ELECTRICITY INDUSTRY ACT 2004 ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY - MARKET) REGULATIONS 2004

Wholesale Electricity Market Rules

IMO AMENDING RULES RC_2009_30 MADE ON 19 October 2009 These Amending Rules commence at 08.00am on 18 December 2009

The following clauses are amended (deleted wording):

- 1.4.1. In these Market Rules, unless the contrary intention appears:
 ...
 - (q) [Blank] (Loss Factor adjusted): In these Market Rules, "Loss Factor adjusted" in respect of a quantity of electricity means that the quantity must be multiplied by any applicable Loss Factor; and

1.5.1. The following documents are subservient to the rules Market Rules:

2.1.2. The functions of the IMO are:

(b) to operate the Reserve Capacity mechanism Mechanism, the Short Term Energy Market and the balancing process;

- 2.5.7. When it has developed a Rule Change Proposal, or within seven Business Days of receiving a Rule Change Proposal under clause 2.5.1, the IMO must publish notice of the Rule Change Proposal on the Market Website Web Site. The notice must include:
- 2.5.14. A Rule Change Proposal that the IMO decides is subject to the Fast Track Rule Change Process is to be progressed in accordance with clause 2.6, and clause 2.7 does not apply.
- 2.5.15. A Rule Change Proposal that the IMO decides is not subject to the Fast Track Rule Change Process is to be progressed in accordance with clause 2.7, and clause 2.6 does not apply.
- 2.7.6. Within 20 Business Days following the close of submissions, the IMO must:
 - (a) prepare and publish a draft Draft Rule Change Report on the Rule Change Proposal; and
 - (b)
- 2.7.8. Within 20 Business Days of the deadline specified under clause 2.7.6(b), the IMO must prepare and publish a Final Rule Change Report containing:
 - (a) the information in the Draft Rule Change Report;
 - (b) all submissions received before the deadline for submissions specified in relation to the relevant draft Draft Rule Change Report under clause

- 2.7.6(b), a summary of those submissions, and the IMO's response to the issues raised in those submissions;
- 2.8.9. Where the Minister does not approve the proposed Amending Rules or sends proposed Amending Rules back to the IMO under clause 2.8.5(c), the Minister must give reasons, and the IMO must publish <u>a</u> notice of the Minister's decision and the reasons given by the Minister.
- 2.13.10. If the IMO becomes aware of an alleged breach of the Market Rules or Market Procedures, then:

. . .

- (e) it must record the response of the Rule Participant to any warning issued under clause 2.23.10(d) 2.13.10(d).
- 2.14.1. The IMO must appoint one or more Market Auditors that may be used to conduct the audits described in clause clauses 2.14.2 and 2.14.6(b).
- 2.14.3. The IMO must ensure that the Market Auditor carries out the audits of such matters as the IMO considers appropriate, which must include:

...

- (b) the IMO's compliance with the Market Rules and Market Procedures; and
- (c) the IMO's market software systems and processes for software management.

. . .

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:

. . .

(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-;

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2.28.16B. Without limiting the generality and the operation of clause 2.28.16, the IMO may exempt under clause 2.18.16 a person who owns, controls or operates a generation system which has a rated capacity that equals or exceeds 10 MW and is electrically connected to a transmission system or distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, from the requirement to register as a Rule Participant in the Market Generator class, in respect of that generation system, where all of the following are satisfied:

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(b) negative MWh quantities measured by the interval meter or meters associated with that generation system are not reasonably expected to increase by more that-5 MWh in any Trading Interval in the event of an outage of that generating system;

. . .

- 2.29.9. The IMO may determine that a person is exempted from the requirement to register a Facility in accordance with this clause 2.29. An exemption may be given subject to any conditions that the IMO considers appropriate.
- 2.30.5. The IMO must only allow the aggregation of facilities if, in its opinion:
 - (a) the aggregation will not adversely impact on System Management's ability to maintain power system Power System Security and Power System Reliability;
- 2.30B.3. The IMO must require that a Market Customer, or applicant to become a Market Customer, applying to register an Intermittent Load provide in regard to the generation system referred to in clause 2.30B.2(a):
 - (a) the maximum capacity in MW, excluding capacity for which Capacity Credits are held, that the generating system can be guaranteed to have available to supply Intermittent Load, when it is operated normally at an ambient temperature of 41 ℃;
 - (aA) where clause 2.30B.11 applies, the connection point of the generation system,:
 - (b) at the option of the applicant,:
 - i. the anticipated reduction, measured in MW, in the maximum capacity described in (a) when the ambient temperature is 45°C;
 - ii. the method to be used to measure the ambient temperature at the site of the generating system for the purpose of determining Intermittent Load Refunds, where the method specified may be either:
 - a publicly available daily maximum temperature at a location representative of the conditions at the site of the generating system as reported daily by a meteorological service; or
 - 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 ℃ will be assumed; and
 - (c) 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 generation system from operating at its full capacity.

- 2.30B.5. A Market Customer, or applicant to become a Market Customer, may apply for a Load to be treated as an Intermittent Load as part of Market Customer registration (for a Non-Dispatchable Load) or Facility Registration registration (for an Interruptible Load or Curtailable Load).
- 2.30B.9. Where an Intermittent Load is transferred from one Market Customer to another all obligations to pay Intermittent Load Refunds calculated after the date of transfer, in regard to that Intermittent Load, including those Intermittent Load Refunds arising from consumption that occurred prior to the date of transfer are to be automatically transferred to the Market Customer.
- 2.30B.11. The generation system described in clause 2.30B.2(a) is deemed to satisfy the requirements of clause 2.30B.2(a)(i) if it is located at a different connection point to that of the Load to which clause 2.30B.2 pertains and all of the following conditions are satisfied prior to the Load commencing to be an Intermittent Load:

. . .

(d) the generation system must have no Capacity Credits associated with it for the Capacity Year during which it is expect expected to commence operation;

. . .

(h) the IMO was notified of the use of such a generation system to serve the Intermittent Load in accordance with clause 4.5.3A(b)(iii) prior to the registration of that Intermittent Load;.

. . .

- 2.30C.1. The IMO must not require that an applicant for Rule Participant registration or Facility Registration registration provide information on any application form, or evidence to support that application form, pertaining to registration if the applicable Market Rules requiring that information to be provided have not commenced.
- 2.31.3. The IMO must notify an applicant of the receipt of the application within one Business Day of receipt of an application form described in clause 2.31.2 2.31.1.
- 2.32.4. From the time the IMO issues a Suspension Notice to a Rule Participant:

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- (b) the IMO may do all or any of the following to give effect to the notice:
 - reject any Submissions submissions from, or on behalf of, the Market Participant, and cancel any existing Submissions submissions; and

...

2.34.7. The IMO may reject a change:

. . .

(b) in any other Standing Data if it considers that an inadequate explanation, including tests test results, is was provided to justify the change in Standing Data.

. . .

- 3.10.2. The standard for Spinning Reserve Service is a level which satisfies the following principles:
 - (a) the level must be sufficient to cover the greater of:
 - 70% of the total output, including parasitic load Parasitic Load, of the generation unit synchronised to the SWIS with the highest total output at that time; and

...

3.18.11. System Management must apply the following criteria when evaluating Outage Plans:

...

AA) The the total capacity of the generation Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must satisfy the Ready Reserve Standard described in clause 3.18.11A;

..

- 3.18.11A. The Ready Reserve Standard requires that the available generation and demand-side capacity at any time satisfies the following principles:
 - (a) Subject to (c), the additional energy available within fifteen minutes must be sufficient to cover:
 - 30% of the total output, including parasitic load Parasitic Load, of the generation unit synchronized to the SWIS with the highest total output at that time;

. . .

- (b) Subject to (c), and in addition to the additional energy described in (a), the additional energy available within four hours must be sufficient to cover—:
 - 70% of the total output, including parasitic load Parasitic Load, of the generation unit synchronized to the SWIS with the second highest total output at that time;

- - -

3.19.6. System Management must use the following criteria when considering approval of Scheduled Outages or Opportunistic Maintenance:

(a) The the capacity of the generation Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must be greater than the load forecast for the relevant time period-;

..

4.10.1. The information to be submitted with an application for certification of Reserve Capacity must pertain to the Reserve Capacity Cycle to which the certification relates and must include:

...

- (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 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 ℃:
 - iii. the maximum sent out capacity, net of Intermittent Loads, embedded and parasitic loads Parasitic Loads, beyond the capacity described in (ii), that can be made available for supply to the relevant Network from the Facility at an ambient temperature of 41oC and any restrictions on the availability of that capacity, including limitations on duration;

...

- 4.11.1. Subject to clause 4.11.7, the IMO must apply the following principles in assigning a quantity of Certified Reserve Capacity to a Facility for the Reserve Capacity Cycle to which the application relates:
 - (a) subject to paragraphs (d) and (e) and clause 4.11.2, the Certified Reserve Capacity for a Facility for a Reserve Capacity Cycle is not to exceed the IMO's reasonable expectation as to the amount of capacity likely to be available from that Facility, after netting off capacity required to serve Intermittent Loads, embedded loads and parasitic loads Parasitic Loads, at daily peak demand times in the period from the:
 - i start of December for Reserve Capacity Cycles up to and including 2009; or
 - ii trading day starting on 1 October for Reserve Capacity Cycles from 2010 onwards

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

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4.12.6. Subject to clause 4.12.7, any initial Reserve Capacity Obligation Quantity set in accordance with clauses 4.12.4, 4.12.5, or 4.28B.4 is to be reduced once the Reserve Capacity Obligations take effect, as follows:

. . .

- (b) subject to clause 4.27.9, during Trading Intervals where there is a Consequential Outage or a Planned Outage for a Facility provided to the IMO by System Management in accordance with clause 7.3.4, the IMO must reduce the Reserve Capacity Obligation Quantity for that Facility, after taking into account any adjustments in accordance with paragraph (a), to reflect the amount of capacity unavailable due to that outage; and
- (c) if the Facility is subject to a Commissioning Test during a Trading Interval then the Reserve Capacity Obligation Quantity for that Facility must be zero during that Trading Interval.
- 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 respected 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:

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

- 6.5.1. Market Participants other than the Electricity Generation Corporation may submit Resource Plan Submission data for a Trading Day to the IMO between:
 - (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 Scheduled Day Scheduling Day.

- 8.4.1. A Metering Data Agent must provide meter data submissions Meter Data Submissions to the IMO in accordance with the times specified in clauses 9.16.2(a) and 9.16.3.
- 8.4.2. A Meter data submission Data Submission must be in the format described in clause 8.6.
- 8.4.3. A Meter data submission Data Submission must be made using the Settlement Submission System.
- 8.4.4. Upon receipt of a meter data submission Meter Data Submission, the IMO must provide a Metering Data Agent with confirmation of receipt of a meter data

submission Meter Data Submission made in accordance with clause 8.4.1 within one hour.

- 8.4.5. If a Metering Data Agent fails to receive confirmation of receipt of a meter data submission Meter Data Submission in accordance with clause 8.4.4, it must contact the IMO by telephone within one hour of failing to receive confirmation in accordance with clause 8.4.4 to appraise the IMO of the failure of the IMO to provide confirmation of receipt and, if necessary to make alternative arrangements for the submission of the information.
- 8.5.2. A Metering Data Agent must respond to the notification described in clause 8.5.1 in accordance with the Metering Protocol referred to in clause 8.1.3 and must include any revised meter data in the first meter data submission Meter Data Submission made to the IMO following any correction of the meter data.
- 8.6.1. A meter data submission Meter Data Submission must comprise:
 - (e) meter adjustments that stem from actual meter data becoming available or from the resolution of a dispute concerning meter data ("meter dispute Meter Dispute") in accordance with the dispute resolution process in the applicable Metering Protocol, including:
 - for each interval meter and each Trading Interval in the calendar month to which a meter dispute Meter Dispute has resulted in changes to meter data:
 - 1. the MWh quantity for that meter;

- 8.6.2. The IMO must document:
 - (a) the format of meter data submissions Meter Data Submissions;
 - (b) [Blank]

in the Settlement Procedure, and Metering Data Agents must comply with that documented Market Procedure when developing and submitting meter data submissions Meter Data Submissions.

- 9.3.4. Subject to clause 2.30B.10, the Metered Schedule for a Trading Interval for a Facility or Non-Dispatchable Load, excluding those Non-Dispatchable Loads referred to in clause 9.3.4A, is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility or Non-Dispatchable Load (as applicable) during that Trading Interval, Loss Factor adjusted to the Reference Node, and determined from meter data submissions Meter Data Submissions received by the IMO in accordance with clause 8.4 or SCADA data received from System Management in accordance with clause 7.13.1(cA) where interval meter data is not available.
- 9.9.1. The Ancillary Service settlement amount for Market Participant p for Trading Month m is:

ASSA(p,m) =	Electricity Generation Corporation AS Provider Payment(p,m)
	_+ d(p,i) × ASP_Payment(i,m)
	Load_Following_Share(p,m)
	_x (Capacity_LF(m) + Availability_Cost_LF(m))

- Reserve_Cost_Share(p,m)
- Consumption_Share(p,m) × Cost_LRD(m)

- 9.16.2. For all Financial Years other than the first Financial Year of energy market operations, the settlement cycle timeline for settlement of other amounts payable under these Market Rules for all Trading Days within a Financial Year must be published by the IMO at least one calendar month prior to the commencement of that Financial Year. For the first Financial Year of energy market operation, the settlement cycle timeline must be published one calendar month prior to Energy Market Commencement. This settlement cycle timeline must include for each settlement cycle:
 - (a) The Interval Meter Deadline, being the Business Day by which meter data submissions Meter Data Submissions for a Trading Month must be provided to the IMO. This date must be the first Business Day of the second month following the month in which the Trading Month commenced.

. . .

9.23.4. If the IMO becomes aware that a suspension event has occurred in relation to a Rule Participant, then the IMO must as soon as practicable:

...

- (b) if it has not already done so, draw upon <u>Draw Upon</u> Credit Support held in relation to that Market Participant for the amount which the IMO determines is actually or contingently owing by the Market Participant to the IMO under these Market Rules.
- 9.24.1. In the event that a Market Participant fails to make a payment under these Market Rules to the IMO before it is due, then the IMO may draw upon Draw Upon any Credit Support in relation to that Market Participant to meet the payment.
- 9.24.2. If, under Part 5.7B of the Corporations Act or another law relating to insolvency or the protection of creditors or similar matters, the IMO is required to disgorge or repay an amount, or pay an amount equivalent to an amount, paid by a Market Participant under the Market Rules:
 - (a) the IMO may draw upon <u>Draw Upon</u> any Credit Support held by the IMO in relation to the Market Participant for the amount disgorged, repaid or paid ("Repaid Amount"); and

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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:

...

(vB) reports providing the MWh of non-compliance of the Electricity Generation Corporation by Trading Interval, as specified by System Management in accordance with clause 7.13.1(cC) 7.13.1A(a), for each Trading Month which has been settled;

...

Chapter 11 – Glossary

draw upon Draw Upon: In relation to Credit Support or Reserve Capacity Security held by the IMO in relation to a Market Participant, means that the IMO:

...

meter dispute Meter Dispute: Has the meaning given in clause 8.6.1(e).

parasitic load Parasitic Load: Energy consumption that occurs behind the connection point at which a generation system is connected to the Network, and which consequently reduces the energy sent-out by the generation system relative to the energy actually generated by the generation system.

Appendix 4A: Intermittent Load Individual Reserve Capacity Requirements

This Appendix describes how Individual Reserve Capacity Requirements are derived for Intermittent Loads.

Define:

- MaxL(k) is the nominated load level for Intermittent Load k as specified in clause 4.28.8(c);
- RM is the reserve margin for the Reserve Capacity Cycle defined as negative
 one plus the ratio of the Reserve Capacity Requirement Target for the relevant
 Capacity Year as described in clause 4.6.1 4.5.10(b)(i) and the expected peak
 demand for the relevant Capacity Year as described in clause 4.6.2
 4.5.10(b)(ii);

Calculate Reg(k), which equals MaxL(k) multiplied by RM.

When setting the Intermittent Load Reserve Capacity Requirements in accordance with clause 4.28.7A:

. . .

Appendix 5: Individual Reserve Capacity Requirements

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STEP 1: Define the 12 peak Trading Intervals during the Hot Season preceding the initial calculation of Individual Reserve Capacity Requirements for a Reserve Capacity Cycle (the "preceding Hot Season") as corresponding to the 3 highest demand Trading Intervals on each of the 4 days Trading Days with the highest daily demand, where demand refers to total demand, net of embedded generation, in the SWIS.

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