

Independent Market Operator



Draft Market Rule Change Report

Title: Treatment of DSM in Outage Planning and PASA

Ref: RC_2007_03

Date: 20 July 2007

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1. INTRODUCTION

1.1. *General Information about Rule Changes*

Clause 2.5.1 of the Wholesale Electricity Market Rules provides that any person (including the Independent Market Operator) may make a rule change proposal by completing a Rule Change Proposal Form and submitting this to the Independent Market Operator (IMO).

In order for the proposal to be progressed, the change proposal must 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
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used

A rule change proposal can be processed using a Standard process or a Fast Track process. The Standard process involves a combined 10 weeks public submission period. Under the shorter Fast Track process the IMO consults with Rule Participants who either advise the IMO that they wish to be consulted or the IMO considers have an interest in the change.

1.2. *About this Rule Change*

On 3 May 2007, System Management submitted a Rule Change Proposal titled Treatment of DSM in Outage Planning and PASA.

The proposal is being processed by the IMO using the Standard Rule Change Process, described in section 2.7 of the Wholesale Electricity Market Rules.

The Standard Process adheres to the following timelines, outlined in section 2.7 of the Market Rules:

- The first Public Submission period is 6 weeks from the date the IMO publishes a Rule Change Notice for the proposal.
- The IMO publishes this draft Rule Change report within 20 Business Days of the end of the first Public Submission period.
- The second Public Submission period is a minimum of 20 Business Days

from the date the draft Rule Change Report is published.

- Within 20 Business Days after the end of the second Public Submission period, the IMO must publish a Final Rule Change report.

The key dates in processing this Rule Change Proposal are:

- The Rule Change Notice for this proposal was published on the IMO website on 11 May 2007
- The first Public Submission period on the Rule Change Proposal ended on 22 June 2007
- This draft Rule Change Report is published on 20 July 2007
- The second Public Submission period is from 20 July to 17 August 2007
- The Final Rule Change Report will be published by the IMO on 14 September 2007

Based on the submissions received, the IMO's draft decision is to accept the Rule Change in the modified form described in chapter 5 of this report.

This draft Rule Change Report on the Rule Change Proposal has been prepared by the IMO in accordance with clause 2.7.6 of the Market Rules.

Interested parties are invited to provide further submissions in relation to this draft Rule Change Proposal. In accordance with the Market Rules timelines, the deadline for submissions is 17 August 2007.

2. THE RULE CHANGE PROPOSAL

2.1. *The Submission*

IMO received, on 3 May 2007, a Rule Change Proposal from System Management proposing changes to sections 3.16, 3.17, 3.18 and 3.19 of the Wholesale Electricity Market Rules.

2.1.1. *Submission details*

Name: Alistair Butcher
Phone: 9427 5787
Email: Alistair.butcher@westernpower.com.au
Organisation: System Management
Date submitted: 03/05/2007
Urgency: 3 - high
Change request title: Treatment of DSM in Outage Planning and PASA

2.2. *Details of the Proposal*

The outage planning process (clauses 3.18 and 3.19 of the Market Rules) and the Projected Assessment of System Adequacy (PASA) provisions (clauses 3.16 and 3.17) require System Management to take Demand Side Management (DSM) into account in these processes. System Management submitted that often it is not practicable to adhere to these requirements in the outage planning and PASA processes, due to the uncertainty surrounding DSM (e.g. limitations on frequency of its availability) and risk for system security of overstating system margins.

System Management considered that there should be some discretion in the inclusion of DSM when determining available capacity, and thus the requirement to take DSM into account should not be mandatory.

2.3. *The Proposal and the Market Objectives*

System Management submitted that the proposed rule changes would promote the economically efficient, safe and reliable production and supply of electricity in the South West Interconnected System (SWIS).

System Management stated in its proposal that “revising the mandatory obligation to take into account demand side management ensures that the actual practice of outage planning, which removes the inherent uncertainty of demand side management from the determination of available capacity, is reflected in the Market Rules, and thereby aids the safe and reliable supply of electricity”.

2.4. Amending Rules Proposed by System Management

System Management proposed the follow changes to address this issue:

a. Revision to clause 3.18.11(aA) from:

The capacity of the total generation and Demand Side Management Facilities remaining in service must satisfy the Ready Reserve Standard described in clause 3.18.11A;

to

The total capacity of the generation Facilities remaining in service, which may at System Management's discretion include Demand Side Management, must satisfy the Ready Reserve Standard described in clause 3.18.11A;

b. Revision to clause 3.19.6(a) from:

The capacity of the generation and Demand Side Management Facilities remaining in service must be greater than the load forecast for the relevant time period.

to

The capacity of the generation Facilities remaining in service, which may at System Management's discretion include Demand Side Management, must be greater than the load forecast for the relevant time period.

c. Deletion of clause 3.16.9(c) and inclusion of new clause 3.16.9A:

3.16.9(c)

~~forecast total available Demand Side Management capacity by week and by constrained region;~~

New 3.16.9A:

In submitting the information described in clause 3.16.9, System Management may, but is not required to, include forecast total available Demand Side Management capacity by week and by constrained region.

d. Revision to clause 3.16.9(d)(iii) from:

the total available Demand Side Management capacity;

to

the total available Demand Side Management capacity, which may be included at System Management's discretion.

e. Deletion of clause 3.17.9(c) and inclusion of new clause 3.17.9A:

3.17.9(c)

~~forecast total available Demand Side Management capacity by six-hour period;~~

New 3.17.9A:

System Management may, but is not required to, include in the results of a Short Term PASA study which is provided to the IMO the forecast total available Demand Side Management capacity by six-hour period.

f. Revision to clause 3.17.9(d)(iii) from:

the total available Demand Side Management capacity;

to

the total available Demand Side Management capacity, which may be included at System Management's discretion.

2.5. The IMO's Initial Assessment of the Proposal

The IMO decided to proceed with this proposal on the basis that the IMO's preliminary assessment indicated that the proposal is consistent with the Market Objectives.

The proposal was progressed by the IMO according to the Standard Rule Change Process, described in section 2.7 of the Market Rules.

3. SUBMISSIONS

IMO received submissions from Alinta Sales and Synergy regarding this Rule Change Proposal. A summary of the submissions is provided below. IMO's response to the issues raised by the submissions can be found in chapter 4 of this document. The submissions, in their entirety, can be found on the IMO Website.

3.1. Market Advisory Committee

The Market Advisory Committee (MAC) was invited to have preliminary discussions on the Rule Change Proposal at its meeting on 28 March 2007, before it was formally submitted by System Management.

MAC agreed with System Management that DSM is unsuitable for contingency planning to cover a sudden loss of generation. This is due to the limited availability of DSM over longer periods of time and the advance notice needed to activate a reduction in load through DSM.

MAC acknowledged, however, that DSM still had an important role in covering short term reliability issues and that it can potentially also have a role in long term outage planning.

To ensure that the Rules continue to place value on DSM, MAC suggested that, instead of removing the inclusion of DSM in the proposed changed rules, as originally proposed by System Management, it would be more suitable to amend the rules to state that System Management "may" include DSM in its outage planning and PASA studies.

The formal rule change proposal submitted by System Management, and assessed in this report, took into account the suggestions made by MAC.

MAC members were again invited to express their views on this proposed rule change at their 13 June 2007 meeting. No member expressed concerns with the rule change as proposed.

3.2. Submission from Alinta Sales

Alinta expressed general support to System Management's proposal to allow more discretion in relation to how DSM is reflected when conducting PASA studies and outage planning.

However, Alinta expressed concern that the proposal in its current form does not place any value on DSM's contribution to system capacity and security.

To address this, Alinta proposed to amend the wording in the rule change proposal. Instead of allowing System Management discretion whether to include DSM or not in its forecasts and planning, Alinta proposed to require System Management to include a "reasonable forecast of available DSM" in outage planning and PASA studies.

Alinta considered that System Management's proposal will better facilitate objective (a), promoting the reliable production of electricity. However, Alinta considered that System Management's proposal may be detrimental to objective (a), promoting economically efficient production and supply, if a reasonable amount of DSM is not included in outage planning and PASA studies.

Alinta submitted that the rule change, in the modified form suggested by Alinta, would better facilitate achievement of market objectives (a), (b) and (d).

3.3. *Submission from Synergy*

Synergy supported the proposal to allow some discretion in the inclusion of DSM in PASA studies. Synergy agreed with System Management that DSM programs are generally not appropriate for providing capacity during generator outages especially in the non-summer season.

Synergy submitted that the proposal facilitates objective (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system.

3.4. *Public Forums and Workshops*

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

4. THE IMO'S ASSESSMENT AND DECISION

4.1. **Assessment**

4.1.1. *System Management's proposed changes to sections 3.16, 3.17, 3.18 and 3.19*

System Management submitted in its Rule Change Proposal that the current requirements in the Market Rules regarding outage planning (clauses 3.18 and 3.19) and PASA studies (clauses 3.16 and 3.17) require System Management to take demand side management capacity into account. System Management considered that it is not practicable to adhere to these requirements, due to the uncertainty surrounding demand side management (DSM) and the inherent danger for system security of overstating system margins. System Management's proposal provides discretion in the inclusion of DSM when determining available capacity, and thus the requirement to take DSM into account would not be mandatory.

The IMO agrees with System Management that some parts of the available DSM may not be suitable to cover a sudden loss of generation due to the lead times required to activate DSM and due to the limited availability over longer periods of time. Therefore, the IMO finds it appropriate that System Management, in its forecasting and planning processes, only accounts for the DSM System Management deems appropriate to maintain system security and reliability.

4.1.2. *Submissions*

No objections were expressed regarding the general intent of the changes proposed by System Management. However, concerns were raised over the potential value reduction of DSM's contribution to the SWIS if System Management was not required to include any DSM in its planning and forecasting.

Alinta proposed changes to the amended rules suggested by System Management. Alinta's changes would require System Management to include a reasonable forecast of DSM, instead of giving System Management discretion to exclude DSM in its outage planning and PASA processes.

The IMO considers that it is important that DSM continues to be an important contributor to the reliability of the SWIS. In this regard the IMO supports the inclusion of a reasonable amount of DSM in System Management's forecasting and planning processes.

The IMO has discussed Alinta's submission with System Management before publishing this report. System Management was of the view that its internal procedures already ensure that System Management takes into account a reasonable forecast of DSM in its planning process. System Management supports the changes suggested by Alinta, with a few minor amendments to clarify that the forecast of a reasonable quantity of DSM is to be made by System Management.

4.1.3. The IMO's assessment

According to clauses 2.4.2 of the Market Rules *“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”*.

The IMO' assessment against each of the Market Objectives is as follows:

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

Assessment: Providing System Management with discretion whether to include DSM in its forecasting and planning processes, will increase the reliability of electricity supply in the SWIS.

Including a reasonable amount of DSM in situations where it is appropriate to do so, will ensure that all reliable and available SWIS facilities are accounted for by System Management in its planning processes, thereby facilitating maximum economic efficiency.

The IMO considers that this change (as amended in Chapter 6) will further the achievement of Market Objective (a).

(b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors

Assessment: The IMO considers that the proposed changes do not impact on, and therefore are consistent with, the operation of objective (b) of the Market Objectives.

(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

Assessment: The rule change as proposed in Chapter 6 will maintain the value of DSM as an important component of the SWIS.

The IMO considers that the change is consistent with Market Objective (c).

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

Assessment: This rule change will ensure that DSM resources are utilised appropriately. The inclusion of a reasonable amount of DSM will ensure that System Management includes all available technologies in the most cost effective way in its planning processes. The rule proposed change is considered to be consistent with Market Objective (d).

(e) to encourage the taking of measures to manage the amount of electricity used and when it is used

Assessment: Notwithstanding the discretion provided to System Management to consider how much DSM to reasonably account for in its planning processes, the IMO considers that the proposed changes do not impact on, and therefore are consistent with, the operation of objective (e) of the Market Objectives.

In accordance with Clause 2.4.3(b) of the Market Rules, in deciding whether or not to make Amending Rules, the IMO must also have regard to the practicality and cost of implementing the Amending Rules.

The proposed amendment will not require any changes to the market systems.

The IMO understands that System Management's internal procedures already provide that System Management takes available DSM into account in its planning processes where this is consistent with the applicable system security and reliability criteria. Therefore, no procedural changes are expected to be required by System Management to comply with these Amending Rules.

4.2. IMO's Draft Decision

The IMO's draft decision is to:

- Accept the rule changes, as drafted in Chapter 6. That is, accept the proposed changes to sections 3.16, 3.17, 3.18 and 3.19 in the form suggested by Alinta in its submission, as modified to clarify that the reasonable forecast of DSM is to be made by System Management.

The IMO has made its draft decision on the basis that the resulting Amending Rules will allow the Market Rules to better address the Market Objectives.

5. CALL FOR SUBMISSIONS

The IMO wishes to receive submissions regarding this draft Rule Change Report.

The submission period is 20 Business Days from the publication date of this Report. Submissions must be delivered to the IMO by close of business on Friday, 17 August 2007.

The IMO prefers to receive submissions by email to **marketadmin@imowa.com.au** , using the submission form available on the IMO website:
http://www.imowa.com.au/10_5_1_a_v_open_rule_change_proposals.htm

Submissions may also be sent to the IMO by fax or post, addressed to:

Independent Market Operator

Attn: Dora Guzeleva, Manager Market Administration
PO Box 7096
Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4399

6. PROPOSED AMENDING RULES

The changes proposed by Alinta, together with the further minor modifications proposed by System Management, makes it possible to amend clauses 3.16.9(c) and 3.17.9(c), instead of deleting these clauses and replacing them with new ones, as originally proposed by System Management.

Following are the consolidated proposed amendments (~~deleted wording~~, new wording):

6.1. **Clause 3.16.9(c)**

System Management's reasonable forecast of the total available Demand Side Management capacity by week and by constrained region;

6.2. **Clause 3.16.9(d)(iii)**

System Management's reasonable forecast of the total available Demand Side Management capacity;

6.3. **Clause 3.17.9(c)**

System Management's reasonable forecast of the total available Demand Side Management capacity by six-hour period;

6.4. **Clause 3.17.9(d)(iii)**

System Management's reasonable forecast of the total available Demand Side Management capacity;

6.5. **Clause 3.18.11(aA)**

The total capacity of the ~~total~~ generation and Demand Side Management Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must satisfy the Ready Reserve Standard described in clause 3.18.11A;

6.6. **Clause 3.19.6(a)**

The capacity of the generation and Demand Side Management Facilities remaining in service, and System Management's reasonable forecast of the total available Demand Side Management, must be greater than the load forecast for the relevant time period.