



Independent Market Operator

Final Rule Change Report

**Title: Curtailable Load Dispatch
Clarification**

RC_2011_05

Standard Rule Change Process

Date: 19 October 2011

CONTENTS

EXECUTIVE SUMMARY	3
1. RULE CHANGE PROCESS AND TIMETABLE	4
2. PROPOSED AMENDMENTS	4
2.1 The Rule Change Proposal	4
2.2 The IMO's Initial Assessment of the Proposal	5
3. CONSULTATION	5
3.1 The Market Advisory Committee	5
3.2 Submissions received during the first submission period	5
3.3 The IMO's response to submissions received during the first submission period	6
3.4 Submissions received during the second submission period	6
3.5 Public Forums and Workshops	6
4. THE IMO'S ASSESSMENT	6
4.1 Amending Rules	7
4.2 Wholesale Market Objectives	7
4.3 Practicality and Cost of Implementation	8
5. THE IMO'S DECISION	8
6. AMENDING RULES	8
6.1 Commencement	8
6.2 Amending Rules	8
APPENDIX 1: ORIGINAL RULE CHANGE PROPOSAL	10

Independent Market Operator

Level 3, Governor Stirling Tower
197 St George's Terrace, Perth WA 6000
PO Box 7096, Cloisters Square, Perth WA 6850
Tel. (08) 9254 4300
Fax. (08) 9254 4399
Email: imo@imowa.com.au
Website: www.imowa.com.au

EXECUTIVE SUMMARY

Background

It is currently unclear whether Curtailable Loads and Dispatchable Loads are to be dispatched by System Management as Non Verve Liquid or Non Liquid Fuelled facilities. System Management proposed to clarify the Market Rules to explicitly state that these facilities will be dispatched with the Non Verve Liquid Fuelled facilities consistent with their pay as bid prices.

Consultation

- A Concept Paper was discussed by the Market Advisory Committee (MAC) at the May 2011 meeting. The MAC was generally supportive of System Management's view that there was a lack of clarity in the current Market Rules.
- System Management formally submitted the Rule Change Proposal on 9 June 2011. The IMO issued a notice calling for submissions on 15 June 2011.
- First round submissions were received from EnerNOC, Landfill Gas and Power and Synergy. All submissions supported the proposed amendments.
- A second round submission was received from Synergy supporting the proposed amendments.

Assessment against the Wholesale Market Objectives

The IMO has found the proposed amendments to promote Wholesale Market Objectives (a) and (d) and to be consistent with the remaining Wholesale Market Objectives.

Practicality and Cost of Implementation

Implementing the proposed amendments will not result in either the IMO or System Management incurring any IT costs. Likewise, submitting parties did not identify any costs associated with the proposed amendments. No practical implications have been identified.

The IMO's Decision

The IMO's decision is to accept the Rule Change Proposal as modified following the first submission period.

Next steps

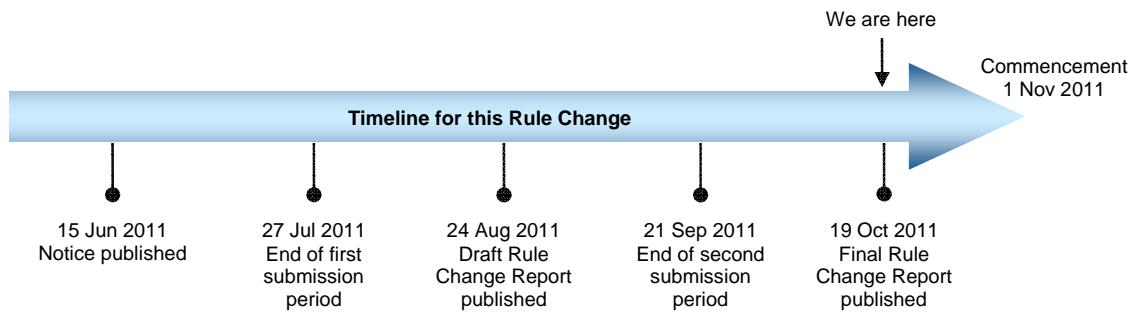
The resultant Amending Rules will commence at **8:00am on 1 November 2011**.

1. RULE CHANGE PROCESS AND TIMETABLE

On 9 June 2011 System Management submitted a Rule Change Proposal regarding amendments to clause 7.6.3 of the Wholesale Electricity Market Rules (Market Rules).

This proposal is being processed using the Standard Rule Change Process, described in section 2.7 of the Market Rules.

The key dates in processing this Rule Change Proposal are:



2. PROPOSED AMENDMENTS

2.1 The Rule Change Proposal

System Management must schedule and dispatch facilities under its obligations in clause 7.6.1. The following dispatch order is currently used by System Management to increase supply:

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

Currently the Market Rules remain silent as to whether Curtailable Loads¹ and Dispatchable Loads, which do not have a fuel characteristic, are to be dispatched as part of the Non Verve Non Liquid or Non Verve Liquid Fuel class. System Management noted that dispatch prices for Curtailable Loads (to decrease consumption) and Dispatchable Loads (to increase or decrease consumption) must not be less than the Minimum STEM Price and not more than the Alternative Maximum STEM Price (refer to Appendix 1 (h)(vi) and Appendix 1 (i)(xA), respectively).

System Management noted that it could be inferred from this that System Management should dispatch Curtailable and Dispatchable Loads in the same class as Non Verve Non Liquid Fuel Facilities. This interpretation may lead to an inefficient dispatch as Curtailable

¹ The IMO notes that on 1 October 2011 the Amending Rules from the Rule Change Proposal: Curtailable Loads and Demand Side Programmes (DSP) (RC_2010_29) commenced. These removed the concept of a Curtailable Load as a Registered Facility from the Market Rules and replaced this with the concept of the DSP being the Registered Facility. The DSP has loads associated with it for the purposes of capacity obligations, dispatch and settlements.

and Dispatchable Loads that have bid at the Alternative STEM Price would be dispatched ahead of Verve Liquid Fuel facilities.

System Management proposed amendments to clarify that Curtailable and Dispatchable Loads are to be dispatched as Non Verve Liquid Fuel facilities.

For full details of the Rule Change Proposal refer to Appendix 1.

2.2 The IMO's Initial Assessment of the Proposal

The IMO decided to proceed with this proposal on the basis that Market Participants should be given an opportunity to provide submissions as part of the rule change process.

3. CONSULTATION

3.1 The Market Advisory Committee

The MAC discussed the proposal at the 11 May 2011 MAC meeting. An overview of the discussion from the MAC meeting is presented below. Further details are available in the MAC meeting minutes available on the IMO website: http://www.imowa.com.au/MAC_38

The MAC was generally supportive of the System Management's view that there was an issue with the lack of clarity in the Market Rules around which dispatch class Curtailable Loads and Dispatchable Loads belonged to. During discussions, a number of suggestions were made by members regarding the options for addressing the identified issue, for example the creation of an alternative class of dispatch for Demand Side Management (DSM) given its unique fuel characteristics. There was also discussion as to whether it would be most appropriate for Curtailable Loads and Dispatchable Loads to be assigned to the Non Verve Liquid Fuel dispatch group.

3.2 Submissions received during the first submission period

The first submission period for this Rule Change Proposal was between 16 June 2011 and 27 July 2011.

The IMO received submissions from EnerNOC, Landfill Gas & Power (LGP) and Synergy in support of the proposed amendments. The main points noted in the submissions are summarised below, with the full text of the submissions available on the IMO website.

EnerNOC supported the proposed amendments as they would ensure the economically efficient operation of the Market. EnerNOC noted that the current *de facto* dispatch order, created as a result of the identified issue, means that Curtailable Loads will always be dispatched ahead of Verve and Non Verve Liquid Fuel facilities, regardless of the respective Standing Data prices that the facilities have submitted. EnerNOC considered that as a result of the *de facto* dispatch order that does not allow System Management to consider the Consumption Decrease Price of a Curtailable Load facility, Market Participants with Curtailable Loads effectively do not have the same rights as owners of Scheduled Generators that run on Liquid Fuel. EnerNOC considered that this could be reasonably viewed as discriminatory (albeit unintentionally so) against DSM.

LGP supported implementing the proposed changes immediately so as to improve the dispatch process over the coming summer (notwithstanding that the proposed changes will be superseded by the prospective Balancing market). LGP's support was based on seeking a simple and effective temporary solution. However, for the prospective Balancing market LGP would otherwise prefer that a Curtailable Load be allocated to a

dispatch category (Non Verve Liquid or Non Verve Non Liquid Fuel) according to its submitted price; that is, treated as liquid when more than the non liquid price cap, and non-liquid otherwise.

Synergy supported the proposed changes noting that it is sensible and pragmatic to categorise Curtailable Loads as a Liquid Fuelled facility as a result of scarcity of DSM resources.

EnerNOC and Synergy considered that the proposed amendments would better address Market Objective (a). LGP considered the proposed changes are consistent with the Market Objectives and improve the integrity of the Market Rules by improving clarity and transparency.

3.3 The IMO's response to submissions received during the first submission period

In response to LGP's comments around the need to further consider the dispatch category for Curtailable Loads and Dispatchable Loads under the prospective Balancing market, the IMO considers that this is a complex issue due to the current restrictions in availability of these facilities. The IMO notes that the availability requirements for DSM are being considered as part of the current review of the Reserve Capacity Mechanism. It is not proposed at this stage to include Curtailable Loads and Dispatchable Loads in the Balancing market. For further details refer to the "Update on Balancing Design options" paper presented to the Rules Development Implementation Working Group's June 2011 meeting. A copy of the paper is available on the following webpage: <http://www.imowa.com.au/RDIWG>

3.4 Submissions received during the second submission period

The second submission period for this Rule Change Proposal was between 24 August and 21 September 2011.

The IMO received a submission from Synergy in support of the proposed amendments. Synergy considered the proposed changes will allow the Market Rules to better achieve Market Objective (a).

A copy of the full text of Synergy's submission is available on the IMO website.

3.5 Public Forums and Workshops

No public forums or workshops were held in relation to this Rule Change Proposal.

4. THE IMO'S ASSESSMENT

In preparing its Final Rule Change Report, the IMO must assess the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3 of the Market Rules.

Clause 2.4.2 outlines that the IMO *"must not make Amending Rules unless it is satisfied that the Market Rules, as proposed to be amended or replaced, are consistent with the Wholesale Market Objectives"*. Additionally, clause 2.4.3 states, when deciding whether to make Amending Rules, the IMO must have regard to the following:

- any applicable policy direction from the Minister regarding the development of the market;
- the practicality and cost of implementing the proposal;
- the views expressed in submissions and by the MAC; and

- any technical studies that the IMO considers necessary to assist in assessing the Rule Change Proposal.

The IMO notes that there has not been any applicable policy direction from the Minister or any technical studies commissioned in respect of this Rule Change Proposal. A summary of the views expressed in submissions and by the MAC is available in section 3 of this report.

The IMO's assessment is outlined in the following sub-sections.

4.1 Additional Amendments to the Proposed Amending Rules

Following the first public submission period the IMO made some additional changes to the proposed Amending Rules to:

- reflect the Amending Rules resulting from RC_2010_29; and
- improve the integrity of the proposed Amending Rules.

These changes are as follows (~~deleted text~~, added text):

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, or
- is registered as a ~~Curtailable Load~~ Demand Side Programme or as a Dispatchable Load.

4.2 Wholesale Market Objectives

The IMO considers that the Market Rules as a whole, if amended, will be consistent with the Wholesale Market Objectives. Further, the IMO considers that the Market Rules if amended would not only be consistent with the Wholesale Market Objectives but also allow the Market Rules to better address Wholesale Market Objectives (a) and (d).

The IMO's assessment is presented below:

- to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West Interconnected System*

The proposed amendments will promote a more economically efficient outcome by ensuring that Curtailable Loads and Dispatchable Loads are dispatched in the same group as other Non Verve Facilities that can bid prices up to the Alternative Maximum STEM Price (the price cap for Liquid Fuel). This will prevent the uneconomic dispatch of these Facilities where lower cost options may be available.

The proposed amendments will also promote the safe and reliable production and supply of electricity in the South West interconnected system by simplifying the dispatch process

for System Management and providing Market Participants with greater clarity around their dispatch obligations.

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

The proposed amendments will prevent the dispatch of high cost Curtailable Loads and Dispatchable Loads when lower cost options are available to System Management, and so will better address Wholesale Market Objective (d).

The IMO considers that the proposed changes are consistent with the remaining Market Objectives and improve the integrity of the Market Rules.

4.3 Practicality and Cost of Implementation

Cost:

The proposed amendments will not require any changes to the systems operated by System Management or the IMO. No other costs were identified by submitting parties.

Practicality:

The IMO has not identified any issues with the practicality of implementing the proposed changes.

5. THE IMO'S DECISION

The IMO's decision is to accept the Rule Change Proposal as modified by the amendments outlined in section 4.1 of this report. The IMO has made its decision on the basis that the Amending Rules:

- will allow the Market Rules to better address Wholesale Market Objectives (a) and (d);
- are consistent with the remaining Wholesale Market Objectives;
- do not have any associated costs or practical implications;
- have the majority support of the MAC; and
- are supported by all the submissions received during the first and second submission periods.

6. AMENDING RULES

6.1 Commencement

The amendments to the Market Rules resulting from this Rule Change Proposal will commence at **8:00am** on **1 November 2011**.

6.2 Amending Rules

The following clauses are amended (added text, ~~deleted text~~):

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 Demand Side Programme or Dispatchable Load.

APPENDIX 1: ORIGINAL RULE CHANGE PROPOSAL

Change Proposal No: RC_2011_05

Received Date: 9 June 2011

Submitted by

Name:	Brendan Clarke
Phone:	9427 5940
Fax:	9427 4228
Email:	Brendan.Clarke@westernpower.com.au
Organisation:	System Management
Address:	
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

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 ~~strike through~~ 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

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

Dispatch Merit Order is

1. Verve Liquid
2. IPP Liquid = \$450/MWh
3. Curtaillable 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.