

### NOTIFICATION OF FURTHER CONSULTATION PERIOD FOR RC\_2011\_10

A number of potentially material issues relating to the proposed new Balancing and Load Following Ancillary Services markets have been identified by the IMO following the second submission period for the Rule Change Proposal: Competitive Balancing and Load Following Market (RC\_2011\_10). Some of the issues were identified through direct discussions with System Management and the Office of Energy. The IMO considers that these issues warrant further consideration by interested parties. Further details of the issues and the IMO's proposed solutions are outlined below.

The IMO considers it appropriate to allow interested parties a further opportunity to:

- consider the issues raised; and
- make further submissions on the IMO's proposed solutions to these issues (including the proposed revised Amending Rules, as set out in Appendix 1).

The IMO acknowledges that clause 2.7 of the Market Rules does not specifically contemplate a further consultation period after second-round submissions on the Draft Rule Change Report. However, given the potential importance of the issues raised and their potential impact on the IMO's assessment of the Rule Change Proposal, the IMO has determined that a further period of consultation, regarding the issues identified in this report, is appropriate in this case.

Any further submissions must be delivered to the IMO (market.development@imowa.com.au) by 5:00pm on **Tuesday 7 February 2012**.

#### Issues and the IMO's proposed solutions

The terms "Amending Rules" and "Revised Amending Rules" are used in this report. Amending Rules refers to the proposed rule amendments in the Draft Rule Change Report issued by the IMO on 6 December 2011 for the second round of consultation on Competitive Balancing and Load Following Market (RC\_2011\_10)<sup>1</sup>. Revised Amending Rules refers to the amendments which the IMO now intends to make to the Amending Rules, as contained in Appendix 1 of this report.

#### *Issue 1: Dispatch Compliance – New Instructions*

Clause 7.7.6 of the Amending Rules requires a Market Participant to advise System Management if it cannot fully comply with a Dispatch Instruction or an Operating Instruction and, if so, the reduced extent to which it can comply with that instruction. System Management has raised concerns, in this situation, that all real time actions should be under its control and that it should issue a new Dispatch Instruction or Operating Instruction reflecting the information provided by the Market Participant. The IMO also has concerns about how the concept of complying to a 'reduced extent' with that instruction might be interpreted and applied by Market Participants.

<sup>&</sup>lt;sup>1</sup> For further details refer to the Draft Rule Change Report available on the following IMO Webpage: <u>www.imowa.com.au/RC 2011 10</u>



Part of the rationale in the Amending Rules was to ensure that where a Market Participant is unable or unwilling to follow an instruction, it remains accountable for the non-compliance with the original instruction. With this and System Management's concerns in mind, the IMO proposes to revise the Amending Rules to enable System Management to issue a new instruction, which the relevant Market Participant must comply with, without excusing the Market Participant from failing to comply with the original instruction.

The IMO also proposes to revise the Amending Rules to clarify the information a Market Participant must provide System Management when it cannot comply fully with a Dispatch Instruction or an Operating Instruction –by replacing the term 'reduced extent' with specific information requirements.

The IMO also proposes to revise the Amending Rules to reinforce the importance of complying with a Dispatch Instruction or an Operating Instruction by making instances of non-compliance in these situations subject to civil penalty provisions. For further details of the specific civil penalty provisions, including the rationale for the changes, that the IMO will be proposing to have reflected in the list of civil penalty and Reviewable Decision provisions in the Electricity Industry (Wholesale Electricity Market) Regulations 2004 see Issue 6:.

The IMO considers that, from a dispatch perspective, the proposed revised approach would be consistent with the outcomes that were intended under the Amending Rules originally put forward.

#### *Issue 2: Dispatch Compliance – Tolerances*

At the December meeting of the Rules Development Implementation Working Group (RDIWG), concerns were raised about the ability of some Facilities to comply with Dispatch Instructions, and in particular Facilities with less flexible ramping capabilities.

Under the proposed new Balancing Market, Market Participants will need to take account of the physical capabilities of their Facilities in preparing their Balancing Submissions, to ensure that they do not receive infeasible Dispatch Instructions (for example, to avoid being asked to generate below minimum generation levels). In relation to ramp rates, Facilities must be able to ramp at instructed levels consistent with their position in the Balancing Merit Order (BMO) and submitted Ramp Rate Limits (RRL). A Facility that is marginal, or that is it is verging on being the marginal generator, may receive an instruction to ramp at less than its RRL (as reflected in the proposed Balancing Facility Requirements Market Procedure<sup>2</sup>). Facilities with less flexible or fixed ramping capabilities will have difficulty complying strictly with this requirement if they are marginal. Accordingly, they would tend to avoid this possibility by pricing their Balancing Submissions at high or low prices, or the caps, so as to ensure they are instructed to ramp at feasible ramp rates. Facilities that can only ramp continuously over a significant MW range at a particular ramp rate will generally need to do this

<sup>&</sup>lt;sup>2</sup> For further details refer to the Procedure Change Proposal: New Facility Balancing Facility Requirements Market Procedure (PC\_2012\_02) available on the following IMO Webpage: <u>http://www.imowa.com.au/PC\_2012\_02</u>



anyway. However, Facilities that ramp at fixed ramp rates but can do so for relatively small MW steps could approximate the intent of a linear ramp rate.

To address these matters, the IMO proposes to revise the Amending Rules to clarify that compliance with Dispatch Instructions is subject to operating within dispatch tolerance. This would enable a Facility to ramp to a target level in increments, approximating a linear ramp rate over the instructed range. The IMO also considers that this clarification is necessary to ensure more generally that Market Participants have some leeway in complying with Dispatch Instructions. However, the IMO also wishes to make it clear that the intent is to provide some flexibility to 'on average' meet instructed MW target and ramp rate levels over an interval, and that purposefully biasing operation within the "dispatch tolerance"<sup>3</sup> (for example, to manipulate constrained on or off or balancing outcomes) may result in compliance action being taken.

#### Issue 3: Strengthening Misleading Conduct Provisions

An important component of the proposed new balancing and LFAS market arrangements is greater reliance on an effective compliance regime. With this in mind, the IMO is concerned about its ability to take effective action with respect to misleading conduct, and proposes to address this in new clauses 7A.2.15A and 7B.2.13A.

In particular, clauses 7A.2.15A and 7B.2.13A would significantly improve the IMO's ability to successfully prosecute contraventions of the misleading conduct provisions of the new balancing Market Rules, in appropriate cases. The proposed new clauses 7A.2.15A and 7B.2.13A is based on section 4 of the Australian Consumer Law (WA) that applies by virtue of the Fair Trading Act 2010 (WA). Section 4 of the Australian Consumer Law reflects the general position in WA in relation to misleading representations in trade or commerce as to future matters. Statements about price, quantity and Ramp Rate Limits contained in a balancing submission are in effect representations by a Market Participant about its future intentions in respect of those matters.

The effect of proposed new clauses 7A.2.15A and 7B.2.13A in the Revised Amending Rules would be that a price, quantity or Ramp Rate Limit in a Balancing Submission is deemed to be misleading unless the Market Participant making the submission can establish that it had reasonable grounds for including that information in its submission.

#### Issue 4: TES, Out of Merit and Constrained On/Off Quantities

The IMO proposes to revise provisions in the Amending Rules concerning Minimum and Maximum Theoretical Energy Schedules (Min TES and Max TES) in clause6.15; Upward and Downward Out of Merit Generation in clauses 6.16A and 6.16B; and Constrained On and Off Generation in clause 6.17. These proposed changes are

<sup>&</sup>lt;sup>3</sup> For the purposes of this document "dispatch tolerance" refers to the Tolerance Range or Facility Tolerance Range (if applicable). Note that under the current Market Rules these two concepts only apply for the purposes of System Managements reporting of potential non-compliances.



mostly clarifications or corrections as highlighted in Appendix 1. More significant proposed changes are:

- Ensuring that any Back-Up LFAS Enablement which System Management instructs a Verve Stand Alone Facility to provide is accounted for in calculating Out Of Merit and Constrained On and Off Generation quantities.
- Clarifying (in clause 6.17.9) that Settlement Tolerance also applies to the Non Scheduled Generators. This is to ensure that Out Of Merit Generation for Scheduled and Non-Scheduled Generators are treated consistently.
- Clarifying how any Network Control Service Contracts, Spinning Reserve and Load Rejection Reserve instructed by System Management are to be treated in calculating Out of Merit and Constrained On and Off Generation for the Verve Portfolio. This also involves clarifying and removing some Glossary terms relating to Spinning Reserve and Load Rejection Reserve.
- Accounting for outages within the Verve Portfolio when calculating the portfolio Min TES and Downward Out of Merit Generation to ensure that Verve Energy does not receive Constrained Off Compensation as a result of outages. This is consistent with the treatment of IPP and Stand Alone Facility outages.
- Amending the Glossary term Available Capacity, used in Min TES and Downward Out of Merit Generation calculations, so that it applies to Facilities rather than at the Market Participant level.
- Clarifying the treatment of any excess Out of Merit Generation which cannot be allocated to a Balancing Price-Quantity Pair. This could happen if a Facility exceeded its Ramp Rate Limit (RRL) because TES calculations are limited by submitted RRLs. In this regard, it would be appropriate that any excess Out of Merit Generation only receives the Balancing Price.
- Adding a (missing) clause for the calculation of Constrained On Generation for Non-Scheduled Generation.

#### Issue 5: TES Processes

Due to similarities in the information used for the TES and Balancing Price the IMO proposes to set TES in a similar manner to the price setting processes for the STEM price and the Balancing Price. The setting of the TES will occur in an almost identical fashion to the setting of the Balancing Price and be based on the same input values. The IMO proposes to set a provisional TES at the same time as the provisional Balancing Price is set, the IMO will then set the final TES 15 Business days later to incorporate any finalised Outage information it receives from System Management.

Given the new timing requirements, the IMO will need to rely on SCADA data to calculate sent out energy from Non-Scheduled Generators when performing the TES calculations. Accordingly the IMO proposes to revise clause 6.15.3A of the Amending Rules to enable the IMO to calculate Sent Out Metered Schedules for this purpose.



#### Issue 6: Civil Penalty Provisions

In the Rule Change Notice issued in September 2011<sup>4</sup>, the IMO advised of a number of changes to civil penalty provisions and reviewable decisions which it proposed should be reflected in the Electricity Industry (Wholesale Electricity Market) Regulations 2004. For reasons outlined below, the IMO proposes that some additional clauses be designated as civil penalty provisions. Given the potential implications for Market Participants, the IMO wishes to ensure that Market Participants understand the intent of, and have a further opportunity to provide their views on all such changes to civil penalties and reviewable decisions, including those previously advised.

<sup>&</sup>lt;sup>4</sup> For further details refer to the IMO's Rule Change Proposal and notification available on the following webpage: <u>www.imowa.com.au/RC\_2011\_10</u>



Proposed amended Civil Penalty Provisions <sup>5</sup>				
Clause	First advised	Relates to	Penalty Magnitude	Comment
2.13.13A	Rule Change Proposal (Sep 2011)	False or misleading conduct in relation to an investigation	Category C \$50,000 first beach (\$100,000 subsequent breaches)	The proposed designation of this clause as a civil penalty provision would strengthen the IMO compliance regime in requesting information from Market Participants.
3.11.7A	Rule Change Proposal (Sep 2011)	Verve Energy obligation to make sufficient capacity available to System Management for Ancillary Services	Category C \$50,000 first beach (\$100,000 subsequent breaches)	This is a current civil penalty provision. The IMO proposes to further amend this clause in the Market Rules under this further notification to reflect new Verve Stand Alone Facility and LFAS market structure.
7.7.6(b) (i)	Potential Revised Amending Rules presented for further consultation (Jan 2012)	Responding to Dispatch Instructions and Operating Instructions	Category C \$50,000 first beach (\$100,000 subsequent breaches)	The proposed designation of this clause as a civil penalty provision is due to the proposed change associated with Issue 1 above. The proposed change associated with Issue 1 is that System Management must issue a second Dispatch Instruction when a Market Participant fails to respond and/or comply with the first Dispatch Instruction. This civil penalty will carry the highest possible limit as it relates to Market Participants who fail to confirm that they have received the Dispatch Instruction and is equivalent to non compliance with a Dispatch Instruction (as System Management will be required to dispatch around their non- compliance).

<sup>&</sup>lt;sup>5</sup> Note that for Category C civil penalties: maximum penalty for first breach \$50,000, maximum penalty for subsequent breaches \$100,000



7.7.6A	Rule Change Proposal (Sep 2011)	Market Participant has advised System Management it cannot comply or only partially comply with a Dispatch Instruction or Operating Instruction	Category C \$30,000 first beach (\$60,000 subsequent breaches)	The proposed designation of this clause as a civil penalty clause is to ensure that participants are encouraged to advise System Management in advance of an interval of their inability to comply with a Dispatch Instruction. The maximum penalty would be lower than the corresponding maximum penalty for clauses 7.10.3A (which applies when a Market Participant advises System Management in real time that it cannot comply with the Dispatch Instruction) which in turn will be less than the civil penalty associated with non compliance with a Dispatch Instruction without informing System Management of the inability to comply This reflects a sliding scale, under which the highest maximum penalties are reserved for the most serious breaches of the Market Rules that are deemed to contribute to a greater risk to power system security/reliability.
7.7.6A	Rule Change Proposal (Sep 2011)	Market Participant has advised System Management it cannot comply or only partially comply with a Dispatch Instruction or Operating Instruction	Category C \$30,000 first beach (\$60,000 subsequent breaches)	The proposed designation of this clause as a civil penalty clause is to ensure that participants are encouraged to advise System Management in advance of an interval of their inability to comply with a Dispatch Instruction. The maximum penalty would be lower than the corresponding maximum penalty for clauses 7.10.3A (which applies when a Market Participant advises System Management in real time that it cannot comply with the Dispatch Instruction) which in turn will be less than the civil penalty associated with non compliance with a Dispatch Instruction without informing System Management of the inability to comply This reflects a sliding scale, under which the highest maximum penalties are reserved for the most serious breaches of the Market Rules that are deemed to contribute to a greater risk to power system security/reliability.



7.10.1	Rule Change Proposal (Sep 2011)	Compliance with Dispatch Instructions and Operating Instructions	Category C \$50,000 first beach (\$100,000 subsequent breaches)	This is a current civil penalty provision. The IMO proposes to maintain the civil penalty provisions around this clause.
7.10.3A	Rule Change Proposal (Sep 2011)	Inability to comply with a Dispatch Instruction or Operating Instruction	Category C \$40,000 first beach (\$80,000 subsequent breaches)	The proposed amendment to this clause as a civil penalty provision would ensure that when an Market Participant advises System Management that it cannot comply with a Dispatch Instruction they are exposed to a lesser civil penalty that if they just do not comply with the Dispatch Instruction.
7.10.3	Rule Change Proposal (Sep 2011)	Obligation to advise System Management of inability to comply with a Dispatch Instruction or Operating Instruction in real time.	Category C \$50,000 first beach (\$100,000 subsequent Breaches)	The proposed amendment to this clause as a civil penalty provision would ensure that Market Participants are encouraged to notify System Management in instances where they are aware that they will not be able to comply with a Dispatch Instruction.
7A.2.8	Rule Change Proposal (Sep 2011)	Accuracy of Facility Balancing Submissions	Category C \$50,000 first beach (\$100,000 subsequent breaches)	The proposed designation of this clause as a civil penalty provision would ensure that Balancing Submissions are based on the most accurate data available. This, in turn, would ensure that the Balancing Merit Order (and hence pricing) are as consistent with dispatch as possible.
7A.2.9	Rule Change Proposal (Sep 2011)	Accuracy of Verve Portfolio Balancing Submissions	Category C \$50,000 first beach (\$100,000 subsequent breaches)	As above for IPP's (clause 7A.2.8) but for the Verve Energy Portfolio.



7A.2.13	Rule Change Proposal (Sep 2011)	Balancing Submissions must be made in good faith, not intend to mislead, not manipulate Constrained On or Off Compensation	Category C \$50,000 first beach (\$100,000 subsequent breaches)	The proposed designation of this clause as a civil penalty provision will ensure that Market Participants are not able to "game" the Balancing Market by misleading other participants as to their intended dispatch. This is important in the new Balancing Market because there is a requirement for Market Participants to use the balancing forecasts in preparing their own Balancing Submissions. This is particularly important when thinking about Facilities with start-up time longer than Gate closure – if a Market Participant was able to mislead other Market Participants that operate slower Facilities as to their intended dispatch; there is a risk that the slower Facilities will not make their energy available. The inclusion of subclause (c) prohibiting the manipulation of constrained on/off payments was included at the recommendation of the market power mitigation review that was conducted for the IMO by Market Reform. More information on this can be found in the report available on the IMO website. <sup>6</sup>
7A.2.16	Rule Change Proposal (Sep 2011)	Balancing Submission prices exceeding short run marginal cost	Category C \$50,000 first beach (\$100,000 subsequent breaches)	This clause replicates the existing short run marginal cost provisions for STEM. The proposed designation of this clause as a civil penalty provision would ensure that Market Participants do not have an incentive to submit Balancing Submission prices that exceed their reasonable expectation of the short run marginal cost.
7B.2.10	Rule Change Proposal (Sep 2011)	Accuracy of LFAS Submissions	Category C \$50,000 first beach (\$100,000 subsequent breaches)	Same comments apply as for clauses 7A.2.8 and 7A.2.9 above, but for the LFAS Market.

<sup>&</sup>lt;sup>6</sup> http://www.imowa.com.au/f139,1751332/IMO Market Power Review - Market Reform v1 0.pdf



7B.2.11	This clause was 7B.2.13 in Rule Change Proposal (Sep 2011)	LFAS Submissions must be made in good faith, not intend to mislead	Category C \$50,000 first beach (\$100,000 subsequent breaches)	Same comment applies as for clause 7A.2.13 above, but for the LFAS Market.
7B.2.14	Potential Revised Amending Rules presented for further consultation (Jan 2012)	LFAS Submission prices exceeding incremental impact on short run marginal cost	Category C \$50,000 first beach (\$100,000 subsequent breaches)	Same reason applies as for clause 7A.2.16 above, but for the LFAS Market.



Proposed new Reviewable Decisions				
Clause	First Advised	Relates to	Comment	
2.10.2A	Rule Change Proposal (Sep 2011)	The IMO and System Managements decision on recommended procedure changes	The IMO proposes that this clause be a reviewable decision to ensure procedural fairness when rejecting a proposed Market Procedure or PSOP change.	
2.34.7A	Rule Change Proposal (Sep 2011)	The IMO determining a Facilities ability to become a LFAS Facility	The IMO proposes that this clause be a reviewable decision to ensure procedural fairness when deciding on the ability of a Facility to become a LFAS Facility.	
2.34.7C	Rule Change Proposal (Sep 2011)	System Management determining a Facilities ability to become a LFAS Facility	The IMO proposes that this clause be a reviewable decision to ensure procedural fairness when deciding on the ability of a Facility to become a LFAS Facility.	
7A.1.8	Rule Change Proposal (Sep 2011)	The IMO placing conditions on a Facility which does not meet the Balancing Facility Requirements	The IMO proposes that this clause be a reviewable decision to ensure procedural fairness when placing conditions on how a Facility is eligible to participate in the Balancing Market.	



### Proposed revised Amending Rules

To assist interested parties in making their submissions on these issues and the IMO's proposed solutions, the IMO has updated the proposed Amending Rules presented in the Draft Rule Change Report. A copy of the proposed revisions to the Amending Rules is presented in Appendix 1 of this report.

### Proposed Work Programme

- Interested parties make submissions on the identified issues and proposed solutions presented in this notice.
- The IMO will prepare its Final Rule Change Report, taking into account the views expressed in any relevant submissions received.
- The IMO Board presents its final decision regarding RC\_2011\_10 in the Final Rule Change Report.

Matthew Pember

#### MEP PROGRAMME MANAGER

27 January 2012



#### **APPENDIX 1: PROPOSED REVISED AMENDING RULES**

To assist interested parties in preparing their submissions on the IMO's proposed solutions to the issues outlined in this notice, the IMO has prepared the following revisions to the proposed Amending Rules. The IMO notes that these amendments are purely indicative at this time, have not been approved by the IMO Board and may be subject to change in the Final Rule Change Report.

The amendments to the proposed Amending Rules are marked up from those originally presented in the Draft Rule Change Report are presented as follows (added text, deleted text)<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> Note that changes presented in blue text reflect amendments from what was originally proposed in the Draft Rule Change Report.

Drafting Changes associated with Issue 1, issue 2 and issue 6

- 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, subject to clause 7.7.6B, 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.

#### <u>....</u>

### 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. System Management must develop a The-Power System Operational Procedure whichmust prescribes 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:

i. \_-confirm receipt of the Dispatch Instruction<u>or Operating Instruction;</u> and

- ii. -advise if it cannot comply or 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 Instruction.
- 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 a Dispatch Instruction, the Market Participant deemed to have refused failed to comply with the Dispatch Instructiona Market Participant has notified System Management in accordance with 7.7.6(b) that it cannot comply, or cannot fully comply with a Dispatch Instruction, then the reason why the market Participant cannot comply or cannot fully comply with the Dispatch Instruction must fall within clause 7.10.2(a).
- 7.7.6BIf a Market Participant notifies System Management under clause 7.7.6(b) or<br/>clause 7.10.3 that it cannot fully comply with a Dispatch Instruction or an<br/>Operating Instruction, then it must, at the same time, provide notice of:
  - (a) where the Market Participant can comply with the required quantity but not the required ramp rate, the different ramp rate with which the Market Participant can comply:
  - (b) where the Market Participant cannot comply with the required quantity, the reduced quantity (if any) and associated ramp rate with which the Market Participant can comply:

and System Management must, subject to meeting the Dispatch Criteria, issue a new Dispatch Instruction or Operating Instruction, as applicable, to the Market Participant in accordance with the advice received.

- <u>...</u>
- 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, 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, <u>Operating Instruction or Dispatch</u> <u>Order</u> applicable to the its Registered Facility for the Trading Interval.; and

(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 an Outage. 7.10.2. A Market Participant is not required to comply with clause 7.10.1 if: (a) -such compliance would endanger the safety of any person, damage equipment, or breach any applicable law, or is subject to an approved Equipment Test pursuant to clause 3.21AA.; or the Facility was physically unable to maintain the ramp-rate specified in the (b) **Dispatch Instruction but:** the actual ramp-rate of the Facility was within the applicable Tolerance Range or Facility Tolerance Range at all times: and the average of the ramp-rate that was maintained in order to ii. achieve the MW target specified in the Dispatch Instruction was equal to the ramp-rate specified in the Dispatch Instruction.

- 7.10.3. Where a Market Participant <u>becomes aware that it cannot comply or fully comply</u> <u>with its Resource Plan, a</u> Dispatch Instruction <u>or an Operating Instruction-or</u> <u>direction given under clauses 7.6 or 7.10.7(a)</u>, as applicable, it must inform System Management as soon as practicable.
- 7.10.3AWhere a Market Participant has advised System Management under clause7.7.6(b)7.10.3 that it cannot comply or fully comply with a Dispatch Instruction or<br/>an Operating Instruction has also advised a reduced extent to which it can comply,<br/>the Market Participant must comply with the Dispatch Instruction or Operating<br/>Instruction but only to that reduced extent. A Market Participant's failure to fully<br/>comply with the Dispatch Instruction is not excused by this clause 7.10.3A the<br/>reason why the market Participant cannot comply with the Dispatch Instruction<br/>must fall within clause 7.10.2(a).
  - <u>----</u>
- 7.10.5. Subject to clause 7.10.5A, wWhere 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 is not within:

(a) threatens Power System Security or Power System Reliability;

- (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
- (i-a) the Tolerance Range determined in accordance with clause 2.13.6D; or
- (ii.b) 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:

- (c) warn the Market Participant about the deviation and request an explanation for the deviation; and
- (d)if necessary to meet the Dispatch Criteria, issue a new DispatchInstruction, Operating Instruction or Dispatch Instruction in accordance withclause 7.6where the behaviour has not stopped or has not otherwise beenaddressed by System Management under Market Rules, requestimmediatecessation of the behaviour within a time that SystemManagement considers reasonable.

Drafting Changes associated with Issue 3

### 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 relating toin the Balancing Market; and

- (c)not include information in make a Balancing Submissioncontainingrelating to prices that seek tofor a purpose of influenceing the<br/>determination of the Constrained Off CompensationCompetition Price,<br/>the Constrained Off Quantity which Facility may provide, the Constrained<br/>On Compensation Price or the Constrained On Quantity which Facility<br/>may provide.
- 7A.2.14. A Balancing Submission is made in good faith under clause 7A.2.13 if, at the time it is madesubmitted, the Market Participant had a genuine intention to honour the terms of 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.

### <u>7A.2.15A</u>

(a) If a Market Participant does not have reasonable grounds for the price, <u>quantity or Ramp Rate Limit it has included in a Balancing Submission at</u> <u>the time it submits the Balancing Submission, then the Market Participant</u> <u>is, for the purposes of clause 7A.2.13(b), taken to have known that the</u> Balancing Submission was likely to lead to another Rule Participant being misled or deceived as to the existence or non-existence of a material fact relating to the Balancing Market;

- (b) For the purposes of clause 7A.2.15A(a), a Market Participant is taken not to have had reasonable grounds for including the price, quantity or Ramp Rate Limit in the Balancing Submission, unless evidence is adduced to the contrary.
- (c) To avoid doubt clause 7A.2.15A(b) does not:
  - i. have the effect that, merely because such evidence to the contrary is adduced, the Market Participant who submitted the Balancing Submission is taken to have had reasonable grounds for including the price, quantity or Ramp Rate Limit, as applicable;
  - ii.have the effect of placing on any person an onus of proving that<br/>the Market Participant who submitted the Balancing Submission<br/>had reasonable grounds for including the price, quantity or Ramp<br/>Rate Limit, as applicable.
- (d) Clause 7A.2.15A(a) does not limit by implication the meaning of a reference in this chapter 7A to:
  - i. a misleading representation;
  - ii. a representation that is misleading in a material particular; or
  - iii. conduct that is misleading or is likely or liable to mislead, and

in particular, does not imply that a price, quantity or Ramp Rate Limit included in a Balancing Submission submitted by a Market Participant is not misleading merely because the Market Participant had reasonable grounds for making the representation.

## 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:

is intended to lead; or

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

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

- 7B.2.12. An LFAS Submission is made in good faith under clause 7B.2.11 if, at the time it is submitted-made, the Market Participant had a genuine intention to honour the terms of that LFAS Submission if the material conditions and circumstances upon which the LFAS Submission was based remained unchanged until the relevant Trading Interval.
- 7B.2.13. A Market Participant may be taken to have not made an LFAS Submission in good faith notwithstanding that, 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.2.13A

- (a) If a Market Participant does not have reasonable grounds for the price and quantity it has included in a LFAS Submission at the time it submits the LFAS Submission, then the Market Participant is, for the purposes of clause 7B.2.11(b), taken to have known that the LFAS Submission was likely to lead to another Rule Participant being misled or deceived as to the existence or non-existence of a material fact relating to the LFAS Market;
- (b) For the purposes of clause 7B.2.13A(a), a Market Participant is taken not to have had reasonable grounds for including the price or quantity in the LFAS Submission, unless evidence is adduced to the contrary.
- (c) To avoid doubt clause 7B.2.13A(b) does not:
  - i. have the effect that, merely because such evidence to the contrary is adduced, the Market Participant who submitted the LFAS Submission is taken to have had reasonable grounds for including the price or quantity, as applicable;
  - ii. have the effect of placing on any person an onus of proving that the Market Participant who submitted the LFAS Submission had

reasonable grounds for including the price or quantity, as applicable.

- (d) Clause 7B.2.13A(a) does not limit by implication the meaning of a reference in this chapter 7B to:
  - i. a misleading representation;
  - ii. a representation that is misleading in a material particular; or
  - iii. conduct that is misleading or is likely or liable to mislead, and

in particular, does not imply that a price or quantity included in a LFAS Submission submitted by a Market Participant is not misleading merely because the Market Participant had reasonable grounds for making the representation. Drafting Changes associated with Issue 4

## 6.15. Maximum and Minimum Theoretical Energy Schedule

- 6.15.1. The Maximum 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:
    - the maximum amount of sent out energy (in MWh) which could have been dispatched in the Trading Interval from Balancing Price-Quantity Pairs in respect of the Balancing Facility with a Loss Factor Adjusted Price less than or equal to the Balancing Price, taking into account the Balancing Facility's SOI Quantity and Ramp Rate Limit; and
      - <u>ii.</u> where the Balancing Facility is subject to an 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 the Loss Factor Adjusted Price of the Balancing Price Quantity-Pair in respect of the Balancing Facility is lessgreater than or equal to the Balancing Price, then the Sent Out Metered Schedule; and
    - ii. otherwise the minimum amount of sent out energy (in MWh) which the Balancing Facility could have generated in the Trading Interval if the Facility had been dispatched downwards at its Ramp Rate Limit from its SOI Quantity; 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 the SOI Quantity.
- 6.15.2 The Minimum Theoretical Energy Schedule in a Trading Interval equals:
  - (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 in the Trading Interval from Balancing Price-Quantity Pairs in respect of the Balancing Facility with a Loss Factor Adjusted Price less than the Balancing Price, taking into account the Balancing Facility's SOI Quantity and Ramp Rate Limit; and

- ii. where the Balancing Facility is subject to an 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:
  - if a Dispatch Instruction was issued to the Balancing Facility to decrease its output and the Loss Factor Adjusted Price of the Balancing Price-Quantity Pair in respect of the Balancing Facility is equal to or greaterless than the Balancing Price, then 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 Facility; or
- (c) for the Verve Energy Balancing Portfolio, the amount which is the lesser of:
  - i. the maximum amount of sent out energy (in MWh) which could have been dispatched in the Trading Interval from Balancing Price-Quantity Pairs within the Balancing Portfolio Supply Curve with an associated price less than the Balancing Price, taking into account the Portfolio Ramp Rate Limit and SOI Quantity; and
  - ii. the maximum amount of sent out energy (in MWh) which could have been dispatched given the sum of the Available Capacity of Facilities in the Verve Energy Balancing Portfolio for that Trading Interval.

### <u>...</u>

# 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 in accordance with clause 9.3.4.
- 6.16.1A. For the purposes of clauses 6.15.2, 6.15.2, 6.16A and 6.16B, Sent Out Metered Schedules for a Balancing Facility are to be calculated by the IMO using SCADA data received from System Management in accordance with clause 7.13.1(cA), notwithstanding any requirement in clause 9.3.4 to use Meter Data Submissions received by the IMO.

<u>...</u>

# 6.16A. Facility Out of Merit

- 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 clause 6.16A.1(b), the Sent Out Metered Schedule less the Maximum 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 Maximum TheoreticalEnergy Schedule is less than the sum of:
      - if instructed by System Management to provide LFAS, the any Upwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any Upwards Backup LFAS Enablement, which the facility was instructed by System Management to provide, divided by two so that it is expressed in MWh; and
      - 2. the applicable Settlement Tolerance.
- 6.16A.2. [clauses below to be renumbered]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 Maximum 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 Minimum 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 Minimum 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<br/>any Downwards LFAS Enablement and, if the Facility is a<br/>Stand Alone Facility, any Downwards Backup LFAS<br/>Enablement, which the Facility was instructed System<br/>Management to provide, divided by two so that it is<br/>expressed in MWh; and
  - 2. the applicable Settlement Tolerance.

## 6.16B. Verve Energy Balancing Portfolio Out of Merit

- 6.16B.1. The Portfolio 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 any Sent Out Metered Schedules for Facilities in the Verve Energy Balancing Portfolio less the Maximum 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 any Sent Out Metered Schedules for Facilities in the Verve Energy Balancing Portfolio less the Maximum Theoretical Energy Schedule for the Verve Energy Balancing Portfolio is less than the sum of:
      - 1.
         any increase in sent out energy dispatched on by System

         Management from a due to a Network Control Service

         Contract which System Management instructed associated

         with a Facility within the Verve Energy Balancing Portfolio to provide;
      - 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, both divided by two so that they are expressed in MWh;

- 3. if a Spinning Reserve Event has occurred, any Spinning Reserve Response Quantity, excluding any quantity under clause 6.16B.1(b)(ii)(2); and
- 4. the Portfolio Settlement Tolerance.
- 6.16B.2. The Portfolio 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 Minimum Theoretical Energy Schedule less the sum of any Sent Out Metered Schedules for Facilities in 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; or
- ii.the Minimum Theoretical Energy Schedule of the Verve EnergyBalancing Portfolio less the sum of any Sent Out MeteredSchedules for Facilities in the Verve Energy Balancing Portfolio isless than the sum of:
  - 1.
     any reduction in sent out energy dispatched by System

     Management from due to a Network Control Service

     Contract which System Management instructedassociated

     with a Facility within the Verve Energy Balancing Portfolio to provide;
  - 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, both divided by two so that they are expressed in MWh;
  - 3. if a Load Rejection Reserve Event has occurred, any Load Rejection Reserve Response Quantity excluding any guantity under clause 6.16B. 2(b)(ii)(2); and
  - 4. the Portfolio Settlement Tolerance.

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**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, at the quantities and prices in the Balancing Price-Quantity Pairs 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 at a Loss Factor Adjusted Price, being price N in the Facility's Balancing Price-Quantity Pair-(Price N), with a Loss Factor Adjusted pPrice (Price N) 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 N identified in clause 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 (in MWh) which could have been dispatched from Balancing the Facility's Balancing Price-Quantity Pair Price N+1 with a price higher than but closest to the Price N, taking into account when the Balancing Facility's MW level reached the top of the quantity associated in-with the Balancing Price Price-Quantity Pair for Price-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 Price N+1, any ConQN+1 and ConPN+1 until all Upwards Out of Merit Generation has been attributed to Price-Quantity Pairs or, otherwise, until there are no remaining Price-Quantity Pairs;
  - (e) <u>The Non-Qualifying Constrained On Generation for the Balancing Facility</u> equals the sum, divided by two so that it is expressed as sent out MWh, of any sent out energy (in MWh) from a Network Control Service Contract dispatched on by System Management and any Upwards LFAS

Enablement and, if the Facility is a Stand Alone Facility, any Downwards LFAS Backup Enablementdivided by two so that it is 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:
  - i. the Non-Qualifying Constrained On Generation exceeds ConQ1 set ConQ1 to zero; or
  - ii. otherwise reduce ConQ1 by the amount of Non-Qualifying Constrained On Generation;
- (g) <u>The IMO must repeat the process set out in paragraph (f) above for each</u> <u>ConQN in ascending order until all Non-Qualifying Constrained On</u> <u>Generation has been deducted from ConQN or, otherwise, until there are</u> <u>no remaining ConQN; and</u>
- (h) For settlement purposes under Chapter 9, the IMO must Loss Factor adjust each ConQN calculated in paragraphs (a) to (f) above.
- 6.17.3B Subject to clause 6.17.2A, for any Balancing Facility that is a Non-Scheduled Generator, in a Trading Interval:
  - (a) ConQ1 equals the Upwards Out of Merit Generation (in MWh) for the <u>Trading Interval</u>, which for settlement purposes under Chapter 9 the IMO <u>must Loss Factor adjust; and</u>
  - (b) ConP1 equals the Balancing Price for that Trading Interval less the Loss Factor Adjusted Price in the Balancing Price-Quantity Pair associated with the Balancing Facility for that Trading Interval.

### **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 Balancing Price-Quantity Pairs for that Balancing Facility as follows:
  - (a) Constrained Off Quantity1 (CoffQ1) equals the lesser of:
    - the maximum energy (in MWh) which could have been dispatched down from the Balancing Facility at a Loss Factor Adjusted Price, being price N in the Facility's Balancing Price-Quantity Pair (Price N), with a 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;

- i. the maximum energy (in MWh) which could have been dispatched down from the Facility's Balancing Price-Quantity Pair N, with Price N, taking into account the Available Capacity and actual SOI Quantity of the Balancing Facility and the applicable Ramp Rate Limit, where N is determined from either of the following Price-Quantity Pairs or, if different, the one with the lower price:
  - 1
     the Price-Quantity Pair associated with the intersection of

     Available Capacity and the quantities in all Price-Quantity

     Pairs summed in order of lowest to highest price; and
  - 2 the Price-Quantity Pair with a Loss Factor Adjusted Price lower than but closest to the Balancing Price; and
- ii. the Downwards Out of Merit Generation for the Balancing Facility;
- (b) Constrained Off Compensation Price1 (CoffP1) equals the Balancing Price less the Loss Factor Adjusted Price, Price N, identified in clause 6.17.4(a);
- (c) If the Balancing Facility Downwards Out of Merit Generation exceeds CoffQ1, then Constrained Off Quantity2 (CoffQ2) equals the lesser of:
  - i. the maximum energy (in MWh) which could have been dispatched down from Balancing-the Facility's Balancing Price-Quantity Pair Price-N+1 with a price lower than but closest to the Price N, taking into account when the Balancing Facility's MW level reached the bottom of the quantity associated in-with the Balancing Price-Price-Quantity Pair for Price-N in the calculation in clause 6.17.4(a)(i) and the applicable 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 Price N+1, any CoffQN+1 and CoffPN+1 until all Downwards Out of Merit Generation has been attributed to Price-Quantity Pairs or, otherwise, until there are no remaining Price Quantity Pairs;
- (e) The Non-Qualifying Constrained Off Generation for the Balancing Facility equals the sum, divided by two so that it is expressed as sent out MWh, of any sent out energy (in MWh) on from a Network Control Service Contract dispatched off by System Management and any-Downwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any Downwards Backup LFAS Enablement, divided by two so that it is 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:
  - i. the Non-Qualifying Constrained Off Generation exceeds CoffQ1, set CoffQ1 to zero; or
  - ii. 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 or, otherwise, until there are no remaining CoffQN; and
- (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:
  - (a) CoffQ1 equals Loss Factor adjusted the Downwards Out of Merit Generation (in MWh) for that Trading Interval, which for settlement purposes under Chapter 9 the IMO must Loss Factor adjust; aand
  - (b) CoffP1 equals the price in the Balancing Price-Quantity Pair associated with the Balancing Facility less the Balancing Price for that Trading Interval.

### **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 Price-Quantityquantity tranche Pair N in the Balancing Portfolio Supply Curve with a price (Price N) higher than but closest to the Balancing Price, taking into account the actual 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-Price N identified in clause 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-Price-Quantity Pair 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-Price-Quantity Pair N in the calculation in clause 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-Price-Quantity Pair N+1, any PConQN+1 and PConPN+1 until all Upwards Out of Merit Generation has been attributed to Price-Quantity Pairs or, otherwise, until there are no remaining Price-Quantity Pairs in the Balancing Portfolio Supply Curve;
- (e)The Non-Qualifying Constrained On Generation for the Verve Energy<br/>Balancing Portfolio equals the sum, expressed in sent out MWh, of any<br/>increase in energy due to a Network Control Service Contract and of the<br/>following Ancillary Services (if any), which System Management instructed<br/>Verve Energy to provide from Facilities within the Verve Energy Balancing<br/>Portfolio:
  - i. Upwards LFAS Enablement;
  - ii. Upwards LFAS Backup Enablement; and
  - iii. the Spinning Reserve Response Quantity-less the LFAS Response Quantity;
- (e) If the Non-Qualifying Constrained On Generation exceeds PConQ1:
  - i. the Non-Qualifying Constrained On Generation exceeds PConQ1 set PConQ1 to zero; or
  - ii. otherwise reduce PConQ1 by the amount of Non-Qualifying Constrained On Generation;
- (g) The IMO must repeat the process set out in paragraph (f) above for each PConQN in ascending order until all Non-Qualifying Constrained On

<u>Generation has been deducted from PConQN or otherwise until there are</u> <u>no remaining PConQN; -and</u>

(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
    - i. the maximum energy (in MWh) which could have been dispatched down from Price-Quantity Pair N, with Price N, in the Balancing Portfolio Supply Curve, taking into account the Available Capacity of the Verve Energy Balancing Portfolio, the MW level at the start of the Trading Interval and the Portfolio Ramp Rate Limit, where N is determined from either of the following Price-Quantity Pairs or, if different, the one with the lower price:
      - 1the Price-Quantity Pair associated with the intersection of<br/>Available Capacity and the quantities in all Price-Quantity<br/>Pairs in the Balancing Portfolio Supply Curve summed in<br/>order of lowest to highest price; and
      - 2 the Price-Quantity Pair with a Loss Factor Adjusted Price lower than but closest to the Balancing Price; and
    - ii. the Portfolio Downwards Out of Merit Generation;
  - (b) Portfolio Constrained Off Compensation Price1 (PCoffP1) equals the Balancing Price less the pPrice of tranche-N identified in clause 6.17.6A(a);
  - (c) If the Portfolio Downwards Out of Merit Generation (in MWh) exceeds <u>PCoffQ2</u>, 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-Price-Quantity Pair 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 Price-Quantity Pair N in the calculation in clause 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-Price-Quantity Pair N+1, any PCoffQN and PCoffPN until all Downwards Out of Merit Generation has been attributed to Price-Quantity Pairs or, otherwise, until there are no remaining Price-Quantity Pairs in the Balancing Portfolio Supply Curve;
- (e) The Non-Qualifying Constrained off Generation for the Verve Energy Balancing Portfolio equals the sum, expressed in sent out MWh, of any reduction in sent out energy due to a Network Control Service Contract and of the following Ancillary Services (if any), which System Management instructed Verve Energy to provide from Facilities in the Verve Energy Balancing Portfolio:
  - i. Downwards LFAS Enablement;
  - ii. Downwards LFAS Backup Enablement; and
  - iii. the Load Rejection Reserve Response Quantity less the LFAS Response Quantity;
- (f) If the Non-Qualifying Constrained Off Generation exceeds PCoffG1:
  - i. the Non-Qualifying Constrained Off Generation exceeds PCoffG1 set PCoffGQ1 to zero; or
  - ii. otherwise reduce PCoffGQ1 by the amount of Non-Qualifying Constrained On Generation;
- (g)The IMO must repeat the process set out in paragraph (f) above for each<br/>PCoffQN in ascending order until all Non-Qualifying Constrained On-Off<br/>Generation has been deducted from PCoffQN or there are no remaining<br/>PCoffQN; and
- (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.

- 6.17.9. The IMO must <u>other than for Facilities in the Verve Energy Balancing Portfolio</u>, determine a <u>FacilityDispatch-Settlement</u> Tolerance for each Scheduled Generator, <u>Non-Scheduled Generator</u> and Dispatchable Load, where this <u>Facility Dispatch</u> <u>Settlement</u> 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 <u>Non-Scheduled Generator</u> and 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 MWh.

### <u>....</u>

- 9.3.4. Subject to clause 2.30B.10, the Metered Schedule for a Trading Interval for each of the following Facilities:
  - (a) Non-Dispatchable Loads, excluding those Non-Dispatchable Loads referred to in clause 9.3.4A;
  - (b) Interruptible Loads;
  - (c) Dispatachable Loads;
  - (d) Scheduled Generators; and
  - (e) Non-Scheduled Generators,

is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility during that Trading Interval, Loss Factor adjusted to the Reference Node, and, <u>subject to clause 6.16.1A</u>, 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.

<u>...</u>

Available Capacity: Means, for a Trading Interval, the quantity of sent out capacity, in MW, of a Non-Scheduled Generator or a Scheduled Generator resulting from the sum of the Capacity Credits for all Facilities of a Market Participant less the Capacity Credits-that was not subject to an Outages provided notified under clause 7.13.1A(b).

**Downwards LFAS Backup Enablement**: Means the capacity quantity, in MW, by which the output of Facilities in the of a Registered Facility of Verve Energy Balancing Portfolio-which System Management was reduced activated under clause 7B.4.1 in a Trading Interval to compensate for a shortfall in Downwards LFAS Enablement and notified to the IMO under clause 7B.4.2.

Load Rejection Reserve Response Quantity: Means, for a Trading Interval, the quantity of energy reduction, in MWh, provided by a Facility as a Load Rejection Reserve Response due to a Load Rejection Reserve Event, but excluding any such contribution that occurred because System Management had instructed the Facility to provide Downwards LFAS Enablement or Downwards LFAS Backup Enablement.

Load Rejection Reserve Event: Means an contingency event which causes System Management to activate a Facility in the Verve Energy Balancing Portfolio, which System Management has instructed to provide Load Rejection Reserve Service, so that it to provides a Load Rejection Reserve Response.

Spinning Reserve Event: Means an contingencyevent which causes System Management to activate a Facility in the Verve Energy Balancing Portfolio, which System Management had instructed to provide Spinning Reserve Service, to so that it provides a Spinning Reserve Response.

Spinning Reserve Response Quantity: Means, for a Trading Interval, the quantity of additional energy, in MWh, provided by a Facility as a Spinning Reserve Response due to a Spinning Reserve Event, but excluding any such contribution that occurred because System Management had instructed the Facility to provide Upwards LFAS Enablement or Upwards LFAS Backup Enablement.

Upwards LFAS Backup Enablement: Means the capacity quantity, in MW, by which the output of Facilities in the- of a Registered Facility of Verve Energy Balancing Portfolio-which System Management was increased activated for Upwards Backup LFAS under clause 7B.4.1 in a Trading Interval to compensate for a shortfall in Upwards LFAS Enablement, and notified to the IMO under clause 7B.4.2.

**Upwards Out of Merit Generation**: Has the meaning given in clauses 6.16A.1, 6.16A.2 and 6.16B.1, as applicable. Drafting Changes associated with Issue 5

# 6.15.3 The IMO must:

- (a) calculate the Maximum Theoretical Energy Schedule under clause 6.15.1 and the Minimum Theoretical Energy Schedule under clause 6.15.2 as soon as practicable after receiving applicable SCADA data under clause 7.13.1(cA); and
- (b) update the Maximum Theoretical Energy Schedule or the Minimum Theoretical Energy Schedule calculated under clause 6.15.3(a) as soon as practical after receiving a relevant schedule of Outages under clause 7.13.1A(b).
- 6.15.4 The Maximum Theoretical Energy Schedules and Minimum Theoretical Energy Schedules calculated by the IMO in accordance with clause 6.15.3 cannot be altered by:

(a) disagreement under clause 9.20.6; or

(b) disputes under clause 9.21.1.