
Wholesale Electricity Market Pre Market Rule Change Discussion Paper Revised on 9 July 2007 (boxed)

Submitted by

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Address:	
Date submitted:	28 June 2007
Urgency:	High
Change Proposal title:	Forced Outage Notification to the IMO
Market Rule(s) affected:	Clauses 3.18.6, 3.21.4, 7.3.4, 7.13.1

Introduction

This Pre Market Rule Change Discussion Paper can be posted, faxed or emailed to:

Independent Market Operator

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The discussion paper should explain how it will enable the Market Rules to better contribute to the achievement of the wholesale electricity market objectives. The objectives of the market are:

- (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- (b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

Details of the proposed Market Rule Change

1) Outline the issue concerning the existing Market Rules that is to be addressed by the proposed Market Rule change:

Currently, the Reserve Capacity Refund Mechanism (RCRM) results in an inequitable treatment of Market Participants with respect to unplanned outages. Participants with Scheduled or Non-Scheduled generation that have a maximum capacity greater than the Reserve Capacity Obligation Quantity (RCOQ) are penalised for providing uncertified capacity.

For example, if a facility that has a maximum capability of 120 MW, with an RCOQ of 100 MW, has an unplanned outage of 30 MW, the RCRM will penalise the Participant for the entire 30 MW. This is inequitable as the Participant only receives payment for the provision of 100 MW of capacity; in effect the Participant is being penalised for providing capacity in excess of the requirement. An equitable approach would result in a penalty of only 10 MW.

This discrepancy penalises those Participants with facilities that have a maximum capacity greater than RCOQ. This provides a disincentive for Participants to provide capacity to the SWIS in excess of RCOQ, which impacts upon Power System Security and Reliability, and reduces the opportunity for Participants to schedule planned outages due to reduced system margins.

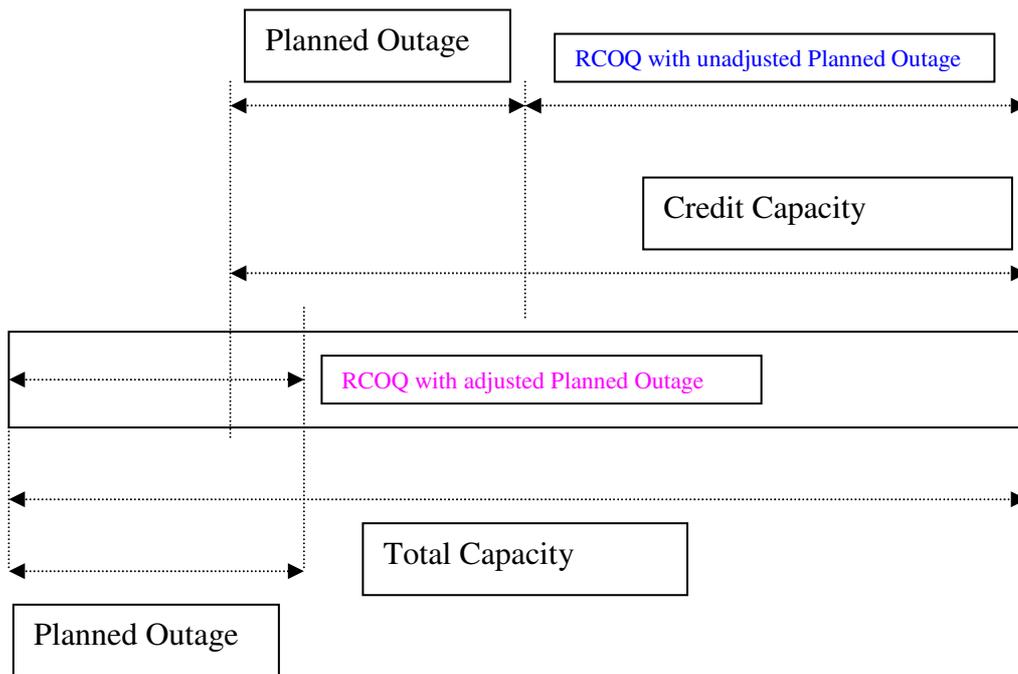
System Management proposes this Rule Change as an interim solution to the inequity, which must ultimately be solved within the settlements system.

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Following discussion with System Management, the IMO considers that Planned Outages should also be amended. The following diagram illustrates the need to include Planned Outages in the adjustment.

Reserve Capacity Obligation Quantity (RCOQ) is reduced from the Reserve Capacity Credit awarded to a facility by a Planned Outage. Without adjusting the Planned Outage amount the facility RCOQ will be reduced from the credit capacity to the level labelled in blue in the diagram below. This will be a capacity below that which the facility is capable of performing.

The adjusted Planned Outage amount reduces the facility RCOQ to the level labelled in pink. This is the level the facility is capable of performing.



2) Explain the reason for the degree of urgency:

The issue is a manifest error of the Market Rules and should be resolved as soon as possible. Therefore, System Management submits that the amendment should be subject to the Fast Track Rule Change process, on the basis that it satisfies MR 2.5.9(b).

3) Provide any proposed specific changes to particular Rules (for clarity, please use the current wording of the Rules and place a ~~strikethrough~~ where words are deleted and underline words added)

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, where this quantity is in accordance with 3.21.6;
- (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”).

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 available capacity by Trading Interval, where this is to be submitted in accordance with 3.21.6.

3.21.6 The quantity of an outage notification submitted to System Management is:

- (a) The reduction in capacity from maximum capacity, where

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(b) The maximum capacity is:

- i. For generators with a Reserve Capacity Obligation Quantity greater than zero, the value of the Reserve Capacity Obligation Quantity plus the value of Non-Credit Capacity, as indicated in clause 3.21.8, on a sent out basis at 41 degrees Celsius.
- ii. For all other generators, the maximum capacity as indicated in Standing Data, on a sent out basis at 41 degrees Celsius.
- iii. For all other non-generation facilities with a Reserve Capacity Obligation Quantity greater than zero, the value of the Reserve Capacity Obligation Quantity, at 41 degrees Celsius.
- iv. For all other non-generation facilities, the nominated maximum demand as indicated in Standing Data, at 41 degrees Celsius.

3.21.7 For the purposes of clauses 7.3.4 and 7.13.1, System Management will perform the following calculations:

a) the outage for a Registered Facility in a Trading Interval (on a sent out basis at 41 degrees Celsius):

$$PO_{Market} = \max(0, POSystem - NCC \times POSystem / (POSystem + FOSystem))$$

$$FO_{Market} = \max(0, FOSystem - NCC \times FOSystem / (POSystem + FOSystem))$$

Where

PO_{Market} is the planned outage for the purposes of clauses 7.3.4 and 7.13.1

FO_{Market} is the forced outage for the purposes of clauses 7.3.4 and 7.13.1

PO_{System} is the Planned Outage notified in accordance with clause 3.18.6

FOSystem is the Forced Outage notified in accordance with clause 3.21.4

NCC is the Non-Credit Capacity as defined in clause 3.21.8

b) Outage data submitted at 15 degrees Celsius will be converted to 41 degrees Celsius equivalent by multiplying the outage at 15 degrees Celsius by the ratio of the maximum capacity at 41 degrees Celsius to the maximum capacity at 15 degrees Celsius for the facility as indicated in the Standing Data file for temperature dependence as detailed in Appendix 1(b)iv on a generated basis for that facility.

3.21.8 Non-Credit Capacity for a generation facility is:

- (a) Capacity in excess of the Reserve Capacity Obligation Quantity for the current Capacity Cycle.
- (b) As determined by the IMO, using as a basis, the difference between the Reserve Capacity Obligation Quantity that will apply in the second Capacity Cycle and the Reserve Capacity Obligation Quantity in the Current Cycle.
- (c) To be provided to System Management yearly, where the value in (b) is greater than zero.

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 3.21.7.

~~(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.

7.13.1. 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:

...

(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:

...

(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 3.21.7;

4) Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

This proposed Rule Change would better address the following Market Objectives:

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

This Rule Change Proposal would not discourage Participants from providing capacity to the SWIS in excess of RCOQ. This would increase Power System

Security and Reliability.

- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system;

This Rule Change Proposal would remove inequitable penalties to Participants, and would allow further opportunity for Participants to schedule planned outages due to increased system margins. Both of which would reduce costs to Participants and therefore reduce the long-term cost of electricity supplied to customers.

5) Provide any identifiable costs and benefits of the change:**Benefits:**

- Participants providing capacity in excess of RCOQ not penalised inappropriately.
- Increased Power System Security and Reliability through the provision of capacity in excess of RCOQ.
- Greater ability for Participants to schedule planned outages due to increased system margins.
- Reduced costs to Participants.

Costs:

- This change will require modifications to SMMITS. The currently approved budget for the SMMITS project should cover the required changes and should not require System Management to seek a Declared Market Project. Under currently scheduling, System Management intends to complete SMMITS changes by October 2007 should this Rule Change Proposal be approved.
 - No changes to WEMS are required.
 - No changes to Participant processes are required.
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