gate Closure for the first of those Trading Intervals.

**LFAS Horizon:** Means:

- (a) from 31 March 2012 and to 4:00AM on 1 April 2012, the 6 hour period from 7:30AM to 1:30PM occurring on the Trading Day of 1 April 2012;
- (b) on and from 10:00 AM on 1 April 2012, the 6 hour period from 1:30PM to 7:30PM of the Trading Day 1 April 2012;
- (c) on and from 4:00 PM 2 April 2012, the 6 hour period from 7:30PM to 1:30AM of the Trading Day 2 April 2012;
- (d) on and from 10:00 PM 2 April 2012, the 6 hour period from 1:30AM to 7:30AM of the Trading Day 3 April 2012;
- (e) on and from 3:30AM of each subsequent Trading day, the 6 hours from 7:30AM the beginning of the next Trading Day to 1:30PM that Trading Day;
- (f) on and from 9:30AM of each subsequent Trading Day, the 6 hour period from 1:30 PM of that Trading Day to 7:30PM that Trading Day;
- (g) on and from 3:30PM of each subsequent Trading Day, the 6 hours from 7:30PM that Trading Day to 1:30AM that Trading Day; and
- (h) on and from 9:30PM of each subsequent Trading Day, the 6 hour period 1:30AM of that Trading Day to 7:30AM the next Trading Day.

**LFAS Market:** Means the market operated under Chapter 7B in which Facilities, including the Verve Energy Balancing Portfolio as a single Facility, can provide Load Following Services.

**LFAS Merit Order:** Means the LFAS Downwards Merit Order and/or the LFAS Upwards 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 Price-Quantity Pair and/or an LFAS Downwards Price-Quantity Pair, as applicable.

**LFAS Quantity:** Means:

(a) the Upwards LFAS Quantity; and

(b) the Downwards LFAS Quantity.

**LFAS Quantity Balance:** Means the quantity in clause 7B.4.1(a).

**LFAS Standing Data:** Means the Standing Data in Appendix 1(j)(ii).

**LFAS Submission:** Means:

(a) for an LFAS Facility that is a:

i. Scheduled Generator, for a Trading Interval or Trading Intervals, a ranking of LFAS Price-Quantity Pairs for each MW of capacity which the Market Participant wants to offer for LFAS for each Trading Interval; and

ii. Non-Scheduled Generator, for a Trading Interval or Trading Intervals, the Market Generator's best estimate of the quantity for the LFAS Price-Quantity Pair, in MW, the Facility is able to reduce its output for each Trading Interval; and

(b) for the Verve Energy Balancing Portfolio for a Trading Interval or Trading Intervals, a ranking of LFAS Price-Quantity Pairs for each MW of capacity which the Market Participant wants to offer for LFAS for each Trading Interval.

**LFAS Upwards Merit Order:** Means the ordered list of LFAS Facilities determined by the IMO under clause 7B.3.2.

**LFAS Upwards Price-Quantity Pair:** Means for the Verve Energy Balancing Portfolio, an LFAS Facility which is a Scheduled Generator or Non-Scheduled Generator:

(a) the specified non-Loss Factor adjusted MW quantity by which a Market Participant is prepared to increase the output of a LFAS Facility, or the Verve Energy Balancing Portfolio, as applicable, within a Trading Interval;

(b) the non-Loss Factor Adjusted Price, in \$/MW, the Market Participant wants to be paid to have that quantity available within that Trading Interval; and

(c) the Steady State LFAS Base Point of the LFAS Facility to achieve that quantity.

**Load:** Has the meaning given in clause 2.29.1(d).

**Load Following Service or LFAS:** Has the meaning given in clause 3.9.1.

~~**Load Following Service:** Has the meaning given in clause 3.9.1.~~

**Load Forecast:** An expectation of the demand levels in the SWIS or in a region of the SWIS in future Trading Intervals.

**Load Rejection Reserve Service:** Has the meaning given in clause 3.9.6.

**Local Black Start Procedures:** The procedures developed under clause 3.7.4, by each Scheduled Generator and Non-Scheduled Generator in accordance with the guidelines published by System Management under clause 3.7.3.

**Long Term PASA:** A PASA study conducted in accordance with clause 4.5 in order to determine the Reserve Capacity Target for each year in the Long Term PASA Study Horizon and prepare the Statement of Opportunities Report for a Reserve Capacity Cycle.

**Long Term PASA Study Horizon:** The ten year period commencing on 1 October of Year 1 of a Reserve Capacity Cycle.

**Long Term Special Price Arrangement:** A Special Price Arrangement that applies for more than one Reserve Capacity Cycle.

**Loss Factor:** A factor defining the annual average marginal network loss between any given node and the Reference Node where the Loss Factor at the Reference Node is 1, determined in accordance with clause 2.27.2, and includes the Portfolio Loss Factor.

**Loss Factor adjusted:** In respect of a quantity of electricity, means that quantity multiplied by any applicable Loss Factor.

**Loss Factor Adjusted Price:** Means, in respect of any price, that price multiplied by any applicable Loss Factor but any resulting price exceeding the Price Caps, must be adjusted down to the relevant Price Cap.

**Margin Call:** The amount determined in accordance with clause 2.42.3.

**Margin Call Notice:** A notification by the IMO to a Market Participant that the Market Participant's Trading Margin has dropped below zero, and requiring the payment of a Margin Call.

~~**Marginal Cost Administered Price (MCAP):** The dollar per MWh price calculated in accordance with clause 6.14.2.~~

**Market Advisory:** Has the meaning given in clause 6.19.1.

**Market Advisory Committee:** An advisory body to the IMO comprised of industry representatives established under clause 2.3.1.

**Market Auditor:** An auditor appointed by the IMO under clause 2.14.1.

**Market Customer:** A Rule Participant registered as a Market Customer under clauses 2.28.10, 2.28.11 or 2.28.13.

**Market Fees:** The fees determined by the IMO in accordance with clauses 2.24, and calculated for each Market Participant in accordance with clause 9.13.1.

**Market Generator:** A Rule Participant registered as a Market Generator under clauses 2.28.6, 2.28.7, 2.28.8 or 2.28.13.

**Market Participant:** A Rule Participant that is a Market Generator or a Market Customer.

**Market Procedure:** The procedures developed by IMO and System Management in accordance with clause 2.9, (including the Power System Operation Procedures developed by System Management) as amended in accordance with the Procedure Change Process.

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

**Market Surveillance Data Catalogue:** The catalogue developed by the IMO under clause 2.16.2.

**Market Web Site:** Has the meaning given in the Regulations, and includes any website operated by the IMO to carry out its functions under these Market Rules.

**Maximum Consumption Capability:** For each Market Participant is as calculated in accordance with clause 6.3A.2(b).

**Maximum Reserve Capacity Price:** In respect of a given Reserve Capacity Cycle, the price in clause 4.16.2 as revised in accordance with clause 4.16.

**Maximum STEM Price:** The price determined in accordance with clause 6.20.2 as the maximum price that may be associated with a Portfolio Supply Curve for a portfolio including no Facilities expected to run on Liquid Fuel forming part of a STEM Submission or Standing STEM Submission.

**Maximum Supply Capability:** For each Market Participant is as calculated in accordance with clause 6.3A.2(a).

**Medium Term PASA:** A PASA study conducted in accordance with clause 3.16 in order to assist System Management in determining Ancillary Service Requirements, outage planning for Registered Facilities and also assessing the availability of Facilities in respect of which Capacity Credits are held.

**Metered Balancing Quantity:** Has the meaning given in clause 6.17.2.

**Meter Data Submission:** A submission of meter data by a Metering Data Agent to the IMO in accordance with clause 8.4.

**Meter Dispute:** Has the meaning given in clause 8.6.1(e).

**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 Schedule:** Has the meaning given in clause 9.3.4.

**Metering Data Agent:** The person identified under clause 8.1.2 or clause 8.1.4.

**Metering Protocol:** A combination of the Metering Data Rules as specified by the Economic Regulation Authority and a Network Operator's metering requirements as a condition of access. The metering requirement means in the context of a "covered network" (as that term is defined in the Access Code) the "Metering Rules" as defined in the Access Code while when used in the context of a network which is not a "covered network" (as that term is defined in the Access Code) means any commercial arrangement for metering energy. The definition of the Metering Protocol is subject to finalisation of the Metering Rules arrangements.

**Minimum Frequency Keeping Capacity:** Has the meaning given in clause 3.10.1(a).

**Minimum STEM Price:** ~~Means negative \$1,000.00 per MW. The price determined in accordance with clause 6.20.4 as the minimum price that may be associated with a Portfolio Supply Curve or a Portfolio Demand Curve forming part of a STEM Submission or Standing STEM Submission.~~

**Minister:** The Minister responsible for administering the Electricity Industry Act.

**Monitoring and Reporting Protocol:** The procedure developed by System Management and approved by the IMO in accordance with clauses 2.15.4 and 2.15.7 and, if applicable, as amended in accordance with clauses 2.9 and 2.10.

**Monitoring Protocol:** The procedure developed by the IMO in accordance with clause 2.15.1, 2.15.7 and, as amended from time to time in accordance with clauses 2.9 and 2.10.

**Monthly Reserve Capacity Price:** The dollar per megawatt per Trading month price calculated in accordance with clause 4.29.1.

**Monthly Special Reserve Capacity Price:** The dollar per megawatt per Trading Month price calculated in accordance with clause 4.29.2.

**MW:** Means megawatt.

**MWh:** Means megawatt hour.

**Net Bilateral Position:** Means in relation to a Market Participant, the amount calculated under clause 6.9.2.

**Net Contract Position:** In respect of a Market Participant for a Trading Interval is calculated in accordance with clause 6.9.13.

**Net STEM Refund:** Has the meaning given in clause 4.26.3.

**Net STEM Shortfall:** Has the meaning given in clause 4.26.2.

**Network:** A transmission system or distribution System registered as a Network under clause 2.29.3.

**Network Control Service:** Has the meaning given in clause 5.1.1.

**Network Control Service Contract:** A contract between a Network Operator and a Market Participant to provide a Network Control Service.

**Network Operator:** A person who registers as a Network Operator, in accordance with clause 2.28.2, 2.28.3 or 2.28.4.

**Non-Balancing Dispatch Merit Order:** An ordered list of Scheduled Generators, ~~Curtailable Loads Demand Side Programmes~~ and Dispatchable Loads registered by Market Participants, other than ~~the Electricity Generation Corporation Verve Energy~~, determined by the IMO in accordance with clause 6.12.1, ~~indicating the order in which those Scheduled Generators and Dispatchable Loads should receive Dispatch Instructions from System Management in the circumstances to which the relevant Dispatch Order applies.~~

**Non-Balancing Facility Dispatch Instruction Payment (DIP):** Has the meaning given in clause 6.17.6.

**Non-Balancing Facility:** Means a Registered Facility that is not a Balancing Facility.

**Non-Business Day:** A day that is a Saturday, Sunday, or a public holiday throughout Western Australia.

**Non-Dispatchable Load:** A Load which is not a Dispatchable Load or an Interruptible Load.

**Non-Liquid Fuel:** Means all fuels other than Liquid Fuel.

**Non-Qualifying Constrained On Generation:** Has the meaning given in clause 6.17.3(e).

**Non-Qualifying Constrained Off Generation:** Has the meaning given in clause 6.17.4(e).

~~**Non-Liquid Supply Decrease Price:** A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Scheduled Generator declared to be operating on Non-Liquid Fuel and in the calculation of the Dispatch Instruction Payment for that Scheduled Generator when declared to be operating on Non-Liquid Fuel during that Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.~~

~~**Non-Liquid Supply Increase Price:** A price specified in Balancing Data to apply in forming the Dispatch Merit Order for a Trading Interval for a Scheduled Generator declared to be operating on Non-Liquid Fuel and in the calculation of the Dispatch Instruction Payment for that Scheduled Generator when declared to be operating on Non-Liquid Fuel during that Trading Interval. Different values apply for Peak Trading Intervals and Off-Peak Trading Intervals.~~

**Non-Scheduled Generator:** A generation system that can be self-scheduled by its operator (with the exception that System Management can require it to decrease its output subject to its physical capabilities) and which is registered as a Non-Scheduled Generator in accordance with clause 2.29.4(a) or (d).

**Non-STEM Settlement Date:** The Business Day, determined under clause 9.16.2(e), on which the IMO issues Non-STEM Settlement Statements relating to a Trading Month.

**Non-STEM Settlement Statement:** A settlement statement for a Trading Month containing the information described in clause 9.18.3.

**Non-STEM Settlement Statement Date:** Has the meaning given in clause 9.16.2(c).

**Non-STEM Settlement Disagreement Deadline:** Has the meaning given in clause 9.16.2(f).

**Non-Temperature Dependent Load:** A Load accepted by the IMO as a Non-Temperature Dependent Load under clause 4.28.9.

**Normal Operating State:** The state of the SWIS defined in clause 3.3.1.

**Notice of Disagreement:** A notice issued by a Market Participant under any of clause 9.17.3, clause 9.18.4 or clause 9.19.5, to the IMO indicating a disagreement with either a STEM Settlement Statement or a Non-STEM Settlement Statement.

**Notice of Dispute:** A notice issued under clause 2.19.1 and containing the information described in clause 2.19.3.

**Notional Wholesale Meter:** A notional interval meter quantity associated with a Market Customer's aggregate consumption not metered by Trading Interval. This value will be an estimate produced by the IMO.

**Off-Peak Trading Interval:** A Trading Interval occurring between 10 PM and 8 AM.

**Offer:** Means a specified MW range over which a Market Participant is prepared to have its Balancing Facility dispatched upwards from a Resource Plan for Balancing, subject to the specified Ramp Rate Limit, at or above a specified \$/MWh price.

**Operating Instruction:** Means an instruction issued by System Management requiring a Facility to increase or decrease its output or decrease its consumption to meet the requirements of:

**(a)** a Network Control Service Contract;

**(b)** an Ancillary Service Contract;

**(c)** a Test under these Market Rules;

(d) a Supplementary Capacity Contract; or

(e) Ancillary Services, other than LFAS, to be provided by a Stand Alone Facility in accordance with the Market Rules.

**Operating State:** Means an Emergency Operating State, a High Risk Operating State or a Normal Operating State.

**Operational System Load Estimate:** ~~Has the meaning given in clause 6.14.4(a).~~

**Opportunistic Maintenance:** Has the meaning given in clause 3.19.2.

**Outage Contingency Plan:** Part of an Outage Plan specifying contingency plans for returning the relevant item of equipment to service before the time when the outage or de-rating is planned to finish.

**Outage Plan:** Has the meaning given in clause 3.18.4A and includes a revised Outage Plan submitted under clause 3.18.9.

**Out of Merit:** Means dispatch of a Balancing Facility for quantities greater than that specified in the BMO or in which the Ramp Rate Limit is taken into account, other than in the order in which the Balancing Facility appears in the Balancing Merit Order.

**Outstanding Amount:** The amount calculated in accordance with clause 2.40.1.

**PASA:** See Projected Assessment of System Adequacy.

**Parasitic Load:** Energy consumption that occurs behind the connection point at which a generation system is connected to the Network, and which consequently reduces the energy sent-out by the generation system relative to the energy actually generated by the generation system.

**Payment Default:** Any failure to make a payment in respect of an Invoice in accordance with clause 9.22 or 9.24.7 or pay any other amount owing under these Market Rules by the time it is due.

**Peak Trading Interval:** A Trading Interval occurring between 8 AM and 10 PM.

**Planned Outage:** Has the meaning given in clause 3.19.11.

**Planning Criterion:** Has the meaning given in clause 4.5.9.

**Portfolio Constrained Off Compensation Price:** Has the meaning given in clause 6.17.6A(b).

**Portfolio Constrained On Quantity:** Has the meaning given in clause 6.17.5(a).

**Portfolio Demand Curve:** A curve describing the STEM Price at which a Market Participant will purchase different levels of energy from the market having the form given in clause 6.6.2A(e).

**Portfolio Downwards Out of Merit Generation:** Means the amount calculated in accordance with clause 6.16B.2.

**Portfolio Loss Factor:** For each Trading Interval =  $\text{sum}(\text{Facility}(i) \text{ Sent Out Metered Schedule} \times \text{Loss Factor } (i)) / \text{sum}(\text{Facility } (i) \text{ Sent Out Metered Schedule})$ .

**Portfolio Ramp Rate Limit:** Means Verve Energy's best estimate, on a linear basis, of the Verve Energy Balancing Portfolio's physical ability to increase or reduce its output from the commencement of a Trading Interval to the end of the Trading Interval.

**Portfolio Settlement Tolerance:** Has the meaning given in clause 6.17.10.

**Portfolio Supply Curve:** A curve describing the STEM Price at which a Market Participant will provide the market with different levels of energy supply having the form given in clause 6.6.2A(d).

**Portfolio Upwards Out of Merit Generation:** Means the amount calculated in accordance with 6.16B.2.

**Power System Adequacy:** The ability of the SWIS to supply all demand for electricity in the SWIS at the time, allowing for scheduled and unscheduled outages of generation, transmission and distribution equipment and secondary equipment.

**Power System Operation Procedure:** See Market Procedure.

**Power System Reliability:** The ability of the SWIS to deliver energy within reliability standards while maintaining Power System Adequacy and Power System Security.

**Power System Security:** The ability of the SWIS to withstand sudden disturbances, including the failure of generation, transmission and distribution equipment and secondary equipment.

**Price Cap:** Means:

(a) a maximum price of:

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 the Minimum STEM Price.

**Price-Quantity Pair:** In the context of Reserve Capacity Offers, Supply Portfolio Curves and STEM Offers, a quantity that will be provided to the IMO by a Market Participant for a price equalling or exceeding the specified price. In the context of Demand Portfolio Curves and STEM Bids, a quantity that will be purchased from the IMO by a Market Participant for a price equalling or less than the specified price.

**Pricing BMO: Means the Balancing Merit Order adjusted:**

**(a) to take into account 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.**

**Procedure Amendment:** The specific wording of a proposed or accepted change to a Market Procedure.

**Procedure Change Process:** The process for amending a Market Procedure as set out in clauses 2.10 and 2.11.

**Procedure Change Proposal:** A proposal developed by the IMO or System Management to initiate a Procedure Change Process.

**Procedure Change Report:** A final report prepared by the IMO or System Management in relation to a Procedure Change Proposal, containing the information described in clause 2.10.13.

**Procedure Change Submission:** A submission made in relation to a Procedure Change Proposal submitted in accordance with clause 2.10.7.

**Projected Assessment of System Adequacy (PASA):** A forecasting study, undertaken by the IMO in the case of a Long Term PASA, and undertaken by System Management in the case of a Short Term PASA and a Medium Term PASA.

**Protected Provision:** A chapter or clause of the Market Rules, identified in clause 2.8.13.

**Prudential Obligations:** In respect of a Market Participant, the obligations set out in clauses 2.37 to 2.43.

**Public:** When used in reference to information confidentiality, ~~an information confidentiality status whereby information~~ or documents that is not Confidential and may be made available to any person.

**Ramp Rate Limit: Means the Market Participant's best estimate, on a linear basis, of a Facility's physical ability to increase or reduce its output from the commencement of a Trading Interval.**

**Ready Reserve Standard:** Has the meaning given in clause 3.18.11A.

**Reassessment Fee:** A fee determined by the IMO under clause 2.24.2.

**Reference Node:** The Muja 330 bus-bar (relative to which Loss Factors are defined).

**Refund Table:** The table titled “Refund Table” and set out in Chapter 4.

**Registered Facility:** In respect of a Rule Participant, a Facility registered by that Rule Participant with the IMO under Chapter 2.

**Regulations:** Any regulations made under the Electricity Industry Act 2004 (WA) but excluding the Electricity Industry (Wholesale Market) Regulations 2004 (WA).

**Regulator Fees:** The fees determined by the IMO in accordance with clause 2.24, and payable by Market Participants for the services provided by the Economic Regulation Authority in undertaking its Wholesale Electricity Market related functions and other functions under these Market Rules.

**Relevant Demand:** The consumption of a Demand Side Programme as determined in clause 4.26.2CA. Relevant Demand is used to determine Reserve Capacity shortfalls.

**Relevant Dispatch Quantity:** Means, for a Trading Interval, the quantity determined under clause 7A.3.6(b).

**Relevant Level:** Has the meaning provided in clause 4.11.3A.

**Relevant Settlement Statements:** Has the meaning given in clause 9.16.3A.

**Relevant Quantity:** Has the meaning given in clause 6.14.4(d).

**Repaid Amount:** Has the meaning given in clause 9.24.2(a).

**Representative:** In relation to a person means a representative of that person, including an employee, agent, officer, director, auditor, adviser, partner, consultant, joint venturer or sub-contractor, of that person.

**Request for Expression of Interest:** In respect of a Reserve Capacity Cycle, the request for expression of interest made available in accordance with clause 4.2.2.

**Required Level:** The level of output (expressed in MW) required to be met by a Facility as determined in clause 4.11.3B.

**Reserve Capacity:** Capacity associated with a Facility. Capacity may be:

- (a) the capacity of generation Systems to generate electricity and send it out into a network forming part of the SWIS; or
- (b) Demand Side Management, being the capability of a Facility registered by the Market Customer at a connection point to a Network forming part of the SWIS to reduce the consumption of electricity at that connection point.

**Reserve Capacity Auction:** The process for determining the Reserve Capacity Price for a Reserve Capacity Cycle and the quantity of Reserve Capacity scheduled by the IMO for each Market Participant under clause 4.19.

**Reserve Capacity Auction Requirement:** The quantity of Reserve Capacity calculated in accordance with clause 4.15.2(b), which is the target quantity to be procured in a Reserve Capacity Auction.

**Reserve Capacity Cycle:** The cycle of events described in clause 4.1.

**Reserve Capacity Deficit:** Has the meaning given in clause 4.26.1A.

**Reserve Capacity Information Pack:** A package of information, including the information described in clause 4.7.3, pertaining to a Reserve Capacity Auction.

**Reserve Capacity Mechanism:** Chapter 4 of the Market Rules.

**Reserve Capacity Obligations:** For a Market Participant holding Capacity Credits, determined in accordance with clause 4.12.1, clause 4.28B or clause 4.28C.

**Reserve Capacity Obligation Quantity:** The specific amount of capacity required to be provided in a Trading Interval as part of a Reserve Capacity Obligation set by the IMO in accordance with clauses 4.12.4 and 4.12.5 or clauses 4.28B or 4.28C as adjusted from time to time in accordance with these Market Rules, including under clause 4.12.6.

**Reserve Capacity Offer:** A submission from a Market Participant to the IMO, in the format and including the information described in clause 4.18.1.

**Reserve Capacity Price:** In respect of a Reserve Capacity Cycle, the price for Reserve Capacity determined in accordance with clause 4.29.1 and multiplied by 12, where this price is expressed in units of dollars per megawatt per year and has a value between zero and the Maximum Reserve Capacity Price.

**Reserve Capacity Requirement:** Has the meaning given in clause 4.6.1.

**Reserve Capacity Security:** The reserve capacity security to be provided for a Facility as calculated and re-calculated under clause 4.13 and clause 4.28C.

**Reserve Capacity Target:** In respect of a Capacity Year, the IMO's estimate of the total amount of generation or Demand Side Management capacity required in the SWIS to satisfy the Planning Criterion for that Capacity Year determined in accordance with clause 4.5.10(b).

**Reserve Capacity Test:** Means a test for Reserve Capacity under clause 4.25.

**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.

**Review Period:** In the case of the first Review Period, the 3 year period commencing on 1 July in the calendar year following the calendar year in which Energy Market Commencement occurs. For each subsequent Review Period, the 3 year period commencing on the third anniversary of the commencement of the previous Review Period.

**Reviewable Decision:** Decisions made by the IMO in respect of which an eligible person may apply to the Electricity Review Board in accordance with section 125 of the Electricity Industry Act and the Regulations, and does not include any decisions of a class specified for this purpose in the Regulations under section 125 of that Act.

**Rule Change Proposal:** A proposal made in accordance with clause 2.5 proposing that the IMO make Amending Rules.

**Rule Participant:** Any person registered as a Rule Participant in accordance with Chapter 2, the IMO and System Management.

~~**Rule Participant Dispatch Restricted:** An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(d).~~

~~**Rule Participant Market Restricted:** An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(c).~~

**Scheduled Generator:** A generation system that can increase or decrease the quantity of electricity it generates and sends out into a network forming part of the SWIS (subject to limits on its physical capabilities) in response to instructions from System Management and is registered as such in accordance with clause 2.29.4(b) and (c).

**Scheduled Outages:** Has the meaning given in clause 3.19.1.

**Scheduled System Load:** Has the meaning given in clause 6.14.4(c).

**Scheduling Day:** In respect of a Trading Day, the calendar day immediately preceding the calendar day on which the Trading Day commences.

**Season:** As the context requires, any of the Cold Season, Intermediate Season or Hot Season.

**Secretariat:** ‡The secretariat of the Market Advisory Committee.

**Security Deposit:** Has the meaning given in clause 2.38.4(b).

**Security Limit:** Any technical limit on the operation of the SWIS as a whole, or a region of the SWIS, necessary to maintain the Power System Security, including both static and dynamic limits.

**Sent Out Capacity:** Means:

(a) for a Balancing Facility, other than the Verve Energy Balancing Portfolio, that is a:

i. Scheduled Generator, the capacity provided as the Standing Data in Appendix 1(b)(iii); and

ii. Non-Scheduled Generator, the capacity provided as the Standing Data in Appendix 1(e)(iiiA); and

(b) for the Verve Energy Balancing Portfolio, the sum of all of the Standing Data in Appendix 1(b)(iii) and Appendix 1(e)(iiiA) for each Facility in the Verve Energy Balancing Portfolio.

**Sent Out Metered Schedule:** Means the Metered Schedule converted to sent out MWh quantities using applicable Loss Factors.

**Service Fee Settlement Amount:** Has the meaning given in clause 9.15.

**Facility Dispatch Settlement Tolerance:** The quantity ~~by which the Metered Schedule of a Scheduled Generator registered by a Market Participant other than the Electricity Generation Corporation can deviate from the Dispatch Schedule for that Scheduled Generator before the Upward Deviation Administered Price (UDAP) or the Downward Deviation Administered Price (DDAP) will be applied to that deviation in settlement as~~ determined under clause 6.17.9.

**Settlement Statement:** A STEM Settlement Statement, a Non-STEM Settlement Statement, an adjusted STEM Settlement Statement or an adjusted Non-STEM Settlement Statement.

**Shareholding Minister:** The Minister responsible for administering the Electricity Corporation Act.

**Short Term Energy Market (STEM):** A forward market operated under Chapter 6 in which Market Participants can purchase electricity from, or sell electricity to, the IMO.

**Short Term PASA:** A PASA study conducted in accordance with clause 3.17.

**Short Term Special Price Arrangement:** A Special Price Arrangement that applies for not more than one Reserve Capacity Cycle.

**SOI Quantity:** Means the quantity, in MW, at which a Balancing Facility was operating as at the start of a Trading Interval.

**South West interconnected system (SWIS):** Has the meaning given in the Electricity Industry Act.

**Special Price Arrangement:** An arrangement under clause 4.21 or 4.22 whereby a Market Participant can secure a price for Reserve Capacity that may differ from the Reserve Capacity Price.

**Special Reserve Capacity Price:** The dollar per megawatt per year price applicable to Capacity Credits held by a Market Participant in respect of a Registered Facility and subject to a Special Price Arrangement.

**Spinning Reserve:** Supply capacity held in reserve from synchronised Scheduled Generators, Dispatchable Loads or Interruptible Loads, so as to be available to support the system frequency in the event of an outage of a generating works or transmission equipment or to be dispatched to provide energy as allowed under these Market Rules.

**Spinning Reserve Service:** Has the meaning given in clause 3.9.2.

**Stand Alone Facility:** Means a Facility that is accepted by the IMO under clause 7A.4 as a Stand Alone Facility.

**Standard Rule Change Process:** The process for dealing with Rule Change Proposals set out in clause 2.7.

**~~Standing Balancing Data:~~** ~~Balancing Data stored by the IMO reflecting the information described in Appendix 1 provided to the IMO in accordance with clause 2.33.3(c)(x) or clause 2.34.~~

**Standing Bilateral Submission:** A submission by a Market Generator to the IMO made in accordance with clause 6.2A.

**Standing Data:** Data maintained by the IMO under clause 2.34.1.

**Standing Resource Plan:** A submission related in Resource Plans by a Market Generator to the IMO made in accordance with clause 6.5C.

**Standing STEM Submission:** A submission by a Market Participant to the IMO made in accordance with clause 6.3C.

**Statement of Corporate Intent:** The statement of corporate intent as agreed by the Minister or otherwise deemed to apply by Division 2 of Part 5 of the Electricity Corporations Act.

**Statement of Opportunities Report:** A report prepared in accordance with clause 4.5.13 presenting the results of the Long Term PASA study, including a statement of required investment if Power System Security and Power System Reliability are to be maintained.

**Steady State LFAS Base Point:** Means the MW level at which a Market Participant must operate an LFAS Facility in a Trading Interval when not providing a LFAS, in order for the

LFAS Facility to subsequently be capable of providing a specified LFAS in that Trading Interval.

**STEM:** See Short Term Energy Market.

**STEM Auction:** The process, described in clause 6.9, used to clear the STEM.

**STEM Bid:** A bid to purchase energy from the IMO via the STEM Auction for a Trading Interval.

**STEM Clearing Price:** Has the meaning given in clause 6.9.7.

**STEM Clearing Quantity:** Has the meaning given in clause 6.9.8.

**STEM Invoice:** An Invoice issued in accordance with clause 9.16.1(a)(ii).

**STEM Offer:** An offer to provide energy through the STEM Auction for a Trading Interval determined by the IMO in accordance with clause 6.9.3.

**STEM Settlement Date:** The date determined in accordance with clause 9.16.1(b) for settling transactions covered by STEM Settlement Statements.

**STEM Settlement Disagreement Deadline:** The time determined in accordance with clause 9.16.1(c) by which Notices of Disagreement concerning a STEM Settlement Statement for a Trading Week must be submitted to the IMO.

**STEM Settlement Statement:** A settlement statement for STEM transactions during a Trading Day issued under clause 9.16.1(a)(i) and containing the information described in clause 9.17.2.

**STEM Submission:** A submission by a Market Participant to the IMO made in accordance with clause 6.3B containing the information set out in, and in the format prescribed by, clause 6.6.

**Supplementary Capacity Contract:** An agreement under which a service provider agrees to supply one or more Eligible Services to the IMO, entered into in accordance with clause 4.24.

**Suspension Event:** An event described in clause 9.23.1.

**Suspension Notice:** A notice issued by the IMO in accordance with clause 2.32 or 9.23.7 that a Market Participant is suspended from trading in the Wholesale Electricity Market.

**SWIS:** See the South West Interconnected **s**System.

**SWIS Operating Standards:** The standards for the operation of the SWIS including the frequency and time error standards and voltage standards set out in clause 3.1.

**SWIS Operating State:** One or any of the Normal Operating State, High Risk Operating State or Emergency Operating State.

~~**SWIS Restricted:** An information confidentiality status whereby information or documents may only be made available to the parties described in clause 10.2.2(b).~~

~~**Synergy:** The body corporate established under s4(1)(c) of the Electricity Corporations Act 1994 (WA).~~

**System Management:** A segregated business unit of Western Power Corporation responsible for dispatching the power system.

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

**System Operation Fees:** The fees determined by the IMO in accordance with clause 2.24, and payable by Market Participants for the services provided by System Management.

**System Restart Service:** Has the meaning given in clause 3.9.8.

**Technical Code:** A code prescribing technical rules and requirements for access arrangements, established under the Access Code.

**Technical Envelope:** The limits for the operation of the SWIS in each SWIS Operating State.

**Temperature Dependent Load:** A Load that is not a Non-Temperature Dependent Load.

~~**Test:** Means a Commissioning Test, an Equipment Test or a Reserve Capacity Test.~~

~~**Test Plan:** Means a plan approved under Chapter 3 in relation to a Test.~~

~~**Theoretical Energy Schedule:** Means the schedule determined under clause 6.15.1.~~

~~**Theoretical Portfolio Dispatch Schedule:** Has the meaning set out in 6.16B.1(b).~~

**Total Amount:** Has the meaning given in clause 9.24.3.

~~**Total Consumed Energy:** Means the total Loss Factor adjusted MWh consumed energy.~~

~~**Total Sent Out Energy:** Means the total Loss Factor adjusted MWh sent out energy of a Market Generator's Scheduled Generators and Non-Scheduled Generators as determined by generator operational meter data and the use of state estimator systems.~~

**Tolerance Range:** The amount, determined by System Management under clause 2.13.6D of the Market Rules, by which a Market Participant may deviate from the obligations imposed on it under clause 7.10.1 or clause 3.21 before System Management must report an alleged breach of that clause under clause 2.13.6A.

**Trading Day:** A period of 24 hours commencing at 8:00 AM on any day after Energy Market Commencement, except where the IMO declares that part of a Trading Day is to be treated as a full Trading Day under clause 9.1.1, in which case that part is a Trading Day.

**Trading Interval:** A period of 30 minutes commencing on the hour or half-hour during a Trading Day.

**Trading Limit:** Has the meaning given in clause 2.39.1.

**Trading Margin:** Has the meaning given in clause 2.41.1.

**Trading Month:** A period from the beginning of a Trading Day commencing on the first day of a calendar month to the end of the Trading Day that finishes on the first day of the following calendar month.

**Trading Week:** A period from the beginning of a Trading Day commencing on a Thursday, to the end of the Trading Day that finishes on the following Thursday.

**Typical Accrual:** The amount determined in accordance with clause 2.42.2.

~~**Upward Deviation Administered Price (UDAP):** The amount calculated under clause 6.14.5.~~

~~**Upwards LFAS Backup Enablement:** Means the quantity determined under clause 7B.4.2(a).~~

~~**Upwards LFAS Enablement:** Means, for a Generator, a Non-Scheduled Generator and the Verve Energy Balancing Portfolio, the capacity, or that part of the capacity, in MW, in an LFAS Upwards Price-Quantity Pair selected under clause 7B.3.5(b) which is associated with that Facility or with the Verve Energy Balancing Portfolio, as applicable.~~

~~**Upwards LFAS Price:** Means the price determined under clause 7B.3.9.~~

~~**Upwards LFAS Quantity:** Means the quantity, in MW, by which the sum of the output of LFAS Facilities increased in a Trading Interval to provide LFAS.~~

~~**Upwards Out of Merit Generation:** Has the meaning given in clauses 6.16A.1, 6.16A.2 and 6.16B.1, as applicable.~~

~~**Verification Test:** Means a test under clause 4.25A.~~

~~**Verve Energy:** Means the body established by section 4(1)(a) of the Electricity Corporations Act 2005 (WA).~~

~~**Verve Energy Balancing Portfolio:** Means all the Registered Facilities of Verve Energy other than Stand Alone Facilities.~~

**Western Power:** The body corporate established under the *Electricity Corporation Act* (1994) as Western Power Corporation.

**Western Standard Time:** Co-ordinated Universal Time + 8 hours.

**Wholesale Electricity Market:** The market established under section 122 of the Electricity Industry Act.

**Wholesale Market Objectives:** The market objectives set out in Section of 122(2) of the Electricity Industry Act and repeated in clause 1.2.1.

**Working Group:** A working group as established under clause 2.3.17 of these Market Rules.