
Wholesale Electricity Market Rule Change Proposal

Change Proposal No: RC_2011_08
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Submitted by

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Urgency:	3 - High
Change Proposal title:	Curtaillable Load Dispatch for Network Control Services and Changes to the Reserve Capacity Obligation Quantity for Curtaillable Loads under certain circumstances
Market Rule(s) affected:	Clauses 4.12.4, 4.12.8, 4.26.2D and 7.6.10

Introduction

This Market Rule Change Proposal can be posted, faxed or emailed to:

Independent Market Operator

Attn: Troy Forward, Manager Market Administration & System Capacity
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The 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:

Issue 1: The Market Rules limit the dispatch of Curtailable Loads and so limits the effectiveness of alternate options to network investment in Network Control Service Contracts

System Management may dispatch curtailable load facilities under its obligations in Clause 7.6.10.

“7.6.10. Where a Market Participant has Capacity Credits granted in respect of a Curtailable Load:

(a) the IMO must provide System Management with the details of the Reserve Capacity Obligations to enable System Management to dispatch the Curtailable Load.

(b) System Management may issue directions to the Curtailable Load in accordance with the Reserve Capacity Obligations.”

The Reserve Capacity Obligations are determined by the particular availability class, being 24, 48, 72 or 96 hours in any year and by Rule 4.12.8 which prevents full dispatch for more than 2 days.

“4.12.8. Where a Curtailable Load is dispatched to a level equal to its Reserve Capacity Obligation Quantity on two consecutive days the Reserve Capacity Obligation Quantity for the following day shall be zero.”

System Management may need to issue dispatch instructions to curtailable loads to meet system security in accordance with the dispatch merit order or for network control service contracts.

Network Control Service Contracts generally require unrestricted dispatch, that is for more than 2 consecutive days and more than 24 hours per year. The current rules prevent System Management dispatching curtailable loads for this purpose.

As such System Management believes the Market Rules prevents operation of Network Control Services as agreed between the Curtailable Load Owner and the Network Service Provider.

Issue 2: The Market Rules reduce the Reserve Capacity Obligation Quantity (RCOQ) for Curtailable Loads for unintended purposes being Network Control Service Dispatch, Ancillary Service, Tests and Balancing Support.

The IMO, at the MAC meeting of 13 July 2011, requested System Management include this issue in this submission as it is related to the RCOQ of curtailable loads. This expands the scope of the concept to include Ancillary Services Contracts, Testing and Balancing Support Contracts.

System Management may issue a dispatch instruction under Market Rule 7.6.6

“7.6.6. 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.”

The availability of curtailable loads is limited in the number of times it can be called per year. For example a curtailable load can have a limit of 6 activations per capacity year. The curtailable however may be called for various purposes such a reserve capacity test or a network control service. These are requirements are additional to the need to have the curtailable load available to meet the system supply shortfalls.

Hence the number of times called however should only be counted if it is used for system security purposes, that is, only for the reason given in sub section (e) of clause 7.6.6.

The rule that defines the obligations at any time for a curtailable load is given in clauses 4.12.4 and 4.12.8

“4.12.4. Subject to clause 4.12.5, the IMO must apply the following principles in establishing the initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:

(c) for Interruptible Loads, Curtailable Loads and Dispatchable Loads, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity for each block:

i. must be required to be available for a number of hours per year that does not exceed the maximum number of hours per year as specified in accordance with clause 4.10.1(f)(ii);

ii. must be required to be available for a number of hours per day that does not exceed the maximum number of hours per day as specified in accordance with clause 4.10.1(f)(iii);

iii. must be specified as dropping to zero once the capacity from the block has been called the maximum number of times per year as specified in accordance with clause 4.10.1(f)(iv); and

iv. must account for staffing and other restrictions on the ability of the Facility to provide energy upon request.”

“4.12.8. Where a Curtailable Load is dispatched to a level equal to its Reserve Capacity Obligation Quantity on two consecutive days the Reserve Capacity Obligation Quantity for the following day shall be zero.”

The current market rules amend the RCOQ for any reasons, not just those relating to system supply shortfall events.

2) Explain the reason for the degree of urgency:

System Management submits that the Rule Change Proposal be progressed with an urgency of high.

The change is urgent, to address the anticipated need to dispatch Network Control Services during the summer of 2011/12. The dispatch of curtailable loads should not be restricted for this period being from 1 December 2011.

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)

The proposed amendments are based on the rules that are scheduled to come into effect on 1 October 2011 as part of rule change RC_2010_29 (Curtailable Loads and Demand Side Programmes) This effectively replaces curtailable loads with demand side programmes.

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;

...

(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) 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) 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) for the maximum number of times per year specified under clause 4.10.1(f)(iv) ~~excluding where the Facility has been requested to perform a Reserve Capacity test in accordance with clause 4.25;~~
- 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 ~~intervals~~ 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) 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.

4.26.2D. 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 7.6.6(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(eC), 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 7.6.6(e) to the Demand Side Programme for Trading Interval t as advised to the IMO by System Management under clause 7.13.1.

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 ~~may issue directions~~ to the Demand Side Programme under clause 7.6.6(e) must be in accordance with those Reserve Capacity Obligations.

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 objective (a) of the Market Objectives. The change as submitted would promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West Interconnected System.

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

Benefits:

- The changes allow curtailable loads to provide a more economic alternative to network investment

Costs:

- No costs have been anticipated by System Management other than the administrative costs to change the rules.
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