

Final Market Rule Change Report

Title: Intermittent Generator Resource Plan Exemption

Ref: RC_2007_10

Date: 17 January 2008

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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 13 September 2007, Synergy submitted a Rule Change Proposal regarding changes to clauses 6.5.1A, 6.5.1C, 6.17.1, 6.17.5, 6.21.2, 7.10.1, 9.8.1 and the Glossary in Chapter 11 of the Wholesale Electricity Market Rules.

This proposal has been processed using the Standard Rule Change Process, described in section 2.7 of the Wholesale Electricity Market Rules.

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

- The first Public Submission period is 6 weeks after the IMO has published the 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 for 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 17 September 2007.
- The first Public Submission period on the Rule Change Proposal ended on 29 October 2007.
- The Draft Rule Change Report was published on 26 November 2007.
- The second Public Submission period was from 26 November to 24 December 2007.
- This Final Rule Change Report is published by the IMO on 17 January 2008.

Based on the response received from interested parties, and the IMO's assessment of the proposed changes against the Market Objectives, IMO's decision is to accept the Rule Changes as proposed by Synergy.

This Final 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.

2. THE RULE CHANGE PROPOSAL

2.1. The Submission

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Organisation: Synergy

Date submitted: 13 September 2007

Urgency: 3- high

Change Proposal title: Intermittent Generator Resource Plan Exemption

2.2. Details of the Proposal

Synergy submitted that the Market Rules generally treat Intermittent Generators differently from Scheduled Generators in recognition of the fact that Intermittent Generators do not have the same control as Scheduled Generators over their output.

However, Synergy argued that certain rules do not recognise this important difference and impose obligations on Intermittent Generators that cannot always be met. Such obligations create uncertainty for Intermittent Generators and this potentially creates a barrier to entry. In Synergy's view, the removal of these obligations will promote the objectives of the market, with regard to avoiding discrimination against technologies that use renewable resources (Wholesale Market Objective (c)) as well as promoting efficient entry (Wholesale Market Objective (b)).

2.2.1. Removal of the Requirements to Submit and Comply with Resource Plans

Synergy proposed that the requirement for Market Generators that only have Intermittent Generators to make Resource Plan Submissions be removed. As Resource Plans must be submitted by 12:50 pm on the Scheduling Day, Synergy argued that in all likelihood these plans will not reflect an Intermittent Generator's actual generation through the Trading Day.

Synergy submitted that the Market Rules already recognise this and require Intermittent Generators to provide, by 10 am daily, a forecast of energy output for the 44-hour period commencing at noon. This ensures that System Management has the latest information available, and results in the Intermittent Generator's Resource Plan being effectively redundant. Synergy submitted that System Management has confirmed that Resource Plans are generally not used to predict generation for Intermittent Generators.

In its proposal, Synergy acknowledged that Intermittent Generators may still elect to make a Resource Plan Submission. That is, the option to do so should be retained. Further, Synergy proposed that the requirement for Intermittent Generators to comply with Resource Plans be also removed. Synergy argued that it is impractical to require Intermittent Generators to comply with their Resource Plans when they do not have full control over their output.

Synergy claimed that the requirement for Intermittent Generators to comply with Resource Plans, when it is impractical to do so, creates uncertainty for Intermittent Generators and hence their on-going financial viability. Synergy argued that removing

this uncertainty would reduce risk for both commissioned generators and those considering entry.

2.2.2. Removal of the Resource Plan Deviation Quantity

In addition, Synergy proposed that the Resource Plan Deviation Quantity (RPDQ) be removed from the balancing settlement. Currently, the balancing settlement quantities include the determination of the RPDQ, which is priced at the Downward Deviation Administered Price (DDAP). According to Synergy's proposal, this is effectively a penalty against Market Generators. Synergy submitted that currently it is not clear what type of behaviour is being discouraged through the application of this penalty.

Synergy noted that an RPDQ only arises where a shortfall (a difference between a Net Contract Position (NCP) and a Resource Plan (RP)) exists and a generator's output exceeds its resource plan.

Synergy submitted that, for example, for an NCP of 100 MWh and an RP of 80 MWh, and thus a shortfall of 20 MWh, if the actual output is less than the RP, an RPDQ will not be defined. In Synergy's example, if the actual output were 70 MWh, then no RPDQ would be defined and no penalty would apply even though a shortfall was recorded as part of the Resource Plan Submission. It is only when the output exceeds the RP that the RPDQ is defined. In this example, if the output were 90 MWh then the RPDQ would be 10 MWh. By increasing generation from 80 MWh to 90 MWh, the generator is charged a penalty i.e. 10 MWh * DDAP. Synergy argued that this is counterintuitive as a generator may be trying to make good the shortfall.

Synergy argued that in its current formulation the RPDQ creates inefficient outcomes by penalising generators in certain circumstances without any obvious benefits to market efficiency.

Synergy therefore advocated that the removal of the RPDQ would reduce uncertainty for all generators and promote market efficiency. This proposed amendment would also give effect to the original intent of the Market Rules – namely that Intermittent Generators should not be penalised in the balancing mechanism when deviating from their Resource Plans.

2.3. Amending Rules Proposed by Synergy

The Rule Changes to clauses 6.5.1A, 6.5.1C, 6.5.4, 6.17.1, 6.17.5, 6.21.2, 7.10.1, 9.8.1, and to the Glossary in Chapter 11 of the Market Rules, proposed by Synergy, are outlined in section 7 of this Report.

3. SUBMISSIONS RECEIVED IN THE FIRST SUBMISSION PERIOD

The first submission period for this Rule Change Proposal was between 17 September and 29 October 2007. The IMO received two submissions, from Landfill Gas and Power Pty Ltd (LGP) and Alinta Sales Pty Ltd (Alinta). A summary of the submissions is given below. The full text of the submissions can be found on the IMO website.

3.1. Market Advisory Committee

The Market Advisory Committee (MAC) was invited to review the Proposal at its meeting on 10 October 2007. MAC expressed general support of the Rule Change Proposal.

3.2. Submission from Landfill Gas & Power (LGP)

LGP supported Synergy's contention that Intermittent Generators do not have the same control over their output as Scheduled Generators and that Market Rules that do not recognise this increase the risk profile of developing an Intermittent Generator and can create a barrier to entry. LGP submitted that the removal of the requirement to submit Resource Plans would avoid unnecessary obligations and promote the use of renewable energy technologies.

LGP also supported Synergy's contention that the removal of the Resource Plan Deviation Quantity from the balancing settlement quantities would remove confusion, thereby improving market efficiencies.

3.3. Submission from Alinta Sales Pty Ltd (Alinta)

Alinta agreed with Synergy's Proposal to remove the obligation on Intermittent Generators to submit and follow a resource plan. Alinta questioned why the Proposal had been limited to generators that only have intermittent generation in their portfolio, and suggested that to avoid discrimination in the treatment of Intermittent Generators, the change should apply to all Intermittent Generators. Alinta considered that the proposal might not satisfy market objectives (b) and (d) if it did not apply to all Intermittent Generators.

Alinta also sought further detail and supporting analysis regarding the removal of the RPDQ calculation from the Market Rules, before commenting on that aspect of the rule change.

3.4. Public Forums and Workshops

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

3.5. The IMO's Response to the First Round of Submissions

LGP supported the changes in the Synergy proposal. Alinta however, while expressing its support of the changes, also raised some issues regarding the proposed

amendments. These were addressed by the Market Advisory Committee (MAC) at its meeting on 14 November 2007.

With regard to Alinta's first query whether the proposed new rule would apply only to generators that only have intermittent generation in their portfolio, the IMO clarified that, as a result of the changes, generators with a mixed portfolio are allowed to include in their Resource Plans a zero quantity for their intermittent generators without facing any penalty.

The intent of the rule change is to remove the requirement for participants with only intermittent generators to have to submit a Resource Plan, given that they will not be required to comply with the Resource Plan under the proposed amendment to clause 7.10.1. The changes to clause 7.10.1, however, would also remove the requirement to follow Resource Plans for all intermittent generators, including those in a mixed portfolio.

Alinta's second query concerned the proposal to remove the RPDQ from the Market Rules. The IMO had analysed the current application of the RPDQ and the results of that analysis were provided to MAC. The analysis showed, in summary, that for an RPDQ to be non-zero, the Resource Plan shortfall in clause 6.11.1(e) will also have to be non-zero.

Based on the IMO's analysis, MAC noted that the non-zero RPDQ results are not consistent. For example, a Market Generator who is also a Market Customer, that has a Scheduled Generator, a positive Net Contract Position and a Shortfall, will have a non-zero RPDQ for all types of Dispatch Instructions. However, if the Market Generator were not also a Market Customer, a non-zero RPDQ would only occur with an upward Dispatch Instruction.

MAC noted that the presence of the RPDQ appears to be inappropriate. For example, it could penalise a participant (including a Market Generator with only Non-Scheduled Generators) trying to make good in production a shortfall it disclosed in its Resource Plan. This could create a perverse incentive for generators not to disclose their shortfalls.

MAC also noted that as the Resource Plan shortfalls are rarely non-zero and Dispatch Instructions are not given often, non-zero RPDQs have only been encountered a few times since Market Start.

Alinta and MAC in general were satisfied with the explanations given in relation to these two concerns.

4. THE IMO'S DRAFT DECISION

Based on the submissions received and its assessment against the Wholesale Market Objectives, the IMO's draft decision was to accept the proposed changes to clauses 6.5.1A, 6.5.1C, 6.5.4, 6.17.1, 6.17.5, 6.21.2, 7.10.1, 9.8.1, and to the Glossary in Chapter 11 of the Market Rules as proposed in the Rule Change Proposal, and presented in section 7 of this Report.

The IMO made its draft decision on the basis that the resulting Amending Rules will allow the Market Rules to better address the Wholesale 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 26 November and 24 December 2007. The IMO received one submission, from Alinta Sales. A summary of the submission is provided below. The full text of the submission can be found on the IMO website.

5.1. Submission from Alinta Sales Pty Ltd (Alinta)

In its submission Alinta expressed its continued support for the proposed rule change. Alinta confirmed that the concerns it had raised in its previous submission had been adequately addressed.

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

No interested party expressed any concerns regarding the amendments to the Market Rules as outlined in the Draft Rule Change Report. In its submission, Alinta Sales expressed its support for 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.

The IMO considers that deleting the Resource Plan Deviation Quantity (RPDQ) from the balancing settlement will remove confusion about the purpose and the application of the RPDQ, thereby improving market efficiency.

The IMO considers that the proposed changes are, therefore, consistent with the operation of objective (a) of the Market Objectives.

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

The IMO considers that the Market Rules as they are currently written impose obligations on Intermittent Generators that are impractical to comply with. Non-compliance with the current Rules exposes such generators to uncertainty. This potential uncertainty unnecessarily increases the risk profile of renewable generators and creates a barrier to entry, which will be removed by the proposed changes.

The IMO considers that the proposed changes are, therefore, consistent with the operation of objective (b) of the Wholesale 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.

The IMO considers that the proposed changes will give effect to the original intent of the Market Rules – namely that Intermittent Generators should not be penalised when deviating from their Resource Plans. It will therefore avoid perceived discrimination against technologies which cannot comply with the current Rules because of their constraints.

The IMO considers that the proposed changes are, therefore, consistent with the operation of objective (c) of the Market Objectives.

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

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.

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

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, and in particular the settlement systems. The cost of implementing these changes has been estimated at less than \$2,000.

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

6.2. The IMO's Final Decision

The IMO's final decision is to:

Accept the proposed changes to clauses 6.5.1A, 6.5.1C, 6.5.4, 6.17.1, 6.17.5, 6.21.2, 7.10.1, 9.8.1, and to the Glossary in Chapter 11. The changes to these clauses will remove the requirement for Intermittent Generators to submit or follow their Resource Plans, and remove the Resource Plan Deviation Quantity term from the settlement equations of the Market Rules.

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 wording of the relevant Amending Rules is presented in section 7 of this Report.

6.3. Amending Rules Commencement

The amendments to clause 10.5.1(i)(ii) of the Wholesale Electricity Market Rules will commence at **08.00am** on **1 February 2008**.

7. AMENDING RULES

The following clauses are amended (deleted wording, new wording):

- 6.5.1A. Market Participants that are Market Generators with Registered Facilities that are not undergoing commissioning, except those with only Intermittent Generators, or that are Market Customers with Dispatchable Load must provide the IMO with a Resource Plan Submission, unless undergoing commissioning, either via submitting Resource Plan Submissions or in accordance with clause 6.5.1B.
- 6.5.1C.Market Generators with only Intermittent Generators may provide the IMO with a Resource Plan Submission, unless undergoing commissioning, either via submitting Resource Plan Submissions or in accordance with clause 6.5.1B.
- 6.5.4. If the IMO has not accepted a Resource Plan Submission for a Trading Day by the closing time specified in 6.5.1(b) delete 1 PM on the relevant Scheduling Day from a Market Participant that is required to make a Resource Plan Submission or a Market Participant covered by clause 6.5.1C, then it must prepare a default Resource Plan for that Market Participant which must include, for each Trading Interval on the Trading Day:
 - (a) all the Market Participant's Scheduled Generators and Non-Scheduled Generators having a scheduled output of zero;
 - (b) all Dispatchable Loads having a scheduled consumption of zero; and
 - (c) the level of the supply shortfall required pursuant to clause 6.11.1(e) equal to the total Net Contract Position.
- 6.17.1. The IMO must determine for each Market Participant and each Trading Interval of each Trading Day:
 - (a) the Authorised Deviation Quantity;
 - (b) the Upward Unauthorised Deviation Quantity;
 - (c) the Downward Unauthorised Deviation Quantity; and
 - (d) [Blank]the Resource Plan Deviation Quantity; and
 - (e) the Dispatch Instruction Payment,

in accordance with this clause 6.17.

- 6.17.5. [Blank] The Resource Plan Deviation Quantity, RPDQ(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals:
 - (a) if Market Participant p is the Electricity Generation Corporation, zero; and
 - (b) otherwise, the lesser of zero and:

- i. the Net Contract Position of Market Participant p for Trading Interval t, less the shortfall quantity specified in clause 6.11.1(e) less:
- ii. the lesser of:
 - 1. the Net Contract Position of Market Participant p for Trading Interval t;
 - 2. the net sum of all the Metered Schedules for Trading Interval t for the Registered Facilities and Non-Dispatchable Loads registered by Market Participant p; and
 - 3. the net sum of all the Dispatch Schedules for Trading Interval t for the Registered Facilities and Non-Dispatchable Loads registered by Market Participant p.
- 6.21.2. The IMO must provide the following information to the Settlement System for each Trading Interval in a Trading Day:
 - (a) MCAP, UDAP and DDAP; and
 - (b) for each Market Participant:
 - i. the Authorised Deviation Quantity;
 - ii. the Upward Unauthorised Deviation Quantity;
 - iii. the Downward Unauthorised Deviation Quantity;
 - iv. [Blank] the Resource Plan Deviation Quantity;
 - v. the Dispatch Instruction Payment; and
 - vi. any Commitment Compensation due to the Market Participant.
- 7.10.1. Subject to clause 7.10.2, a Market Participant other than the Electricity Generation Corporation must comply with:
 - (a) subject to paragraph (b), its Resource Plan <u>except where it relates to</u> Intermittent Generators;
 - (b) if a Dispatch Instruction has been issued for a Registered Facility for a Trading Interval, the most recently issued Dispatch Instruction applicable to the Registered Facility for the Trading Interval; and
 - (c) a direction given to the Market Participant under clauses 7.6 or 7.10.7(a).
- 9.8.1. The balancing settlement amount for Market Participant p for Trading Interval t of Trading Day d is:

$$\mathsf{BSA}(\mathsf{p},\mathsf{d},\mathsf{t}) = \mathsf{MCAP}(\mathsf{d},\mathsf{t}) \times \mathsf{ADQ}(\mathsf{p},\mathsf{d},\mathsf{t}) + \mathsf{UDAP}(\mathsf{d},\mathsf{t}) \times \mathsf{UUDQ}(\mathsf{p},\mathsf{d},\mathsf{t}) \\ + \mathsf{DDAP}(\mathsf{d},\mathsf{t}) \times (\mathsf{DUDQ}(\mathsf{p},\mathsf{d},\mathsf{t}) + \mathsf{RPDQ}(\mathsf{p},\mathsf{d},\mathsf{t})) + \mathsf{DIP}(\mathsf{p},\mathsf{d},\mathsf{t})$$

Where

ADQ(p,d,t), is the Authorised Deviation Quantity for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.2;

UUDQ(p,d,t) is the Upward Unauthorised Deviation Quantity for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.3;

DUDQ(p,d,t) is the Downward Unauthorised Deviation Quantity, for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.4:

RPDQ(p,d,t) is the Resource Plan Deviation Quantity for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.5;

MCAP(d,t) is the Marginal Cost Administered Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.2;

UDAP(d,t) is the Upward Deviation Administered Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.5;

DDAP(d,t) is the Downward Deviation Administered Price for Trading Interval t of Trading Day d calculated in accordance with clause 6.14.6;

DIP(d,t) is the Dispatch Instruction Payment for Market Participant p for Trading Interval t of Trading Day d calculated in accordance with clause 6.17.6.

Glossary

Resource Plan Deviation Quantity: The amount calculated in accordance with clause 6.17.5.