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

IMO AMENDING RULES RC_2007_16 MADE ON 24 SEPTEMBER 2007 These Amending Rules commence at 08.00am on 4 October 2007

The following clauses will be amended (deleted wording, new wording):

Clause 3.18.6

3.18.6. The information submitted in an Outage Plan must include:

- (a) identity of the Facility or item of equipment that will be unavailable;
- (b) the quantity of any de-rating, <u>where, if the Facility is a generating</u> <u>system, this quantity is in accordance with clause 3.21.5;</u>
- (c) the reason for the outage;
- (d) the proposed start and end times of the outage;
- (e) an assessment of risks that might extend the outage;
- (f) details of the time it would take the Facility or item of equipment to return to service, if required; and
- (g) contingency plans for the early return to service of the Facility or item of equipment("Outage Contingency Plans").

Clause 3.21.4

- 3.21.4. If a Facility or item of equipment that is on the list described in clause 3.18.2 or a Facility or generation system to which clause 3.18.2A relates suffers a Forced Outage or Consequential Outage, then the relevant Market Participant or Network Operator must inform System Management of the outage as soon as practical. Information provided to System Management must include:
 - (a) the time the outage commenced;
 - (b) an estimate of the time the outage is expected to end;
 - (c) the cause of the outage;
 - (d) the Facility or item of equipment or Facilities or items of equipment affected; and

(e) for each affected Facility or item of equipment, the expected <u>quantity of any de-rating available capacity</u> by Trading Interval, <u>where, if the Facility is a generating system, this quantity is to be</u> <u>submitted in accordance with clause 3.21.5</u>.

Clause 3.21.5

3.21.5 The quantity of an outage notification submitted to System Management is the reduction in capacity from the relevant Facility's maximum capacity measured on a sent out basis at 41 degrees Celsius where the maximum capacity is as found in the Standing Data file for Temperature Dependence provided under Appendix 1(b) iv and converted to a sent out basis at 41 degrees Celsius. The remaining capacity, determined as the maximum capacity minus the notified outage, must be available to System Management for dispatch.

Clause 3.21.6

- 3.21.6 The following will apply for the purposes of clauses 7.3.4 (a) and 7.13.1 (e):
 - (a) <u>outage data will be entered by Market Participants in System</u> <u>Management's computer interface system on a sent out basis at 15</u> <u>degrees Celsius. System Management will convert the outage data</u> to a sent out basis at 41 degrees Celsius by multiplying the outage <u>quantity at 15 degrees Celsius by the ratio of the maximum capacity</u> <u>at 41 degrees Celsius to the maximum capacity at 15 degrees</u> <u>Celsius for the Facility as found in the Standing Data file for</u> <u>temperature dependence provided under Appendix 1(b) iv on a</u> <u>generated basis for that facility. Market Participants will submit the</u> <u>outage data at 41 degrees Celsius as displayed by System</u> <u>Management's computer interface system;</u>
 - (b) <u>System Management will calculate the Forced Outage (on a sent out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:</u>
 - i zero and
 - ii the sum of all Forced Outages notified for that Facility minus the difference of the Facility maximum capacity and its Reserve Capacity Obligation Quantity;
 - (c) <u>System Management will calculate the Planned Outage (on a sent</u> out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:
 - i. zero and
 - ii. the sum of all Planned Outages minus the greater of:

- 1. <u>zero and</u>
- 2. the maximum capacity of the Facility minus its Reserve Capacity Obligation Quantity minus the sum of all Forced Outages notified for the Facility before the adjustment in (a) above is made by System Management; and
- (d) <u>System Management will calculate the Consequential Outage (on a sent out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:</u>
 - i. zero and
 - ii. the sum of all Consequential Outages minus the greater of:
 - 1. <u>zero and</u>
 - 2. <u>the maximum capacity of the Facility minus its Reserve</u> <u>Capacity Obligation Quantity minus the sum of all</u> <u>Forced Outages and the sum of all Planned Outages</u> <u>notified for the Facility before the adjustments in (a)</u> and (b) above are made by System Management;
- (e) <u>the IMO will provide System Management the Reserve Capacity</u> Obligation Quantity of each Facility as currently applicable;
- (f) <u>the maximum capacity used in this clause is the value defined in</u> <u>clause 3.21.5.</u>

Clause 6.3A.2

- 6.3A.2 By 9:00 AM on the Scheduling Day the IMO must have calculated and released to each Market Participant the following parameters to be 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:
 - i. less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6; and
 - 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; and

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

- (b) the Maximum Consumption Capability where this equals the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be consumed during a Trading Interval by that Market Participant's Non-Dispatchable Loads, Interruptible Loads, Curtailable Loads and Dispatchable Loads based on the Standing Data maximum consumption quantities for those Facilities and Non-Dispatchable Loads, less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6;
- (c) for each Scheduled Generator and Non-Scheduled Generator that is registered as being able to run on Liquid Fuel only, the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval based on the Standing Data of that Scheduled Generator or Non-Scheduled Generator less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6; and
- (d) for each Scheduled Generator and Non-Scheduled Generator that is registered as being able to run on both Liquid Fuel and Non-Liquid Fuel, the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval when run on each of Liquid Fuel and Non-Liquid Fuel based on the Standing Data of that Scheduled Generator or Non-Scheduled Generator less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6.
- (e) in the case of 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 after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day; and
 - the list of Facilities that System Management might reasonably expect to call upon to provide the energy described in (i),

as provided to the IMO by the System Management in accordance with clauses 7.2.3B or 7.2.3C.

Clause 7.3.4

- 7.3.4. System Management must provide to the IMO the following information:
 - (a) a schedule of Planned Outages, Forced Outages and Consequential Outages for each Registered Facility of which System Management is aware at that time, where outages are calculated in accordance with clause 3.21.6;
 - (b) [Blank]

for each Trading Interval of a Trading Day, between 8:00 AM and 8:30 AM on the Scheduling Day prior to the Trading Day.

Clause 7.13.1

- 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:
 - the Operational System Load Estimate in each Trading Interval in the Trading Day;
 - Load Forecasts prepared by System Management in accordance with clause 7.2.1(b);
 - (c) a schedule of all of the Dispatch Instructions that System Management issued for each Trading Interval in the Trading Day by Market Participant and Facility, including the information specified in clause 7.7.3, or as agreed between the IMO and System Management;
 - (cA) a schedule of the MWh output of each generating system monitored by System Management's SCADA system for each Trading Interval of the Trading Day;
 - (cB) the maximum daily ambient temperature at the site of each generating system monitored by System Management's SCADA system for the Trading Day;
 - (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 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;
- (dB) The MWh energy dispatched under a Network Control Service Contract for each Trading Interval in the Trading Day by Facility;
- (e) 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, for any Facility with a Reserve Capacity Obligation Quantity greater than zero, where outages are calculated in accordance with clause 3.21.6;
- (eA) details of notifications received by System Management in accordance with clause 7.5.4;
- (eB) the estimated decrease, in MWh, in the output of each Non-Scheduled Generator, by Trading Interval, as a result of System Management Dispatch Instructions, as determined in accordance with clause 7.7.5A, where this is to be used in settlement as the quantity described in clause 6.17.6(c)(i).
- (eC) the required decrease, in MWh, in the consumption of each Curtailable Load, by Trading Interval, as a result of System Management Dispatch Instructions, as determined in accordance with clause 7.7.5D, where this is to be used in settlement as the quantity described in clause 6.17.6(d)(i).
- (f) [Blank]
- (g) details of the instructions provided to:
 - i. Curtailable Loads that have Reserve Capacity Obligations; and
 - ii. providers of Supplementary Capacity;

on the Trading Day; and

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