

**ELECTRICITY INDUSTRY ACT 2004**  
**ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY MARKET) REGULATIONS 2004**  
**Wholesale Electricity Market Rules**

**IMO AMENDING RULES RC\_2011\_10 MADE ON 23 March 2012**  
**These Amending Rules commence at 08.00am on 1 July 2012**

The following clauses are amended (~~deleted wording~~, new wording):

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 do anything that the IMO determines to be conducive or incidental to the performance of the functions set out in this clause 2.1.2;
- (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.

2.2.1. ~~The Electricity Networks Corporation~~Western Power, acting through the segregated business unit known as System Management, has the function of operating the SWIS in a secure and reliable manner for the purposes of regulation 13(1) of the Regulations.

2.2.2. The other functions of System Management in relation to the Wholesale Energy Market are:

- (a) to procure adequate Ancillary Services where ~~the Electricity Generation Corporation~~Verve Energy cannot meet the Ancillary Service Requirements;
- (b) to assist the IMO in the processing of applications for participation and for the registration, de-registration and transfer of facilities;
- (c) to develop Market Procedures, and amendments and replacements for them, where required by these Market Rules;
- (d) to release information required to be released by these Market Rules;
- (e) to monitor Rule Participants' compliance with Market Rules relating to dispatch and Power System Security and Power System Reliability; and
- (f) to carry out any other functions or responsibilities conferred, and perform any obligations imposed, on it under these Market Rules.

2.3.5. Subject to clause 2.3.13, the Market Advisory Committee must comprise:

- (a) at least three and not more than four members representing Market Generators, of whom one must represent ~~the Electricity Generation Corporation~~Verve Energy;
- ...
- (c) at least one and not more than two members representing Network Operators, of whom one must represent ~~the Electricity Networks Corporation~~Western Power;
- (d) at least three and not more than four members representing Market Customers, of whom one must represent ~~the Electricity Retail Corporation~~Synergy;

...

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.

2.13.6B\_ System Management is not required to report an alleged breach by a Market Participant of clause 7.10.1 or clause 3.21 of the Market Rules to the IMO if:

- (a) the extent of the alleged breach is either within the Tolerance Range ~~established under clause 2.13.6D~~ or the Facility Tolerance Range for that Facility established under clause 2.13.6E; or
- (b) the alleged breach is limited to occurring within a single Trading Interval; or
- (c) in the case of an alleged breach of clause 7.10.1, the alleged breach is outside the Tolerance Range or Facility Tolerance Range, as applicable, where:
  - i. the Rule Participant has notified System Management of a Forced Outage in accordance with clause 3.21.4 that is applicable to the period of the alleged breach; and
  - ii. the alleged breach relates to the Rule Participant generating at a level below its Resource Plan or the Dispatch Instruction applicable to the relevant Forced Outage period.

2.13.6E\_ System Management may determine a Facility Tolerance Range to apply to a specific generation Facility ~~for the purposes of System Management's reporting of alleged breaches of clause 7.10.1 and clause 3.21 to the IMO under clause 2.13.6A.~~ A Facility Tolerance Range will apply for a specific generation Facility in place of the Tolerance Range determined under clause 2.13.6D. When determining the Facility Tolerance Range to apply for the specific generation Facility, System Management must:

- (a) consult with Market Participants prior to setting the Facility Tolerance Range; and
- (b) submit to the IMO for publication on the Market Web Site at least 14 Business Days prior to the date from which any changes to the Facility Tolerance Range become effective the following:
  - i. the reasons for System Management's decision;
  - ii. any submissions received from Market Participants;
  - iii. the applicable Facility Tolerance Range; and
  - iv. an effective date for the commencement of the applicable Facility Tolerance Range.

2.13.6F\_ System Management must not show bias towards a Market Participant in respect to ~~at~~ the Facility Tolerance Range.

2.13.6K\_ System Management must document the procedure for determining and reviewing the annual Tolerance Range and any Facility Tolerance Ranges ~~to apply for the purposes of clause 7.10.1 and clause 3.21 of the Market Rules~~ in the Power System Operation Procedure, and System Management and Market Participants must follow that documented Power System Operation Procedure.

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

- (a) [Blank]
- (b) clauses 3.4.6 and 3.4.8;
- (c) clauses 3.5.8 and 3.5.10;
- (d) clauses 3.6.5 and 3.6.6B;
- (e) clauses 3.16.4, 3.16.7, and 3.16.8A;
- (f) clauses 3.17.5 and 3.17.6;
- (g) clause 3.18.2(f);
- (gA) clauses 3.21A.2, 3.21A.12, and 3.21A.13(a);
- (gB) clauses 3.21B.1 and 3.21B.2;
- (h) clause 4.10.2, where System Management is instructed by the IMO under clause 4.25.13;
- (hA) clause 7.2.5;
- (hB) clause 7.5.5;
- (i) clause 7.7.6(b);
- (j) clauses 7.10.1, 7.10.3, 7.10.6 and 7.10.6A; and
- (k) clause 7.11.7.

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 of the report or other documentation must be met by the Rule Participant unless the IMO determines otherwise.

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 Balancing Price-Quantity Pairs 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.2.18(c);
- (hC) any substantial variations in Balancing Prices, Non-Balancing Facility Dispatch Instruction Payments or Balancing Quantities relative to recent past behaviour;
- (i) the capacity available through Balancing from Balancing Facilities, Generators and Non-Scheduled Generators and Dispatchable Loads and Demand Side Programmes;
- (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}~~all LFAS Prices;
- (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.

2.16.4. 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, ~~and the~~ Balancing Market and the LFAS Market;
- (c) statistical analysis of the volatility of prices in the STEM Auctions, ~~and the~~ Balancing Market and the LFAS Market;
- (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 in~~ Balancing, in the Balancing Market and in the LFAS Market, 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.

2.16.7. 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.

2.16.9. 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;
- (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 change in short run marginal 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 ~~a~~Ancillary ~~s~~Services to be provided by a ~~f~~Facility; and
  - vi. Fuel Declarations that may not reflect the reasonable expectation of the fuel that a ~~f~~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 2.16.9(b)(i), 2.16.9(b)(ii) and 2.16.9(b)(iii) by examining prices in ~~STEM Submissions, including Standing STEM Submissions, used in forming STEM Bids and STEM Offers~~

- (a) Balancing Price-Quantity Pairs;

- (b) LFAS Price-Quantity Pairs; and
- (c) relevant submissions, including:
  - i. standing submissions; and
  - ii. STEM Submissions and Standing STEM Submissions used in forming STEM Bids and STEM Offers.

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:

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

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
- (bd) advise the Economic Regulation Authority of its conclusions. The IMO's 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-two Business Days from receiving the request.

2.16.9E. Where the Economic Regulation Authority receives an advice from the IMO under clause 2.16.9B(bd) 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(bd) 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.

2.16.9FB. 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:

- (a) 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 electricity;
- (b) prices in a Balancing Submission, subject to the investigation, exceeded the Market Generator's reasonable expectation of the short run marginal cost of generating the relevant electricity; or
- (c) prices in the LFAS Submission, subject to the investigation, exceeded the Market Generator's reasonable expectation of the incremental change in short run marginal cost incurred by the LFAS Facility in providing the relevant LFAS.

the Economic Regulation Authority must request that the IMO applies to the Electricity Review Board for an order for contravention of clauses 6.6.3, 7A.2.17 or 7B.2.15, as applicable.

2.16.10. The Economic Regulation Authority must also review:

- (a) the effectiveness of the Market Rule change process and Procedure Cchange 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.

2.16.12. 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 Wholesale 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.

2.17.1. Decisions by the IMO or System Management, as applicable, made under the following clauses are Reviewable Decisions:

- (a) clause 2.3.8;

- (baA) clause 2.5.9;
- (caB) clause 2.6.4(f);
- (daC) clause 2.7.8(e);
- (e) clause 2.10.2A;
- (faD) clause 2.10.13;
- (gaE) clause 2.10.14;
- (hb) clause 2.13.28;
- (je) clause 2.28.16;
- (je) clauses 2.30.4 and 2.30.8;
- (ke) clause 2.31.10;
- (leA) ~~Clause~~ clause 2.32.7E(b);
- (mf) clause 2.34.7;
- (n) clause 2.34.7A(b)(ii);
- (o) clause 2.34.7C(c);
- (pg) clause 2.34.11;
- (qh) clauses 2.37.1 to 2.37.3;
- (i) {Blank}
- (rj) clause 4.9.9;
- (sk) clause 4.15.1;
- (tl) clause 4.27.7;
- (um) clause 4.28.7;
- (v) clause 7A.1.11; and
- (n) {Blank}
- (e) {Blank}
- (wp) clause 10.2.1.

2.23.10. The budget proposal must be reflected in the Statement of Corporate Intent for ~~the Electricity Networks Corporation~~Western Power and must be consistent with the segregation of System Management from other business units of ~~the Electricity Networks Corporation~~Western Power.

2.34.1. The IMO must:

- (a) maintain a record of the Standing Data described in Appendix 1, including the date from which the data applies; and

- (b) provide the Standing Data, excluding any Standing Data described in the following clauses of Appendix 1, and any revisions of that Standing Data, to System Management as soon as practicable:
  - i. ~~clause (c); [Blank]~~
  - ii. ~~clause (e) v; [Blank]~~
  - iii. clause (h)-(vi);
  - iv. clause (i)-(xA);
  - v. clause (k)-(i)-(7);
  - vi. ~~clause (k) ii.2; [Blank]~~
  - vii. clause (l)-(iii)-(4);
  - viii. clause (l)-(iii)-(5); and
  - ix. clause (m).

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:
  - i. if System Management advises the IMO within five Business Days that System Management is satisfied the proposed change meets the LFAS Facility Requirements, accept the proposed change; or
  - ii. 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 one Business Day of receiving a referral under clause 2.34.7A(a), request the IMO to extend the period under clause 2.34.7A(b) for a further period of five Business Days. The IMO must advise System

Management within one Business Day of receiving a request under this clause 2.34.7B whether the IMO agrees to extend the period and, if the IMO so advises, the period specified under clause 2.34.7A(b) is extended to ten Business Days.

2.34.7C. System Management must within the period specified in clause 2.34.7A(b), as extended under clause 2.34.7B, if applicable:

- (a) consider whether the proposed change to LFAS Standing Data meets the LFAS Facility Requirements;
- (b) if the proposed change to LFAS Standing Data will meet the LFAS Facility Requirements, advise the IMO to accept the proposed change, including any enablement and quantity restrictions that are to apply to the Facility for LFAS Submissions; or
- (c) if the proposed change to LFAS Standing Data will not meet the LFAS Facility Requirements, advise the IMO to reject the proposed change and provide the IMO with System Management's reasons for rejecting the proposed change to LFAS Standing Data.

2.34.12. The IMO must consult with System Management before making a decision requiring a Rule Participant to provide updated Standing Data under clause 2.34.11, excluding any Standing Data described in the following clauses of Appendix 1:

- (a) ~~clause (e);~~[Blank]
- (b) ~~clause (e) v;~~ [Blank]
- (c) clause (h)-(vi);
- (d) clause (i)-(xA);
- (e) clause (k)-(i)-(7);
- (f) ~~clause (k) ii.2;~~[Blank]
- (g) clause (l)-(iii)-(4);
- (h) clause (l)-(iii)-(5); and
- (i) clause (m).

2.34.14. The IMO must commence using revised Standing Data from:

- (a) 8:00 AM on the Scheduling Day following the IMO's acceptance of the revised Standing Data in the case of:
  - i. Standing STEM Submissions;
  - iA. Standing Bilateral Submissions;
  - iB. Standing Resource Plan Submissions;

- ii. Consumption Increase Prices and Consumption Decrease Prices 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<sub>4</sub>

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.

2.36.1. Where the IMO uses software systems to determine Balancing Prices, to determine Non-Balancing Facility Dispatch Instruction Payments, to determine LFAS Prices, in the Reserve Capacity Auction, STEM Auction or settlement processes, it must:

- (a) maintain a record of which version of software was used in producing each set of results, and maintain records of the details of the differences between each version and the reasons for the changes between versions;
- (b) maintain each version of the software in a state where results produced with that version can be reproduced for a period of at least 1 year from the release date of the last results produced with that version;
- (c) ensure that appropriate testing of new software versions is conducted;
- (d) ensure that any versions of the software used by the IMO have been certified as being in compliance with the Market Rules by an independent auditor; and
- (e) require vendors of software audited in accordance with clause 2.36.1(d) to make available to Rule Participants explicit documentation of the functionality of the software adequate for the purpose of audit.

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 must develop an IMS Interface Market Procedure prescribing the reasonable arrangement by which System Management and the IMO must,

subject to clause 2.36.10, provide each other with 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 must be provided.

2.36.10. Where the IMS Interface Market Procedure is 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 process applies until such time as the IMS Interface Market Procedure is 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 Market Procedure is identified and seek to agree an amendment to the IMS Interface Market Procedure that addresses the inadequacy and which is consistent with these Market Rules;
- (b) if agreement is reached under clause 2.36.10(a) within five Business Days of the first meeting, then the IMO and System Management must seek to develop a Procedure Change Proposal accordingly and, in the interim, act in accordance with that agreement;
- (c) if no agreement is reached under clause 2.36.10(a), 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 Market Procedure that addresses the inadequacy and which is consistent with these Market Rules, and develop a Procedure Change Proposal accordingly;
- (d) if agreement is reached under clause 2.36.10(c) within five Business Days of the first meeting of the Authorised Officers, then the IMO and System Management must seek to develop a Procedure Change Proposal accordingly and, in the interim, act in accordance with that agreement; and
- (e) if no agreement is reached under clause 2.36.10(c) within five Business Days of the first meeting of the Authorised Officers, then the IMO, acting reasonably, must, as soon as practicable, develop and draft a Procedure Change Proposal seeking an amendment to the IMS Interface Market Procedure that addresses the inadequacy and which is consistent with these Market Rules.

3.2.5. The Technical Envelope represents the limits within which the SWIS can be operated in each SWIS Operating State. In establishing and modifying the Technical Envelope under clause 3.2.6, System Management must:

- (a) respect all Equipment Limits but only to the extent those limits are not inconsistent with the dispatch of Balancing Facilities that, but for the Equipment Limits, would be dispatched under clause 7.6.1C;
  - (b) respect all Security Limits;
  - (c) respect all SWIS Operating Standards;
  - (d) respect all Ancillary Service standards specified in clause 3.10; and
  - (e) take into account those parts of the SWIS which are not designed to be operated to the planning criteria in the relevant Technical Code.
- 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 7.6.1C as soon as is reasonably practicable in the circumstances.
- 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 7.6.1C, 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:~~
- (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 those Rule Participants.~~
- 3.11.7A. ~~The Electricity Generation Corporation~~ Verve Energy must make its capacity to provide Ancillary Services from its ~~f~~Facilities available to System Management to a standard sufficient to enable System Management to meet its obligations in accordance with these Market Rules.



- 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.
- 3.13.1. 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;~~ LF Capacity Cost, calculated in accordance with clause 9.9.2(q) for that Trading Month; and
      - 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 amount LF Market Cost availability payment Availability\_Cost\_LF(m) calculated in accordance with clause 9.9.2(~~q~~) for that Trading Month;
  - (b) an amount Availability\_Cost\_R(m)SR Availability\_Cost for Spinning Reserve Service for each Trading Month, which is calculated in accordance with clause 9.9.2(~~em~~) for that Trading Month; and
  - (c) Cost\_LRD, the monthly amount for Load Rejection Reserve Service and System Restart Service, determined in accordance with the process described in clauses 3.13.3B and 3.13.3C; and Dispatch Support ~~s~~Service determined in accordance with clause 3.11.8B.
- 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, Ffor 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 Service during Peak Trading Intervals; and
    - 2. the loss in efficiency of ~~the Electricity Generation Corporation Verve Energy~~ Registered Facilities that System Management has scheduled to provide Spinning Reserve Service 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 Service during Off-Peak Trading Intervals; and
    - 2. the loss in efficiency of ~~the Electricity Generation Corporation Verve Energy~~ Registered Facilities that System Management has scheduled to provide Spinning Reserve Service during Off-Peak Trading Intervals that could reasonably be expected due to the scheduling of those reserves; and
- (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) from 8:00 AM on the Balancing Market Commencement Day to 8:00 AM on 1 July 2013:

- i. the Margin Peak value is, subject to clause 3.13.3AB(b), the value determined by the Economic Regulation Authority and published on the Market Web Site; and
  - ii. the Margin Off-Peak value is, subject to clause 3.13.3AB(b), the value determined by the Economic Regulation Authority and published on the Market Web Site;
- (b) if the Economic Regulation Authority has not determined a Margin Peak or Margin Off-Peak value under clause 3.13.3AB(a) by 8:00 AM on the Balancing Market Commencement Day, then any such value is to be the value determined by the IMO and published on the Market Web Site as soon as reasonably practicable after the Balancing Market Commencement Day;
- (c) in determining values for Margin Peak and Margin Off-Peak under clause 3.13.3AB(a) the Economic Regulation Authority must undertake a public consultation process, which must include publishing an issues paper and issuing an invitation for public submissions;
- (d) when determining a value for the parameter Margin Peak under this clause 3.13.3AB the Economic Regulation Authority or the IMO, as applicable, must take account of
- i. the margin Verve Energy could reasonably have been expected to earn on energy sales foregone due to the supply of Spinning Reserve during Peak Trading Intervals; and
  - ii. the loss in efficiency of 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; and
- (e) when determining a value for the parameter Margin Off-Peak under this clause 3.13.3AB the Economic Regulation Authority or the IMO, as applicable, must take account of:
- i. the margin Verve Energy could reasonably have been expected to earn on energy sales foregone due to the supply of Spinning Reserve during Off-Peak Trading Intervals; and
  - ii. the loss in efficiency of Verve Energy Registered Facilities that System Management has scheduled to provide Spinning Reserve during Off-Peak Trading Intervals that could reasonably be expected due to the scheduling of those reserves.

3.14.1. Market Participant p's share of the Load Following Service payment cost in each Trading Month m is  $\text{Load\_Following\_Share}(p,m)_{LF\_Share}(p,m)$  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 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.
- iii. [Blank]

3.14.2. Market Participant p's share of the Spinning Reserve ~~s~~Service payment costs in each Trading Interval t is ~~Reserve\_Share(p,t)~~SR\_Share (p,t) which equals the amount determined in Appendix 2.

3.21.6. The following will apply for the purposes of clauses 7.3.4(a) and 7.13.1A(b):

...

3.21A.13. If a Market Participant conducting a Commissioning Test cannot conform to the ~~test plan~~ Test Plan approved by System Management then it must:

- (a) inform System Management as soon as practicable; and
- (b) obtain System Management's approval under this clause 3.21A. for a new Commissioning Test.

~~3.21A.14. Where a Facility is subject to a Commissioning Test the Dispatch Schedule for that Facility during the period of the Commissioning Test is to reflect the energy produced by the facility.~~

### **~~3.21AA~~ Equipment Tests**

~~3.21AA.1 An Equipment Test ("Equipment Test") is a test conducted by a Market Participant of the ability of a generating system to:~~

- ~~(a) verify Standing Data for a Facility in accordance with clause 2.34.6;~~
- ~~(b) resolve technical performance issues; or~~
- ~~(c) confirm capability of Ancillary Services.~~

~~3.21AA.2 A Market Participant may apply to System Management for an Equipment Test no later than 12PM on the Scheduling Day for the next Trading Day.~~

~~3.21AA.3 An application for an Equipment Test must be made in accordance with the Power System Operation Procedure and contain:~~

- ~~(a) the name and location of the Facility to be tested;~~

~~(b) — the commencement time of all Trading Intervals during which testing will be conducted; and~~

~~(c) — details of the test to be conducted, including an indicative test program.~~

~~3.21AA.4 System Management must notify the Market Participant of whether System Management has approved an Equipment Test by no later than 4PM on the Scheduling Day.~~

~~3.21AA.5 System Management must not show bias towards a Market Participant concerning the approval of Equipment Tests.~~

~~3.21AA.6 In deciding whether to approve a proposed Equipment Test, System Management must have regard to whether:~~

~~(a) — there is adequate time to properly consider the application;~~

~~(b) — outages approved pursuant to clause 3.19 and tests approved pursuant to clause 4.25.8 would be affected by the intended Equipment Test; and~~

~~(c) — the test can be accommodated at the proposed time without undue risk to Power System Security or Power System Reliability.~~

~~3.21AA.7 System Management must document the procedure it follows in approving Equipment Tests in the Power System Operation Procedure and System Management and Market Participants must follow that documented Market Procedure when planning and conducting Equipment Tests.~~

~~3.21AA.8 If, having approved an Equipment Test, System Management becomes aware that:~~

~~(a) — the conduct of the test at the proposed time would pose a threat to Power System Security or Power System Reliability; or~~

~~(b) — the Equipment Test is no longer required, then it may cancel its approval of the Equipment Test at any time, including after the start of the Equipment Test, and must notify the Market Participant of the cancellation.~~

~~3.21AA.9 In conducting an Equipment Test a Market Participant must conform to the test plan approved by System Management.~~

~~3.21AA.10 If a Market Participant conducting an Equipment Test cannot conform to the test plan approved by System Management then it must inform System Management as soon as practicable.~~

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);~~[Blank]

(b) ~~[Blank]~~

(c) ~~Margin\_Peak as described in clause 3.13.3A;~~

- (d) Margin\_Off-Peak as described in clause 3.13.3A;
- (e) ~~SR Capacity Peak~~Capacity\_R\_Peak, the requirement for Spinning Reserve Service for Peak Trading Intervals assumed in forming Margin\_Peak;
- (f) ~~SR Capacity Off-Peak~~Capacity\_R\_Off-Peak, the requirement for Spinning Reserve Service for Off-Peak Trading Intervals assumed in forming Margin\_Off-Peak;
- (fA) ~~LF~~as described in clause 3.13.1(aA)(i)(2);[Blank]
- (g) Cost\_LRD as the sum of:
  - i. Cost\_LR (as described in clauses 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; and
- (b) for each Contracted Ancillary Service 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 Following Service~~;[Blank]
    - 3. Load Rejection Reserve Service;
    - 4. System Restart Service; or
    - 5. 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.

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; and
- (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 Service;~~[Blank]
    - 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 the unit of measure is:
    - 1. MWh for Spinning Reserve Service;
    - 2. ~~MWh for Load Following Service;~~[Blank]
    - 3. MWh for Load Rejection Reserve Service;
    - 4. as determined by System Management for System Restart Service; or
    - 5. 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 clause 3.22.3(b)(ii) per Trading Interval.

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

- (a) the identity of the Facility;
- (b) the Reserve Capacity Cycle to which the application relates;
- (bA) with the exception of applications for Conditional Certified Reserve Capacity:—i., evidence of an Arrangement for Access or evidence that the Market Participant has accepted an Access Proposal from the relevant Network Operator made 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), including the level of unconstrained access and details of any constraints that may apply;

- (c) if the Facility, or part of the Facility, is yet to enter service:
- i. [Blank]
  - ii. with the exception of applications for Conditional Certified Reserve Capacity, evidence that any necessary Environmental Approvals have been granted or evidence supporting the Market Participant's expectation that any necessary Environmental Approvals will be granted in time to have the Facility meet its Reserve Capacity Obligations by the date specified in clause 4.10.1(c)(iii)(7); and
  - iii. the Key Project Dates occurring after the date the request is submitted, including, if applicable, but not limited to:
    1. when all approvals will be finalised or, in the case of Interruptible Loads and Demand Side Programmes all required contracts will be in place;
    2. when financing will be finalised;
    3. when site preparation will begin;
    4. when construction will commence;
    5. when generating equipment or Dispatchable Load equipment will be installed or, in the case of Interruptible Loads and Demand Side Programmes, all required control equipment will be in place;
    6. when the Facility, or part of the Facility, will be ready to undertake Commissioning Tests; and
    7. when the Facility, or part of the Facility, will have completed all Commissioning Tests and be capable of meeting Reserve Capacity Obligations in full;
- (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;
- (dA) a description and a configuration of the main components of the Facility;
- (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 clause 4.10.1(e)(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
  - vii. for Facilities that have operated for at least 12 months, the forced and unforced outage rate of the Facility;
- (f) for Interruptible Loads, Demand Side Programmes and Dispatchable Loads:
- i. the Reserve Capacity the Market Participant expects to make available from each of up to 3 blocks of capacity;
  - ii. the maximum number of hours per year the Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity, where this must be at least 24 hours;
  - iii. the maximum number of hours per day that the Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity if called, where this must be:
    - 1. not less than four hours; and
    - 2. not more than the maximum of the periods specified in clause ~~sub-clause~~ 4.10.1(f)(vi);
  - iv. the maximum number of times the 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 Interruptible Load, Demand Side Programme or Dispatchable Load, where this must not be more than 4 hours; and
  - vi. the periods when the Interruptible Load, Demand Side Programme or Dispatchable Load can be dispatched, which must include the period between noon and 8:00 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 the methodology 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;
- (j) whether the Facility will be subject to a Network Control Service contract;  
~~and~~
- (k) where an applicant nominates to use the methodology described in clause 4.11.2(b) and the Facility is already in full operation under the configuration for which certification is being sought (as outlined in clause 4.10.1(dA)), the date on which the Facility became fully operational under this configuration, unless this date has already been provided to the IMO in a previous application for certification of Reserve Capacity; and
- (l) for a Balancing Facility, evidence of the extent to which the Facility will meet the applicable criteria of the Balancing Facility Requirements.

4.11.1. Subject to clauses 4.11.7 and 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~~ clause 4.10:

- (a) subject to clause 4.11.2, the Certified Reserve Capacity for a Scheduled Generator for a Reserve Capacity Cycle must not exceed the IMO's reasonable expectation 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. the start of December for Reserve Capacity Cycles up to and including 2009; or
- ii. the 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), and must not exceed the unconstrained level of network access as provided in clause 4.10.1(bA);
- (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 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 a 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, and 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, and Forced Outage rate ~~and Equipment Test rate~~ of greater than 30%, where the Planned Outage rate, and 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 Management in deciding whether or not to refuse to grant Certified Reserve Capacity under this clause 4.11.1(h) 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 clause 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;
  - (aA) if it rejects a nomination under clause 4.11.2(a), ~~the IMO~~ must process the application as if the application had nominated to use the methodology described in clause 4.11.1(a) rather than the methodology described in clause 4.11.2(b); and
  - (b) subject to clause 4.11.12, if it has not rejected the nomination under clause 4.11.2(a), must assign a quantity of Certified Reserve Capacity to the relevant Facility for the Reserve Capacity Cycle equal to the Relevant Level as determined in accordance with the Relevant Level Methodology,

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).

4.11.3B. The Required Level (which for an upgraded Facility is calculated for the Facility as a whole):

- (a) for Facilities assigned Certified Reserve Capacity under clause 4.11.1(a), is calculated by the IMO using the Capacity Credits assigned to the Facility and temperature dependence information submitted to the IMO under clause 4.10.1(e)(i) or provided in Standing Data (where available) and converted to a sent out basis to 41°C;
- (b) for Facilities assigned Certified Reserve Capacity under clause 4.11.2(b), is either:
  - i. the value, expressed in MW as a sent out value, that equals the five percent probability of exceedance of expected generation output for the Facility, submitted to the IMO in the report described in clause 4.10.3A(b); or
  - ii. the proposed alternative value, expressed in MW as a sent out value, provided in the report described in clause 4.10.3A(c), where the IMO has accepted the proposed alternative value under clause 4.11.2A; and
- (c) for Demand Side Programmes, is calculated by the IMO using the Facility's Relevant Demand minus the Capacity Credits assigned to the Facility.

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.

4.11.5. 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
- (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.

4.11.7. 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 ~~UNon-S~~scheduled Generators.

- 4.11.10. Upon the receipt of advice provided in accordance with clause 4.10.4 for a Facility that has already been assigned Capacity Credits for the relevant Capacity Year, the IMO must review the information provided and decide whether it is necessary for the IMO to reassess the assignment of Certified Reserve Capacity to the Facility. If this information would have resulted in the IMO assigning a lower, non-zero level of Certified Reserve Capacity the IMO must reduce the Capacity Credits assigned to that Facility accordingly and must advise the Market Participant within 90 days of receiving the submission.
- 4.11.11. Where the IMO reassesses the amount of Certified Reserve Capacity assigned to a Facility under clause 4.11.10 based on information provided to the IMO under clause 4.10.4 the Market Participant will pay a Reassessment Fee to cover the cost of processing the reassessment.
- 4.11.12. The IMO must not assign Certified Reserve Capacity to a Balancing Facility with a rated capacity equal to or greater than 10MW unless the IMO is satisfied the Facility is likely to be able to meet the Balancing Facility Requirements.
- 4.12.1. The Reserve Capacity Obligations of a Market Participant holding Capacity Credits, are as follows:
- (a) a Market Participant (other than the ~~Electricity Generation Corporation~~ Verve Energy) must ensure that for each Trading Interval:
- i. the aggregate MW equivalent of the quantity of Capacity Credits held by the Market Participant applicable in that Trading Interval for Interruptible Loads and Demand Side Programmes registered to the Market Participant; plus
  - ii. the MW quantity calculated by doubling the net MWh quantity of energy to be sent out during the Trading Interval by Facilities registered by that Market Participant; plus
  - iiA. if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any Interruptible Load, but excluding demand associated with any Dispatchable Load, during that Trading Interval as indicated in the applicable Resource Plan; plus
  - iii. the MW quantity calculated by doubling the total MWh quantity covered by STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction determined by the IMO for that Market Participant under clause 6.9 for that Trading Interval, corrected for loss factor adjustments so as to be a sent out quantity; plus

iv. capacity expected to experience a ~~F~~forced ~~Q~~outage at the time that STEM submissions were due which becomes available in real time, is not less than the total Reserve Capacity Obligation Quantity for that Trading Interval for Facilities registered to the Market Participants, less double the total MWh quantity to be provided as Ancillary Services as specified by the IMO for that Market Participant in accordance with clause 6.3A.2(e)(i).

(b) ~~the Electricity Generation Corporation~~ Verve Energy must ensure that for each Trading Interval:

- i. [Blank]
- ii. the MW quantity calculated by doubling the total MWh quantity which ~~the Electricity Generation Corporation~~ Verve Energy is selling to other Market Participants as indicated by the applicable Net Contract Position of ~~the Electricity Generation Corporation~~ Verve Energy, corrected for loss factor adjustments so as to be a sent out quantity; plus
- iii. the MW quantity calculated by doubling the total MWh quantity covered by STEM Offers which were not scheduled and the STEM Bids which were scheduled in the relevant STEM Auction determined by the IMO for ~~the Electricity Generation Corporation~~ Verve Energy under clause 6.9 for that Trading Interval, corrected for loss factor adjustments so as to be a sent out quantity; plus
- iv. capacity expected to experience a ~~forced outage~~ Forced Outage at the time that STEM submissions were due which becomes available in real time,

is not less than the total Reserve Capacity Obligation Quantity for ~~the Electricity Generation Corporation~~ Verve Energy for that Trading Interval, less double the total MWh quantity to be provided as Ancillary Services as specified by the IMO for ~~the Electricity Generation Corporation~~ Verve Energy in accordance with clause 6.3A.2(e)(i).

(c) the Market Participant must make the capacity associated with the Capacity Credits provided by a Facility applicable to a Trading Interval, up to the Reserve Capacity Obligation Quantity for the Facility for that Trading Interval, available for dispatch by System Management in accordance with Chapter 7.

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

- (a) the Reserve Capacity Obligation Quantity must not exceed the Certified Reserve Capacity held by the Market Participant for the Facility;
- (aA) for generation systems that are Intermittent Generators, the Reserve Capacity Obligation Quantity is zero;

- (b) for generation systems other than Intermittent Generators, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:
  - i. must not be less than the amount specified in clause 4.10.1(e)(ii) except on Trading Days when the maximum daily temperature at the site of the generator exceeds 41°C, in which case the Reserve Capacity Obligation Quantity must not be less than the amount specified in clause 4.10.1(e)(ii) adjusted to an ambient temperature of 45°C;
  - ii. may exceed the amount in clause 4.12.4(b)(i) by an amount up to the amount specified in clause 4.10.1(e)(iii), adjusted to an ambient temperature of 45°C on Trading Days when the maximum daily temperature at the site of the generator exceeds 41°C, for not more than the maximum duration specified in accordance with clause 4.10.1(e)(iii); and
  - iii. must account for staffing and other restrictions on the ability of the Facility to provide energy upon request; and
- (c) for Interruptible Loads, Demand Side Programmes and Dispatchable Loads, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:
  - i. will equal zero once the capacity has been dispatched under clause ~~7.6.6(e)~~ 7.6.1C(d) for the number of hours per year that are specified under clause 4.10.1(f)(ii);
  - ii. will equal zero for the remainder of a Trading Day in which the capacity has been dispatched under clause ~~7.6.6(e)~~ 7.6.1C(d) for the number of hours per day that are specified under clause 4.10.1(f)(iii);
  - iii. will equal zero once the capacity has been dispatched under clause ~~7.6.6(e)~~ 7.6.1C(d) for the maximum number of times per year specified under clause 4.10.1(f)(iv);
  - iv. must account for staffing and other restrictions on the ability of the Facility to curtail energy upon request; and
  - v. will equal zero for Trading Intervals which fall outside of the periods specified in clause 4.10.1(f)(vi).

4.12.8. Where a Demand Side Programme is dispatched under clause ~~7.6.6(e)~~ 7.6.1C(d) to a level equal to its Reserve Capacity Obligation Quantity on two consecutive days the Reserve Capacity Obligation Quantity for the third consecutive day will be zero.

4.14.4. The value specified by the ~~Electricity Generation Corporation~~ Verve Energy in accordance with clause 4.14.1(c) must be not less than:



- (a) the lesser of:
  - i. the total Certified Reserve Capacity held by ~~the Electricity Generation Corporation~~ Verve Energy; and
  - ii. ~~the Electricity Generation Corporation~~ Verve Energy's peak load, as determined in accordance with clause 4.14.5 multiplied by an amount equal to:
    - 1. the Reserve Capacity Requirement; divided by
    - 2. the expected peak demand corresponding to the Reserve Capacity Requirement, as determined in accordance with clause 4.6.2; less
- (b) the Minimum Frequency Keeping Capacity.

4.14.5. For the purpose of clause 4.14.4, ~~the Electricity Generation Corporation~~ Verve Energy's peak load is calculated by doubling the average of ~~the Electricity Generation Corporation~~ Verve Energy's supply quantities (expressed in MWh) specified in the Bilateral Submissions that applied during the 12 peak Trading Intervals, as specified in Appendix 5, of the previous Hot Season. Prior to the completion of the first Hot Season following Energy Market Commencement:

- (a) — this value will be determined by the IMO and provided to ~~the Electricity Generation Corporation~~ Verve Energy not less than 20 Business Days prior to the date specified in clause 4.1.14.
- (b) — [Blank]

4.23A.1. For the first Reserve Capacity Cycle, as facilities are registered, the IMO must convert the Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities that were associated with Western Power Corporation's generation systems in accordance with clauses 4.11, 4.12, and 4.20 into Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities associated with individual Registered Facilities.

4.23A.2. In performing the allocations described in clause 4.23A.1, the IMO must:

- (a) ensure that the total Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities of the Registered Facilities equal, respectively, the Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities that were associated with Western Power Corporation's generation systems in accordance with clauses 4.11, 4.12, and 4.20;
- (b) where facilities will not be registered as being Electricity Generation Corporation facilities as at Energy Market Commencement, allocate Certified Reserve Capacity, Capacity Credits and Reserve Capacity Obligation Quantities to the Market Participant to whom those facilities are to be registered; and

- (c) consult with Western Power Corporation or the Electricity Generation Corporation (as applicable) and give consideration to Western Power Corporation or the Electricity Generation Corporation (as applicable) preferences as to how clause 4.23A.1 should be implemented.
- 4.25.3. The IMO must not subject a Facility to more ~~tests of Reserve Capacity~~ Reserve Capacity Tests than it considers are required to satisfy the verification requirements of this clause 4.25.
- 4.25.3A. The IMO must not subject a Facility to a ~~test of Reserve Capacity~~ Reserve Capacity Test if:
- (a) that Facility is undergoing a Scheduled Outage or Opportunistic Outage which has been approved in accordance with clause 3.19, or
  - (b) the relevant Market Participant has advised System Management of a Forced Outage or Consequential Outage for that Facility in accordance with clause 3.21.4; or
  - (c) that Facility is undergoing a Commissioning Test approved in accordance with clause 3.21A.
- 4.25.3B. If a Demand Side Programme fails a Reserve Capacity ~~test~~ Test under clause 4.25.2(b)(ii) and is issued a Dispatch Instruction by System Management to decrease its consumption to a level equivalent to its Required Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval prior to a second Reserve Capacity ~~test~~ Test being undertaken in accordance with clause 4.25.4, then the activation shall be deemed to be the second Reserve Capacity ~~test~~ Test.
- 4.25.4. Subject to clause 4.25.3B, if a Facility fails a Reserve Capacity ~~test~~ Test requested by the IMO under clause 4.25.2, the IMO must require System Management to re-test that Facility in accordance with clause 4.25.2, not earlier than 14 days and not later than 28 days after the first ~~test~~ Reserve Capacity Test. If the Facility fails this second ~~test~~ Reserve Capacity Test, then the IMO must, from the second Trading Day following the Scheduling Day on which the IMO determines that the second ~~test~~ Reserve Capacity Test was failed:
- (a) if the ~~test~~ Reserve Capacity Test related to a generation system, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in either ~~test~~ Reserve Capacity Test performed (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuels); or
  - (b) if the ~~test~~ Reserve Capacity Test related to a Dispatchable Load, Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to the

maximum level of reduction achieved in either of the two ~~tests~~ Reserve Capacity Tests.

- 4.25.7. In requesting System Management to conduct a Reserve Capacity ~~Test~~, the IMO must provide System Management with the following information:
- (a) the Facility to be tested;
  - (b) the fuel to be used by the Facility during the Reserve Capacity ~~Test~~, where applicable; and
  - (c) the time interval during which the Reserve Capacity ~~Test~~ is proposed to be conducted, where this interval must begin not less than two Business Days after the time the IMO issues the request to System Management.
- 4.25.8. If the IMO requests that a Reserve Capacity ~~Test~~ be conducted by System Management ~~in accordance with this clause 4.25~~, then System Management must notify the IMO within one Business Day as to whether it is possible to conduct the Reserve Capacity ~~Test~~ without endangering Power System Security and Power System Reliability within the time interval described in clause 4.25.7(c), and if not, System Management must provide to the IMO:
- (a) justification as to why the Reserve Capacity ~~Test~~ cannot be conducted; and
  - (b) an alternative time interval during which the Reserve Capacity ~~Test~~ will be conducted, where this must be the earliest time that the Reserve Capacity ~~Test~~ can be performed without endangering Power System Security and Power System Reliability.
- 4.25.9. In conducting a Reserve Capacity ~~Test~~, System Management must:
- (a) subject to ~~clauses 4.25.9 paragraphs (b), 4.25.9(c) and 4.25.9(d)~~, endeavour to conduct the Reserve Capacity ~~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 Reserve Capacity ~~Test~~ was successfully performed;
  - (f) maintain adequate records of the Reserve Capacity ~~Test~~ to allow independent verification of the test results; ~~and~~
  - (g) conduct the Reserve Capacity ~~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 Reserve Capacity 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, or referred to in, 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.~~
- 4.25.11. Every three months the IMO must publish details of:
- (a) ~~Facilities that have undergone a Reserve Capacity Test~~ during the preceding three months; and
  - (b) whether any of those Reserve Capacity Tests were delayed by System Management and the reasons for the delay as given by System Management.
- 4.25.12. The IMO may use the results of Reserve Capacity Tests ~~under this clause 4.25~~ in respect of a Facility in assigning Certified Reserve Capacity and setting Reserve Capacity Obligation Quantities for the Facility for subsequent Reserve Capacity Cycles.
- 4.25.14. The IMO must document the procedure to be followed in performing Reserve Capacity Tests in the Reserve Capacity Procedure, and the IMO, System Management, and Market Participants must follow that documented Market Procedure in the performance of Reserve Capacity Tests.
- 4.26.2. The IMO must determine the net STEM shortfall (“**Net STEM Shortfall**”) in Reserve Capacity supplied by each Market Participant p holding Capacity Credits associated with a generation system in each Trading Interval t of Trading Day d and Trading Month m as:

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

Where:

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

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

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

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<sub>1</sub> for all Market Participant p's Registered Facilities, excluding Demand Side Programmes;<sub>1</sub>

~~RCOQ (f,d,t) for Facility f and Trading Interval t of Trading Day d is equal to the product of the factor described in clause 4.26.2B as it applies to Facility f and the Reserve Capacity Obligation Quantity for Facility f.~~

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~~ Auction has been suspended by the IMO in accordance with clause 6.10;
- (d) subject to ~~clause 4.26.2 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 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 ~~clause 4.26.2 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; and

$RTFO(p,d,t)$  is the total MW quantity of Forced Outage associated with Market Participant p in real-time for Trading Interval t of Trading Day d, where this is the sum over all the Market Participant's Registered Facilities

of the lesser of the Reserve Capacity Obligation Quantity of the Facility for Trading Interval t and the MW Forced Outage of the Facility for Trading Interval t as provided to the IMO by System Management in accordance with clause 7.13.1A-(b);;

~~RTFO(f,d,t) is the total MW quantity of Forced Outage associated with Facility f in real time for Trading Interval t of Trading Day d, where this is the lesser of the Reserve Capacity Obligation Quantity of the Facility f for Trading Interval t and the MW Forced Outage of the Facility f for Trading Interval t as provided to the IMO by System Management in accordance with clause 7.13.1A (b);~~

~~DSQ(f,d,t) is a MW quantity calculated by doubling the MWh value of Facility's f's Dispatch Schedule for Trading Interval t of Trading Day d;~~

~~MSQ(f,d,t) is a MW quantity calculated by doubling the MWh value of Facility's f'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.~~

~~F denotes the set of Scheduled Generators registered by Market Participant p, where "f" is used to refer to a member of that set.~~

4.26.2D. The IMO must determine the capacity shortfall in Reserve Capacity ("Capacity Shortfall") supplied by each Market Participant p holding Capacity Credits associated with a Demand Side Programme in each Trading Interval t of Trading Day d and Trading Month m relative to its Reserve Capacity Obligation Quantity as:

- (a) where System Management has issued a Dispatch Instruction under clause ~~7.6.1C(d)~~ 7.6.6(e) to the Demand Side Programme for the Trading Interval as advised to the IMO by System Management under clause 7.13.1:

$$\max(0, \min(\text{RCOQ}, \text{DIMW}) - \max(0, \text{RD} - \text{DSPLMW}))$$

where

RCOQ is the Reserve Capacity Obligation Quantity of the Demand Side Programme for Trading Interval t (in MW), determined in accordance with clause 4.12.4;

DIMW is the quantity by which the Demand Side Programme was instructed by System Management to reduce its consumption in Trading Interval t as specified by System Management in accordance with clause 7.13.1(eGG), multiplied by two to convert to units of MW;

RD is the Relevant Demand of the Demand Side Programme for Trading Day d, determined by the IMO in accordance with clause 4.26.2CA; and

DSPLMW is the Demand Side Programme Load of the Demand Side Programme in Trading Interval t, multiplied by two to convert to units of MW; and

- (b) zero, where System Management has not issued a Dispatch Instruction under clause ~~7.6.1C(d)~~ ~~7.6.6(e)~~ to the Demand Side Programme for Trading Interval t as advised to the IMO by System Management under clause 7.13.1.

5.7.4. System Management must ~~issue an Operating Instruction in order to document the procedure it will follow in calling 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(dA);
- (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).

6.2.4C. ~~[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.~~

6.3A.1. The IMO must publish the following information:

- (a) by 8:00 AM of each Scheduling Day to support the Bilateral Submission process the Load Forecast in MWh and MW as measured at the Reference Node for each of the Trading Intervals of the Trading Day determined in accordance with clauses ~~7.2.1(a)~~ as provided to the IMO by System Management in accordance with clauses ~~7.2.3B or 7.2.3C~~;

...

6.3A.2. By 9:00 AM on the Scheduling Day the IMO must have calculated and released to each Market Participant the following parameters to be applied by that Market



Participant in forming its STEM Submissions for each Trading Interval in the Trading Day:

- (a) the Maximum Supply Capability where this equals the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval based on the Standing Data of that Market Participant's Scheduled Generators and Non-Scheduled Generators and assuming the use of the fuel which maximises the capacity of each Facility:
  - i. less an allowance for ~~o~~Outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6; and
  - ii. less, for each Market Participant that is a provider of Ancillary Services, the estimated Loss Factor adjusted quantity- of energy-, in units of MWh, that could potentially be called upon by System Management from that Market Participant after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day, as provided to the IMO by System Management in accordance with clauses ~~7.2.3B or 7.2.3C~~;

...

- (e) in the case of each Market Participant that is a provider of Ancillary Services:
  - i. the estimated Loss Factor adjusted quantity of energy, in units of MWh, that could potentially be called upon by System Management after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day; and
  - ii. the list of Facilities that System Management might reasonably expect to call upon to provide the energy described in clause 6.3A.2(e)(i),  
  
as provided to the IMO by the System Management in accordance with clauses ~~7.2.3B or 7.2.3C~~.

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~~clauses 6.2, 6.3A, 6.3B and this sectionclause 6.4, subject to:

- (a) any such extension not resulting in more than a two hour delay to any of the timelines prescribed in ~~section~~clauses 6.2, 6.3A, 6.3B and this sectionclause 6.4; and
- (b) any such extension maintaining a 50 minute window between the timelines prescribed in clauses 6.3B.1(a) and 6.3B.1(b) as extended by the IMO;

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

- 6.5.1. ~~Market Participants, including other than the Electricity Generation Corporation~~ Verve Energy but only in respect of its Stand Alone Facilities, may submit Resource Plan Submission data for a Trading Day to the IMO between:
- (a) 11:00 AM on the Scheduling Day, with the exception that if the IMO has delayed any timelines in accordance with clause 6.4.6, the IMO may at its discretion extend this time up to 1:00 PM on the Scheduling Day; and
  - (b) 12:50 PM on the Scheduling Day, with the exception that if:
    - i. a software system failure at the IMO site has prevented any Market Participant from submitting a Resource Plan; or
    - ii. a software system failure at a Market Participant site has prevented that Market Participant from submitting a Resource Plan and that Market Participant has informed the IMO of this failure by 12:30 PM on the Scheduling Day; or
    - iii. the opening time for Resource Plan Submissions was delayed;the IMO may at its discretion extend the closing time up to 3:00 PM on the Scheduling Day.
- 6.5.1A. ~~Market Generators with Registered Facilities, including Verve Energy but only in respect of its Stand Alone Facilities, that are not undergoing a Commissioning Test, except those with only Intermittent Generators, or Market Customers with Dispatchable Loads,~~ must provide the IMO with a Resource Plan Submission, by either:
- (a) via submitting Resource Plan Submissions; or
  - (b) in accordance with clause 6.5.1B.
- ~~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.~~
- 6.5.4. 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. ~~(b)~~ all Dispatchable Loads having a scheduled consumption of zero; and

- iii. the level of the supply shortfall required pursuant to clause 6.11.1(e) equal to the total Net Contract Position; or
- (b) in respect of all of Verve Energy's Stand Alone Facilities, having a scheduled output of zero.
- (c) the level of the supply shortfall required pursuant to clause 6.11.1(e) equal to the total Net Contract Position.

#### **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 Demand Side Programmes, 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).~~

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

(a) 1:00 PM; and

(b) 3:50 PM;

~~Where,~~ if accepted by 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.1A, it must as soon as practicable:

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

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

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

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**

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

(a) the sum of the expected Loss Factor adjusted output of each of its Non-Scheduled Generators, in MWh, for each Trading Interval in the Trading Day~~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. the name of the Facility;
  - ii. for a Scheduled Generator, the intended times of synchronisation and de-synchronisation, expressed to the nearest minute, during the Trading Day;
  - iii. the target energy, in MWh, to be sent-out or consumed during each Trading Interval of the Trading Day included in the submission, where this amount:
    - 1. ~~must be 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
    - 4. must not exceed the expected capability of the Facility at that time, allowing for de-ratings and outages; and
  - iv. the Ramp Rate Limit, for each Trading Interval the target megawatt output of each Facility at the end of each Trading Interval included in the submission; and
  - v. the target MW level, which must be consistent with the Ramp Rate Limit, that each Facility must achieve and continue to operate at until the end of each Trading Interval included in the submission;
- (c) [Blank] for each Non-Scheduled Generator registered by the Market Participant:
- i. ~~the name of the Facility;~~
  - ii. ~~the expected energy to be sent-out 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; and~~
    - 3. ~~must not exceed the expected capability of the Facility at that time, allowing for de-ratings and outages;~~
- (d) the total Loss Factor adjusted demand, in MWh, to be consumed by that Market Participant for each Trading Interval ~~including demand associated with any Interruptible Load, but~~ excluding demand associated with any Dispatchable Load; ~~and~~

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

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

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

(a) it must conform to the format specified by the IMO under in clause 6.11.1;

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

~~(aB) no energy must be scheduled from a Facility that is a Scheduled Generator for any Trading Interval in which the Facility is not synchronised as indicated by the times specified in clause 6.11.1(b)(ii);~~

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

(bA) it must not include a generator Generator for any Trading Interval if that generator Generator is under-going a Commissioning Test during that Trading Interval; and

(c) [Blank]it must not include Interruptible Loads; and

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

6.11.3. A Market Participant, other than Verve Energy, must ensure that either:

(a)  $Target_{LFA} = (NCP + DQ - NonSchGen - Shortfall) \pm Tol$

Where:

Target<sub>LFA</sub> = the sum of the Loss Factor adjusted energy quantities, in MWh, submitted by the Market Participant under clause 6.11.1(b)(iii)

NCP = the Net Contract Position

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

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

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

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

or

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

Where:

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

NCP = Net Contract Position

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

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

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

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

#### **6.11A. 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 Demand Side Programme registered to 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~~ clauses 6.12.1(b) to 6.12.1(eg). A Non-Balancing Dispatch Merit Order lists the order in which the ~~Scheduled Generators,~~ 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 7.6.1C(d) to increase or decrease consumption output, as applicable.
- (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 clause 6.12.1(b)(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 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 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 clause 6.12.1(c)(i) in increasing/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 an 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~~, 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 paragraph clause 6.12.1(d)(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 decrease~~ 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-~~p~~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; 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 paragraph clause 6.12.1(e)(i) in ~~increasing~~ 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.~~
- (fh) ~~Where the prices in Balancing Data or payments described in Standing Data, as applicable, for two or more Registered Facilities are equal, then, for the purposes 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 will 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.~~

#### **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):~~

~~(a) — subject to clause 6.9.4 the IMO must determine MCAP Price Curves for each Market Generator for the relevant Trading Interval in accordance with Appendix 6 using the valid STEM Submissions and Bilateral Submissions relating to that Trading Interval;~~

~~(b) — the IMO must determine an Aggregate MCAP Price Curve for each Trading Interval from the MCAP Price Curves determined in accordance with paragraph (a) where this Aggregate MCAP Price Curve:~~

- ~~i. — describes the quantity included in the MCAP Price Curves for all Market Generators at every price between, and including, the Minimum STEM Price and the Alternative Maximum STEM Price; and~~
- ~~ii. — passes through the point indicating zero supply at the Minimum STEM Price.~~

- (c) ~~the IMO will determine MCAP as:~~
  - i. ~~the Alternative Maximum STEM Price, where the Relevant Quantity determined according to clause 6.14.4 exceeds the total quantity in the Aggregate MCAP Price Curve; and otherwise~~
  - ii. ~~the lowest price applying for the Relevant Quantity determined according to clause 6.14.4 on the Aggregate MCAP Price Curve.~~

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 equals the corresponding Metered Schedule for any of the following Facilities:~~

~~(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) ~~[Blank]~~
- (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. 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:
  - 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 or equal to the Balancing Price;  
plus
  - ii. if the Facility's SOI Quantity is greater than the sum of the quantities in the Facility's Balancing Price-Quantity Pairs which have a Loss Factor Adjusted Price less than or equal to the Balancing Price, the minimum amount of sent out energy, in MWh, if any, which could have been dispatched in the Trading Interval from any of the Facility's Balancing Price-Quantity Pairs which have a Loss Factor Adjusted Price greater than the Balancing Price,  
taking into account the Balancing Facility's SOI Quantity and Ramp Rate Limit;
- (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 less than or equal to the Balancing Price, then the Sent Out Metered Schedule as determined in accordance with clause 6.15.3(a)(i); 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:
  - 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 or equal to the Balancing Price; plus

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

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

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

- (a) for a Balancing Facility which is a Scheduled Generator, the amount which is the lesser of:

- i. the sum of:

- 1. the maximum amount of sent out energy, in MWh, which could have been dispatched in the Trading Interval from Balancing Price-Quantity Pairs in respect of the Balancing Facility with a Loss Factor Adjusted Price less than the Balancing Price; plus
- 2. if the Facility's SOI Quantity is greater than the sum of the quantities in the Facility's Balancing Price-Quantity Pairs which have a Loss Factor Adjusted Price less than or equal to the Balancing Price, the minimum amount of sent out energy, in MWh, if any, which could have been dispatched in the Trading Interval from any of the Facility's Balancing Price-Quantity Pairs which have a Loss Factor Adjusted Price greater than or equal to 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:

- i. 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 less 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 as determined in accordance with clause 6.15.3(a)(i); or
- (c) for the Verve Energy Balancing Portfolio, the amount which is the lesser of:
- i. the sum of:
1. the maximum amount of sent out energy, in MWh, which could have been dispatched in the Trading Interval from Balancing Price-Quantity Pairs within the Balancing Portfolio Supply Curve with an associated price less than the Balancing Price; plus
  2. if the Verve Energy Balancing Portfolio's SOI Quantity is greater than the sum of the quantities in the Balancing Price-Quantity Pairs within the Balancing Portfolio Supply Curve which have an associated price that is less than or equal to the Balancing Price, the minimum amount of sent out energy, in MWh, if any, which could have been dispatched in the Trading Interval from any of the Balancing Price-Quantity Pairs within the Balancing Portfolio Supply Curve which have an associated price greater than or equal to the Balancing Price,
- taking into account the Portfolio Ramp Rate Limit and SOI Quantity; and
- ii. where a Facility in the Verve Energy Balancing Portfolio is subject to an Outage, the maximum amount of sent out energy, in MWh, which could have been dispatched given the sum of the Available Capacity of Facilities in the Verve Energy Balancing Portfolio for that Trading Interval.

6.15.3 The IMO must:

- (a) calculate Maximum Theoretical Energy Schedules under clause 6.15.1 and Minimum Theoretical Energy Schedules under clause 6.15.2:
- i. using Sent Out Metered Schedules determined using SCADA data and output estimates 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; and
  - ii. as soon as practicable after receiving applicable SCADA data under clause 7.13.1(cA); and
- (b) update Maximum Theoretical Energy Schedules and Minimum Theoretical Energy Schedules calculated under clause 6.15.3(a) as soon as

practicable 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.

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

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

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

- (a) subject to clause 6.16A.1(b), the Sent Out Metered Schedule less the Maximum Theoretical Energy Schedule; or
- (b) zero where:
  - i. 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;
  - ii. the Facility was undergoing a Test or complying with an Operating Instruction; or
  - iii. the Sent Out Metered Schedule less the Maximum Theoretical Energy Schedule is less than the sum of:
    - 1. any Upwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any Upwards Backup LFAS Enablement, which the Facility was instructed by System Management to provide, divided by two so that it is expressed in MWh; and
    - 2. the applicable Settlement Tolerance.

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

- (a) subject to clause 6.16A.2(b), the Minimum Theoretical Energy Schedule less the Sent Out Metered Schedule; or
- (b) zero if:
  - i. 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;
  - 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. any Downwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any Downwards 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.

#### **6.16B. 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 due to a Network Control Service Contract which System Management instructed 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; 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 Energy Balancing Portfolio less the sum of any Sent Out Metered Schedules for Facilities in the Verve Energy Balancing Portfolio is less than the sum of:

1. any reduction in sent out energy due to a Network Control Service Contract which System Management instructed a Facility within the 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; and

4. the Portfolio Settlement Tolerance.

## **6.17. Balancing Settlement Quantities**

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

(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 Constrained Off Verve Energy Balancing Portfolio Quantities and associated prices.~~

~~in accordance with this clause 6.17.~~

- ~~(a) 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) 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 and Prices**

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

- (a) Constrained On Quantity1 (ConQ1) equals the lesser of:
  - i. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched from the Facility's Balancing Price-Quantity Pair N, with a Loss Factor Adjusted Price (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 and a Balancing Price-Quantity Pair exists for the Facility and Trading Interval with a Loss Factor Adjusted Price higher than Price N, then:
  - i. additional Constrained On Quantity2 (ConQ2) equals the lesser of:
    - 1. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched from the Facility's Balancing Price-Quantity Pair N+1 with a Loss Factor Adjusted Price (Price N+1) higher than but closest to the Price N, taking into account when the Balancing Facility's MW level reached the top, or bottom, as applicable, of the quantity associated with the Balancing Price-Quantity Pair N in the calculation in clause 6.17.3(a)(i) and the applicable Ramp Rate Limit; and
    - 2. the Upwards Out of Merit Generation for the Balancing Facility less ConQ1; and
  - ii. Constrained On Compensation Price2 (ConP2) equals the Loss Factor Adjusted Price N+1 identified in clause 6.17.3(c)(i) less the Balancing Price;
- (d) The IMO must repeat the process set out in clause 6.17.3(c) 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 Balancing Price-Quantity Pairs or, otherwise, until there are no remaining Balancing Price-Quantity Pairs;



- (e) The Non-Qualifying Constrained On Generation for the Balancing Facility equals the sum, divided by two so that it is expressed as sent out MWh, of any Upwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any Upwards LFAS Backup Enablement, which the Balancing Facility was instructed to provide by System Management;
- (f) If:
  - 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) The IMO must repeat the process set out in clause 6.17.3(f) for each ConQN in ascending order until all Non-Qualifying Constrained On Generation has been deducted from ConQN or, otherwise, until there are no remaining ConQN; and
- (h) For settlement purposes under Chapter 9, the IMO must Loss Factor adjust each ConQN calculated in clauses 6.17.3(a) to 6.17.3(f).

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

- (a) ConQ1 equals the Upwards Out of Merit Generation, in MWh, for the Trading Interval, which for settlement purposes under Chapter 9 the IMO must Loss Factor adjust; and
- (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 and Prices**

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

- (a) Constrained Off Quantity1 (CoffQ1) equals the lesser of:
  - i. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched down from the Facility's Balancing Price-Quantity Pair N, with a Loss Factor Adjusted Price (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 Balancing Price-Quantity Pairs or, if different, the one with the lower price:
    - 1. the Balancing Price-Quantity Pair associated with the intersection of Available Capacity and the quantities in all

- Balancing Price-Quantity Pairs summed in order of lowest to highest price; and
2. the Balancing 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 and a Balancing Price-Quantity Pair exists for the Facility and Trading Interval with a Loss Factor Adjusted Price lower than Price N, then:
- i. additional Constrained Off Quantity2 (CoffQ2) equals the lesser of:
    1. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched down from the Facility's Balancing Price-Quantity Pair N+1 with a Loss Factor Adjusted Price (Price N+1) lower than but closest to the Price N, taking into account when the Balancing Facility's MW level reached the bottom, or the top, as applicable, of the quantity associated with the Balancing Price-Quantity Pair N in the calculation in clause 6.17.4(a)(i) and the applicable Ramp Rate Limit; and
    2. the Downwards Out of Merit Generation for the Balancing Facility less CoffQ1; and
  - ii. Constrained Off Compensation Price2 (CoffP2) equals the Balancing Price less the Loss Factor Adjusted Price N+1 identified in clause 6.17.4(c)(i);
- (d) The IMO must repeat the process set out in clause 6.17.4(c) 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 Balancing Price-Quantity Pairs or, otherwise, until there are no remaining Balancing 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 Downwards LFAS Enablement and, if the Facility is a Stand Alone Facility, any Downwards Backup LFAS Enablement, which the Balancing Facility was instructed to provide by System Management;
- (f) If:
- 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 clause 6.17.4(f) 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 clauses 6.17.4(a) to clauses 6.17.4(f).

6.17.4A. Subject to clause 6.17.5B, for any Balancing Facility that is a Non-Scheduled Generator, in a Trading Interval:

- (a) CoffQ1 equals the Downwards Out of Merit Generation, in MWh, for that Trading Interval, which for settlement purposes under Chapter 9 the IMO must Loss Factor adjust; and
- (b) CoffP1 equals the Loss Factor Adjusted 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 and Prices**

6.17.5. Subject to clause 6.17.5C, the IMO must attribute any Upwards Out of Merit Generation from the Verve Energy Balancing Portfolio in a Trading Interval as follows:

- (a) Portfolio Constrained On Quantity1 (PConQ1) equals the lesser of:
  - i. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched from the Balancing Price-Quantity Pair N in the Balancing Portfolio Supply Curve with a price (Price N) higher than but closest to the Balancing Price, taking into account the actual 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 N identified in clause 6.17.5(a) less the Balancing Price;
- (c) If the Portfolio Upwards Out of Merit Generation exceeds PConQ1 and a Balancing Price-Quantity Pair exists in the Balancing Portfolio Supply Curve with a price higher than Price N, then:
  - i. additional Portfolio Constrained On Quantity2 (PConQ2) equals the lesser of:
    - 1. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched from the Balancing Portfolio Supply Curve Balancing Price-Quantity Pair N+1

- with a price (Price N+1) higher than but closest to the Price N, taking into account when the Verve Energy Balancing Portfolio MW level reached the top, or the bottom, as applicable, of Balancing Price-Quantity Pair N in the calculation in clause 6.17.5(a)(i) and the Portfolio Ramp Rate Limit; and
2. the Portfolio Upwards Out of Merit Generation less PConQ1; and
- ii. Constrained On Compensation Price<sup>2</sup> (PConP2) equals the Price N+1 identified in clause 6.17.5(c)(i) less the Balancing Price;
- (d) The IMO must repeat the process set out in clause 6.17.5(c) to identify, from the next highest priced Balancing Price-Quantity Pair N+1, any PConQN+1 and PConPN+1 until all Upwards Out of Merit Generation has been attributed to Balancing Price-Quantity Pairs or, otherwise, until there are no remaining Balancing Price-Quantity Pairs in the Balancing Portfolio Supply Curve;
- (e) The Non-Qualifying Constrained On Generation for the Verve Energy Balancing Portfolio equals the sum, expressed in sent out MWh, of any increase in energy due to a Network Control Service Contract and of the following Ancillary Services (if any), which System Management instructed Verve Energy to provide from Facilities within the Verve Energy Balancing Portfolio:
- i. Upwards LFAS Enablement;
- ii. Upwards LFAS Backup Enablement; and
- iii. the Spinning Reserve Response Quantity;
- (f) If:
- i. the Non-Qualifying Constrained On Generation exceeds PConQ1, set PConQ1 to zero; or
- ii. otherwise reduce PConQ1 by the amount of Non-Qualifying Constrained On Generation;
- (g) The IMO must repeat the process set out in clause 6.17.5(f) for each PConQN in ascending order until all Non-Qualifying Constrained On Generation has been deducted from PConQN or otherwise until there are no remaining PConQN; and
- (h) For settlement purposes under Chapter 9, each PConQN calculated in this clause 6.17.5 is to be Loss Factor adjusted by the Portfolio Loss Factor.

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

6.17.5A. Subject to clause 6.17.5C, the IMO must attribute any Downwards Out of Merit Generation from the Verve Energy Balancing Portfolio in a Trading Interval as follows:

- (a) Constrained Off Portfolio Quantity1 (PCoffQ1) equals the lesser of:
  - i. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched down from Balancing 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 Balancing Price-Quantity Pairs or, if different, the one with the lower price:
    - 1. the Balancing Price-Quantity Pair associated with the intersection of Available Capacity and the quantities in all Balancing Price-Quantity Pairs in the Balancing Portfolio Supply Curve summed in order of lowest to highest price; and
    - 2. the Balancing Price-Quantity Pair with a price lower than but closest to the Balancing Price; and
  - ii. the Portfolio Downwards Out of Merit Generation;
- (b) Portfolio Constrained Off Compensation Price1 (PCoffP1) equals the Balancing Price less the Price N identified in clause 6.17.5A(a);
- (c) If the Portfolio Downwards Out of Merit Generation (in MWh) exceeds PCoffQ1 and a Balancing Price-Quantity Pair exists in the Balancing Portfolio Supply Curve with a price lower than Price N, then:
  - i. additional Constrained Off Portfolio Quantity2 (PCoffQ2) equals the lesser of:
    - 1. the maximum energy less the minimum energy, if any, in MWh, which could have been dispatched down from the Balancing Portfolio Supply Curve Balancing Price-Quantity Pair N+1 with a price (Price N+1) lower than but closest to Price N, taking into account when the Verve Energy Balancing Portfolio MW level reached the bottom, or top, as applicable, of Balancing Price-Quantity Pair N in the calculation in clause 6.17.5A(a)(i) and the Portfolio Ramp Rate Limit; and
    - 2. the Portfolio Downwards Out of Merit Generation less PCoffQ1; and
  - ii. Portfolio Constrained Off Compensation Price2 (PCoffP2) equals the Balancing Price less the Price N+1 identified in clause 6.17.5A(c)(i);

- (d) The IMO must repeat the process set out in clause 6.17.5A(c) to identify, from the next lowest priced Balancing Price-Quantity Pair N+1, any PCoffQN+1 and PCoffPN+1 until all Downwards Out of Merit Generation has been attributed to Balancing Price-Quantity Pairs or, otherwise, until there are no remaining Balancing Price-Quantity Pairs in the Balancing Portfolio Supply Curve;
- (e) The Non-Qualifying Constrained Off Generation for the 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 ;
- (f) If:
  - i. the Non-Qualifying Constrained Off Generation exceeds PCoffQ1 set PCoffQ1 to zero; or
  - ii. otherwise reduce PCoffQ1 by the amount of Non-Qualifying Constrained On Generation;
- (g) The IMO must repeat the process set out in clause 6.17.5A(f) for each PCoffQN in ascending order until all Non-Qualifying Constrained Off Generation has been deducted from PCoffQN or there are no remaining PCoffQN; and
- (h) For settlement purposes under Chapter 9, each PCoffQN calculated in this clause 6.17.5A is to be Loss Factor adjusted by the Portfolio Loss Factor.

~~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]~~

**Balancing Quantities and Prices Exceptions**

6.17.5B. Clauses 6.17.3, 6.17.3A, 6.17.4 and 6.17.4A do not apply to Facilities in the Verve Energy Balancing Portfolio.

6.17.5C. Where the IMO is unable to attribute:

- (a) Upwards Out of Merit Generation in accordance with clauses 6.17.3 or 6.17.5, as applicable: or
- (b) Downwards Out of Merit Generation in accordance with clauses 6.17.4 or 6.17.5A,

for a Market Participant, the Market Participant is not entitled to be paid for any Upwards Out of Merit Generation or Downwards Out of Merit Generation, as applicable.

**Non-Balancing Facility Dispatch**

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

- (a) the sum over all Dispatchable Loads registered to zero, if Market Participant p of the amount that is the product of:
    - i. the quantity, in MWh, by which the Dispatchable Load reduced its consumption in response to a Dispatch Instruction, where this quantity is equal to the lesser of:
      - 1. the Loss Factor adjusted quantity in the Dispatch Instruction provided to the IMO by System Management under clause 6.17.6A(a); or
      - 2. the greater of zero and the difference between the Metered Schedule for the Facility in Trading Interval t and the Loss Factor adjusted quantity provided in the Facility's Resource Plan for Trading Interval t under clause 6.11.1(b)(iii); and  
~~is the Electricity Generation Corporation; or~~
    - ii. the applicable Consumption Decrease Price for the Facility in~~was issued no Dispatch Instructions for Trading Interval t;~~
- ~~or the sum of:~~

(b) ~~the sum over all Scheduled Generators and Dispatchable Loads registered to by the Market Participant p of the amount that is the product of the following amounts for Trading Interval t:~~

i. the quantity, in MWh, by which the Dispatchable Load increased its consumption in response to a Dispatch Instruction, where this quantity is equal to the lesser of:

1. the Loss Factor adjusted quantity in the Dispatch Instruction provided to the IMO by System Management under clause 6.17.6A(a); or

2. the greater of zero and the difference between the Loss Factor adjusted quantity provided in the Facility's Resource Plan for Trading Interval t under clause 6.11.1(b)(iii) and the Metered Schedule for the Facility in Trading Interval t and;  
and

~~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 7.13.1(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 7.13.1(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. the applicable Consumption Increase Price for the Facility in Trading Interval t; 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 7.13.1(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 7.13.1(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); 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; and~~

~~(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, as provided to the IMO by System Management under clause 7.13.1(eB) (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; and~~

~~(d) the sum over all Demand Side Programmes registered to the Market Participant p 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 least 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(eCG); or
  3. the greater of zero and the difference between half of the Relevant Demand set in clause 4.26.2CA and the Demand Side Programme Load measured in the Trading Interval; and
- ii. the applicable Consumption Decrease Price for the Facility in Trading Interval t ~~the price defined in the Market Participant's Balancing Data Submission provided in accordance with clause 6.5A, 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);~~ and
- (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 defined as:~~
    1. ~~MCAP for Trading Interval t, if the Facility was instructed to increase its output; or~~
    2. ~~zero, if the Facility was instructed to reduce its consumption.~~

6.17.6A. System Management must:

- (a) for each Trading Interval in which a Dispatchable Load was subject to a Dispatch Instruction, provide the IMO with the non-Loss Factor adjusted quantity, in MWh, by which the Dispatchable Load was dispatched, where this must be a positive number, together with information regarding whether it was dispatched upwards or downwards from its Resource Plan; and
- (b) provide the information in clause 6.17.6A(a) to the IMO as soon as reasonably practicable but in any event in time for the IMO to undertake settlement under Chapter 9.

6.17.7. The Consumption Decrease Price and Consumption Increase Price used in clauses 6.17.6(a)(ii), 6.17.6(b)(ii) and 6.17.6(c)(ii) 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 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. [Blank]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, 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 Facilities in the Verve Energy Balancing Portfolio, determine a Facility Dispatch Settlement Tolerance for each Scheduled Generator, Non-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 Non-Scheduled Generator 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 two to be expressed as MWh.

6.17.10. The Portfolio Settlement Tolerance equals the lesser of:

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

## **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.~~

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.

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

6.20.6. The IMO must annually review the appropriateness of the value of the ~~Energy Price Limits~~Maximum STEM Price and Alternative Maximum STEM Price.

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 Authorised Deviation Quantity;~~
  - ~~ii. the Upward Unauthorised Deviation Quantity;~~
  - ~~iii. the Downward Unauthorised Deviation Quantity;~~
  - ~~iv. [Blank]~~
    - i. the Metered Balancing Quantity;
    - ii. the Facility Loss Factor adjusted Constrained On Quantities and Loss Factor Adjusted Prices calculated in accordance with clauses 6.17.3 and 6.17.3A;
    - iii. the Facility Loss Factor adjusted Constrained Off Quantities and Loss Factor Adjusted Prices calculated in accordance with clauses 6.17.4 and 6.17.4A;
    - iv. the Verve Energy Balancing Portfolio Loss Factor adjusted Constrained On Quantities and prices calculated in accordance with clause 6.17.5;
    - v. the Verve Energy Balancing Portfolio Loss Factor adjusted Constrained Off Quantities and prices calculated in accordance with clause 6.17.5A; and
    - vi. the Non-Balancing Facility Dispatch Instruction Payment; and

vi. ~~any Commitment Compensation due to the Market Participant.~~

## Data used in the Non-Balancing Dispatch Process

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

- 7.1.1. System Management must maintain and in accordance with clause 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 clauses 5.3A.3 and 5.3A.4.

7.2.1. System Management must prepare:

- ~~(a) a Load Forecast for a Trading Day by 7:30 AM on the Scheduling Day for the Trading Day, where this Load Forecast is for information purposes; and~~
- ~~(b) a Load Forecast for a Trading Day by 1:30 PM on the Scheduling Day for the Trading Day, where this Load Forecast is to be used in the dispatch process.~~

7.2.3. ~~[Blank] System Management must update the Load Forecast for a Trading Day described in clause 7.2.1(b), as required, to reflect:~~

- ~~(a) revised weather forecasts;~~
- ~~(b) higher or lower actual demand than predicted; and~~
- ~~(c) higher or lower Non-Scheduled Generation than predicted.~~

7.2.3A. By 8:30 AM on the Scheduling Day, System Management must determine for each Market Participant that is a provider of Ancillary Services:

- (a) an estimate of the Loss Factor adjusted MWh of energy that could potentially be called upon by System Management after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day where these estimates must reflect the Ancillary Service standards described in clause 3.10; and
- (b) a list of Facilities that it might reasonably expect to call upon to provide the energy described in clause 7.2.3A(a).

7.2.3B. System Management must provide:

- ~~(a) the information determined in clauses 7.2.1(a) and 7.2.3A to the IMO in accordance with the IMS Interface Market Procedure by 7:30 AM on the Scheduling Day; and~~
- ~~(b) the information determined in clause 7.2.3A to the IMO by 8:30 AM on the Scheduling Day.~~

~~7.2.3C. If the IMO does not receive information described in clause 7.2.3B by the required time, it must arrange for System Management to provide the information by alternative means prior to 7:50 AM in the case of the information described in clause 7.2.3B(a) and 8:50 AM in the case of the information described in clause 7.2.3B(b) and extend the timeframes in clauses 7.2.3B (a) and 7.2.3B (b) accordingly.~~

~~7.2.3D. The IMO must confirm receipt of the submissions described in clauses 7.2.3B and 7.2.3C to System Management within five minutes of receiving the submission.~~

- 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.~~
- 7.3.4. 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~~Outages are calculated in accordance with clause 3.21.6<sub>3</sub>;
  - (b) ~~[Blank]~~
- for each Trading Interval of a Trading Day, between 8:00 AM and 8:30 AM on the Scheduling Day prior to the Trading Day.

## **7.5. Non-Balancing Dispatch Merit Orders and Fuel Declarations**

- 7.5.1. The IMO must provide System Management with the Non-Balancing Dispatch Merit Orders and Fuel Declarations for a Trading Day by 1:30 PM on the Scheduling Day.
- 7.5.2. Upon receipt of the Non-Balancing Dispatch Merit Orders and Fuel Declarations for a Trading Day, System Management must within 5 minutes confirm to the IMO that it has received the Non-Balancing Dispatch Merit Orders and Fuel Declarations.
- 7.5.3. In the event that the IMO does not receive confirmation of receipt of the Non-Balancing Dispatch Merit Orders and Fuel Declarations for a Trading Day from System Management within 5 minutes of submission, then the IMO must contact System Management. If System Management has not received the Non-Balancing Dispatch Merit Orders and Fuel Declarations, then the IMO must make alternative arrangements to communicate the information.
- 7.5.4. Subject to clause 7.5.5, a Market Participant other than ~~the Electricity Generation Corporation~~Verve Energy may at any time between 1:30 PM on the Scheduling Day and 30 minutes prior to the commencement of the Trading Interval described in clause 7.5.4(b) notify System Management that the Market Participant will change the fuel upon which a Scheduled Generator registered to it will operate on from a Liquid Fuel to a Non-Liquid Fuel, or vice versa, where the notification must include:
- (a) the identity of the Scheduled Generator;
  - (b) the first Trading Interval in the Trading Day from which the fuel change will take effect;



- (c) the last Trading Interval in the Trading Day for which the fuel change will apply; and
- (d) the fuel (Liquid Fuel or Non-Liquid Fuel) to be used;

~~7.5.7. 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.~~

7.6.1. Subject to clause 7.6.1B, when scheduling and issuing dDispatching 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 SWIS Operating State;
- (b) to minimise involuntary load shedding on the SWIS; and
- (c) to maintain Ancillary Services to meet the Ancillary Service standards appropriate for the applicable SWIS Operating State.

~~7.6.1A. Notwithstanding clauses 7.6.2 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 7.6.4.~~

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

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

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

- (a) Dispatch Instructions to Balancing Facilities in the order and, subject to clause 7.7.6B, for the quantities that appear in the BMO, taking into account Ramp Rate Limits for that Facility;
- (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 for that Facility;

- (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 relevant to that Facility 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 relevant to that Facility.

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

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

where System Management considers, on reasonable grounds, that it needs to do so in order to:

- (d) avoid a High Risk Operating State or an Emergency Operating State; or
- (e) if the SWIS is in a High Risk Operating State or an Emergency Operating State, return the SWIS to a Normal Operating State.

7.6.2. For the purposes of clauses 7.6.1 and 7.6.1C, 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 the Dispatch Plan or 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, 7.6.1A, 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.

7.6.2A. 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.

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

- (a) the BMO provided by the IMO to System Management under clause 7A.3.6(b);

- (b) if no such BMO is provided, the most recent Forecast BMO for that Trading Interval provided under clause 7A.3.17(b); and
- (c) if no such Forecast BMO is provided, the BMO or the Forecast BMO that was used by System Management for issuing Dispatch Instructions for the same Trading Interval on the previous day if both Trading Intervals occur on a Business Day, or the most recent non-Business Day if the Trading Interval occurs on a non-Business Day.
- 7.6.3. ~~[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:~~
- (a) ~~— would result in that Facility using Liquid Fuel, or~~
- (b) ~~— is registered as a Demand Side Programme or Dispatchable Load.~~
- 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. 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 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 to the Demand Side Programme under clause ~~7.6.1C(d)~~ ~~7.6.6(e)~~ 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; and
  - (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 and Stand Alone Facilities for certain Ancillary Services ~~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 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 and the scheduling of Facilities in the Verve Energy Balancing Portfolio generally:

- (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~~ a plant schedule describing the merit order in which the Facilities in the Verve Energy Balancing Portfolio are to be called upon and any restrictions on the operations of such Facilities;
  - ii. ~~A~~ a plan for which fuels will be used in each Facility in the Verve Energy Balancing Portfolio and guidance as to how that plan might be varied depending on circumstances; ~~and~~
  - iii. ~~A~~ a description as to how Ancillary Services are to be provided from Facilities in the Verve Energy Balancing Portfolio; and
  - iv. a description as to how Ancillary Services are to be provided from the Stand Alone Facilities,

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

- (b) System Management must provide to ~~the Electricity Generation Corporation~~ Verve Energy by 8:30 AM on the Scheduling Day associated with a Trading Day a forecast of total system demand for the Trading Day

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

- (c) System Management must provide to ~~the Electricity Generation Corporation~~ Verve Energy by ~~12:30 PM~~ 4:00 PM on the Scheduling Day associated with a Trading Day:
- i. a forecast of the requirements for ~~the Electricity Generation Corporation~~ energy in the Verve Energy Balancing Portfolio, being a forecast of the whole of system energy requirement less:
    1. the aggregate Net Contract Positions energy of all Resource Plans associated with the Scheduled Generators and Dispatchable Loads of other Market Participants; and
    2. the aggregate forecast output of other Market Participants' Non-Scheduled Generators, including the aggregate forecast output of any Non-Scheduled Generators which are Stand Alone Facilities, for the Trading Day;
  - ii. the Dispatch Plan for each Facility for the Trading Day; and
  - iii. a forecast of the detailed Ancillary Services required from each Facility in the Verve Energy Balancing Portfolio and Ancillary Services from each Stand Alone Facility;

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

- (d) System Management must consult with ~~the Electricity Generation Corporation~~ Verve Energy in developing the information described in clause 7.6A.2(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 clause 7.6A.2(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) System Management must provide to the IMO by 4:00 PM on the Scheduling Day associated with a Trading Day the aggregate forecast output of all Non-Scheduled Generators for the Trading Day, referred to in clause 7.6A.2(c)(i)(2); ~~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~~ 4:00 PM on the Scheduling Day but prior to the start of a Trading Interval on the corresponding Trading Day, System Management

becomes aware of a change in conditions which will require a significant change in the Dispatch Plan it may make such change but must notify ~~the Electricity Generation Corporation~~ Verve Energy of such change; and

- (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 but including LFAS Backup Enablement, 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 the Verve Energy Balancing Portfolio is required to respond to an instruction given under clause 7.6A.3(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 clause 7.6A.3(a).

7.6A.4. With respect to the dispatch compliance of ~~the Electricity Generation Corporation~~ Verve Energy for Facilities in the 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 in 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.

7.6A.5. With respect to administration and reporting:

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

7.6A.6. ~~The Electricity Generation Corporation~~ Verve Energy and System Management must retain all records, including meeting minutes, created because of the operation of this clause 7.6A and procedures required by this clause 7.6A.

7.6A.7. Subject to clause 7.6A.8, System Management must document the procedures System Management and ~~the Electricity Generation Corporation~~ Verve Energy must follow to comply with this clause 7.6A, including the process to follow in developing the confidential procedure described in clause 7.6A.8, in the Power System Operation Procedure, and System Management and ~~the Electricity Generation Corporation~~ Verve Energy must follow that documented Market Procedure.

7.6A.8. Any procedure created or data exchanged in accordance with this clause 7.6A which is commercially sensitive information of ~~the Electricity Generation Corporation~~ Verve Energy must not be included in the Power System Operation Procedure. Instead, such information must be included in a confidential procedure



developed by System Management in consultation with Verve Energy~~the Electricity Generation Corporation.~~

- 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 specified Trading Intervals.~~
- 7.7.2. Each Dispatch Instruction issued to a Non-Balancing Facility or to a Balancing Facility Out of Merit under clause 7.6.1C(c) 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) details of the Registered Facility to which the Dispatch Instruction relates;
  - (b) the time the Dispatch Instruction was issued;
  - (c) ~~the time by which 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))~~ the required level of sent out generation or consumption which may be any one of the following:
    - i. a target MW output;
    - ii. for a Non-Scheduled Generator, that it no longer needs to restrict its output; or
    - iii. a required decrease in consumption, in MW, for a Demand Side Programme;
  - (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; or~~
    - iii. ~~a required decrease in consumption (in MW) for a Demand Side Programme;~~the ramp rate to maintain until the required level of sent out generation or consumption is reached, which must not exceed any applicable Ramp Rate Limit; and

- (e) ~~the ramp rate to maintain until the required level of sent out generation or consumption is reached, if a ramp rate has been identified in Standing Data~~ the time at which the ramp rate specified in clause 7.7.3(d) is required to commence.

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

- (a) details of 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 an estimate of when the Operating Instruction will cease to apply;
- (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.

~~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 Merit Order would otherwise require that System Management dispatch a Demand Side Programme when, due to limitations on the availability of the Demand Side Programme, such dispatch 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.~~

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

- (a) only discriminate between Demand Side Programmes Non-Balancing Facilities based on size of the capacity, response time and availability of ~~different Demand Side Programmes;~~ 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 2:00 PM on the Scheduling Day for the Trading Day on which the Trading Interval falls or later than the end of the Trading Interval.

7.7.5A. System Management must develop, in a Power System Operation Procedure, the information that must be provided by a Market Participant to System Management for each of the Market Participant's Non-Scheduled Generators for each Trading Interval to enable an estimation of the output of each Facility<sub>x</sub> (in MWh<sub>x</sub>) to be undertaken by:

(a) System Management, as required under clauses 6.15.2(b)(i), 7.7.5B(a) and 7.13.1C(e); and

(b) the IMO, as required by the Relevant Level Methodology.

7.7.5B. ~~The quantity to be used in clause 6.15.2(b)(i) reduction in the output of a Non-Scheduled Generator as a result of a Dispatch Instruction from System Management (in MWh) for each Trading Interval to be used in clause 6.17.6(c)(i) is:~~ System Management's estimate, determined in accordance with the Power System Operation Procedure, of the maximum amount of sent out energy, in MWh, which each Non-Scheduled Generator, by Trading Interval, would have supplied in the Trading Interval had a Dispatch Instruction not been issued.

~~(a) where information has been made available to System Management in accordance with the Power System Operation Procedure developed under clause 7.7.5A, System Management's estimate, determined in accordance with the Power System Operation Procedure, of the decrease in output of the Non-Scheduled Generator (in MWh) during the Trading Interval; or~~

~~(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 the Power System Operation Procedure developed under clause 7.7.5A, the greater of zero and the difference between the Resource Plan quantity of the Non-Scheduled Generator (in MWh) less the output of the Non-Scheduled Generator (in MWh) over the Trading Interval derived from its Dispatch Instruction.~~

7.7.5C. The information to be provided by a Market Participant in the Power System Operation Procedure developed under clause 7.7.5A may include such modelling for the Market Participant's Non-Scheduled Generators that System Management

considers may assist it to determine the estimates under clause 7.7.5A(a) or to meet the Dispatch Criteria.

7.7.5D. System Management must provide the estimate required under clause 6.15.2(b)(i) as soon as reasonably practicable but in any event in time for settlement under Chapter 9.

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 Power System Operation Procedure which 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 or Operating Instruction; and
  - ii. advise if it cannot comply or cannot fully comply with the Dispatch Instruction or Operating Instruction.

The advice and confirmation under this clause 7.7.6 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 a Market Participant has notified System Management in accordance with clause 7.7.6(b) that it cannot comply, or cannot fully comply with a Dispatch Instruction:

- (a) the Market Participant must provide System Management with the reason it cannot comply or cannot fully comply with the Dispatch Instruction; and
- (b) the reason provided by the Market Participant under clause 7.7.6A(a) must fall within clause 7.10.2(a).

7.7.6B. If a Market Participant notifies System Management under clause 7.7.6(b) or clause 7.10.3 that it cannot fully comply with a Dispatch Instruction, then it must, at the same time, provide notice of:

- (a) where the Market Participant can comply with the quantity required in the Dispatch Instruction but not the required ramp rate, the different ramp rate with which the Market Participant can comply; or
- (b) where the Market Participant cannot comply with the quantity required in the Dispatch Instruction:

- i. the reduced quantity (if any) and associated ramp rate with which the Market Participant can comply; and
- ii whether the Market Participant needs to desynchronise the Facility in order to provide the reduced quantity,

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.

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 and notifications received from Market Participants under clauses 7.7.6(b) and 7.7.6B, in a form sufficient for independent audit and for settlement purposes.

7.7.9. System Management must develop, in a Power System Operation Procedure, the procedure System Management and Market Participants must follow in forming, issuing, recording, receiving, ~~and~~ confirming and responding to Dispatch Instructions and Operating Instructions and that System Management must follow in determining the quantities described in clause 7.7.5A(a).

7.7.10. When System Management has issued a Dispatch Instruction or an Operating Instruction to a Demand Side Programme to decrease its consumption, System Management may issue a further ~~i~~ instruction terminating the requirement for the Demand Side Programme to 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
- (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.

7.9.1. 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 synchronisation immediately as it is known; and
- (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.

7.9.4. 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) confirm with System Management the expected time of desynchronisation 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. 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~~ intends 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.
- 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.
- 7.10. 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) ~~subject to paragraph (b), its Resource Plan, except where it relates to Intermittent Generators;~~
- (b) ~~if a Dispatch Instruction 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~~ its Registered Facility for the Trading Interval; ~~and~~
- (c) ~~a direction given to the Market Participant under clauses 7.6 or 7.10.7(a).~~

- 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~~
  - (b) the Facility was physically unable to maintain the ramp rate specified in the Dispatch Instruction but:
    - i. the actual output of the Facility did not, at any time the Dispatch Instruction applied, vary from the output specified in the Dispatch Instruction by more than the applicable Tolerance Range or Facility Tolerance Range; and
    - ii. the average output over a Trading Interval of the Facility was equal to the output specified in the Dispatch Instruction.
- 7.10.3. Where a Market Participant becomes aware that it cannot comply or fully comply with meet its Resource Plan, a Dispatch Instruction, or an Operating Instruction ~~or 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 7.10.3 that it cannot comply or fully comply with a Dispatch Instruction:
- (a) the Market Participant must provide System Management with the reason it cannot comply or cannot fully comply with the Dispatch Instruction; and
  - (b) the reason provided by the Market Participant under clause 7.10.3A(a) must fall within clause 7.10.2(a).
- 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, w~~Where 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~~
  - (d) ~~is outside:~~
  - (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;<sub>1</sub>

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 Dispatch Instruction, Operating Instruction or Dispatch Order in accordance with clause 7.6 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.~~

7.10.6A. A Market Participant that cannot comply with a request under clause 7.10.5 must notify System Management as soon as practicable and must:

- (a) include an explanation in that notification; and
- (b) ensure it has complied with the requirements of clause 7A.2 in relation to the Market Participant's Balancing Submission.

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;~~

- (~~ba~~) unless the deviation is within the Tolerance Range, must, in the time, form and manner prescribed in the IMS Interface Market Procedure, 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(a);
  - 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
- (~~eb~~) if the deviation is within the Tolerance Range, may provide a report to the IMO containing the same information as specified in ~~subclause 7.10.7(ab)~~.

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.

- 7.11.5. 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) ~~{Blank}~~ System Management expects to issue a Dispatch Instruction Out of Merit including, for the purpose of this clause, issuing a Dispatch Order to

the Verve Energy Balancing Portfolio in accordance with clause 7.6.2, which will result in Out of Merit dispatch of the Verve Balancing Portfolio;

- (h) [Blank]System Management expects to use LFAS Facilities other than in accordance with the LFAS Merit Order under clause 7B.3.8; or
- (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 clause 7.11.6A, 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 Operating 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 Out of Merit quantities, reasons for the deviation from the BMO and all relevant information about the deviation;
- (dB) where System Management is to release a Dispatch Advisory under clause 7.11.5(h), details of the estimated quantities of LFAS that are to be used, reasons for the deviation from the LFAS Merit Order 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.

7.11.6A. If any information that would otherwise be released under clauses 7.11.6(d), 7.11.6(dA), 7.11.6(e), 7.11.6(f) or 7.11.6(g) is confidential or has a confidentiality status that would prevent the IMO from releasing the information, System Management must:

- (a) release that information to the IMO but, subject to clause 7.11.6A(b), ensure that the Dispatch Advisory contains information of only a general or aggregate nature so that the information publically released is not confidential; and
- (b) include in the Dispatch Advisory the details of any circumstance that has given rise to System Management issuing the Dispatch Advisory, including:

- i. the name of the Facility where that Facility has caused or materially contributed to the circumstances giving rise to the Dispatch Advisory;
- ii. any likely change in the quantities of energy that, but for the circumstance, would have been dispatched under the Market Rules; and
- iii. the quantities of energy likely to be dispatched Out of Merit.

7.11.6BA. 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~~ SWIS 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 7.11.6BA.

## **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 and Dispatch Instructions;
  - (b) the incidence and extent of non-compliance with Operating Instructions and Dispatch Instructions;
  - (bA) the incidence and reasons for the issuance of Dispatch Instructions to Balancing Facilities Out of Merit, including for the purposes of this clause, issuing Dispatch Orders to the Verve Energy Balancing Portfolio in accordance with clause 7.6.2;
  - (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 and reasons for the selection and use of LFAS Facilities under clause 7B.3.8~~the incidence of any Equipment Test approved in~~

~~accordance with clause 3.21AA, including the date the Equipment Test occurred and the Facility details.~~

7.13.1. 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) ~~the Operational System Load Estimate in each Trading Interval in the Trading Day~~ schedule of all of the Dispatch Orders that System Management issued for each Trading Interval in the Trading Day, including the information specified in the IMS Interface Market Procedure or as agreed between the IMO and System Management;
- (b) ~~[Blank] 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 and an estimate of the output, in MWh, of each generating system not monitored by System Management's SCADA system, for each Trading Interval of the Trading Day;
- (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 of 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;~~

- ~~(dA)~~ ~~The MWh energy dispatched under a Balancing Support Contract for each Trading Interval in the Trading Day by Facility;~~
- ~~(dAB)~~ ~~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 and the EOI Quantity of each Facility for each Trading Interval;
- (dC) the Relevant Dispatch Quantity for each Trading Interval;
- (e) ~~{Blank}~~ for each LFAS Facility, the quantity of any Ex-post Upwards LFAS Enablement that was being provided at the end of each Trading Interval by that LFAS Facility;
- (eA) for each LFAS Facility, the quantity of any Upwards LFAS Backup Enablement that System Management activated by the end of each Trading Interval by that LFAS Facility;
- (eB) for each LFAS Facility, the quantity of any Downwards LFAS Backup Enablement that System Management activated by the end of each Trading Interval by that LFAS Facility;
- (eC) for each LFAS Facility, the quantity of any Ex-post Downwards LFAS Enablement that was being provided at the end of each Trading Interval by that LFAS Facility;
- (eD) by Trading Interval, the Load Rejection Reserve Response Quantity and the Spinning Reserve Response Quantity calculated in accordance with the Power System Operation Procedure;
- (eAE) details of notifications received by System Management in accordance with clause 7.5.4;
- (eBF) the maximum quantity of sent out energy estimated decrease, in MWh, in the output of which each Non-Scheduled Generator, by Trading Interval, would have generated in the Trading Interval had a Dispatch Instruction not been issued as a result of System Management Dispatch Instructions, as determined in accordance with clause 7.7.5B;
- (eGG) the required decrease, in MWh, in the consumption of each Demand Side Programme, by Trading Interval, as a result of System Management Dispatch Instructions, where this is to be used in settlement as the quantity described in clause 6.17.6(c)(i)(2);
- (f) ~~{Blank}~~ in instances where System Management has not used an LFAS Facility which they would otherwise have been required to use under clause 7B.3.6, the reasons why it has not used the LFAS Facility;
- (g) details of the instructions provided to:

- i. Demand Side Programmes that have Reserve Capacity Obligations; and
    - ii. providers of Supplementary Capacity; <sub>2</sub>

on the Trading Day; and
  - (h) the identity of the Facilities that were subject to a Commissioning Test, or 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; <sub>2</sub>
- 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.
- 7.13.1C. The IMO may request, and System Management must provide, within 10 Business Days of receipt of a request from the IMO:
- (a) for each Facility, all information made available to System Management under the Power System Operation Procedure developed under clause 7.7.5A;
  - (b) an estimate of the total quantity of energy not served (in MWh) due to involuntary load shedding (manual and automatic);
  - (c) an estimate of the reduction in energy consumption (in MWh) of any Interruptible Loads in accordance with the terms of an Ancillary Service Contract;
  - (d) a schedule of all instructions, including Dispatch Orders, provided to ~~the Electricity Generation Corporation~~ Verve Energy's Non-Scheduled Generators to deviate from the Dispatch Plan or change their commitment or output in accordance with clause 7.6A.3; and
  - (e) an estimate of the decrease in the output (in MWh) of each ~~Electricity Generation Corporation~~ Verve Energy's Non-Scheduled Generators as a result of an instruction from System Management to deviate from the

Dispatch Plan or change their commitment or output in accordance with clause 7.6A.3(a),

for each Trading Interval during the time period specified by the IMO in its request.

7.13.4. System Management must provide the IMO with SCADA data by Facility and the Operational System Load Estimate in accordance with the IMS Interface Market Procedure.

## **7A. Balancing Market**

### **7A.1. Balancing Market**

7A.1.1. The IMO must operate the Balancing Market.

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

- (a) enable Balancing Facilities to participate in the Balancing Market;
- (b) dispatch the lowest cost combination of Facilities 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; and
- (e) seek to ensure timely and accurate information relevant to the operation and administration of the Balancing Market is provided to affected Rule Participants.

7A.1.4. 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.1.5. All Rule Participants must take into account the Balancing Market Objectives in undertaking their functions and obligations under this Chapter 7A.

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

- (a) technical and communication criteria that a Balancing Facility, or a type of Balancing Facility, must meet, including:
  - i. Facility quantity parameters and limits for participation in Balancing;
  - ii. the manner and forms of communication to be used while participating in Balancing, including receiving Dispatch Instructions; and



iii. ramp rate limitations; and

(b) the type of conditions the IMO may impose under clause 7A.1.11(b) and the manner and circumstances in which they may be imposed and lifted.

7A.1.7. The IMO must consult with System Management when creating and amending the Balancing Facility Requirements.

7A.1.8. A Market Participant must ensure that its Balancing Facilities with a rated capacity equal to or greater than 10 MW meet the relevant specifications of the Balancing Facility Requirements.

7A.1.9. A Market Participant may inform the IMO that a Balancing Facility registered to that Market Participant with a rated capacity less than 10 MW meets the relevant specifications of the Balancing Facility Requirements.

7A.1.10. 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 a Balancing Facility registered to that Market Participant meets the relevant specifications of the Balancing Facility Requirements.

7A.1.11. If based on the information provided to it under clause 7A.1.10, the IMO determines that a Balancing Facility, including a Balancing Facility with a rated capacity of less than 10 MW, does not meet the relevant specifications of the Balancing Facility Requirements, the IMO may impose conditions on the manner in which that Balancing Facility must participate in the Balancing Market under these Market Rules, including:

(a) the prices at which the Market Participant may include in a Balancing Submission in Balancing Price-Quantity Pairs for that Facility; and

(b) the manner and time in which a Balancing Submission for that Balancing Facility must be submitted.

7A.1.12. Where a condition imposed by the IMO under clause 7A.1.11 is inconsistent with another clause in the Market Rules the condition is to be given effect notwithstanding that inconsistency.

7A.1.13. The IMO must publish a decision to impose a condition on a Balancing Facility under clause 7A.1.11 together with the details of such condition.

7A.1.14. 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.1.15. Where this Chapter 7A imposes a timeframe of “as soon as reasonably practicable”, the IMO may prescribe, in a Market Procedure, the latest time by which it must be done.

7A.1.17. The IMO may, from time to time, change the point in time determined under clause 7A.1.16 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 Submissions**

7A.2.1. A Market Participant must ensure that:

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

7A.2.2. A Market Participant may submit a subsequent Balancing Submission in accordance with clause 7A.2.4 in respect of any of its Balancing Facilities, excluding Facilities in the 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 covered in the Balancing Submission, whether the Balancing Facility is to use Liquid Fuel or Non-Liquid Fuel; and
- (e) specify, for each Trading Interval covered in the Balancing Submission, Ramp Rate Limits.

- 7A.2.5. For the purposes of clause 7A.2.4(b), where the IMO accepts a Balancing Submission from a Market Participant that complies with clause 7A.2.4(a), the submission will be deemed to constitute a declaration by an Authorised Officer of the Market Participant.
- 7A.2.6. A subsequent Balancing Submission made under clauses 7A.2.2, 7A.2.9(d), 7A.2.9(e) or 7A.2.9(f), 7A.2.10 or 7A.3.5 in respect of the same Balancing Facility covering the same Trading Interval as an earlier Balancing Submission, overrides the earlier Balancing Submission for, and has effect in relation to, that Trading Interval.
- 7A.2.7. Where a subsequent Balancing Submission is made under clause 7A.2.6, a Market Participant must create and maintain internal records of the reasons for submitting the subsequent Balancing Submission, including details of any changed circumstances and the impacts of those circumstances that gave rise to the new Balancing Submission.
- 7A.2.8. A 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 the Market Participant, including Balancing Forecasts published by the IMO, the information provided by the IMO under clause 7A.3.17 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 clauses 7A.2.9(e) and 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 prescribed 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;
  - ii. Facilities which are likely to provide LFAS; and
  - iii. for each completed Trading Interval, which Facilities actually provided the LFAS in the Trading Interval;
- (c) must:
- i. ensure that quantities in the Balancing Portfolio Supply Curve that are required for the provision of Ancillary Services, other than LFAS, are priced at the Price Caps, to reflect that these quantities are not generally available for Balancing;
  - ii. advise the IMO in a manner and form prescribed by the IMO, the Facilities which are likely to provide the quantities specified in clause 7A.2.9(c)(i); and
  - iii. for each completed Trading Interval, advise the IMO which Facilities actually provided the Ancillary Services referred to in clause 7A.2.9(c)(i) in the Trading Interval;
- (d) may update its Balancing Portfolio Supply Curve in relation to any Trading Interval in the Balancing Horizon for which Balancing Gate Closure for that Trading Interval is more than two hours in the future:
- i. by submitting its updated Balancing Portfolio Supply Curve to the IMO immediately before 6:00 PM; or
  - ii. otherwise by submitting its updated Balancing Portfolio Supply Curve to the IMO within one hour after LFAS Gate Closure;
- (e) may update its Balancing Portfolio Supply Curve in relation to any Trading Interval in the Balancing Horizon for which Balancing Gate Closure is more than two hours in the future if a Facility in the 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 a Forced Outage which Verve Energy expects will cause a Facility to run on Liquid Fuel, where the Facility would not have run on Liquid Fuel but for the Forced Outage, in order to meet 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 of that Facility and the Ramp Rate Limit is accurate but no prices are altered, in respect of that Trading Interval as soon as reasonably practicable;

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

7A.2.11. Where a Market Participant has submitted a Balancing Submission in accordance with clauses 7A.2.10(a) or 7A.2.10(b) after Balancing Gate Closure, the Market Participant must, as soon as reasonably practicable, provide 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 clauses 7A.2.9(e) or 7A.2.9(f) because of a Forced Outage of one of the Facilities in the Verve Energy Balancing Portfolio 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 relating to the Balancing Market; and
- (c) not include information in a Balancing Submission relating to prices for a purpose of influencing the determination of the Constrained Off Compensation Price, the Constrained Off Quantity which the Facility may

provide, the Constrained On Compensation Price or the Constrained On Quantity which the Facility may provide.

7A.2.14. A Balancing Submission is made in good faith under clause 7A.2.13 if, at the time it is submitted, 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 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.

- (a) If a Market Participant does not have reasonable grounds for a price, quantity or Ramp Rate Limit it has included in a Balancing Submission at the time it submits that Balancing Submission, then the Market Participant is, for the purposes of clause 7A.2.13(b), taken to have known that the 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.2.16(a), a Market Participant must adduce evidence that it had reasonable grounds for including a price, quantity or Ramp Rate Limit in the Balancing Submission.
- (c) To avoid doubt, the effect of clause 7A.2.16(b) is to place an evidentiary burden on a Market Participant, and clause 7A.2.16(b) does not have the effect that, merely because such evidence is adduced, the Market Participant who submitted the Balancing Submission is taken to have had reasonable grounds for including a price, quantity or Ramp Rate Limit, as applicable.
- (d) Clause 7A.2.16(a) does not imply that merely because the Market Participant had reasonable grounds for making the representation or the conduct referred to in this Chapter 7A, and in particular putting the price, quantity or Ramp Rate Limit in a Balancing Submission submitted by a Market Participant, that such representation or conduct is not misleading.

7A.2.17. Subject to clauses 7A.2.3, 7A.2.9(c) and 7A.3.5, a Market Participant must not, for any Trading Interval, offer prices in its Balancing Submission in excess of the Market Participant's reasonable expectation of the short run marginal cost of generating the relevant electricity by the Balancing Facility, when such behaviour relates to market power.

7A.2.18. 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.2.19. 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 clauses 7A.2.8, 7A.2.9, 7A.2.13 or 7A.2.17 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 the Balancing Market Commencement Day was less than 12 months, prior to the date the civil penalty is received.

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

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

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

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

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

- (a) a Balancing Facility that meets the Balancing Facility Requirements;

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

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

7A.3.5. A Market Participant, other than Verve Energy in respect of the Verve Energy Balancing Portfolio, must make a new Balancing Submission within 30 minutes of the end of the Trading Interval in which the information is published under clause 7B.3.4(e) as follows:

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

7A.3.6. The IMO must:

- (a) determine the BMO under clause 7A.3.2 for a Trading Interval using the most recent, valid Balancing Submissions available to it; and
- (b) each time the IMO creates a BMO for a Trading Interval, provide this BMO to System Management between 15 to 30 minutes before the start of that Trading Interval.

7A.3.7. System Management must, no later than two 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 Relevant Dispatch Quantity, which is the sum of the EOI Quantities for each Balancing Facility, 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.3.8. The IMO must, by the end of a Trading Day where it has been provided with the information under clause 7A.3.7 for a Trading Interval in the previous Trading Day:

- (a) use that information to determine a Provisional Pricing BMO for that Trading Interval;
- (b) use the Provisional Pricing BMO under clause 7A.3.8(a) to determine the Provisional Balancing Price, being the Loss Factor Adjusted Price corresponding to the point where the estimated Relevant Dispatch Quantity plus 1 MW intersects the Provisional Pricing BMO; and
- (c) publish the Provisional Balancing Price on the Market Web Site.

7A.3.9. Subject to clause 7A.3.12, System Management must, as soon as reasonably practicable but in any event no later than 24 hours after the start of the Business Day following the time specified in clause 7A.3.7, provide the IMO with any updated adjustments to the information provided under clause 7A.3.7 and the IMO must use any such updated SOI Quantity and EOI Quantity information to revise the Provisional Pricing BMO accordingly.

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

7A.3.11. The IMO must, subject to clause 7A.3.12, publish the Balancing Price for each Trading Interval in a Trading Day on the next Business Day after the latest time specified in clause 7A.3.9.

7A.3.12. 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.3.7 or 7A.3.9, the IMO may extend the timeline prescribed in clause 7A.3.11 and/or 7A.3.9. No such extension may be given that would result in a delay of that timeline of more than two Business Days. The IMO must advise Rule Participants of any such extension as soon as practicable.

7A.3.13. If the IMO is unable to determine the Balancing Price under clause 7A.3.10 in time to publish it in accordance with clause 7A.3.11, including because it has not received the information required to be provided by System Management under clauses 7A.3.7 or 7A.3.9, the IMO must determine the Balancing Price:

- (a) where the Relevant Dispatch Quantity and/or Pricing BMO is not available, the IMO must use the BMO and/or the Forecast Relevant Dispatch Quantity for the Trading Interval so that the Balancing Price is the point where the Relevant Dispatch Quantity or most recent forecast 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 are not available for the Trading Interval the IMO must use the most recent Forecast BMO in place of the BMO in clause 7A.3.13(a); and
- (c) where there is no Forecast BMO:
  - i. if the IMO is determining the Balancing Price for a Trading Interval in a Business Day, the Balancing Price will be the value for the equivalent Trading Interval in the most recent Trading Day in the past which is also a Business Day; or
  - ii. if the IMO is determining the Balancing Price for a Trading Interval in a day which is not a Business Day, the Balancing Price will be the value for the equivalent Trading Interval in the most recent Trading Day in the past which is also not a Business Day.

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

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

### **Forecast BMO**

7A.3.15. System Management must, for each future Trading Interval in the Balancing Horizon, 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.3.16. The IMO must for each future Trading Interval in the Balancing Horizon determine a Forecast BMO.

7A.3.17. Where the IMO determines a Forecast BMO under clause 7A.3.16, the IMO must:

- (a) provide to each Market Participant the Balancing quantities expected to be provided by that Market Participant for each future Trading Interval in the Balancing Horizon; and
- (b) provide to System Management the Forecast BMO.

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

### **Balancing Forecast**

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

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

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

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

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

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

7A.4.1. Verve Energy may, at any time, nominate one of its Registered Facilities to be trialed 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 five Business Days that the IMO should reject the Facility as a Stand Alone Facility, reject the nomination;
- (c) if System Management does not provide any advice within five Business Days, allow System Management a further five Business Days to advise whether the IMO should reject the Facility as a Stand Alone Facility;
- (d) if the IMO does not receive any advice in accordance with clause 7A.4.2(b) or 7A.4.2(c), accept the nomination; and
- (e) notify Verve Energy of the IMO's decision and, at the same time, notify the Market of any further time allowed under clause 7A.4.2(c).

- 7A.4.3. A Facility may undergo a trial as a Stand Alone Facility under this clause 7A.4 once only.
- 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 must 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) seven Business 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 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 five Business Days that the IMO should reject the nomination of the Stand Alone Facility, reject the nomination;
  - (c) otherwise accept the nominated Stand Alone Facility as a permanent Stand Alone Facility; and
  - (d) notify Verve Energy of the IMO's decision and the reasons for that 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 Service Market**

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

7B.1.1. The IMO must operate the LFAS Market.

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

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

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

7B.1.4. System Management must, by 12:00 PM on the Scheduling Day, 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 Balancing 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 Balancing 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 6:00 PM 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 in accordance with clauses 7B.2.6 and 7B.2.7.

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 clauses 7B.2.5 and 7B.2.7; and
- (b) at the time it submits an updated Balancing Portfolio Supply Curve under clause 7A.2.9(d).

7B.2.5. Verve Energy must ensure that, for each Trading Interval for which it has made LFAS Submissions under this Chapter 7B, the sum of the MW quantities contained in those LFAS Submissions equals at least the latest forecast LFAS Quantity for that Trading Interval published under clause 7B.3.15(b), if any.

7B.2.6. Verve Energy, in its LFAS Submission for the Verve Energy Balancing Portfolio, must include a cost per MW for providing any Upwards LFAS Backup Enablement and for providing any 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) abide by any enablement or quantity restrictions specified by System Management under clause 2.34.7C(b).

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

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

7B.2.10. A 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 an 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 relating to the LFAS Market.

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

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

- (a) the conduct of the Market Participant;

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

7B.2.14.

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

7B.2.15. A Market Participant must not, for any Trading Interval, offer prices within its LFAS Submission in excess of the Market Participant's reasonable expectation of the incremental change in short run marginal cost incurred by the LFAS Facility providing LFAS when such behaviour relates to market power.

7B.2.16. In determining whether a Market Participant has made an LFAS Submission in accordance with its obligations under this Chapter 7B, the 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.2.17. 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 clauses 7B.2.10, 7B.2.11 or 7B.2.15, the civil penalty amount must be distributed



amongst all Market Participants in proportion to their Market Fees calculated over the previous full 12 months, or part thereof if the Balancing Market Commencement Day was less than 12 months, prior to the date the civil penalty is received.

7B.2.18. Where an LFAS Facility is selected under clauses 7B.3.4(b) or 7B.3.4(c) to provide LFAS in a Trading Interval, then a Market Participant must, as soon as it becomes aware that the LFAS Facility is physically unable to provide some or all of the LFAS Quantity for which it has been selected, advise the IMO and System Management, in the manner and form prescribed by the IMO and System Management respectively, whether the LFAS Facility is physically able to provide any LFAS in that Trading Interval and if so, the quantity, in MW.

7B.2.19. Where an LFAS Facility is selected under clauses 7B.3.4(b) or 7B.3.4(c) to provide LFAS in a Trading Interval, then a Market Participant must, unless it has provided advice to the IMO and System Management under clause 7B.2.18, provide the LFAS in the Trading Interval when required to do so by System Management under the Market Rules.

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

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

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

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

7B.3.4. The IMO must to the extent that it is able:

- (a) determine the LFAS Merit Order for each Trading Interval in an LFAS Horizon for which LFAS Gate Closure has occurred, as soon as reasonably practicable after the LFAS Gate Closure, using the most recent, valid LFAS Submissions available to it;
- (b) select from the LFAS Upwards Merit Order derived under clause 7B.3.4(a) the lowest priced LFAS Upwards Price-Quantity Pair or LFAS Upwards

Price-Quantity Pairs, and associated LFAS Facility or LFAS Facilities, so that:

- i. the capacity in the lowest priced LFAS Upwards Price-Quantity Pair, or the sum of the capacity in the lowest priced LFAS Upwards Price-Quantity Pairs, equals the LFAS Requirement; and
  - ii. if only part of the capacity in the highest priced LFAS Upwards Price-Quantity Pair selected in clause 7B.3.4(b)(i) is required to make up the LFAS Requirement, that LFAS Upwards Price-Quantity Pair is selected for that part of its capacity only;
- (c) select from the LFAS Downwards Merit Order derived under clause 7B.3.4(a) the lowest priced LFAS Downwards Price-Quantity Pair or Pairs, and associated LFAS Facility or Facilities, so that:
- i. the capacity in the lowest priced LFAS Downwards Price-Quantity Pair, or the sum of the capacity in the lowest priced LFAS Downwards Price-Quantity Pairs, equals the LFAS Requirement; and
  - ii. if only part of the capacity in the highest priced LFAS Downwards Price-Quantity Pair selected in clause 7B.3.4(c)(i) is required to make up the LFAS Requirement, that LFAS Downwards Price-Quantity Pair is selected for that part of its capacity only;
- (d) provide to System Management the details of:
- i. the LFAS Facility or Facilities determined under clause 7B.3.4(b) and the associated LFAS Facility quantities and the associated Trading Interval; and
  - ii. the LFAS Facility or Facilities determined under clause 7B.3.4(c) and the associated LFAS Facility quantities and the associated Trading Interval; and
- (e) each time the IMO creates an LFAS Merit Order, publish the highest price selected under each of clauses 7B.3.4(b) and 7B.3.4(c) for each Trading Interval in the LFAS Horizon to which the LFAS Merit Order relates, as soon as reasonably practicable after the determination, but no later than 15 minutes after the LFAS Gate Closure to which the LFAS Merit Order relates.

7B.3.5. The IMO must, to the extent it is reasonably able:

- (a) provide the information referred to in clause 7B.3.4(d) within 15 minutes of the LFAS Gate Closure to which the information relates; and
- (b) notify the Market Participant with the LFAS Facility or Facilities selected under clauses 7B.3.4(b) and 7B.3.4(c) of that selection and the associated LFAS Facility quantities to be provided by Trading Interval, within 15 minutes of the LFAS Gate Closure for that Trading Interval.

7B.3.6. Subject to clauses 7B.3.7, 7B.3.8 and 7B.4.1, System Management must use the LFAS Facilities referred to in clause 7B.3.4(d) for meeting LFAS requirements in the associated Trading Interval in reasonable proportion to the quantities selected under clauses 7B.3.4(b) and 7B.3.4(c), as applicable, and those LFAS Facilities must provide those LFAS requirements.

7B.3.7. Where the IMO is unable to publish an LFAS Merit Order for a Trading Interval in accordance with clause 7B.3.4(d), System Management must use the Registered Facilities of Verve Energy to provide LFAS for that Trading Interval.

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

### **LFAS Price**

7B.3.9. The IMO must, at the time it makes the selection under clause 7B.3.4(b), determine the Upwards LFAS Price for a Trading Interval as the highest price in those selected LFAS Upwards Price-Quantity Pairs.

7B.3.10. The IMO must, at the time it makes the selection under clause 7B.3.4(c), determine the Downwards LFAS Price for a Trading Interval as the highest price in those selected LFAS Downward Price-Quantity Pairs.

7B.3.11. The IMO must, by the end of a Trading Day, publish the LFAS Price for each Trading Interval for that Trading Day.

7B.3.12. If the IMO is unable to determine an LFAS Price under clauses 7B.3.9 or 7B.3.10 in time to publish it in accordance with clause 7B.3.11, the IMO must 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.3.13. Once the IMO has published an LFAS Price under clause 7B.3.11 it cannot be altered by:

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

### **Forecast LFAS Merit Order**

7B.3.14. The IMO must, for each future Trading Interval in the Balancing Horizon for which LFAS Gate Closure has not occurred, determine a forecast LFAS Merit Order.

7B.3.15. Where the IMO determines the forecast LFAS Merit Order under clause 7B.3.14, the IMO must, to the extent it is reasonably able, within a Trading Interval, publish on the Market Web Site to each Market Participant:

- (a) the LFAS Quantities expected to be provided by that Market Participant for each Trading Interval in the Balancing Horizon as indicated by the forecast LFAS Merit Orders;
- (b) any quantities provided to the IMO by System Management under clauses 7B.1.4 and 7B.1.5;
- (c) forecasts of LFAS Prices based upon the forecast LFAS Merit Orders;
- (d) forecasts of LFAS Upwards Merit Orders and LFAS Downwards Merit Orders in the form of anonymous LFAS Upwards Price-Quantity Pairs and LFAS Downwards Price-Quantity Pairs; and
- (e) forecasts of Backup Upwards LFAS Prices and Backup Downwards LFAS Prices for each future Trading Interval in the Balancing Horizon.

7B.3.16. Where the IMO determines the forecast LFAS Merit Order under clause 7B.3.14, the IMO must, to the extent it is reasonably able, within a Trading Interval, provide to System Management the forecast LFAS Merit Order.

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

7B.4.1. Where:

- (a) an LFAS Facility has failed to provide all or part of its LFAS when called upon to do so by System Management in accordance with clause 7B.3.6 or 7B.3.8; or
- (b) the quantity of LFAS in a Trading Interval required by System Management is greater than the most recent LFAS Quantity published under clause (b) for that Trading Interval.

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

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

9.3.3. The IMO must determine the Metered Schedule for each of the following-Facilities Facility types 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.

9.3.4A. 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.

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

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

Where:

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

$$\text{Sum}(n \in P, (\text{IRCR}(n,m) - \text{Sum}(q, \text{CC\_ANSPA}(q,n,m) + \text{Sum}(a \in A, \text{CC\_ASPA}(q,n,m,a))))))$$

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);

~~LF\_Capacity\_Cost(m)~~Capacity\_LF(m) is the total Load Following ~~s~~Service capacity payment cost for Trading Month m as specified ~~by IMO~~ under in clause ~~3.22.1(a)~~9.9.2(g).

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

$$BSA(p,d,t) = MCAP(d,t) \times ADQ(p,d,t) + UDAP(d,t) \times UUDQ(p,d,t) \\ + DDAP(d,t) \times DUDQ(p,d,t) + DIP(p,d,t)$$

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

Where:

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

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

CONC(p,d,t) is the Constrained On Compensation for Market Participant p for Trading Interval t of Trading Day d. For a Market Participant other than Verve Energy, CONC(p,d,t) is the sum of all ConQN x ConPN for each of the Market Participant's Scheduled Generators and Non-Scheduled Generators for Trading Interval t. For Verve Energy, CONC(p,d,t) is the sum of all PConQN x PConPN plus the sum of all ConQN x ConPN for each Stand Alone Facility for Trading Interval t, where ConQN, ConPN, PConQN and PConPN are calculated in accordance with clause 6.17;

COFFC(p,d,t) is the Constrained Off Compensation for Market Participant p for Trading Interval t of Trading Day d. For a Market Participant other than Verve Energy, COFFC(p,d,t) is the sum of all CoffQN x CoffPN for each of the Market Participant's Scheduled Generators and Non-Scheduled Generators for Trading Interval t. For Verve Energy, COFFC(p,d,t) is the sum of all PCoffQN x PCoffPN plus the sum of all CoffQN x CoffPN for each Stand Alone Facility for Trading Interval t, where CoffQN, CoffPN, PCoffQN and PCoffPN are calculated in accordance with clause 6.17; and

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

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;

MCAP(d,t) is the Marginal Cost Administered 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.

- 9.9.1. The Ancillary Service settlement amount for Market Participant p for Trading Month m is:

$$\begin{aligned} \text{ASSA}(p,m) = & \text{Electricity Generation Corporation AS Provider Payment}(p,m) \\ & + \text{ASP\_Payment}(p,m) \\ & - \text{Load\_Following\_Share}(p,m) \\ & \times (\text{Capacity\_LF}(m) + \text{Availability\_Cost\_LF}(m)) \\ & - \text{Reserve\_Cost\_Share}(p,m) \\ & - \text{Consumption\_Share}(p,m) \times \text{Cost\_LRD}(m) \end{aligned}$$

$$\begin{aligned} \text{ASSA}(p,m) = & \text{Verve Energy AS Provider Payment}(p,m) \\ & + \text{ASP\_Payment}(p,m) \\ & + \text{LF\_Market\_Payment}(p,m) \\ & - \text{LF\_Capacity\_Cost\_Share}(p,m) \\ & - \text{LF\_Market\_Cost\_Share}(p,m) \\ & - \text{SR\_Availability\_Cost\_Share}(p,m) \\ & - \text{Consumption\_Share}(p,m) \times \text{Cost\_LRD}(m) \end{aligned}$$

Where

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))  
— ASP\_Balance\_Payment(m) otherwise;~~

the Verve Energy AS Provider Payment(p,m) =  
0 if Market Participant p is not Verve Energy and  
(SR\_Availability\_Payment(m) + Cost\_LRD(m)  
- ASP\_Balance\_Payment(m)) otherwise;

SR\_Availability\_Payment(m) is defined in clause 9.9.2(g);

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

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

~~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;~~

LF\_Market\_Payment(p,m) is defined in clause 9.9.2(d);

LF\_Capacity\_Cost\_Share(p,m) is defined in clause 9.9.2(p);

LF\_Market\_Cost\_Share(p,m) is defined in clause 9.9.2(n);

SR\_Availability\_Cost\_Share(p,m) is defined in clause 9.9.2(l);

~~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; and

~~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);~~

~~Availability\_Cost\_R(m) is the total Spinning Reserve Service 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 total Load Following Service availability payment cost 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 payment cost for Trading Month m as specified by the IMO under clause 3.22.1(g).

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

~~(a) — the total availability cost for Trading Month m;~~

$$\begin{aligned}
\text{Availability\_Cost}(m) = & \\
& 0.5 \times (\text{Margin\_Peak}(m) \times \text{Sum}(t \in \text{Peak}, \text{MCAP}(t) \\
& \times (\text{Capacity\_R\_Peak}(m) - \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t)))) \\
& \pm 0.5 \times (\text{Margin\_Off\_Peak}(m) \times \text{Sum}(t \in \text{Off\_Peak}, \text{MCAP}(t) \\
& \times (\text{Capacity\_R\_Off\_Peak}(m) - \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t)))) \\
& + \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRPayment}(c,m)) \\
& \pm \text{Sum}(c \in \text{CAS\_LF}, \text{ASP\_LFPayment}(c,m))
\end{aligned}$$

(b) the Spinning Reserve cost share for Market Participant p, which is a Market Generator, for Trading Month m:

$$\begin{aligned}
\text{Reserve\_Cost\_Share}(p,m) = & \\
& 0.5 \times (\text{Margin\_Peak}(m) \times \text{Sum}(t \in \text{Peak}, \text{MCAP}(t) \\
& \times \text{Reserve\_Share}(p,t) \\
& \times (\text{Capacity\_R\_Peak}(m) - \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t)) - 0.5 \times \\
& \text{LFR}(m))) \\
& \pm 0.5 \times (\text{Margin\_Off\_Peak}(m) \times \text{Sum}(t \in \text{Off\_Peak}, \text{MCAP}(t) \\
& \times \text{Reserve\_Share}(p,t) \\
& \times (\text{Capacity\_R\_Off\_Peak}(m) - \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRQ}(c,t)) \\
& - 0.5 \times \text{LFR}(m))) \\
& \pm \text{Sum}(t \in T, \text{Reserve\_Share}(p,t) \\
& \times \text{Sum}(c \in \text{CAS\_SR}, \text{ASP\_SRPayment}(c,m) / \text{TITM}))
\end{aligned}$$

(c) the total Spinning Reserve availability cost for Trading Month m:

$$\begin{aligned}
\text{Availability\_Cost\_R}(m) = & \\
& \text{Sum}(p \in P, \text{Reserve\_Cost\_Share}(p,m))
\end{aligned}$$

(d) the total Load Following availability cost for Trading Month m:

$$\begin{aligned}
\text{Availability\_Cost\_LF}(m) = & \\
& \text{Availability\_Cost}(m) - \text{Availability\_Cost\_R}(m)
\end{aligned}$$

(a) the payment to Market Participant p for providing upwards LFAS in Trading Interval t:

$$\begin{aligned}
\text{LF\_Up\_Market\_Payment}(p,t) = & \\
& \text{LF\_Up}(p,t) \times \text{LF\_Up\_Price}(t) \\
& + \text{LF\_Up\_Backup}(p,t) \times \text{LF\_Up\_Backup\_Price}(p,t)
\end{aligned}$$

(b) the payment to Market Participant p for providing downwards LFAS in Trading Interval t:

$$\begin{aligned}
\text{LF\_Down\_Market\_Payment}(p,t) = & \\
& \text{LF\_Down}(p,t) \times \text{LF\_Down\_Price}(t) \\
& + \text{LF\_Down\_Backup}(p,t) \times \text{LF\_Down\_Backup\_Price}(p,t)
\end{aligned}$$

(c) the total payment to Market Participant p for Load Following Service in Trading Interval t:

$$\begin{aligned}
\text{LF\_Market\_Payment}(p,t) = & \\
& \text{LF\_Up\_Market\_Payment}(p,t) + \text{LF\_Down\_Market\_Payment}(p,t)
\end{aligned}$$

(d) the total payment to Market Participant p for Load Following Service in Trading Month m:

$$\text{LF\_Market\_Payment}(p,m) = \text{Sum}(t \in T, \text{LF\_Market\_Payment}(p,t))$$

(e) the total payment to all Market Participants for Load Following Service in Trading Interval t:

$$\text{LF\_Market\_Payment}(t) = \text{Sum}(p \in P, \text{LF\_Market\_Payment}(p,t))$$

(f) the total payment to all Market Participants for Spinning Reserve Service in Trading Interval t:

$$\begin{aligned} \text{SR\_Availability\_Payment}(t) = & 0.5 \times \text{Margin}(t) \times \text{Balancing\_Price}(t) \\ & \times \max(0, \text{SR\_Capacity}(t) - \text{LF\_Up\_Capacity}(t)) \\ & - \text{Sum}(c \in \text{CAS\_SR,ASP\_SRQ}(c,t)) \\ & + \text{Sum}(c \in \text{CAS\_SR,ASP\_SRPayment}(c,m) / \text{TITM}) \end{aligned}$$

(g) the total payment to Market Participants for Spinning Reserve Service in Trading Month m:

$$\text{SR\_Availability\_Payment}(m) = \text{Sum}(t \in T, \text{SR\_Availability\_Payment}(t))$$

(h) the assumed total cost of Spinning Reserve Service if no Spinning Reserve was provided by Load Following plant and without the Ancillary Service cost saving, in Trading Interval t:

$$\begin{aligned} \text{SR\_NoLF\_Cost}(t) = & 0.5 \times \text{Margin}(t) \times \text{Balancing\_Price}(t) \\ & \times \max(0, \text{SR\_Capacity}(t) - \text{Sum}(c \in \text{CAS\_SR,ASP\_SRQ}(c,t))) \\ & + \text{Sum}(c \in \text{CAS\_SR,ASP\_SRPayment}(c,m) / \text{TITM}) \end{aligned}$$

(i) the Ancillary Service cost saving, derived through the dual use of plant to simultaneously provide Spinning Reserve Service and Load Following Service in Trading Interval t in Trading Month m:

$$\begin{aligned} \text{AS\_Cost\_Saving}(t) = & 0.5 \times \text{Margin}(t) \times \text{Balancing\_Price}(t) \\ & \times \min(\text{LF\_Up\_Capacity}(t), \\ & \text{SR\_Capacity}(t) - \text{Sum}(c \in \text{CAS\_SR,ASP\_SRQ}(c,t))) \end{aligned}$$

(j) the allocation factor for the Ancillary Service cost saving in Trading Interval t:

$$\text{AS\_Saving\_Factor}(t) = \frac{\text{LF\_Market\_Payment}(t)}{\text{LF\_Market\_Payment}(t) + \text{SR\_NoLF\_cost}(t)}$$

(k) LF Up Capacity(t) is the capacity necessary to cover the requirement for providing upwards LFAS for Trading Interval t:

$$\underline{LF\_Up\_Capacity(t) = \text{Sum}(p \in P, LF\_Up(p,t) + LF\_Up\_Backup(p,t))}$$

(l) the Spinning Reserve availability cost share for Market Participant p, which is a Market Generator, for Trading Month m:

$$\begin{aligned} \underline{SR\_Availability\_Cost\_Share(p,m) =} \\ & \underline{\text{Sum}(t \in T, SR\_Share(p,t) \times} \\ & \underline{((0.5 \times \text{Margin}(t) \times \text{Balancing\_Price}(t)} \\ & \underline{\times \max(0, SR\_Capacity(t) - LF\_Up\_Capacity(t)} \\ & \underline{- \text{Sum}(c \in CAS\_SR, ASP\_SRQ(c,t)))}} \\ & \underline{+ \text{Sum}(c \in CAS\_SR, ASP\_SRPayment(c,m) / TITM)}} \\ & \underline{+ (\text{AS\_Saving\_Factor}(t) \times \text{AS\_Cost\_Saving}(t))}} \end{aligned}$$

(m) the total Spinning Reserve availability cost for Trading Month m:

$$\begin{aligned} \underline{SR\_Availability\_Cost(m) =} \\ & \underline{\text{Sum}(p \in P, SR\_Availability\_Cost\_Share(p,m))} \end{aligned}$$

(n) the Load Following market cost share for Market Participant p for Trading Month m:

$$\begin{aligned} \underline{LF\_Market\_Cost\_Share(p,m) =} \\ & \underline{\text{Sum}(t \in T, LF\_Share(p,m)} \\ & \underline{\times (LF\_Market\_Payment}(t) \\ & \underline{- \text{AS\_Saving\_Factor}(t) \times \text{AS\_Cost\_Saving}(t))}} \end{aligned}$$

(o) the total Load Following market cost for Trading Month m:

$$\begin{aligned} \underline{LF\_Market\_Cost(m) =} \\ & \underline{\text{Sum}(p \in P, LF\_Market\_Cost\_Share(p,m))} \end{aligned}$$

(p) the Load Following capacity cost share for Market Participant p for Trading Month m:

$$\begin{aligned} \underline{LF\_Capacity\_Cost\_Share(p,m) =} \\ & \underline{(\text{Monthly\_Reserve\_Capacity\_Price}(m) / TITM)} \\ & \underline{\times \text{Sum}(t \in T, LF\_Share(p,m) \times LF\_Up\_Capacity(t))} \end{aligned}$$

(q) the total Load Following capacity cost for Trading Month m:

$$\begin{aligned} \underline{LF\_Capacity\_Cost(m) =} \\ & \underline{\text{Sum}(p \in P, LF\_Capacity\_Cost\_Share(p,m))} \end{aligned}$$

Where

t denotes a Trading Interval in Trading Month m;

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

LF\_Up(p,t) is the sum of any Ex-post Upwards LFAS Enablement quantities provided under clause 7.13.1(e) for LFAS Facilities registered to Market Participant p in Trading Interval t;

LF\_Up\_Price(t) is the Upwards LFAS Price for Trading Interval t;

LF Up Backup(p,t) is the sum of any Upwards LFAS Backup Enablement quantities for Trading Interval t if Market Participant p is Verve Energy and 0 otherwise;

LF Up Backup Price(p,t) is the Backup Upwards LFAS Price for Trading Interval t if Market Participant p is Verve Energy and 0 otherwise;

LF Down(p,t) is the sum of any Ex-post Downwards LFAS Enablement quantities provided under clause 7.13.1(eC) for LFAS Facilities registered to Market Participant p in Trading Interval t;

LF Down Price(t) is the Downwards LFAS Price for Trading Interval t;

LF Down Backup(p,t) is the sum of any Downwards LFAS Backup Enablement quantities for Trading Interval t if Market Participant p is Verve Energy and 0 otherwise;

LF Down Backup Price(p,t) is the Backup Downwards LFAS Price for Trading Interval t if Market Participant p is Verve Energy and 0 otherwise;

Balancing\_Price(t) is the Balancing Price for Trading Interval t;

c denotes a Contracted Ancillary Service;

CAS\_SR is the set of Contracted Spinning Reserve Services;

~~CAS\_LF is the set of Contracted Load Following Services;~~

P is the set of all Market Participants;

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 in Trading Interval t multiplied by 2, ~~in~~ to convert to units of MW;

ASP\_SRPayment(c,m) is defined in clause 9.9.4;

~~ASP\_LFPayment(c,m) is defined in clause 9.9.4;~~

TITM is the number of Trading Intervals in Trading Month m (excluding any Trading Intervals prior to Energy Market Commencement);

~~Reserve\_Share(p,t)~~ SR\_Share(p,t) is the share of the Spinning Reserve Service payment costs allocated to Market Participant p in Trading Interval t, where this is to be determined by the IMO using the methodology described in clause 3.14.2;

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

Margin(t) is Margin\_Peak(m), if Trading Interval t is a Peak Trading Interval and Margin\_Off-Peak(m), if Trading Interval t is a Off-Peak Trading Interval;

Margin\_Peak(m) is the reserve availability payment margin applying for Peak Trading Intervals for Trading Month m as specified by 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);

SR Capacity(t) is SR Capacity\_Peak(m), if Trading Interval t is a Peak Trading Interval; and SR Capacity\_Off-Peak(m) if Trading Interval t is an Off-Peak Trading Interval;

SR Capacity\_Peak(m), 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);

SR Capacity\_Off-Peak(m), 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);~~

Ex-post Upwards LFAS Enablement(t) is the sum of the quantities provided under clause 7.13.1(e) for Trading Interval t; and

Upwards LFAS Backup Enablement(t) is any quantity provided under clause 7.13.1(eA) for Trading Interval t.

~~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;~~

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

~~Off-Peak is the set of Off-Peak Trading Intervals in Trading Month m.~~

- 9.9.3. The value of ASP\_Payment(i,m) for Rule Participant i in Trading Month m is the sum of:
- (a) the sum over all Contracted Spinning Reserve Services c provided by Rule Participant i of ASP\_SRPayment(c,m);
  - (b) ~~[Blank]the sum over all Contracted Load Following Services c provided by Rule Participant i of ASP\_LFPayment(c,m);~~
  - (c) the sum over all Contracted Load Rejection Reserve Services c provided by Rule Participant i of ASP\_LRPayment(c,m);
  - (d) the sum over all Contracted System Restart Services c provided by Rule Participant i of ASP\_BSPayment(c,m); and

(e) the sum over all Contracted Dispatch Support Services  $c$  provided by Rule Participant  $i$  of  $ASP\_DSPayment(c,m)$ ,

where 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.

9.9.3A. The value of  $ASP\_Balance\_Payment(m)$  for Trading Month  $m$  is:

$$\begin{aligned} ASP\_Balance\_Payment(m) = & \\ & \text{Sum}(c \in CAS\_SR, ASP\_SRPayment(c,m)) + \\ & \text{Sum}(c \in CAS\_LF, ASP\_LFPayment(c,m)) + \\ & \text{Min}(\text{Cost\_LR}(m), \text{Sum}(c \in CAS\_LR, ASP\_LRPayment(c,m))) \\ & + \text{Sum}(c \in CAS\_BS, ASP\_BSPayment(c,m)), + \\ & \text{Sum}(c \in CAS\_DS, ASP\_DSPayment(c,m)) \end{aligned}$$

Where

$c$  denotes a Contracted Ancillary Service;

$CAS\_SR$  is the set of Contracted Spinning Reserve Services;

~~$CAS\_LF$  is the set of Contracted Load Following 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;

$\text{Cost\_LR}(m)$  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.

9.9.3B. The value of  $\text{Cost\_LR\_Shortfall}(m)$  for Trading Month  $m$  is:

$$\begin{aligned} \text{Cost\_LR\_Shortfall}(m) = & \\ & \text{Max}(0, \text{Sum}(c \in CAS\_LR, ASP\_LRPayment(c,m))) \\ & + \text{Sum}(c \in CAS\_BS, ASP\_BSPayment(c,m)) \\ & - \text{Cost\_LR}(m) \end{aligned}$$

Where

$c$  denotes a Contracted Ancillary Service;

$CAS\_LR$  is the set of Contracted Load Rejection Reserve Services;

$CAS\_BS$  is the set of Contracted System Restart Services;

$\text{Cost\_LR}(m)$  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<sub>i</sub>; and

each of the terms ASP\_LRPayment(c,m) and ASP\_BSPayment(c,m) is determined in accordance with clause 9.9.4.

9.9.4. For each Contracted Ancillary Service c, the payment ASP\_SRPayment(c,m) for Spinning Reserve Service, ~~ASP\_LFPayment(c,m) for Load Following Service,~~ ASP\_LRPayment(c,m) for Load Rejection Reserve Service, ASP\_BSPayment(c,m) for System Restart Service or ASP\_DSPayment(c,m) for Dispatch Support Service, as applicable, 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
- (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:

$$\text{COCSA}(p,m) = (\text{Com\_Compensation}(p,m) + \text{Out\_Compensation}(p,m)) - \text{Consumption\_Share}(p,m) \times \text{Sum}(q, \text{Com\_Compensation}(q,m) + \text{Out\_Compensation}(q,m))$$

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 Month m is:~~

~~If Market Participant p is the Electricity Generation Corporation~~

~~$$\text{NCC}(p,m) = \text{Sum}(t \in T, \text{CP}(t) \times \text{ABS}[\text{NCQ}(p,t)])$$~~

~~Otherwise~~

~~$$\text{NCC}(p,m) = 0$$~~

~~Where~~



~~T is the set of all Trading Intervals in Trading Month m, where “t” refers to a member of that set;~~

~~CP(t) is the non-compliance cost applicable in Trading Interval t as specified in clause 9.10A.2;~~

~~NCQ(p,t) is the MWh quantity of non-compliance for Market Participant p for Trading Interval t as specified by System Management in accordance with clause 7.13.1A(a); and~~

~~ABS[NCQ(p,t)] means the mathematical absolute value of NCQ(p,t).~~

~~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:

$$RSA(p,m) = (-1) \times \text{Consumption\_Share}(p,m) \times (\text{Sum}(q \in P, d \in D, t \in T, BSA(q,d,t)) \mp \text{Sum}(q \in P, NCC(q,m))) + \text{Cost\_LR\_Shortfall}(m)$$

Where

Consumption\_Share(p,m) is the proportion of consumption associated with Market Participant p for Trading Month m determined by 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;~~

Cost\_LR\_Shortfall(m) is determined ~~is~~ in accordance with clause 9.9.3B;

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

D is the set of all Trading Days in Trading Month m, where “d” is used to refer to a member of that set; and

T is the set of all Trading Intervals in Trading Day d, where “t” refers to a member of that set.

9.18.3. 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 Maximum Theoretical Energy Schedule and the Minimum 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~~ clause 9.18.3(c)(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~~
- viii(A). any ConQN, CoffQN, PConQN, PCoffQN, Non Qualifying Constrained On Generation and Non Qualifying Constrained Off Generation under Chapter 6; in the case of the Electricity Generation Corporation the MWh quantity of non-compliance; and
- viiiB. details of any Non-Balancing Facility Dispatch Instruction Payment;
- viiiC. the Metered Balancing Quantity for the Market Participant;
- ix. details of amounts calculated for the Market Participant under clauses 9.7 to 9.14 with respect to:
  - 1. Reserve Capacity settlement;
  - 2. Balancing settlement;
  - 3. Ancillary Services settlement;
  - 4. ~~Commitment and outage~~ 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 to be made;
- (d) whether the statement is an adjusted Non-STEM Settlement Statement and replaces a previously issued Non-STEM Settlement Statement;
- (e) in the case of an adjusted Non-STEM Settlement Statement, details of all adjustments made relative to the first Non-STEM Settlement Statement issued for that Trading Month with an explanation of the reasons for the adjustments;
- (f) any interest applied in accordance with clause 9.1.3;
- (g) the net dollar amount owed by the Market Participant to 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), 9.16.2(e), and 9.16.4(d) (as applicable), except as provided for in clause 9.24.

10.2.2. 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) ~~[Blank]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 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, 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~~ clause 10.2.3(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) the IMO ~~can~~may declare incomplete working documents of System Management to be System Management Confidential; ~~and~~
- (g) subject to this clause 10.2.3, 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, has a confidentiality status of Public;
- (i) information already known to a person, other than by reason of a breach of existing confidentiality obligations, is available to that person;
- (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; and
- (k) information that may be aggregated or provided in a form that does not disclose material that would otherwise be confidential, is to be Public.

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, is or becomes available in the public domain;
- (b) that, other than as a result of a breach of confidentiality obligations, is or becomes~~already~~ known to ~~the~~ person 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; or
- (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. A Rule Participant may disclose information or a document to:

- (a) any person (including another Rule Participant) where the confidentiality status of the information or document is set as Public by the IMO under clause 10.2.1;
- (b) ~~[Blank]any other Rule Participant where the confidentiality status of the information or document is set as SWIS Restricted by the IMO under clause 10.2.1;~~

- (c) the specific Rule Participant able to receive the information or document in accordance with the confidentiality status, where the confidentiality status of the information or document is set as either Rule Participant Market Restricted or Rule Participant Dispatch Restricted by the IMO under clause 10.2.1; or
- (d) a Representative of the Rule Participant or a Representative of any person able to receive the information or document under ~~paragraphs~~ clauses 10.2.6(a), 10.2.6(b) or 10.2.6(c).

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:

- (a) the following Market Rule and Market Procedure information and documents:
  - i. information on the records that must be maintained by Rule Participants;
  - ii. 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~~ 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; and
  - 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;
  - iiiA. for each Market Participant that was assigned Certified Reserve Capacity, the level of Certified Reserve Capacity assigned to each to Facility for each Reserve Capacity Cycle;
  - iv. for each Market Participant holding Capacity Credits, the Capacity Credits provided by each Facility for each Reserve Capacity Cycle;
  - v. the identity of each Market Participant from which the IMO procured Capacity Credits in the most recent Reserve Capacity Auction, and the total amount procured, where this information is to be published by January 7th of the year following the Reserve Capacity Auction;
  - vi. for each Special Price Arrangement for each Registered Facility:
    - 1. the amount of Reserve Capacity covered;
    - 2. the term of the Special Price Arrangement; and
    - 3. the Special Reserve Capacity Price applicable to the Special Price Arrangement,



where this information is to be current as at, and published on, January 7th of each year;

- 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 outcomes of Reserve Capacity Tests and reasons for delays in those tests, as required by clause 4.25.11; ~~and~~
  - 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; and
  - x. The following information identified for a Reserve Capacity Cycle under the Relevant Level Methodology:
    - 1. the Existing Facility Load for Scheduled Generation for each Trading Interval in the five year period determined under step 1(a) of the Relevant Level Methodology; and
    - 2. the 12 Trading Intervals occurring on separate Trading Days with the highest Existing Facility Load for Scheduled Generation for each 12 month period in the five year period; ~~;~~
- (g) the Ancillary Service report referred to in clause 3.11.11;
- (h) for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
- i. the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to ~~the Electricity Generation Corporation~~ Verve Energy;
  - ii. the sum of the Metered Schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Market Participants other than ~~the Electricity Generation Corporation~~ Verve Energy; and
  - iii. the sum of the Resource Plan schedule generation for Scheduled Generators and Non-Scheduled Generators registered to Market Participants other than ~~the Electricity Generation Corporation~~ Verve Energy;
- (i) the following STEM summary information:

- i. for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
  - 1. the total STEM Offer quantity;
  - 2. the total STEM Bid quantity;
  - 3. whether the STEM was suspended in relation to the relevant Trading Interval;
  - 4. where the STEM was not suspended, the STEM quantity purchased by the IMO; and
  - 5. where the STEM was not suspended, the STEM Clearing Price;
- ii. 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 STEM Offers by Market Participant;
  - 2. the STEM Bids by Market Participant;
  - 3. the quantity bought or sold in the STEM by Market Participant; and
  - 4. the Fuel Declaration, Availability Declaration and, if applicable, Ancillary Service Declaration made by the Market Participant;

(iA) the following Balancing summary information:

- i for each Trading Interval in each completed Trading Day in the previous 12 calendar months:
  - 1. where available, each Balancing Forecast;
  - 2. where available, the BMO, excluding information that would identify specific Market Participants;
  - 3. where available, the Relevant Dispatch Quantity; and
  - 4. where available, the Balancing Price;
- ii. for each Trading Interval in each completed Trading Day in the previous 12 calendar months, before the end of the seventh day from the start of the Trading Day:
  - 1. the prices in Balancing Price-Quantity Pairs submitted in Balancing Submissions by Market Participant; and
  - 2. the Fuel Declaration, Availability Declaration and, if applicable, Ancillary Service Declaration made by Market Participant;

(iB) the following LFAS summary information for each Trading Interval in each completed Trading Day in the previous 12 calendar months:

- i. the LFAS Downwards Merit Order;
  - ii. the LFAS Upwards Merit Order;
  - iii. where available, the Upwards LFAS Quantity and the Downwards LFAS Quantity; and
  - iv. where available, the LFAS Price;
- (iC) for each Trading Interval in each completed Trading Day in the previous 12 calendar months, before the end of the seventh day from the start of the Trading Day, the LFAS Submissions 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 the Balancing Price, the LFAS Price, the Backup Downwards LFAS Price and the Backup Upwards LFAS 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;
  - iv. estimates of the energy not served due to involuntary load curtailment; and
  - v. any shortfalls in Ancillary Services;
- ~~(jA)~~
- i. for each Trading Interval in each completed Trading Day in the previous 12 calendar months, before the end of the seventh day from the start of the Trading Day, any changes to a Facility's Consumption Decrease Price or Consumption Increase Price; and
  - ii. the values of any Consumption Decrease Price or Consumption Increase Price of a Facility that has been dispatched pursuant to a Dispatch Instruction, as soon as practicable;
- ~~(jB)~~ for each Trading Month which has been settled under Chapter 9, reports providing the MWh quantities of energy dispatched under Network Control Service Contracts, by Facility, and by Trading Interval, as specified by System Management in accordance with clause 7.13.1(dA);
- ...
- ~~(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;

...

(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 the 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;
- ii. the total Spinning Reserve in that Trading Interval; and
- 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 Non-Balancing 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; and
- iii. the Settlement System software; and
- (zH) information relating to Commissioning Tests which is supplied under clause 3.21A.16 by System Management.

10.5.2. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Public:

- (a) SCADA data by Facility;
- (b) the sum of each LF Up Market Payment referred to in clause 9.9.2(a) that was made in a Trading Month;
- (c) the sum of each LF Down Market Payment referred to in clause 9.9.2(b) that was made in a Trading Month;
- (d) the sum of each total Trading Month LF Market Payment referred to in clause 9.9.2(d) that was made in a Trading Month;
- (e) the payment referred to in clause 9.9.2(e) for each Trading Interval in a Trading Month;
- (f) the payment referred to in clause 9.9.2(f) for each Trading Interval in a Trading Month;
- (g) the payment referred to in clause 9.9.2(g);
- (h) the cost referred to in clause 9.9.2(h) for each Trading Interval in a Trading Month;
- (i) the cost referred to in clause 9.9.2(i) for each Trading Interval in a Trading Month;
- (j) the cost referred to in clause 9.9.2(m);
- (k) the cost referred to in clause 9.9.2(o); and
- (l) the cost referred to in clause 9.9.2(p).

## **10.6. [Blank]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.~~

10.7.1. 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, and 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

10.8.1. ~~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.~~ [Blank]

10.8.2. The IMO must set the class of confidentiality status for all ~~Electricity Generation Corporation~~ Verve Energy information specified in clause 7.6A as Rule Participant Dispatch Restricted Information with the exception of information specified by ~~the Electricity Generation Corporation~~ Verve Energy under clauses 7.6A.2(g) and 7.6A.3(c).



# 11 Glossary

**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 ~~Rule~~Market Participant, and ~~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; or
- (c) for a Rule Participant that is not a body corporate, a person who is legally able to bind that Rule Participant.

**Available Capacity:** Means, for a Trading Interval, the sent out capacity, in MW, of a Scheduled Generator or a Non-Scheduled Generator that was not subject to an Outage notified to the IMO under clause 7.13.1A(b).

**Backup Downwards LFAS Price:** Means the cost referred to in clause 7B.2.6 for Verve Energy providing Downwards LFAS Backup Enablement.

**Backup Upwards LFAS Price:** Means the cost referred to in clause 7B.2.6 for Verve Energy providing Upwards LFAS Backup Enablement.

**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 technical and communication criteria that a Balancing Facility, or a type of Balancing Facility, must meet, which are set out in the Market Procedure developed under clause 7A.1.6.

**Balancing Final Rule Change Report:** Has the meaning given in clause 1.10.1.

**Balancing Forecast:** Means a forecast, determined by the IMO in accordance with the Balancing Forecast Market Procedure, for a Trading Interval, of the following:

- (a) the Relevant Dispatch Quantity for the Trading Interval;
- (b) the aggregate output of all Non-Scheduled Generators which are Balancing Facilities for the Trading Interval; and
- (c) the Balancing Price for the Trading Interval. .

**Balancing Forecast Market Procedure:** Means the Market Procedure developed under clause 7A.3.20.

**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.1.16 or 7A.1.17, as applicable.

**Balancing Horizon:** Means:

- (a) from 8:00 AM the day before the Balancing Market Commencement Day and to 6:00 PM on the Balancing Market Commencement Day, the 24 hour period occurring for the Trading Day (8:00 AM to 8:00 AM) of the Balancing Market Commencement Day; and
- (b) from 6:00 PM on the Balancing Market Commencement Day, the 38 hour period from 6:00 PM on the Balancing Market Commencement Day to the end of the Trading Day after the end of the Balancing Market Commencement; and
- (c) from 6:00 PM every day thereafter, the 38 hour period from 6:00 PM to the end of the next Trading Day at 8:00 AM.

**Balancing Market:** Means the market operated under Chapter 7A in which Facilities, including the Verve Energy Balancing Portfolio as a single Facility, can manage their contractual positions and meet supply and consumption deviations from contracted bilateral and STEM positions in each Trading Interval.

**Balancing Market Commencement Day:** Means the Trading Day determined by the IMO under clause 7A.1.2.

**Balancing Market Objectives:** Means the objectives listed in clause 7A.1.3.

**Balancing Merit Order or BMO:** Means the ordered list of Balancing Facilities, and associated quantities, determined by the IMO under clause 7A.3.2.

**Balancing Price:** For a Trading Interval means the price determined under clause 7A.3.10.

**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, at which the Market Participant is prepared to provide 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, at which the Market Participant is prepared to provide 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, at which Verve Energy is prepared to provide from the sum of all of its Sent Out Capacity for each Facility in the Verve Energy Balancing Portfolio by the end of the Trading Interval.

**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, calculated in accordance with the Market Procedure and published under clause 7A.3.17(a).

**Balancing Submission:** Means:

- (a) for a Balancing Facility, other than the Verve Energy Balancing Portfolio, that is:
  - i. a Scheduled Generator, for each Trading Interval or Trading Intervals, a ranking of Balancing Price-Quantity Pairs for each MW of its Sent Out Capacity from zero capacity to the maximum Sent Out Capacity, together with associated Ramp Rate Limit for each Trading Interval; and
  - ii. a Non-Scheduled Generator, for each Trading Interval or Trading Intervals, the Market Generator's best estimate of the quantity for the Balancing Price-Quantity Pair, in MW, the Facility is able to reduce its output, together with the associated Ramp Rate Limit for each Trading Interval; and
- (b) for the Verve Energy Balancing Portfolio, the Balancing Portfolio Supply Curve together with the Portfolio Ramp Rate Limit.

**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.

~~**Commitment Compensation:** The amount calculated in accordance with clauses 6.18.2.~~

**Constrained Off Compensation Price:** Has the meaning given in clause 6.17.4 and 6.17.4A.

**Constrained Off Quantity:** Has the meaning given in clause 6.17.4 and 6.17.4A.

**Constrained Off Portfolio Quantity:** Has the meaning given in clause 6.17.5A.

**Constrained On Compensation Price:** Has the meaning given in clause 6.17.3, 6.17.3A or clause 6.17.5.

**Constrained On Quantity:** Has the meaning given in clause 6.17.3 and 6.17.3A.

**Consumption Decrease Price:** A price specified in items (h)(vi), (i)(xA)(3) or (i)(xA)(4) of Standing Balancing 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 (i)(xA)(1) or (i)(xA)(2) of Standing Balancing 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 Load Following Service:** A Load Following Service provided by a Rule Participant under an Ancillary Service Contract.~~

**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.

**Dispatch Criteria:** Means the criteria under clause 7.6.1.

**Dispatch Instruction Payment (DIP):** Has the meaning given in clause 6.17.6.

**Dispatch Merit Order:** An ordered list of Scheduled Generators and Dispatchable Loads registered by Market Participants, other than the Electricity Generation Corporation, 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.

**Dispatch Order:** Means an instruction by System Management under clause 7.6A for a Facility or Facilities in the Verve Energy Balancing Portfolio to vary output or consumption 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 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.

**Downward Deviation Administered Price (DDAP):** The amount calculated under clause 6.14.6.

**Downward Unauthorised Deviation Quantity (DUDQ (p, d, t)):** The amount calculated in accordance with clause 6.17.4.

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

**Downwards LFAS Enablement:** Means, for 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.3.4(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.3.10 or clause 7B.3.12 and published under clause 7B.3.11.

**Downwards LFAS Quantity:** Means the capacity, in MW, of downwards Load Following Service required by System Management for a Trading Interval.

**Downwards Out of Merit Generation:** Has the meaning given in clauses 6.16A.2 and 6.16B.2, as applicable.

**Electricity Corporations Act:** Means the Electricity Corporations Act 2005 (WA).

**Electricity Industry Act:** Means the 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.

**EOI Quantity:** Means the quantity, in MW, at which a Scheduled Generator or a Non-Scheduled Generator was operating as at the end of a Trading Interval, which must equal the SOI Quantity for the next Trading Interval.

**Equipment Test:** has the meaning given in clause 3.21AA.1.

**Ex-post Downwards LFAS Enablement:** Means the capacity, in MW, of an LFAS Facility that was activated to provide downwards LFAS at the end of a Trading Interval.

**Ex-post Upwards LFAS Enablement:** Means the capacity, in MW, of an LFAS Facility that was activated to provide upwards LFAS at the end of a Trading Interval.

**External Constraint:** Means an event impacting the operation of the whole of the SWIS, or any significant part of it.

**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 Tolerance Range:** Means ~~the amount, determined by System Management under clause 2.13.6E-(b)(iii) of the Market Rules in relation to a specific Facility, as varied under clauses 2.13.6G or 2.13.6H, as applicable, 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.~~

**Forecast BMO:** Means a forecast of the BMO for future Trading Intervals in the Balancing Horizon determined by the IMO in accordance with the Balancing Forecast Market Procedure.

**IMS:** Mean the Information Management System.

**IMS Interface Market Procedure:** Means the Market Procedure developed under clause 2.36.9.

**Increased LFAS Quantity:** Means the capacity, in MW, of LFAS which is the difference between the actual capacity of LFAS that was activated in a Trading Interval referred to in clause 7B.4.1(b) and the most recent LFAS Quantity published under clause 7B.3.15(b).

**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.

**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 ranked list of LFAS Submissions determined by the IMO under clause 7B.3.2.

**LFAS Downwards Price-Quantity Pair:** Means for an LFAS Facility and for the Verve Energy Balancing Portfolio:

- (a) the specified non-Loss Factor adjusted capacity, in MW, by which a Market Participant is prepared to have its LFAS Facility, or the Verve Energy Balancing Portfolio, as applicable, activated downwards within a Trading Interval; and
- (b) the non-Loss Factor Adjusted Price, in \$/MW, the Market Participant wants to be paid to have that capacity available within that Trading Interval.

**LFAS 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) either:
  - i. 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
  - ii. each Stand Alone Facility for which LFAS Standing Data has been accepted by the IMO.

**LFAS Facility Requirements:** Means the technical and communication criteria that an LFAS Facility, or a type of LFAS Facility, must meet, which are set out in the Market Procedure in accordance with clause 7B.1.2.

**LFAS Gate Closure:** Means, for the 12 Trading Intervals in an LFAS Horizon, the point in time which is 3 hours immediately before the Balancing Gate Closure for the first of those Trading Intervals.

**LFAS Horizon:** Means a 6 hour period commencing at 8:00 AM, 2:00 PM, 8:00 PM or 2:00 AM, as applicable.

**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 capacity, in MW, of LFAS referred to in clause 7B.4.1(a) which an LFAS Facility has failed to provide.

**LFAS Requirement:** Means the most recent forecast LFAS Quantity published by the IMO under clause 7B.3.15(b).

**LFAS Standing Data:** Means the Standing Data in Appendix 1(j)(ii).

**LFAS Submission:** Means:

- (a) for an LFAS Facility that is:
  - i. a 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. a Non-Scheduled Generator, for a Trading Interval or Trading Intervals, the Market Generator's best estimate of the capacity for the LFAS Price-Quantity Pair, in MW, the Facility is able to be activated downwards 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 ranked list of LFAS Submissions determined by the IMO under clause 7B.3.1.

**LFAS Upwards Price-Quantity Pair:** Means for an LFAS Facility and for the Verve Energy Balancing Portfolio:

- (a) the specified non-Loss Factor adjusted capacity, in MW, by which a Market Participant is prepared to have its LFAS Facility, or the Verve Energy Balancing Portfolio, as applicable, activated upwards within a Trading Interval;
- (b) the non-Loss Factor Adjusted Price, in \$/MW, the Market Participant wants to be paid to have that capacity available within that Trading Interval.

**Load Following Service or LFAS:** Has the meaning given in clause 3.9.1.

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

**Load Rejection Reserve Response:** Means a load rejection reserve response by a Facility in accordance with clause 3.9.7.

**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.

**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 Price:** Means, in respect of any price, that price divided by any applicable Loss Factor for the relevant Facility but any resulting price exceeding the Price Caps, must be adjusted to the relevant Price Cap.

**Marginal Cost Administered Price (MCAP):** ~~The dollar per MWh price calculated in accordance with clause 6.14.2.~~

**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 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.

**Maximum Theoretical Energy Schedule:** Means the schedule determined under clause 6.15.1.

**Metered Balancing Quantity:** Has the meaning given in clause 6.17.2.

**Minimum LFAS Quantity:** Means the minimum quantity of LFAS that may be specified in an LFAS Price-Quantity Pair, as determined by System Management in accordance with clause 7B.1.2(a), and which is published by the IMO on the Market Web Site.

**Minimum STEM Price:** Means negative \$1,000.00 per MWh. 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.

**Minimum Theoretical Energy Schedule:** Means the schedule determined under clause 6.15.2.

**Monitoring and Reporting Protocol:** The Market 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 Market Procedure developed by the IMO in accordance with clauses 2.15.1 and, 2.15.7 and, as amended from time to time in accordance with clauses 2.9 and 2.10.

**Net Bilateral Position:** Means in relation to a Market Participant, the amount calculated under clause 6.9.2.

**Network Operator:** A person who registers as a Network Operator, in accordance with clauses 2.28.2, 2.28.3 or 2.28.4.

**Non-Balancing Dispatch Merit Order:** An ordered list of Scheduled Generators, Demand Side Programmes and Dispatchable Loads registered by Market Participants, other than Verve Energy, determined by the IMO in accordance with clause 6.12.1.

**Non-Balancing Facility:** Means a Registered Facility that is not a Balancing Facility.

**Non-Balancing Facility Dispatch Instruction Payment or DIP:** Has the meaning given in clause 6.17.6.

**Non-Qualifying Constrained Off Generation:** Has the meaning given in clause 6.17.4(e) or 6.17.5A(e).

**Non-Qualifying Constrained On Generation:** Has the meaning given in clause 6.17.3(e) or 6.17.5(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 clauses 2.29.4(a) or 2.29.4(d).

**Operating Instruction:** Means an instruction issued by System Management requiring a Facility to increase or decrease its output or decrease its consumption to meet the requirements of:

- (a) a Network Control Service Contract;
- (b) an Ancillary Service Contract;
- (c) a Test under these Market Rules;
- (d) a Supplementary Capacity Contract; or
- (e) Ancillary Services, other than LFAS but including LFAS Backup Enablement, to be provided by Facilities other than Facilities in the Verve Energy Balancing Portfolio.

**~~Operational System Load Estimate:~~** Has the meaning given in clause 6.14.4(a). ~~Means, for a Trading Interval, System Management's estimate of the total Loss Factor adjusted MWh consumption supplied via the SWIS during that Trading Interval, which is to equal the total Loss Factor adjusted Scheduled Generator and Non-Scheduled Generator sent out energy as estimated by System Management from Scheduled Generator and Non-Scheduled Generator operational meter data and the use of state estimator systems.~~

**Outage:** Means a Forced Outage, a Planned Outage or a Consequential Outage.

**Out of Merit:** Means dispatch of a Balancing Facility for a quantity different to that specified for the Facility in the BMO taking into account the Ramp Rate Limit and the Relevant Dispatch Quantity in the applicable Trading Interval for the Balancing Facility.

**Portfolio Constrained Off Compensation Price:** Has the meaning given in clause 6.17.5A.

**Portfolio Constrained On Quantity:** Has the meaning given in clause 6.17.5.

**Portfolio Downwards Out of Merit Generation:** Means the amount calculated in accordance with clause 6.16B.2.

**Portfolio Loss Factor:** For each Trading Interval =  $\text{sum}(\text{Facility}(i) \text{ Sent Out Metered Schedule} \times \text{Loss Factor } (i)) / \text{sum}(\text{Facility } (i) \text{ Sent Out Metered Schedule})$  for all Facilities in the Verve Energy Balancing Portfolio.

**Portfolio Ramp Rate Limit:** Means Verve Energy's best estimate, in MW per minute, on a linear basis, of the Verve Energy Balancing Portfolio's physical ability to increase or decrease its output from the commencement of a Trading Interval.

**Portfolio Settlement Tolerance:** Has the meaning given in clause 6.17.10.

**Portfolio Upwards Out of Merit Generation:** Means the amount calculated in accordance with 6.16B.1.

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

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

**Price Cap:** Means:

- (a) a maximum price of:
  - 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.

**Pricing BMO:** Means the Balancing Merit Order adjusted to take into account:

- (a) the associated Ramp Rate Limits to reflect the physically achievable capacity of the Balancing Facility given the SOI Quantity; and
- (b) for Non-Scheduled Generators, the EOI Quantity.

**Provisional Balancing Price:** Means the price determined under clause 7A.3.8(b).

**Provisional Pricing BMO:** Means the provisional Pricing BMO determined under clause 7A.3.8(a).

**Public:** When used in reference to information confidentiality, ~~an information confidentiality status whereby information~~ or documents that are not confidential and may be made available to any person.

**Ramp Rate Limit:** Means the Market Participant's best estimate, in MW per minute, on a linear basis, of a Facility's physical ability to increase or decrease its output from the commencement of a Trading Interval.

**Regulations:** Any regulations made under the Electricity Industry Act 2004 (WA) but excluding the Electricity Industry (Wholesale Electricity Market) Regulations 2004 (WA).

**Relevant Dispatch Quantity:** Means, for a Trading Interval, the quantity determined under clause 7A.3.7(b).

**Relevant Quantity:** Has the meaning given in clause ~~6.14.4(d)~~.

**Reserve Capacity Deficit:** Has the meaning given in clause 4.26.1A.

**Reserve Capacity Test:** Means a test of the Reserve Capacity associated with a Facility as conducted under clause 4.25.

**Resources Plan Submission:** A submission by a Market Participant to the IMO made in accordance with clause 6.5.

**Scheduled System Load:** Has the meaning given in clause ~~6.14.4(c)~~.

**Sent Out Capacity:** Means:

- (a) for a Balancing Facility, other than the Verve Energy Balancing Portfolio, that is:
  - i. a Scheduled Generator, the capacity provided as the Standing Data in Appendix 1(b)(iii); and
  - ii. a 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.

**Settlement Tolerance:** The quantity determined under clause 6.17.9.

**SOI Quantity:** Means the quantity, in MW, at which a Balancing Facility was operating as at the start of a Trading Interval.

**Spinning Reserve Event:** Means an event which causes a Facility in the Verve Energy Balancing Portfolio, which System Management has instructed to provide Spinning Reserve Service, to provide a Spinning Reserve Response.

**Spinning Reserve Response:** Means a Spinning Reserve response by a Facility in accordance with clause 3.9.3.

**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.

**Stand Alone Facility:** Means a Facility that is accepted by the IMO under clause 7A.4 as a stand alone facility.

**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.

**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 section 4(1)(c) of the Electricity Corporations Act.

**Test:** Means a Commissioning Test or a Reserve Capacity Test.

**Test Plan:** Means a plan approved under Chapter 3 in relation to a Test.

**Tolerance Range:** Means 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.

**Upward Deviation Administered Price (UDAP):** The amount calculated under clause 6.14.5.

**Upward Unauthorised Deviation Quantity (UUDQ):** The amount calculated under clause 6.17.3.

**Upwards LFAS Backup Enablement:** Means the capacity, in MW, of a Registered Facility of Verve Energy which System Management has activated under clause 7B.4.1 in a Trading Interval to compensate for a shortfall in Upwards LFAS Enablement, and which has been notified to the IMO under clause 7B.4.2.

**Upwards LFAS Enablement:** Means, for 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 Upwards Price-Quantity Pair selected under clause 7B.3.4(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 or clause 7B.3.12 and published under clause 7B.3.11.

**Upwards LFAS Quantity:** Means the capacity, in MW, of upwards Load Following Service required by System Management for a Trading Interval.

**Upwards Out of Merit Generation:** Has the meaning given in clauses 6.16A.1 and 6.16B.1, as applicable.

**Verification Test:** Means a test conducted under clause 4.25A.

**Verve Energy:** Means the body corporate established by section 4(1)(a) of the Electricity Corporations Act.

**Verve Energy Balancing Portfolio:** Means all the Registered Facilities of Verve Energy other than Stand Alone Facilities.

**Western Power:** The body corporate established by section 4(1)(b) of the Electricity Corporations Act.

**Western Power Corporation:** The body corporate established under the Electricity Corporation Act (1994) as Western Power Corporation.

# 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; and
    - 3. [Blank]; ~~and~~
    - 4. Load Rejection Reserve;

- 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 facility can begin to respond to an Dispatch Instruction or Operating Instruction 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 point on 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;~~
- 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. the sent out capacity of the generator, expressed in MW;
- iv. the capability to provide Load Rejection Reserve, including information on trade-off functions when energy is provided simultaneously;
- v. ~~[Blank] 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 point on 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 Demand Side Programme:
  - i. [Blank]
  - ii. evidence that the communication and control systems required by clause 2.35 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 Demand Side Programme 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;~~

- vii. the minimum response time before the Demand Side Programme can begin to respond to an instruction from System Management to change its output;
  - viii. the maximum number of hours per year the Demand Side Programme can be curtailed;
  - ix. the Trading Intervals where the Demand Side Programme can be curtailed;
  - x. any restrictions on the availability of the Demand Side Programme;
  - xi. the normal ramp up and ramp down rates as a function of output level, if applicable;
  - xii. emergency ramp up and ramp down rates, if applicable; and
  - xiii. the maximum number of times that the Demand Side Programme can be curtailed during the term of its Capacity Credits.
- (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:
    - 1. Load Following;

2. Spinning Reserve; and
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 Data~~ 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 point on the network nodes ~~nodes~~ at which the facility can connect; and
- xv. the short circuit capability of facility equipment.

~~(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 Facility Requirements including any limitations on enablement and quantities.

~~(k)~~ for each Registered Facility:

- i. Reserve Capacity information including:
  1. the most recent Certified Reserve Capacity of the facility;
  2. the Capacity Credits held by the facility;

3. the Reserve Capacity Obligation Quantity of the facility at 41°C (if applicable);
  4. the Reserve Capacity Obligation Quantity of the facility at 45°C (if applicable);
  5. for Interruptible Loads and Demand Side Programmes, the maximum number of times that interruption can be called during the term of the Capacity Credits;
  6. the method to be used for determining the ambient temperature at the site of the facility (if applicable); and
  7. for each Short Term Special Price Arrangement and Long Term Special Price Arrangement associated with the facility, the number of Capacity Credits covered, the Special Reserve Capacity Price to be applied, and the expiration date and time of the Special Price Arrangement.
- ii. Network Control Service information including:
1. the identity of any Network Operator that has entered into a Network Control Service Contract in relation to the Facility;
  2. the unique identifier for any Network Control Service Contract applicable to the Facility provided by a Network Operator in accordance with clause 5.3A.1(c); and
  3. whether the Facility is subject to a Network Control Service Contract that requires the Facility not to be part of an aggregated Facility; and
- iii. the ~~Facility Dispatch Tolerance~~; Settlement Tolerance.
- ...

## Appendix 2: Spinning Reserve Cost Allocation

This Appendix determines the value of ~~Reserve\_Share(p,t)~~ SR\_Share (p,t) of the Spinning Reserve service payment costs in Trading Interval t to be borne by Market Participant p.

In this Appendix the relevant Market Participant p is the Market Participant to whom a facility is registered, with the exception that in the case of unregistered generation systems serving Intermittent Loads, the relevant Market Participant p is the Market Participant to whom the Intermittent Load is registered..

The calculations in this Appendix are based on data for a set of applicable facilities (indexed by f) where this set comprises all Scheduled Generators and all Non-Scheduled Generators registered during Trading Interval t, except those Intermittent Generators

exempted under clause 2.30A.2. This set also includes all unregistered generation systems serving Intermittent Loads.

For the purpose of determining the ~~Reserve\_Share(p,t)~~ SR\_Share (p,t) values, each applicable facility f has an applicable capacity associated with it for Trading Interval t.

- If facility f is an Intermittent Generator with an interval meter then this is double the MWh average interval meter reading for the Trading Month containing Trading Interval t.
- If facility f is a Scheduled Generator with an interval meter then this is double the MWh interval meter reading for Trading Interval t.
- If facility f is a Scheduled Generator that is the sum of more than one aggregated Facility, each with an interval meter and each injecting energy at an individual network connection point to the South West interconnected system, then each individual Facility is treated as an individual Scheduled Generator under Appendix 2.
- If facility f is an ~~Electricity Generation Corporation Verve Energy~~ Intermittent Generator without an interval meter then this is double the average monthly MWh sent out generation of that facility based on SCADA data over the Trading Month containing Trading Interval t.
- If facility f is an ~~Electricity Generation Corporation Verve Energy~~ Scheduled Generator without an interval meter or an unmetered generation system serving Intermittent Load then this is double the MWh sent out generation of that facility based on SCADA data for Trading Interval t.

The methodology makes use of the data in Table 1.

Block Number	Block Range (MW)	Block Size (MW)
1	> 200	100
2	>125 and ≤ 200	75
3	>65 and ≤ 125	60
4	>45 and ≤ 65	20
5	>10 and ≤ 45	35

Table 1: Data for Determine Reserve\_Share(p,t)

For each Block, indicated by block number b, in Table 1, the Reserve Block Share is:

If  $\text{Sum}(f(i \leq)) > 0$

$$\text{RBS}(b) = [\text{Block Size}(b) / \text{Sum}(i, \text{Block Size}(i))] / \text{Sum}(f(i \leq), \text{TIS}(f))$$

If  $\text{Sum}(f(i \leq)) = 0$

$$\text{RBS}(b) = 0$$

Where

Block Size(i) is the size of the Block with block number i listed in Table 1.

f(i≤) is the subset of applicable facilities that had applicable capacities for Trading Interval t lying within the block range of any Block with a block number value of b or less.

TIS(f) is 1 if the applicable facility f was synchronised to the SWIS during Trading Interval t, and is zero otherwise.

For each Block b in Table 1, the Reserve Generator Share is:

$$RGS(b) = \text{Sum}(i \geq, RBS(i))$$

Where

i ≥ is the set of Blocks listed in Table 1 that have a block number i greater than or equal to b.

For each Market Participant p, its unadjusted share of the Spinning Reserve service payment costs for the Trading Interval is:

$$USHARE(p) = \text{Sum}(f(p), RGS(b(f)) \times TIS(f))$$

Where

f(p) is the set of applicable facilities for the Market Participant p that have applicable capacities within one of the block ranges listed in Table 1.

b(f) is the block number of the Block in Table 1 that has a block range that corresponds to the applicable capacity of the applicable facility f.

TIS(f) is 1 if the applicable facility f was synchronised to the SWIS during Trading Interval t, and is zero otherwise.

For each Market Participant p, its adjusted share of the Spinning Reserve services payment costs for Trading Interval t is:

$$\text{Reserve\_Share}(p,t) \text{ SR\_Share}(p,t) = USHARE(p) / \text{sum}(q, USHARE(q))$$

Where

q is the index of the set of all Market Participants.

## **Appendix 6: ~~STEM Bid, STEM Offer and~~ ~~MCAP STEM~~ Price Curve Determination**

The first part of this appendix describes a process

...

The second part of this appendix describes a process for converting all Market Participant Portfolio Supply Curves into a single MCAP Price Curve.

For each Trading Interval in the Trading Day:

- (f) Determine for every price between the Minimum STEM Price and the Alternative Maximum STEM Price:
  - i. the sum over all Market Participants except those recorded as not making a STEM Submission for the Trading Interval of the maximum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price Quantity Pairs in its Portfolio Supply Curve;
  - ii. the sum over all Market Participants except those recorded as not making a STEM Submission for the Trading Interval of the minimum cumulative quantity the Market Participant is prepared to sell into the STEM from all of its Price Quantity Pairs in its Portfolio Supply Curve;
  - iii. the MCAP Price Curve quantity for that price where
    - 1. the minimum MCAP Price Curve quantity for that price equals the value in (ii);
    - 2. the maximum MCAP Price Curve quantity for that price equals the value in (i); and
    - 3. the MCAP Price Curve for that price includes all quantities between those in (1) and (2).

## 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:

$$Dispatch\ Schedule = 0.5 \times \text{Sum}[n=1\ to\ N, (FOL(n-1) + FOL(n)) \times (t(n) - t(n-1))] / 60$$

## Appendix 9: Relevant Level Determination

This Appendix presents the methodology for determining the Relevant Levels for Facilities that have applied for certification of Reserve Capacity under clause 4.11.2(b) for a given Reserve Capacity Cycle ("Candidate Facility").

For the purposes of the Relevant Level determination in this Appendix 9:

- the full operation date of a Candidate Facility for the Reserve Capacity Cycle ("Full Operation Date") is:
  - the date provided under clause 4.10.1(c)(iii)(7) or revised in accordance with clause 4.27.11A or clause 4.27.11B, where at the time the application for certification of Reserve Capacity is made the Facility, or part of the Facility (as applicable) is yet to enter service; or
  - the date most recently provided for a Reserve Capacity Cycle under clause 4.10.1(k) otherwise; and
- a Candidate Facility will be considered to be:
  - a new candidate Facility, if the five year period identified in step 1(a) of this Appendix commenced before 8:00 AM on the Full Operation Date for the Facility ("New Candidate Facility"); or

- an existing Candidate Facility (“Existing Candidate Facility”), otherwise.

The IMO must perform the following steps to determine the Relevant Level for each Candidate Facility:

***Determining Existing Facility Load for Scheduled Generation***

Step 1: Identify:

- (a) the five year period ending at 8:00 AM on 1 April of Capacity Year 1 of the relevant Reserve Capacity Cycle;
- (b) any 12 month period, from 1 April to 31 March, occurring during the five year period identified in step 1(a), where the 12 Trading Intervals with the highest Existing Facility Load for Scheduled Generation in that 12 month period have not previously been determined under this Appendix 9; and
- (c) any 12 month period, from 1 April to 31 March, occurring during the five year period identified in step 1(a), where the 12 Trading Intervals with the highest Existing Facility Load for Scheduled Generation in that 12 month period have previously been determined under this Appendix 9.

Step 2: Determine the quantity of electricity (in MWh) sent out by each Candidate Facility using Meter Data Submissions for each of the Trading Intervals in the period identified in step 1(b).

Step 3: For each Candidate Facility, identify any Trading Intervals in the period identified in step 1(b) where ~~the Facility:~~

- (a) ~~was owned, controlled or operated by a Market Participant other than the Electricity Generation Corporation and the Facility, other than a Facility in the Verve Energy Balancing Portfolio, was issued a directed to restrict its output under a Dispatch Instruction as provided in a schedule from System Management as notified under clause 7.13.1(c); or~~
- (b) ~~was owned, controlled or operated by the Electricity Generation Corporation the Facility, if in the Verve Energy Balancing Portfolio, and was instructed by issued an instruction from System Management to deviate from its Dispatch Plan or change its commitment or output as provided in a schedule as notified under clause 7.13.1C(d); or~~
- (c) was affected by a Consequential Outage as notified by System Management to the IMO under clause 7.13.1A.

Step 4: For each Candidate Facility and Trading Interval identified in step 3(a) use:

- ~~(a) the estimate provided by System Management to the IMO under clause 7.13.1(eBF); and~~
- ~~(b) the quantity determined for the Facility and Trading Interval in step 2,~~

~~to estimate as~~ the quantity of energy (in MWh) that would have been sent out by the Facility during the Trading Interval had it not complied with the a Dispatch Instruction not been issued for that during the Trading Interval.

- Step 5: For each Candidate Facility and Trading Interval identified in step 3(b) use:
- (a) the estimate provided by System Management to the IMO under clause 7.13.1C(e); and
  - (b) the quantity determined for the Facility and Trading Interval in step 2,
- to estimate the quantity of energy (in MWh) that would have been sent out by the Facility had it not complied with System Management's instruction to change its commitment or output during the Trading Interval.

- Step 6: For each Candidate Facility and Trading Interval identified in step 3(c) use:
- (a) the schedule of Consequential Outages provided by System Management to the IMO under clause 7.13.1A;
  - (b) the quantity determined for the Facility and Trading Interval in step 2; and
  - (c) the information provided by System Management under clause 7.13.1C(a),
- to estimate the quantity of energy (in MWh) that would have been sent out by the Facility had it not been affected by the notified Consequential Outage during the Trading Interval.

- Step 7: Determine for each Trading Interval in each 12 month period identified in step 1(b) the Existing Facility Load for Scheduled Generation (in MWh) as:
- $$(\text{Total\_Generation} + \text{DSP\_Reduction} + \text{Interruptible\_Reduction} + \text{Involuntary\_Reduction}) - \text{CF\_Generation}$$

where

Total\_Generation is the total sent out generation of all Facilities, as determined from Meter Data Submissions;

DSP\_Reduction is the total quantity by which all Demand Side Programmes reduced their consumption in response to a Dispatch Instruction, as determined under clause 6.17.6(c)(i)(3);

Interruptible\_Reduction is the total quantity by which all Interruptible Loads reduced their consumption in accordance with the terms of an Ancillary Service Contract, as provided by System Management to the IMO under clause 7.13.1C(c);

Involuntary\_Reduction is the total quantity of energy not served due to involuntary load shedding (manual and automatic), as provided by System Management to the IMO under clause 7.13.1C(b); and

CF\_Generation is the total sent out generation of all Candidate Facilities, as determined in step 2 or estimated in steps 4, 5 or 6 as applicable.

- Step 8: Determine for each 12 month period identified in step 1(b) the 12 Trading Intervals, occurring on separate Trading Days, with the highest Existing Facility Load for Scheduled Generation.
- Step 9: Identify, for each 12 month period identified in step 1(c), the following:
- (a) the Existing Facility Load for Scheduled Generation previously determined under this Appendix 9 for each Trading Interval in the 12 month period;
  - (b) the sent out generation (in MWh) for each Candidate Facility for each Trading Interval in the 12 month period that was used in the determination of the Existing Facility Load for Scheduled Generation for that Trading Interval; and
  - (c) the 12 Trading Intervals occurring on separate Trading Days that were previously determined to have the highest Existing Facility Load for Scheduled Generation in the 12 month period.

***Determining New Facility Load for Scheduled Generation***

Step\_10: For each New Candidate Facility determine, for each Trading Interval in the period identified in step 1(a) that falls before 8:00AM on the Full Operation Date for the Facility, an estimate of the quantity of energy (in MWh) that would have been sent out by the Facility in the Trading Interval, if it had been in operation with the configuration proposed under clause 4.10.1(dA) in the relevant application for certification of Reserve Capacity. The estimates must reflect the estimates in the expert report provided for the Facility under clause 4.10.3, unless the IMO reasonably considers the estimates in the expert report to be inaccurate.

Step11: For each New Candidate Facility determine, for each Trading Interval in the period identified in step 1(a), the New Facility Load for Scheduled Generation (in MWh) as:

- (a) if the Trading Interval falls before 8:00 AM on the Full Operation Date for the Facility:

$$\text{EFLSG} + \text{Actual\_CF\_Generation} - \text{Estimated\_CF\_Generation}$$

where

EFLSG is the Existing Facility Load for Scheduled Generation for the Trading Interval, determined in step 7 or identified in step 9(a) as applicable;

Actual\_CF\_Generation is the sent out generation of the New Candidate Facility for the Trading Interval, as identified in step

9(b), determined in step 2 or estimated in steps 4, 5 or 6 as applicable; and

Estimated\_CF\_Generation is the quantity determined for the New Candidate Facility and the Trading Interval in step 10;

or

- (b) the Existing Facility Load for Scheduled Generation for the Trading Interval, otherwise.

Step 12: For each New Candidate Facility determine, for each 12 month period identified in step 1(a), the 12 Trading Intervals, occurring on separate Trading Days, with the highest New Facility Load for Scheduled Generation.

***Determining the Facility Average Performance Level***

Step 13: For each Existing Candidate Facility, determine the 60 quantities comprising:

- (a) the MWh quantities determined in step 2 or estimated in steps 4, 5 or 6 as applicable for each of the Trading Intervals determined in step 8, multiplied by 2 to convert to units of MW; and
- (b) the MWh quantities determined in step 9(b) for each of the Trading Intervals identified in step 9(c), multiplied by 2 to convert to units of MW.

Step 14: For each New Candidate Facility, determine the 60 quantities comprising:

- (a) the MWh quantities identified in step 9(b), determined in step 2 or estimated in steps 4, 5 or 6 as applicable for each of the Trading Intervals identified in step 12 that fall after 8:00 AM on the Full Operation Date for the Facility, multiplied by 2 to convert to units of MW; and
- (b) the MWh quantities determined in step 10 for each of the Trading Intervals identified in step 12 that fall before 8:00 AM on the Full Operation Date of the Facility, multiplied by 2 to convert to units of MW.

Step 15: Determine the average performance level (in MW) for each Candidate Facility f ("Facility Average Performance Level") as the mean of the 60 quantities determined for Facility f in step 13 or step 14 as applicable.

***Determine the Facility Adjustment Factor***

Step 16: Determine the variance (in MW) for each Candidate Facility f ("Facility Variance") as the variance of the MW quantities determined for Facility f in step 13 or step 14 as applicable.

Step 17: Determine the facility adjustment factor (in MW) for each Candidate Facility f ("Facility Adjustment Factor") in accordance with the following formula:

Facility Adjustment Factor =  $\min (G \times \text{Facility Variance (f)}, \text{Facility Average Performance Level (f)} / 3 + K \times \text{Facility Variance (f)})$

Where

$$G = K + U/\text{Facility Average Performance Level (f)}$$

K is determined in accordance with the following table:

Reserve Capacity Cycle	Capacity Year	K value
2012	2014/15	0.001
2013	2015/16	0.002
2014	2016/17	0.003
2015 onwards	From 2017/18 onwards	To be determined by the IMO in accordance with clause 4.11.3B.

U is determined in accordance with the following table:

Reserve Capacity Cycle	Capacity Year	U
2012	2014/15	0.211
2013	2015/16	0.422
2014	2016/17	0.635
2015 onwards	From 2017/18 onwards	To be determined by the IMO in accordance with clause 4.11.3B.

### ***Determining the Relevant Level for a Facility***

Step 18: Determine the Relevant Level for each Candidate Facility f (in MW) in accordance with the following formula:

$$\text{Relevant Level (f)} = \max(0, \text{Facility Average Performance Level (f)} - \text{Facility Adjustment Factor (f)})$$

### ***Publication of information***

Step 19: Publish on the Market Web Site by 1 June of Year 1 of the relevant Reserve Capacity Cycle:

- (a) the Trading Intervals identified in step 8; and
- (b) the Existing Facility Load for Scheduled Generation quantities determined in step 7.