

Independent Market Operator



## **Final Market Rule Change Report**

### **Title: Treatment of DSM in Outage Planning and PASA**

Ref: RC\_2007\_03

Date: 14 September 2007

## CONTENTS

<b>1. INTRODUCTION .....</b>	<b>2</b>
1.1. General Information about Rule Changes.....	2
1.2. About this Rule Change .....	2
<b>2. THE RULE CHANGE PROPOSAL .....</b>	<b>4</b>
2.1. The Submission.....	4
2.2. Details of the Proposal .....	4
2.3. The Proposal and the Market Objectives .....	4
2.4. Amending Rules Proposed by System Management .....	5
<b>3. SUBMISSIONS RECEIVED IN THE FIRST SUBMISSION PERIOD .....</b>	<b>7</b>
3.1. Market Advisory Committee .....	7
3.2. Submission from Alinta Sales .....	7
3.3. Submission from Synergy .....	8
3.4. Public Forums and Workshops .....	8
<b>4. THE IMO'S DRAFT DECISION.....</b>	<b>9</b>
<b>5. SUBMISSIONS RECEIVED IN THE SECOND SUBMISSION PERIOD .....</b>	<b>10</b>
5.1. Submission from Griffin Energy .....	10
<b>6. THE IMO'S ASSESSMENT AND FINAL DECISION.....</b>	<b>11</b>
6.1. The IMO's Assessment .....	11
6.2. The IMO's Final Decision .....	12
6.3. Amending Rules Commencement .....	12
<b>7. AMENDING RULES .....</b>	<b>13</b>
7.1. Clause 3.16.9(c) .....	13
7.2. Clause 3.16.9(d)(iii) .....	13
7.3. Clause 3.17.9(c) .....	13
7.4. Clause 3.17.9(d)(iii) .....	13
7.5. Clause 3.18.11(aA) .....	13
7.6. Clause 3.19.6(a) .....	13

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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 has been 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 must publish a Draft Rule Change Report within 20 Business Days of the end of the submission period.

## Public Domain

- The second Public Submission period is 4 weeks from the date the IMO publishes the Draft Rule Change Report.
- The IMO publishes its Final Rule Change Report within 20 Business Days of the end of the second Public Submissions period.

The key dates in processing this Rule Change Proposal were:

- 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 ended on 22 June 2007.
- The IMO Draft Rule Change Report was published on 20 July 2007.
- The second Public Submission period was from 20 July to 17 August 2007.
- This Final Rule Change Report was published by the IMO on 14 September 2007.
- The amendments to clauses 3.16.9(c), 3.16.9(d)(iii), 3.17.9(c), 3.17.9(d)(iii), 3.18.11(aA), 3.19.6(a) will commence on 1 October 2007.

Based on the submissions received and the IMO's assessment of the proposed changes against the Market Objectives, the IMO's decision is to accept the Rule Change in the modified form described in section 7 of this report.

This Final Rule Change Report on the Rule Change Proposal has been prepared by the IMO in accordance with clause 2.7.8 of the Market Rules.

## 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*

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Email: [Alistair.butcher@westernpower.com.au](mailto: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).

In its proposal, System Management stated 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 following changes to the Market Rules to address the issues identified in its Proposal:

**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.

### **3. SUBMISSIONS RECEIVED IN THE FIRST SUBMISSION PERIOD**

The first submission period for this Rule Change Proposal was between 14 May and 22 June 2007. The IMO received submissions from Alinta Sales and Synergy. A summary of the submissions is provided below. The submissions 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 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, 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 for 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 did 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 or not to include DSM 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 would better facilitate Market Objective (a) by promoting the reliable production of electricity. However, Alinta considered that System Management's proposal may also be detrimental to objective (a), i.e. detrimental to 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), i.e. it will 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 DRAFT DECISION

During the first submission period Alinta proposed changes to the amended rules to require System Management to include a reasonable forecast of DSM in its outage planning and PASA processes. The IMO discussed Alinta's proposal with System Management, who accepted that these changes should be made to their proposed amending rules, as long as it was made clear that the relevant forecasts are made by System Management.

Based on the submissions received and its own assessment against the Market Objectives, the IMO's draft decision was to accept the proposed changes to sections 3.16, 3.17, 3.18 and 3.19 as proposed by System Management and modified by Alinta in its submission, and as further modified to clarify that the reasonable forecast of DSM is to be made by System Management.

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

## 5. SUBMISSIONS RECEIVED IN THE SECOND SUBMISSION PERIOD

The second submission period was between 20 July and 24 August 2007, following the publication of the Draft Rule Change Report. The IMO received a submission from Griffin Energy. A summary of the submission is provided below. The submission can be found on the IMO website.

### 5.1. *Submission from Griffin Energy*

Griffin acknowledged the limitations on DSM in providing contingency planning and coverage for forced outages. Griffin considered that it is clear that DSM can be used for short to medium term outage planning and that DSM is a valuable resource in the capacity market. As such, Griffin acknowledged that DSM's contribution to system adequacy should be recognised in System Management's outage planning and PASA studies.

Griffin agreed with the IMO's draft decision that System Management should recognise a reasonable forecast of available DSM when conducting outage planning and PASA studies.

Griffin also proposed that the inadequacies of DSM as a reliable capacity augmentation mechanism during forced outage contingencies, as outlined by System Management in its Rule Change Proposal, should be addressed in a separate forum.

Griffin considered that the proposed rule change in its modified form (to include a reasonable forecast of available DSM) will better facilitate, or at the very least not impede the achievement of the Market Objectives.

## 6. THE IMO'S ASSESSMENT AND FINAL DECISION

No interested party expressed concerns regarding the amendments to the Market Rules as proposed in the IMO's Draft Rule Change Report. In its submission, Griffin Energy expressed its support of the modified changes.

### 6.1. *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 of the proposed Rule Changes against each of the Market Objectives, which was also published in the IMO's Draft Report, 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 the changes 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 changes will maintain the value of DSM as an important component of the SWIS.

The IMO considers that the changes are consistent with Market Objective (c).

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

Assessment: The rule changes 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 proposed changes are 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 amendments 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.

## **6.2. The IMO's Final Decision**

The IMO's final decision is to:

- Accept the proposed rule changes to sections 3.16, 3.17, 3.18 and 3.19 as modified as a result of amendments proposed by Alinta in its submission, and as further modified to clarify that the reasonable forecast of DSM is to be made by System Management.

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

The wordings of the relevant Amending Rules are presented in section 7 of this Report.

## **6.3. Amending Rules Commencement**

The amendments to clauses 3.16.9(c), 3.16.9(d)(iii), 3.17.9(c), 3.17.9(d)(iii), 3.18.11(aA) and 3.19.6(a) of the Wholesale Electricity Market Rules will commence at **08.00am on 1 October 2007**.

## 7. AMENDING RULES

The following consolidated amendments will be made to the Market Rules (~~deleted wording, new wording~~):

### 7.1. **Clause 3.16.9(c)**

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

### 7.2. **Clause 3.16.9(d)(iii)**

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

### 7.3. **Clause 3.17.9(c)**

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

### 7.4. **Clause 3.17.9(d)(iii)**

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

### 7.5. **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;

### 7.6. **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.