
Wholesale Electricity Market Rule Change Proposal

Change Proposal No: RC_2011_05
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Submitted by

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Date submitted:	9 June 2011
Urgency:	Fast Track Rule change process
Change Proposal title:	Curtailed Load Dispatch Clarification
Market Rule(s) affected:	Clause 7.6.3

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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Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4399

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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:

System Management must schedule and dispatch WEM facilities under its obligation in Clause 7.6.1.

Currently System Management complies with clauses 7.6.3 and 7.6.4 amongst others to dispatch Electricity Generation Corporation and Non-Electricity Generation Corporation facilities it uses. These are

“7.6.3. 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 would result in that Facility using Liquid Fuel.

7.6.4. 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.”

In summary System Management uses the following dispatch order to increase supply:

1. Verve Non Liquid (other than distillate, fuel oil, liquid petroleum gas, or liquefied natural gas)
2. Non Verve Non Liquid (other than distillate, fuel oil, liquid petroleum gas, or liquefied natural gas)
3. Verve Liquid (distillate, fuel oil, liquid petroleum gas, or liquefied natural gas)
4. Non Verve Liquid (distillate, fuel oil, liquid petroleum gas, or liquefied natural gas)

System Management has interpreted this to mean that curtailable and dispatchable loads, which do not have a fuel characteristic, are classified as Non Verve Non Liquid as it matches the definition of Non Liquid. In essence its dispatch order is

1. Verve Non Liquid (other than distillate, fuel oil, liquid petroleum gas, or liquefied natural gas)
2. Non Verve Non Liquid (other than distillate, fuel oil, liquid petroleum gas, or liquefied natural gas) and Non Verve Curtailable and Non Verve Dispatchable loads
3. Verve Liquid (distillate, fuel oil, liquid petroleum gas, or liquefied natural gas)
4. Non Verve Liquid (distillate, fuel oil, liquid petroleum gas, or liquefied natural gas)

System Management notes, however, that

- Appendix 1 (c)vi allows a Scheduled Generators registered as being capable of running on Liquid Fuel to submit a Consumption Increase & Decrease Prices not less than the Minimum STEM Price and not more than the Alternative Maximum STEM Price
- Appendix 1 (h)vi allows a Curtailable Load to submit a Consumption Decrease Price not less than the Minimum STEM Price and not more than the Alternative Maximum STEM Price

- Appendix 1 (i)xA allows a Dispatchable Load to submit a Consumption Increase & Decrease Prices not less than the Minimum STEM Price and not more than the Alternative Maximum STEM Price

These prices are the same as a Liquid Supply Increase price for a scheduled generator as given in Appendix 1(c)vi. A reader of this clause could infer that System Management should dispatch curtailable and dispatchable loads in the same class as Non Verve Liquid facilities.

As such System Managements interpretation may lead to an inefficient dispatch as curtailable and dispatchable loads that have bid at the alternative STEM price would be dispatched ahead of Verve Liquid facilities.

This is shown in the following example

Scenario 1

IPP Liquid Facility Bid = \$450/MWh

Curtailable Load Bid (Non-Liquid) = \$400/MWh

Dispatch Merit Order is

1. Curtailable Load (Non-liquid)= \$400/MWh
2. Verve Liquid
3. IPP Liquid = \$450/MWh

(This is economically correct as the lower cost bid is dispatched before the higher cost bid)

Scenario 2

IPP Liquid Facility Bid = \$450/MWh

Curtailable Load Bid (Non-Liquid) = \$500/MWh

Dispatch Merit Order is

1. Curtailable Load (Non-liquid)= \$500/MWh
2. Verve Liquid
3. IPP Liquid = \$450/MWh

(This is not economically correct as it forces the higher cost bid to be dispatched before the lower cost bid)

As such System Management believes there is a manifest error in the Market Rules as two sections are in conflict giving inefficient market outcomes.

To avoid doubt System Management believes there is less risk to the market if the required dispatch order is stated explicitly and the standing data prices reflect the order for avoidance of doubt. This allows owners and potential owners of curtailable and dispatchable loads to be given a clear view of how their facilities will be dispatched.

System Management believes that dispatching curtailable loads and dispatchable loads as liquid facility is theoretically better as it provides higher dispatch payments for lower capacity factor facilities. System Management notes generally this is associated with lower capacity payments.

2) Explain the reason for the degree of urgency:

System Management submits that the Rule Change Proposal be progressed through the Fast Track Rule Change Process, on the basis that the requirements of clause 2.5.9(c) are met.

Clause 2.5.9(c) requires that the rule change be both urgently required **and** essential for the safe, effective and reliable operation of the SWIS (or the market).

In the view of System Management, both requirements are met in this case.

The change is urgent, to address the anticipated dispatch of an increasing number of curtailable loads.

The change is essential for the safe, effective and reliable operation of the SWIS because without the change Market Participants are unclear as to the dispatch obligations. System Management hence believes that this should be retained as a fast track rule change. The rule change should be in place prior to the next certification of reserve capacity circa July 2011 as potential proponents need to be clear of their obligations.

Additionally System Management is of the view that this issue constitutes a manifest error in the Rules.

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)

7.6.3. 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 Curtailable Load or as a Dispatchable Load.

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.

It better addresses this objective by making the dispatch rules more transparent and so the Market Participants can determine their obligations more fully than without this amendment.

With this rule change the previous example would be

Scenario 1

IPP Liquid Facility Bid = \$450/MWh
 Curtailable Load Bid (Non-Liquid) = \$400/MWh

Dispatch Merit Order is

1. Verve Liquid
2. Curtailable Load = \$400/MWh
3. IPP Liquid = \$450/MWh

(This is economically correct as the lower cost bid is dispatched before the higher cost bid)

Scenario 2

IPP Liquid Facility Bid = \$450/MWh
 Curtailable Load Bid (Non-Liquid) = \$500/MWh

Dispatch Merit Order is

1. Verve Liquid
2. IPP Liquid = \$450/MWh
3. Curtailable Load = \$500/MWh

(This is economically correct as the lower cost bid is dispatched before the higher cost bid)

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

Benefits:

- The changes would remove doubt for Participants and System Management regarding real-time dispatch.

- System Controllers would not be distracted from their primary function of maintaining power system security.

Costs:

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