Independent Market Operator

Final Market Rule Change Report

Title: Intermittent Generator Downward Dispatch Amendment

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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.

1.1. About this Rule Change

On 3 May 2007, Alinta Sales submitted a Rule Change Proposal titled Intermittent Generator Downward Dispatch Amendment.

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.
- 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 6.17.6(c), 7.7.5A and 7.7.5B, contained in section 7 of this Report, will commence on 1 October 2007.

Based on the response received from interested parties, and the IMO's assessment of the proposed changes against the Market Objectives, the IMO's decision is to accept the rule changes as proposed by Alinta in its Rule Change Proposal.

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

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Organisation:	Alinta Sales Pty Ltd
Date submitted:	3 May 2007
Urgency:	High
Change Proposal title:	Intermittent Generator Downward Dispatch Amendment
Market Rule(s) affected:	6.17.6 (c), 7.7.5A and 7.7.5B

2.2. Details of the Proposal

Alinta raised two issues in its Proposal. The first issue related to current differences in how the Market Rules treat Scheduled Generators and Non-Scheduled Generators in regard to dispatch instruction payments. The second issue related to how the downward dispatch quantity is calculated when a Non-Scheduled Generator is dispatched down.

The issues are addressed in turn below:

2.2.1. Non-Scheduled Generators – Dispatch Instruction Payment

Under the current Market Rules, clauses 6.17.6(c) and 9.8.1, Non-Scheduled Generators are treated differently from Scheduled Generators in regard to downward dispatch instruction payments, as a result of being dispatched down by System Management.

Alinta was concerned that this difference results in potentially inequitable outcomes for Non-Scheduled Generators, compared to Scheduled Generators.

The Effective Downward Dispatch Instruction Payment (EDDIP), as calculated according to clause 9.8.1, for a Scheduled Generator under the current Rules is:

*a. EDDIP = Dispatch Quantity * (Bid Price)*

The EDDIP for a Non Scheduled Generator is:

*b) EDDIP = Dispatch Quantity * (MCAP + Bid Price)*

Under *a)*, Scheduled Generators always pay or are paid their bid price and the MCAP value does not impact upon this.

Under *b)*, Non Scheduled Generators could be adversely impacted in instances where MCAP > 0. This is because the Bid Price for a downward dispatch instruction may be a negative value, while MCAP is a positive value.

In *a)* above, the negative Dispatch Quantity multiplied by a negative Bid Price results in a positive EDDIP. In *b)*, the EDDIP is lower due to a positive MCAP value added to a potentially negative Bid Price.

Alinta proposed to remove this inequality, by ensuring that Scheduled Generators and Non Scheduled Generators are treated in the same way in regard to Dispatch Instruction Payments. It was also proposed to clarify that the downward dispatch quantity is a negative value.

2.2.2. Non Scheduled Generators - Dispatch Quantity

For Non Scheduled Generators, clause 7.7.5A states that:

- the Dispatch Quantity is relative to their Resource Plan; unless
- no Resource Plan is submitted – then the Dispatch Quantity is based upon System Management's estimate of the output reduction for the dispatch period.

Alinta considered that under the current clause 7.7.5A, a Non Scheduled Generator may be disadvantaged in the circumstances of a particular combination of a level of downward Dispatch Quantity, the submitted Resource Plan Quantity and a potentially estimated output for the dispatch period. This disadvantage will occur in cases where the estimated output is higher than the quantity specified in the Resource Plan.

Alinta's proposal was to change the way in which System Management determines the estimated output from a Non Scheduled Generator. The changes would provide for System Management to first look at available data, (for example wind speed data for a wind farm) and then, only if no such data is available, look at the data specified in the Resource Plan.

2.3. The Proposal and the Market Objectives

Alinta submitted that, if its proposal is implemented, Market Participants receiving downward dispatch instructions would be treated equally, i.e. Intermittent Generators would not be disadvantaged relative to Scheduled Generators.

2.4. Amending Rules Proposed by Alinta

Alinta proposed the following changes:

2.4.1. Clause 6.17.6 (c):

(c) the sum over all Non-Scheduled Generators registered by the Market Participant of the amount that is the product of:

i. the quantity, defined as a negative value, by which the Non-Scheduled Generator was instructed by System Management to reduce its output (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and

ii. the Standing Data price defined in Appendix 1(e)(v) that was current at the time of the Trading Interval for the Non-Scheduled

Generator for a decrease in generation, (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval) less MCAP for the Trading Interval;

2.4.2. Clause 7.7.5A

7.7.5A. For the purpose of determining the quantity described in clause 6.17.6(c)(i) for each Trading Interval, the quantity is:

(a) where System Management has been provided with information in accordance with clause 7.7.5B, System Management's estimate of the MWh reduction in output, by Trading Interval, of the Non-Scheduled Generator as a result of System Management's Dispatch Instruction; or

(b) in the case of a Non-Scheduled Generator included in a Resource Plan, for which System Management has not been provided with information in accordance with clauses 7.7.5B, the greater of zero and the MWh difference between the Resource Plan MWh quantity of the Non-Scheduled Generator less the MWh output of the Non-Scheduled generator over the Trading Interval implied by its Dispatch Instruction.

2.4.3. Clause 7.7.5B

7.7.5B. A Market Participant may provide System Management with information specified in the Power System Operation Procedure to support the calculation of the quantity described in clause 7.7.5A(a).

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. 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 proposal at its meeting on 28 March 2007, before it was formally submitted by the IMO.

MAC expressed general support to the proposed changes. MAC considered that Non Scheduled Generators should be treated the same as Scheduled Generators when requested to reduce their output.

MAC also discussed how the reduction in quantity for a Non Scheduled Generator, when following a dispatch instruction from System Management, should be estimated. In the case of a Non Scheduled Generator without a Resource Plan, System Management will need data that in practice enables System Management to determine a downward dispatch instruction volume. The following comments were made by MAC:

- For wind generators that are not included in Resource Plans, the required data is already prescribed in the rules and in the Power System Operating Procedure. This is real time wind speed data from the generator site plus the number of turbines in operation during the period when the instruction applied;

- For Non Scheduled Generators that are not wind turbines:
    - For those that have SCADA, the SCADA measurement available to System Management at the time the dispatch instruction should be the basis of compensation. This would need to be clarified in the Power System Operation Procedure as a consequential amendment to the amendment to 7.7.5A;
    - For those that do not have SCADA, there is no ability for System Management to determine the quantity of a dispatch instruction. However, in general, System Management will not issue a dispatch instruction to a generator that is not on SCADA because System Management does not have visibility or control over such a generator. Generators that are not on SCADA are normally of a very small size (<10MW in all circumstances) and these generators are not subject to dispatch at present. Therefore, the only circumstances these generators would have to reduce their output or shut down would result from network issues. In those circumstances there would be no “dispatch instructions” issued for the purposes of the rules.

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

3.2. Submission from Alinta Sales

Alinta expressed its continuing support for the Rule Change. It considered that the changes will better facilitate Market Objectives a), c) and d).

3.3. Submission from Synergy

Synergy supported the analysis presented by Alinta. It acknowledged that the bid price for a downward dispatch instruction may be a negative value, while MCAP is a positive value and therefore, under the current Market Rules, a Non-Scheduled Generator may be unfairly penalised for complying with a downward dispatch instruction. Synergy also supported the proposal to clarify that the downward dispatch quantity as a negative quantity.

Synergy also acknowledged the concern and the analysis presented by Alinta which indicated that a Non-Scheduled Generator will be disadvantaged in cases where the estimated output of a is higher than the quantity specified in its Resource Plan. Synergy supported the approach suggested in Alinta's Rule Change Proposal for determining the downward dispatch quantity.

Synergy considered that the proposal will facilitate Market Objective c) i.e. the changes will avoid discrimination in the market against particular energy options and technologies.

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 no interested party expressed any concern regarding the proposed changes. The changes were supported by Synergy, Alinta, and, in principle, by the Market Advisory Committee. The IMO therefore considered that the proposed changes had the support of the participants in the Wholesale Electricity Market.

Based on the submissions received and its own assessment against the Market Objectives, the IMO's draft decision was to approve the changes as proposed by Alinta.

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

Following the Draft Rule Change Report publication on the IMO website, the second submission period was between 20 July and 24 August 2007. The IMO received one 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 Energy expressed its support of the Rule Change as published in the Draft Rule Change Report. Griffin considered that, in general, the Rule Change Proposal will lead to a better facilitation of the Market Objectives through non-discrimination of generator types. The changes will therefore provide for more economically efficient generation across the SWIS.

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

No interested party expressed concerns regarding the amendments to the Market Rules outlined in the Draft Rule Change Report. In its submission, Griffin Energy expressed its support of the changes.

6.1. The IMO's Assessment of the Rule Change Proposal

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's assessment of the Rule Change Proposal 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: Not disadvantaging Non-Scheduled Generators financially when following a dispatch instruction will ensure that System Management can issue dispatch instructions to the most appropriate facility, from a system security and reliability perspective, without that facility incurring a negative financial outcome as a result of following System Management's dispatch instruction. Therefore, the IMO considers that the rule changes will assist in promoting the economically efficient and reliable production and supply of electricity in the market.

(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 will remove an inequity among different type of generators, in regard to dispatch instruction payments, that currently exists in the Rules. This will remove a potential discrimination in the current rules against particular technologies in regard to these payments.

The IMO considers that the proposed changes will further the achievement of Market Objective (c). Submissions received from participants also supported this assessment.

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

Assessment: The IMO considers that, by avoiding inappropriate financial consequences for Non-Scheduled Generators, the Rule Change will contribute positively to the operation of objective (d) of the Market Objectives.

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

Assessment: 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 changes will require changes to the Wholesale Electricity Market Systems operated by the IMO. The cost of implementing these changes has been estimated at $ 2,500.

The IMO found this cost to be acceptable and considers that the benefits the changes will bring to Market Participants will outweigh the cost. The implementation of the required system changes will take about one week. No other costs have been identified in relation to this Rule Change during the consultation process.

6.2. The IMO's Final Decision

The IMO's final decision is to:

- Accept the proposed changes to clause 6.17.6(c) as proposed by Alinta. This will clarify that the downward dispatch quantity is a negative value and ensure the compensation amount is calculated in the same way for Scheduled Generators and Non-Scheduled Generators.

- Accept the proposed changes to clause 7.7.5A(a) and (b) as proposed by Alinta. This will ensure that the downward dispatch quantity will be determined by actual data when available, before using data in a Resource Plan.

- Accept the proposed change to clause 7.7.5B as proposed by Alinta. This is to amend the reference in this clause to reflect the changes in clause 7.7.5A

The IMO makes 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 6.17.6(c), 7.7.5A and 7.7.5B of the Wholesale Electricity Market Rules will commence at **08.00am** on **1 October 2007**.

7. AMENDING RULES

The following clauses will be amended (~~deleted wording~~, new wording):

7.1. Clause 6.17.6 (c)

(c) the sum over all Non-Scheduled Generators registered by the Market Participant of the amount that is the product of:

i. the quantity, defined as a negative value, by which the Non-Scheduled Generator was instructed by System Management to reduce its output (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and

ii. the Standing Data price defined in Appendix 1(e)(v) that was current at the time of the Trading Interval for the Non-Scheduled Generator for a decrease in generation, (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval) less MCAP for the Trading Interval;

7.2. Clause 7.7.5A

7.7.5A. For the purpose of determining the quantity described in clause 6.17.6(c)(i) ~~for a Non-Scheduled Generator~~ for each Trading Interval the quantity is:

~~(a) in the case of a Non-Scheduled Generator included in a Resource Plan, to be the greater of zero and the MWh difference between the Resource Plan MWh quantity of the Non-Scheduled Generator less the MWh output of the Non-Scheduled generator over the Trading Interval implied by its Dispatch Instruction; and~~

~~(b) in the case of a Non-Scheduled Generator not included in a Resource Plan, System Management's estimate of the MWh reduction in output, by Trading Interval, of the Non-Scheduled Generator as a result of System Managements Dispatch Instruction.~~

(a) where System Management has been provided with information in accordance with clause 7.7.5B, System Management's estimate of the MWh reduction in output, by Trading Interval, of the Non-Scheduled Generator as a result of System Management's Dispatch Instruction; or

(b) in the case of a Non-Scheduled Generator included in a Resource Plan, for which System Management has not been provided with information in accordance with clauses 7.7.5B, the greater of zero and the MWh difference between the Resource Plan MWh quantity of the Non-Scheduled Generator less the MWh output of the Non-Scheduled generator over the Trading Interval implied by its Dispatch Instruction.

7.3. Clause 7.7.5B

7.7.5B. A Market Participant may provide System Management with information specified in the Power System Operation Procedure to support the calculation of the quantity described in clause 7.7.5A~~(b)~~(a).