Draft Rule Change Report
Title: Commissioning Tests for Intermittent Generators

Ref: RC_2008_24

Standard Rule Change Process

Date: 31 October 2008

CONTENTS

DOCUMENT DETAILS

IMO Notice No.: RC_2008_24
Report Title: Draft Rule Change Report: Commission Tests for Intermittent Generators
Release Status: Public
Confidentiality Status: Public domain
Published in accordance with Market Rule 2.7.6

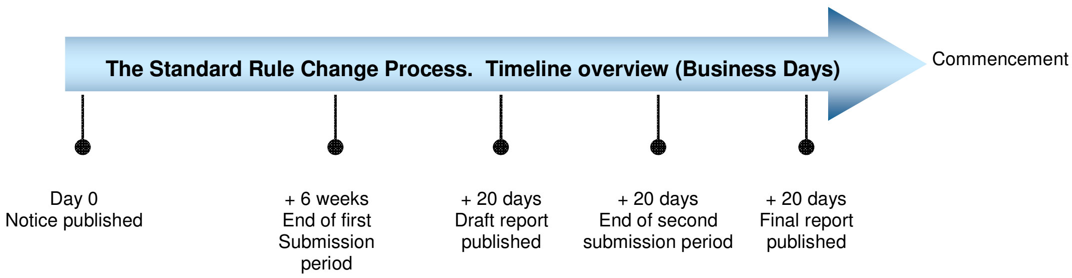
Independent Market Operator
Level 3, Governor Stirling Tower
197 St George's Terrace, Perth WA 6000
PO Box 7096, Cloisters Square, Perth WA 6850
Tel. (08) 9254 4300
Fax. (08) 9254 4399
Email: imo@imowa.com.au
Website: www.imowa.com.au

1. INTRODUCTION

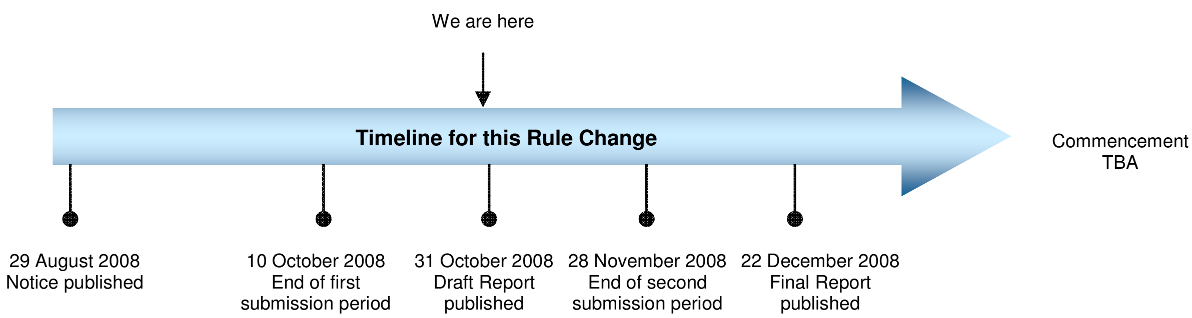
On 28 August 2008, the Independent Market Operator (IMO) submitted a Rule Change Proposal regarding changes to clauses 4.26.1 and 4.26.1A of the Wholesale Electricity Market Rules (Market Rules).

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

The standard process adheres to the following timelines, outlined in section 2.7 of the Market Rules:



The key dates in processing this Rule Change Proposal are:



Based on its analysis of the proposal against the Market Objectives, the IMO's draft decision is to implement the Rule Change Proposal in the form outlined in section 6 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 Report. In accordance with the Market Rules timelines, the deadline for submissions is 28 November 2008.

2. THE RULE CHANGE PROPOSAL

2.1. Submission Details

Name:	Allan Dawson
Phone:	(08) 9254 4300
Fax:	(08) 9254 4399
Email:	imo@imowa.com.au
Organisation:	Independent Market Operator
Address:	197 St George's Terrace, Perth WA 6000
Date submitted:	28/08/2008
Urgency:	Medium
Change Proposal title:	Commissioning Tests for Intermittent Generators

2.2. Details of the Proposal

In its proposal, the IMO stated that intermittent Generators have a Reserve Capacity Obligation Quantity (RCOQ) of zero. This means that they can meet their RCOQ even if they do not commission their plant in the way that was intended when applying for Capacity Credits. The IMO explained that currently no Capacity Cost Refunds apply in this situation as would be applied to a Scheduled Generator that does not provide the level of capacity intended when Capacity Credits are assigned by the IMO.

The rule change proposal submitted by the IMO aimed to introduce the requirement for Intermittent Generators to receive Capacity Cost Refunds in the case where the Facility is not commissioned in accordance with the application made for Certified Reserve Capacity and Capacity Credits. The IMO stated that it must apply the principle that the Facility is fully operational in accordance with the basis on which the Facility applied for, and was granted, Certified Reserve Capacity, in accordance with clause 4.10 and 4.11 respectively and was subsequently assigned Capacity Credits in accordance with clause 4.14. The IMO submitted that it can request additional information from Intermittent Generators to assess whether the intermittent facility will be fully commissioned by a nominated date. This additional information will help determine whether the Intermittent Generator is deemed to be commissioned and whether refunds will be applied.

2.3. The Proposal and the Wholesale Market Objectives

The IMO submitted that the proposal supported market objective (a) 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 considered that the proposal supports market objective (a) by promoting the reliable production and supply of electricity and electricity related services in the South West Interconnected System. This will be achieved by improving the clarity in the process of Intermittent Facilities being granted Certified Reserve Capacity and subsequently receiving Capacity Credits, and providing incentives to Market Participants developing Intermittent Facilities to develop projects in accordance with applications made to the IMO.

2.4. Amending Rules proposed by the IMO

The amendments to the Market Rules proposed by the IMO are outlined in section 6 of this report.

2.5. The IMO's Initial Assessment of the Proposal

The IMO decided to proceed with the proposal on the basis of its preliminary assessment, which indicated that the proposal was consistent with the Wholesale Market Objectives. This preliminary assessment was published in a Rule Change Notice on 29 August 2008.

3. SUBMISSIONS

The IMO received three submissions on the Rule Change Proposal from Griffin Energy, Landfill Gas & Power Pty Ltd (LGP) and Synergy. The submissions are summarised below, and the full text is available on the IMO website.

3.1. Market Advisory Committee

The Market Advisory Committee (MAC) discussed the proposed rule change at two consecutive meetings, 20 August 2008 and 10 September 2008. MAC supported the rule change as proposed at the August meeting.

During the discussion at the September MAC meeting, one MAC member deemed that the rule change proposal introduced penalties that were too harsh for new intermittent generators that have failed to come online as a result of construction delays. After additional discussion, regarding the application of refunds to new facilities, MAC supported the rule change as proposed.

3.2. Submission from LGP

LGP supported the Proposed Rule Change as Intermittent Generators should "receive" Capacity Cost Refunds (which actually means they should make payments) in the case where a new Facility is not commissioned in accordance with the application made for Certified Reserve Capacity and Capacity Credits.

3.3. Submission from Synergy

Synergy supported this rule change as it provides for the consistent and equitable treatment for all providers of Capacity Credits.

3.4. Submission from Griffin Energy

In its submission, Griffin Energy did not support the Rule Change Proposal.

Griffin Energy noted that it understands the principle of improving reliability by incentivising participants developing intermittent generation to meet expected delivery timelines. However, it questioned whether the capacity refund mechanism was the most appropriate method.

Griffin Energy contended that there is a disconnect between the application of the Market Rules (and assessment against the Market Objectives) into the real world commercial setting. In particular Griffin Energy stated that a new entrant intermittent generator would be incentivised to meet its project delivery dates by contractual obligations (RECs, bilateral contracts and capacity credits) rather than by the capacity refund mechanism.

Griffin Energy noted that intermittent generators are built for social and environmental reasons rather then for the "economically efficient, safe and reliable supply of electricity".

Griffin Energy asserted that, should this rule change progress, the refund mechanism will "simply become an arbitrary financial penalty" and that this risk will be managed by pricing these costs into the project development.

Griffin Energy queried the argument that if the generator does not price in this cost then others in the market (i.e. retailers) will price it in. Griffin noted that this argument is only true if the late delivery of an intermittent generator actually leads to higher market costs, such as:

- Higher costs incurred through calling for supplementary reserve capacity (SRC)- which should be an infrequent event; or
- Replacing the expected energy with higher cost generation in the market.

Griffin Energy contended that there has not been sufficient analysis to suggest that allowing an intermittent generator to cover the potential refund cost of each project development and pass that cost on through higher wholesale pricing is more efficient/cost effective than incurring costs relating to SRC on an infrequent basis.

Griffin Energy also contended that the second potential market cost, that of higher priced electricity for the marginal unit not produced by the intermittent generator, will primarily be borne by the intermittent generator through its bilateral obligations and is the main commercial driver for ensuring timely delivery.

Griffin Energy asserted that the interrelationship between the cost of incentivising reliability by penalising new entrant generators and the long term economically efficient production of electricity in the market has not been properly investigated. Griffin queried whether applying capacity cost refunds for late delivery actually produces additional reliability benefits (as stated in IMO's assessment against the market objectives) and contended that the IMO is naturally biased towards the reliability outcome over economic efficiency. Griffin Energy stated that this would result in higher long term costs of electricity for end consumers and that while reliability comes at a price, it may not be the best outcome for the market.

Griffin Energy also submitted that it does not support the rationale that the same reliability incentives should be imposed on differing types of capacity and equally applied to new entrant generators and existing generators.

3.5. Public Forums and Workshops

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

4. THE IMO'S ASSESSMENT AND DECISION

4.1. Assessment

4.1.1. Submissions

The response to the Rule Change Proposal submitted by the IMO was mixed. While two submitters supported the proposal in its entirety, one submitter did not support the proposal, citing a number of reasons for this.

Below is the IMO's response to each of the main issues raised by Griffin Energy:

- Griffin Energy queried whether the capacity refund mechanism is the most appropriate mechanism to incentivise intermittent generators to meet expected delivery timeframes, and noted that in practice it is the commercial/contractual obligations providing the incentives.

  The IMO acknowledges that there are multiple commercial drivers incentivising intermittent generators to meet expected delivery timeframes and that the capacity refund mechanism is not the only driver. However, intermittent generators receive a substantial amount of capacity credits on 1 December, whether they are commissioned or not. This is, in effect, being paid for a service and not delivering that service. This is not desirable from both a fairness and economic efficiency point of view.

  The IMO strongly believes that the party that has direct control over the construction risk should be the party addressing that risk, to ensure that generation is supplied to the market in a timely manner. This underlying principle is applied elsewhere in the rules to the extent practicable.

- Griffin Energy noted that if this rule change was in place, then the cost of capacity refunds will become an arbitrary financial penalty, which will be built in to overall project development costs. Griffin Energy then queried whether the potentially higher project development costs, to the intermittent generators (and potentially passed on through higher wholesale pricing), is more efficient and cost effective than incurring costs relating to SRC on an infrequent basis.

  The IMO notes that the capacity refund mechanism is not a penalty. Rather, it is simply a refund of a revenue stream paid for a service that is not delivered, as per a set of agreed terms and conditions for the provision of that service.

  The IMO accepts that there could be potentially higher project development costs associated with this rule change proposal but contends that the costs associated with SRC would be higher. Additionally, the IMO contends that lower risk projects are less likely to be late, therefore the potentially higher project development costs should only really be applied to the higher risk development projects.

  There are caps associated with capacity cost refunds, whereas at present, SRC costs are potentially uncapped. Additionally, market customers carry the risk of paying for SRC, if required, but have little control over the construction of intermittent generation.

The IMO is firm on the principle that risks need to be targeted to the parties that can influence the outcome. This principle is applied elsewhere in the rules to the extent practicable.

Over time the IMO expects increasing penetration rates of Intermittent Generation. Therefore it is becoming increasingly important to ensure that the timeframes these generators commit to are met.

- Griffin Energy queried whether penalising new entrant generators for late delivery actually produces any additional reliability benefits (as was stated in the IMO's assessment against market objectives).

  The IMO would like to reiterate that the capacity refund mechanism is not a penalty. Rather, it is simply a refund of revenue paid for a service not delivered.

  The IMO still considers that the proposal supports market objective (a) by promoting the reliable production and supply of electricity and electricity related services in the SWIS. This will be achieved by improving the fairness and equity in the process of Intermittent Generators being granted Certified Reserve Capacity and subsequently receiving Capacity Credits. This rule change will provide financial incentives to Market Participants developing Intermittent Generators to develop projects in accordance with applications made to the IMO. This clear incentive for a developer to deliver on time contributes to the overall reliability of the system by ensuring that all services contracted for are available, should the need arise.

- Griffin Energy did not support the rationale that the same reliability incentives be imposed on differing types of capacity and applied to new entrant generators and existing generators. Griffin Energy noted that there are other instances in the Market Rules where different types of capacity are treated differently.

  One of the Market Objectives is to *"avoid discrimination in the market against particular energy options and technologies".* The rules, as they stand, currently discriminate against scheduled generators and in favour of intermittent generators. This rule change is to avoid this potential discrimination. The IMO is keen to see this principle applied elsewhere in the rules to the extent practicable.

  Another market objective is to *"encourage competition among generators…including by facilitating efficient entry of new competitors".* The IMO believes that this rule change proposal contributes to this objective by clarifying the process and requirements and ensuring all new facilities, whether scheduled or intermittent generators, are treated in a similar manner, to the extent that all other market objectives are satisfied.

4.1.2. The IMO's Assessment

According to clause 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 considers that the proposed Amending Rules will have the following impact on how the Market Rules address the Wholesale Market Objectives:

Impact	Wholesale Market Objectives
Allow the Market Rules to better address objective	a, b and c
Consistent with objective	d and e
Inconsistent with objective	-

The IMO's assessment against market objective (a) 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 the proposal supports market objective (a) by promoting the reliable production and supply of electricity and electricity related services in the South West Interconnected System. This will be achieved by improving certainty in the process of Intermittent Generators being granted Certified Reserve Capacity and subsequently receiving Capacity Credits, and providing incentives to Market Participants developing Intermittent Generators to develop projects in accordance with applications made to the IMO.

The IMO's assessment against market objective (b) and (c) is as follows:

(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;

The IMO considers that the proposal supports market objective (b) and (c) by avoiding discrimination in the market against particular energy options and technologies, encouraging competition among generators and facilitating efficient entry of new competitors. The IMO considers that this would be achieved by enhancing the fairness and equity in the process and requirements, and ensuring all new entrants, whether scheduled or intermittent generators, are treated in a similar manner, to the extent practicable.

It will be necessary to make some changes to the IMO settlement systems to implement this rule change. The IMO has obtained a quote from its system support vendor for AUD $4,762 (USD $3,225) to carry out the system changes.

4.2. IMO's Draft Decision

The IMO's draft decision is to implement the proposed amendments to 4.26.1 and 4.26.1A, in order to introduce the requirement for Intermittent Generators to receive Capacity Cost Refunds in the case where Facilities are not commissioned in accordance with the relevant applications made for Certified Reserve Capacity and Capacity Credits.

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

The wording of the relevant Amending Rules is presented in section 6 of this Report.

5. CALL FOR SUBMISSIONS

The IMO invites Market Participants to make submissions on this Draft Rule Change Report and proposed Rule Change. 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 28 November 2008.

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_b_rule change proposal.htm

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

Independent Market Operator
Attn: Manager Market Administration
PO Box 7096
Cloisters Square, Perth, WA 6850
Fax: (08) 9254 4399

6. PROPOSED AMENDING RULES

The IMO proposes to implement the following new clauses to the Market Rules (~~deleted words~~, added words):

4.26.1. If a Market Participant holding Capacity Credits fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to the IMO calculated in accordance with the following provisions.

REFUND TABLE

Dates	**1 April to 1 October**	**1 October to 1 December**	**1 December to 1 February**	**1 February to 1 April**
Business Days Off-Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Business Days Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	1.5 x Y	1.5 x Y	4 x Y	6 x Y
Non-Business Days Off-Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Non-Business Days Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	0.75 x Y	0.75 x Y	1.5 x Y	2 x Y
Maximum Participant Refund	The total value of the Capacity Credit payments paid or to be paid under these Market Rules to the relevant Market Participant for the 12 Trading Months commencing at the start of the Trading Day of the previous 1 October assuming the IMO acquires all of the Capacity Credits held by the Market Participant and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable).			

Where: For an Intermittent Facility that has been commissioned: Y equals 0 For all other facilities, including Intermittent Facilities that have not been commissioned: Y equals the greater of the Reserve Capacity Price and 85% of the Maximum Reserve Capacity Price for the relevant Reserve Capacity Auction, expressed as a $ per MW per Trading Interval figure. This is determined by dividing the Monthly Reserve Capacity Price by the number of Trading Intervals in the relevant month. <u>For the purposes of this clause, an Intermittent Facility will be deemed to be commissioned when the IMO determines that the facility is fully operational. In this case the IMO must apply the principle that the Facility is fully operating in accordance with the basis on which the Facility applied for, and was granted, Certified Reserve Capacity, in accordance with clause 4.10 and 4.11 respectively and was subsequently assigned Capacity Credits in accordance with clause 4.14.</u>

4.26.1A. The IMO must calculate the Forced Outage refund for each Facility ("**Facility Forced Outage Refund**") as the lesser of:

(a) the sum over all Trading Intervals t in Trading Month m of the product of:

I. the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and

II. the Forced Outage Shortfall in Trading Interval t,

where the Forced Outage Shortfall for a Facility is equal to:

i. the forced outage in that Trading Interval measured in MW; or

<u>ii. the number of Capacity Credits associated with an Intermittent Facility in which are deemed to not have been commissioned for the purposes of clause 4.26.1</u>

7. GENERAL INFORMATION ABOUT RULE CHANGE PROPOSALS

Clause 2.5.1 of the Wholesale Electricity Market Rules (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 Market Objectives. The market objectives 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 Rule Change Process or a Fast Track Rule Change 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.