Independent Market Operator

Draft Rule Change Report
Title: Capacity Refund Mechanism – New Generators

Ref: RC_2008_35

Standard Rule Change Process

Date: 25 March 2009

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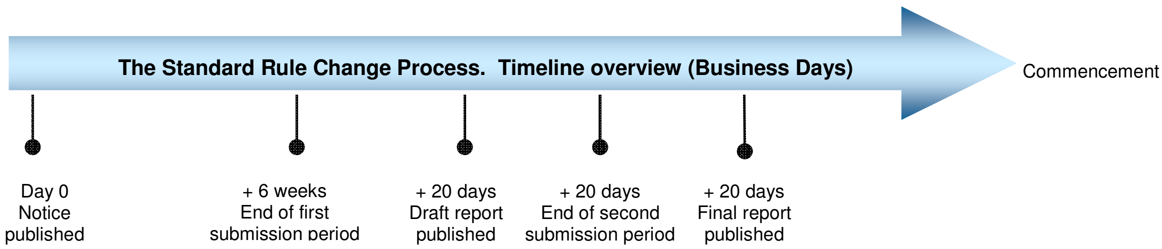
Independent Market Operator
Level 3, Governor Stirling Tower
197 St George's Terrace, Perth WA 6000
PO Box 7096, Cloisters Square, Perth WA 6850
Tel. (08) 9254 4300
Fax. (08) 9254 4399
Email: imo@imowa.com.au
Website: www.imowa.com.au

1. INTRODUCTION

On 14 November 2008 Griffin Energy submitted a Rule Change Proposal regarding changes to clause 4.26 of the Wholesale Electricity Market Rules (Market Rules).

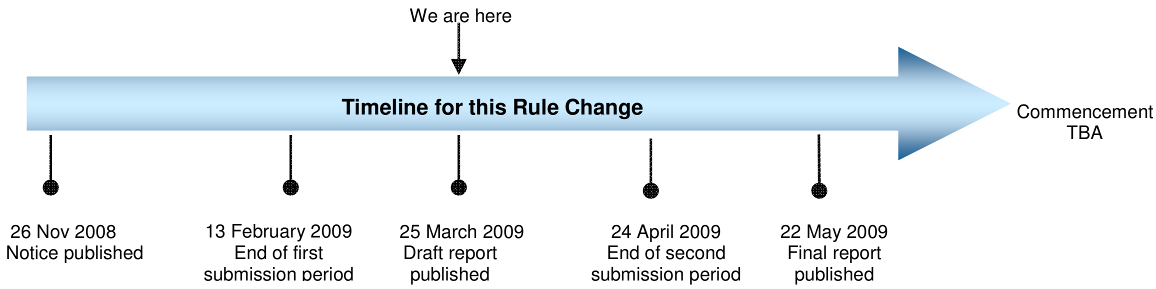
This Proposal is being processed using the Standard Rule Change Process, described in section 2.7 of the Market Rules.

The standard process adheres to the following timelines:



In accordance with clause 2.5.10 of the Market Rules the IMO extended the first submission period for this Rule Change Proposal until 13 February 2009. A notice of this extension under clause 2.5.12 was published on the IMO website on 5 January 2009.

The key dates in processing this Rule Change Proposal, as amended in the extension notice, are:



In making its draft decision on the Rule Change Proposal, the IMO has taken into account:

- the Wholesale Market Objectives;
- the practicality and cost of implementing the proposal;
- the views of the Market Advisory Committee (MAC);
- the Reserve Capacity Mechanism working group's assessment;
- the results of the technical study commissioned by the IMO regarding this Rule Change Proposal; and
- the submissions received, during the first submission period, from the following parties:

- Alinta;
- Griffin Energy (Griffin);
- Landfill Gas and Power (LGP); and
- Synergy.

The IMO's draft decision is to reject the Rule Change Proposal. The detailed reasons for the IMO's decision are set out in section 7.1 of this paper.

This Draft Rule Change Report has been prepared by the IMO in accordance with clause 2.7.6 and 2.7.7 of the Market Rules.

2. CALL FOR SECOND ROUND SUBMISSIONS

The IMO invites Market Participants to make submissions on this Draft Rule Change Report. The submission period is 20 Business Days from the publication date of this Report. Submissions must be delivered to the IMO by close of business on Friday 24 April 2009.

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 and System Capacity
PO Box 7096
Cloisters Square, PERTH, WA 6850
Fax: (08) 9254 4399

3. THE RULE CHANGE PROPOSAL

3.1. Submission Details

Name:	Shane Cremin
Phone:	(08) 9261 2908
Fax:	(08) 9486 7330
Email:	shane.cremin@thegriffingroup.com.au
Organisation:	Griffin Energy
Address:	Level 15, 28 The Esplanade, Perth WA 6000
Date submitted:	14 November 2008
Urgency:	High (3)
Change Proposal title:	Capacity Refund Mechanism – New Generators

3.2. Details of the Proposal

Griffin submitted that section 4.26 of the Market Rules deals with the calculation of capacity refunds applied to Participants that do not meet their Reserve Capacity Obligations. The intent of this section is to provide an appropriate incentive to Participants to ensure they are able to meet their capacity obligations, or to ensure that their capacity is available at times when it is most required.

Griffin submitted that:

- The Refund Table (as part of the overall capacity system itself) attempts to codify in one application a catch-all for all types of capacity and scenarios;
- The Refund Table makes no distinction between existing generators and new entrant generators; and
- New entrant generators have a very different risk profile to existing generators.

Griffin noted that the 2007 Reserve Capacity Refund Mechanism working group (2007 working group) was constituted to assess the drivers of the Reserve Capacity Refund Mechanism and to develop a more permanent solution to the Refund Table. The 2007 working group membership consisted of:

- IMO;
- System Management;
- Alinta;
- Verve;
- Synergy;
- Premier Power;
- TransAlta; and
- Perth Energy.

Griffin submitted that at this time, there were three major new entrant generation construction projects underway:

- Alinta's Wagerup Open Cycle Gas Turbine (near completion);
- NewGen's Kwinana Combined Cycle Gas Turbine; and
- Griffin's Bluewaters Unit 1 coal fired power station.

Neither NewGen nor Griffin, both constructing new capital intensive generation plant, were included on the working group. NewGen and Griffin were also not represented on the MAC at this time.

Griffin argued that adequate consideration was not given to new entrant generators when developing the current Refund Table. It is Griffin's opinion that new entrant generators face excessive risks that lead to outcomes that are contrary to the Market Objectives.

Aligning the Refund Table with the intent of Section 4.26.1

In its Rule Change Proposal Griffin submitted that clause 4.26.1, in its present form, which has been changed several times in the past[1], does not strike an appropriate balance between being an efficient incentive and a being a punitive penalty, especially for the specific subgroup of facilities that are new entrant generators. Griffin's view is that as an efficient incentive, capacity refunds are a useful mechanism to encourage Participants to manage their generation plant in a manner which optimises availability during times of peak demand. When the balance is skewed toward being a punitive measure, its usefulness as an incentive is diminished. A rational Participant will reach a point where additional costs will not impact its behaviour, as all reasonable measures would have been adopted at a lower cost threshold (in fact additional costs will reduce a participants financial ability to respond). Griffin contended that this leads to an increase in inefficient costs to the market (i.e. generators internalise the risk of activating the penalty, which is passed through to consumers as higher wholesale costs an example of this is outlined in text box 1 in appendix 1 of this paper). It is Griffin's view that put simply, the market experiences higher costs for little or no benefit to reliability. Griffin contended that this is clearly inefficient and contrary to the objectives of the electricity market.

Griffin contended that this inefficiency is particularly apparent to new entrant generators. Griffin noted that new entrant generators have a far greater likelihood of experiencing extended 'outages' in the form of construction delays, leading to the repayment of capacity refunds much more quickly during the Hot Season (when the capacity obligations of new entrant generators begin). Griffin says that this comes about due to the removal of the concept of seasonal caps. Seasonal caps protect generators that are unable to meet their Reserve Capacity Obligations from refunding their entire annual capacity payment stream in what can potentially be a very short time frame. Additionally, Griffin noted that since there is little incentive to maintain availability once the maximum refund limit has been reached (with peaking facilities), and then system reliability may be compromised in the later seasons.

Griffin noted that new generation plant is characterised by a very different risk profile than that of existing plant. New entrant plant is susceptible to one-off construction risk where the time frame for completing commissioning can blow out for extended periods for reasons beyond the control of the generator. This is especially so with generation types characterised by higher and more complex capital requirements with longer less controllable lead times[2]. Griffin says that this has the effect, contrary to the market

[1] Griffin note that this includes, importantly, significant changes being made subsequent to Griffin relying upon the previous regime when negotiating and agreeing the damages regime applicable under its EPC contract for the construction of Bluewaters Unit 1 power station

[2] Griffin contended that the capacity refund mechanism; and the whole capacity market itself; is a poor mechanism to deal effectively with differing types of capacity. It says that in this instance, the difference between new entrant generators is stark. An aero-derivative OCGT can be constructed in around 6-9 months using a labour force of between 50 and 100, with much of the components arriving at site

objectives, of discriminating against particular energy options and technologies. Construction delay is often out of the control of Participants (and increasing penalties to generators still under construction actually reduces the financial capacity of the Proponent to expedite the construction process). With the Market Rules not making allowance for this issue (or the concept of Force Majeure[3]), it can be expected that new generation costs will include provisions for such potential significant penalties. Griffin believed that the re-introduction of seasonal caps is important to prevent unnecessary and inefficient potential penalties to new entrant generators.

Griffin considered this to be consistent with previous versions of the Rules. The Refund Table in Section 4.26 in the original version of the Rules contained a provision for daily and seasonal caps. The next incarnation of this table, from the EIRU, modified these caps (before reverting to the original version on review by the Office of Energy)[4]. The remit for the Industry to again review this issue came with the specific direction from the Office of Energy that:

> *"The Market Advisory Committee will be asked to consult with industry and to develop a solution to the issues with Rules that relate to Capacity Cost Refunds that were identified by the IMO in developing its IT Systems, and to ensure that these Rules achieve their intent* ***without being unduly harsh on any single Market Participant or group of Market Participants****."* – OOE Rule change report

Griffin submitted, on the basis of the arguments above, that this proviso requirement of the Rules has not been met. Griffin considered the current rule to discriminate against, and present greater potential risks to, new entrant plant over existing plant – and especially so over new entrant plant with high fixed capital cost and construction requirements.

Griffin also submitted that the purpose of capacity credit refunds is to incentivise reliability and availability. While this may be effective for peaking generation, which has little other incentive to maintain availability, base load generators are less inclined to see these penalties as their main driver for availability. Base load generators are financed on their long term off-take agreements, or their ability to sell large quantities of energy into a liquid market. Capacity payment revenue, or the arbitrary value placed on capacity under the mechanism which sets the Maximum Reserve Capacity Price, is not a consideration when setting prices through bilateral contracts. These prices comprise the Long Run Marginal Cost of producing electricity, or is a bundled price, comprising the fixed capital cost and the variable operating cost. Capacity payments, based on the fixed capital

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prefabricated elsewhere. A large coal fired power station can take between 3-4 years to construct, and require a labour force of over 600 at any one time. Griffin submit that it is very obvious that these types of projects present different construction risk profiles, yet are dealt with using the same set of rules – a set of rules which is based on the dynamics of constructing an OCGT power station.

[3] Griffin submits the new entrant Participant is subject to the normal force majeure from contractors and suppliers but has no force majeure recourse under the market rules. This means legitimate construction delays cannot be cited as a reason for lateness. This increases the risk to new participants thereby restricting new entrants and adding to costs. Also, this provision may increase the leverage of construction labour and others, where in dispute with the baseload proponent, which may add to delays and increase costs.

[4] Griffin submits that here have been interpretational discrepancies with the previous wording of the rules around capacity refunds. These have revolved around the use of the terms 'average' and 'maximum' refunds. Griffin points out that for new entrant generators, where the outage is due to construction delay, the total expected capacity of the facility is likely to be affected for all intervals, so the distinction between average and maximum becomes irrelevant. This highlights the excessive nature that capacity refunds designed to incentivise reliability can have on new entrant generators.

costs of a liquid fired OCGT, bear no relevance to the fixed costs of a base load generator. Capacity payments merely form a 'settlements loop' where they are transferred from retailers to generators via the IMO (while capacity itself, as an arbitrary component of the bundled electricity and essentially an abstract financial instrument created and controlled by the IMO, is in return transferred to the retailer). A far bigger incentive (and potential cost) to a base load generator is the requirement for it to meet its (often) substantive contracted supply obligations using the marginal price of energy being produced in the market. It can be readily assumed that this marginal unit of energy will cost considerably more to produce than the base load energy it is replacing. This means that allocating higher capacity refund penalties to base load generators, especially new entrant generators, is simply adding further risks and costs that do little, if anything, to incentivise reliability and which will ultimately be passed through to consumers.

Griffin maintains that costs that discriminate against base load and mid merit generators do so at the expense of market efficiency. An efficient market is one that optimises the mix of generation types. Regulation that alters the incentive to invest in the optimal generation mix leads to a reduction in market efficiency.

Proposed amendments

Griffin supported the re-introduction of seasonal caps while maintaining the price signals developed under the significant MAC sub-group review of the refund mechanism. In this way, the original balance between providing efficient incentives for availability (without being *unduly harsh* on specific Participants – especially new entrant generators), can coexist with the more appropriate interval-specific signals adopted by the MAC subgroup. The seasonal caps proposed by Griffin were adapted from the caps used in the original Market Rules, where:

Season	Cold	Intermediate	Hot
Maximum Seasonal Rate ($ per maximum Trading Interval MW shortfall)	0.3 x Y	0.1 x Y	0.6 x Y

Where Y represented the annual maximum refund possible under the rules[5]. In order to differentiate Y (as it currently applies in the Refund Table) Griffin proposed, as an additional amendment, that the annual maximum refund concept be denoted as "A" (see below).

Griffin proposed this to equate to a cap of 30% of the annual maximum capacity refund applying to the cold season; a cap of 10% of the annual maximum capacity refund applying to the intermediate season; and a cap of 60% of the annual maximum capacity refund applying to the hot season. As the Hot season was split into a Hot and a Peak season by the MAC subgroup, Griffin proposed the following:

Season	Cold	Intermediate	Hot	Peak
Maximum Seasonal Rate ($ per maximum Trading Interval MW shortfall)	0.3 x A	0.1 x A	0.25 x A	0.35 x A

Griffin contended that adding seasonal caps, (without the daily caps), has the effect of enforcing refunds up to a predetermined cap in each season, and increases the

[5] This was not immediately apparent in the original Market Rules.

timeframe for which Market Participants refund up to their maximum amount (i.e. the Maximum Applicable Refund – if applicable), without inhibiting the interval-specific signals applied to shorter duration outages. Griffin believed that implementing this methodology should not pose significant issues to the IMO IT systems and monthly settlement processes.

Appendix 1 contains three graphs (figures 1, 2 and 3), provided in Griffin's Rule Change Proposal as supporting information.

3.3. The Proposal and the Wholesale Market Objectives

Griffin submitted that its Rule Change Proposal better achieves market objectives (a), (c) and (d) than the current Market Rule 4.26.1 and has a neutral affect on objectives (b) and (e).

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

Griffin submitted that, to promote a reliable supply of electricity, appropriate incentives must be applied that encourage generators to be available at times of peak demand. To ensure that these incentives are also economically efficient, a correct balance must be achieved between financial incentive and an inefficient cost. Costs that do not improve reliability and are ultimately passed through to consumers are clearly economically inefficient. The proposed rule change seeks to address the application of inefficient costs, especially to new entrant generators which are more exposed to these costs and less likely to [*be able to*] respond to them with improvements in reliability.

Further, Griffin contended that inefficient financial penalties for new entrant generators that have not yet commissioned plant may potentially lead to work practices that result in less stringent safety and reliability standards. The safe and reliable production of electricity in the South West Interconnected System (SWIS) is a very serious concern and must certainly extend to the construction of new entrant generation facilities.

(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;

Griffin submitted that the rule, as it currently stands, discriminates against the differing risk profiles of new entrant generators over incumbent generators as well as (and especially) against new entrant generators with high fixed capital costs and long lead time projects. Griffin says that the proposed rule change offsets some of these discriminatory effects.

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

Griffin defined inefficient costs, as outlined in point (a), as being those imposts on Participants that do not return a net value to the market. New entrant base load and mid merit generators that rely on and are incentivised to be available by their energy sales obligations are poorly incentivised (if at all) by excessive capacity refunds. These costs (whether actual or contingent) will ultimately be passed on to consumers.

3.4. Amending Rules proposed by Griffin

Griffin proposed the following amendments to the Market Rules (~~deleted words~~, added words):

4.26.1

…………..

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 Seasonal Cap ($ per maximum possible Trading Interval MW shortfall per season multiplied by the expected annual Capacity Credit payments)	0.30 x A	0.10 x A	0.25 x A	0.35 x A
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; and A 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; and A equals the total value of the Capacity Credit payments associated with the relevant Facility 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 most recent 1 October, assuming the IMO acquires all of the Capacity Credits associated with that Facility and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable).

3.5. 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.

Griffin Energy requested that the Rule Change Proposal be subject to the Fast Track Rule Change Process. The proposal did not satisfy the requirements for fast tracking, as outlined in clause 2.5.9 of the Market Rules, therefore the IMO progressed the Rule Change Proposal following the Standard Rule Change Process.

The Rule Change Notice was published on 26 November 2008.

Additionally, during its initial assessment, the IMO determined that given the complexity of the matter it would be appropriate to reconvene the Reserve Capacity Refund Mechanism Working Group (working group) to ensure that sufficient consideration was given to the complexities and financial implications associated with the rule change proposal.

The following section outlines the process undertaken and the results from the working group's deliberations.

4. THE RESERVE CAPACITY REFUND MECHANISM WORKING GROUP

The working group was reconvened to discuss the merits of the Rule Change Proposal submitted by Griffin Energy (RC_2008_35: Capacity Refund Mechanism – New Generators) against the Wholesale Market Objectives.

The working group met on two occasions, 17 December 2008 and 23 January 2009. During this time the working group developed a list of questions to aid in its assessment of the proposal against the market objectives. Further details of the working group's deliberations are available on the IMO webpage, in the papers for the February 2009 MAC meeting, http://www.imowa.com.au/market_advisory_committee.htm

In summary, the working group did not reach unanimous agreement on the merits of the Rule Change Proposal vis-à-vis the market objectives.

The majority view of the working group was that:

- The proposal, of itself, does not appear to better the market objectives, as a whole.
- On balance, there seemed to be little net change, or no clear benefit for the market as a whole, if this rule change were to proceed.
- The proposal, if implemented, may change the profile of the existing incentives of the Reserve Capacity Mechanism, which places high value on refunds around the summer period, when capacity is typically needed the most. The proposal appears to disincentivise availability when its value is highest – during February. Any amended rules must not provide for a reduced incentive for December-March availability. Doing so would be against the general premise of encouraging availability for summer.
- There is no overriding evidence that this rule change is solving an issue with the current rules, and if this rule is amended too soon then the credibility of the market rules may be compromised.

Griffin disagreed with the other members of the working group and advocated the continuation of this Rule Change Proposal since there is some benefit to new entrants, with no other participant being substantially disadvantaged.

It was widely recognised within the working group, that although there is no substantial disadvantage to other participants, the potential continuation of this rule change needs to be balanced with both the regulatory risk that the Market is faced with if this area in the rules is amended again (noting that rule 4.26.1 has been amended a number of times already) and the potential additional complexity of the Market Rules, if this rule change were to be implemented.

5. FIRST SUBMISSION PERIOD

The first submission period was extended in order for the working group to be able to finalise its deliberations on the Rule Change Proposal. This extension was published in a notice on the IMO website on 5 January 2009. With the extension, the first submission period for this Rule Change Proposal was between 26 November 2008 and 13 February 2009.

5.1. Submissions received

The IMO received four submissions on the Rule Change Proposal, from:

- Alinta;
- Griffin Energy (Griffin);
- Landfill Gas and Power (LGP); and
- Synergy.

The submissions are summarised below. The full text of each submission is available on the IMO website:
http://www.imowa.com.au/Attachments/RuleChange/RuleChange_2008_35.html.

5.1.1 Submission from Alinta

Alinta's submission does not support the Rule Change Proposal. Alinta considers that at the margin, the reliability and security of the electricity system may be dependent on capacity from new Facilities being available no later than the close of the four-month window. If that capacity were not available by 1 December, costly Supplementary Reserve Capacity (SRC) may be required to be procured.

Further, Alinta notes that imposing seasonal caps on the refund of Capacity Credit payments is likely to benefit only new Facilities that experience extended forced outages and may, at the margin, weaken the financial incentive in the Market Rules for new facilities to be available on time (i.e. by 1 December).

Alinta also submits that capacity from new Facilities may currently be made available to the market at any time between 1 August and 30 November. By allowing new Facilities to enter the market as early as August, a time when the additional capacity is unlikely to be of material benefit to the electricity system, new Facilities are afforded an opportunity to commission and resolve immediate post-commissioning issues ahead of when electricity demand may reach system peak (i.e. December through to March).

Assessing the proposal against the market objectives, Alinta considers that there is no evidence that the proposal will further any of the market objectives. The proposal may not avoid discrimination in the market against particular energy options, as it is possible that the proposal will be of greater benefit to new peaking plant Facilities than to new base load facilities, given the greater reliance of peaking plant on capacity payments.

5.1.2 Submission from Griffin Energy

Griffin's submission maintains the arguments outlined in its initial proposal, including that the cost of developing significant assets can be reduced by minimising exposure to unnecessary and punitive capacity refund risks which might occur in extreme circumstances. While the reduction in cost might translate to marginal benefit for the wholesale price in the market, it may have significant ramifications for the competitive position of specific generation types.

Griffin considers the current mechanism to naturally discriminate against assets more likely to incur very high refund costs, such as new entrant plant and specifically capital intensive new entrant plant. Griffin also notes the Rule Change Proposal retains the interval and seasonal specific incentive mechanism of the current capacity refund mechanism and still levies significant refunds against plants experiencing extended forced outages and not meeting their contractual obligations to the IMO to provide capacity.

Griffin concludes that both the capacity and capacity refund mechanisms require significant review as a mechanism for incentivising a diverse range of capacity into the market on a timely basis and in line with system security and legislative objectives.

Griffin submits that the proposal will allow the Market Rules to better address market objectives (a) and (d) and, to a lesser extent, objectives (b) and (c).

5.1.3 Submission from Landfill Gas and Power

LGP's submission does not support the proposal.

Fundamentally, LGP agrees with many of Griffin's assertion, including:

- The refund table makes no distinction between existing generators and new entrant generators and their very different risk profiles;
- Capacity Cost Refunds from a delayed new generator might not modify that generators behavior and are therefore of questionable economic efficiency;
- Coal-fired generation is subject to higher risk associated with longer development periods than open-cycle peaking plant;
- The principal incentive (and potential cost) to a base load generator to commission on time is the requirement for it to meet its contracted supply obligations; and
- The current rules incentivise diesel-fired peaking plant at the potential risk of increasing average prices in the long term.

However, LGP submits that generators should be paid by market customers to supply capacity and in the event of not supplying it should not be paid for it. As capacity has a significantly greater value during the Hot Season than at other times, the payment scheme should also incentivise delivery of capacity at this time. While LGP welcomes initiatives to improve the current capacity mechanism, it concludes that the current mechanism does nonetheless achieve the desired outcomes.

Further, LGP notes that, while it did not itself participate in the working group behind the previous rule change, the entire process was open, transparent and considered in arriving at its conclusions and is therefore wholly legitimate.

In particular, LGP considers that it is not clear whether the savings to the market via reduced penalties would occur, and if they did, whether they would be outweighed by the increased potential costs of Supplementary Reserve Capacity.

LGP perceives that the impact of the proposed changes are minor, subjective and context-dependent and notes that the working group which assessed Griffin's proposal could not establish a consensus on whether outcomes would be holistically constructive or even material.

LGP therefore considers that the market objectives are not better achieved by means of this proposal.

5.1.4 Submission from Synergy

Synergy's submission does not support the proposal. It submits that, from the working group's discussions on the Griffin proposal, it cannot show that the proposed rule change will allow the Market Rules to better address any of the market objectives. Any potential improvement would be at best marginal and some may be negative. On balance Synergy posits that the proposed rule change does not appear to promote the market objectives.

Synergy adds that it would have supported the proposed rule change if it could be shown that it promotes lower generation costs. Synergy's conclusions, resulting from the workshop discussion, are that this is not the case for any type of generation technology or technology size.

Synergy considers that base load and mid merit facilities have sufficient incentive to arrive on time in order to supply contracted load, and peaking facilities to retain the capacity credit cash flow stream. Additionally, if late, Synergy considers the current rules provide further incentives to new facilities to minimize their lateness. Griffin's proposal, on the other hand, may reduce this incentive by capping their refund exposure.

Synergy is also concerned that reducing the incentive for facilities to arrive as expected potentially exposes the market to the possibility of creating SRC costs for market participants by either causing a SRC or by requiring System Management to exercise SRC capacity.

Synergy is of the view as expressed by the working group that making a further rule change shortly after completing an extensive consultation process on refund allocation, which gained broad market participant approval, potentially reduces confidence external observers would have in the rule change process. Synergy is particularly concerned that potential facility investors would not perceive this rule change as an improvement but rather as a sign of market governance instability.

As a result of the answers provided by the working group on the effect of this proposed rule change on the market objectives, Synergy concludes that the overwhelming response was that it was unclear whether it would promote or undermine the achievement of the Wholesale Market Objectives. It is Synergy's view that this impact, if any, would be marginal and potentially negative toward the market objectives.

6. THE IMO'S ASSESSMENT

In preparing its Draft Rule Change Report, the IMO must assess the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3 of the Market Rules.

Market Rule 2.4.2 outlines that 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".

Additionally, clause 2.4.3 states, when deciding whether to make Amending Rules, the IMO must have regard to the following:

- Any applicable policy direction from the Minister regarding the development of the market;
- The practicality and cost of implementing the proposal;
- The views expressed in submissions and by the MAC; and
- Any technical studies that the IMO considers necessary to assist in assessing the Rule Change Proposal.

The IMO notes that there has not been any applicable policy direction from the Minister in respect of this Rule Change Proposal.

This IMO's assessment is outlined in the following sections.

6.1 Wholesale Market Objectives

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".

Wholesale Market Objective		Consistent with objective
(a)	to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system	No
(b)	to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors	Yes
(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	Yes
(d)	to minimise the long-term cost of electricity supplied to customers from the South West interconnected system	Yes
(e)	to encourage the taking of measures to manage the amount of electricity used and when it is used	No

On balance, the IMO considers that the Market Rules, as proposed to be amended, will not be consistent with the Wholesale Market Objectives.

Further, 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	
Consistent with objective	b, c, d
Inconsistent with objective	a, e

The IMO's assessment against the market objectives is as follows:

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

One of the main drivers in the Capacity Refund Mechanism is to encourage Facilities to be available for the hot season, when all available capacity is required to meet hot peak demand. This availability criterion applies for all generation plant- both for new plant and plant returning from planned maintenance. The refund table in clause 4.26.1 emphasises this by having high refund rates for plant unavailability apply from 1 December with the highest refunds applying from 1 February to 1 April. The intention when the refund table was amended by the 2007 RCM Working Group was that a facility not available from 1 December would reach its maximum refund cap at the end of the hot season. The current rules work as intended.

Griffin proposed to cap the maximum refund so that a Facility with a full outage from 1 December – 1 April would have a cap of 60% of the value of its Capacity Credits. With this proposal the incentive in the refund mechanism to ensure availability in the hot season is reduced.

While acknowledging Griffin's argument that certain plant types, such as base load plants whose main income stream is bilaterally contracted energy, may not have the refund mechanism as its main incentive for on time performance, it must be noted that the proposal as submitted would apply to all plant types, including existing plants returning from maintenance.

Several members of the RCM working group expressed concern that Griffin's proposal would indeed provide a reduced incentive to have all plant available by the hot season and thus, potentially increase the system risk and reduce the safe and reliable supply of electricity in the SWIS. The majority of the RCM Working Group agreed that any amended rules must not provide for a reduced incentive for December-March availability.

By reducing the incentive for new generators and plants returning from maintenance to be on time for the hot season, the IMO considers the proposal to be detrimental to, and inconsistent with, the achievement of market objective (a).

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

By reducing the incentive for generators (new or existing) to come in on time for the hot season, the risk of the IMO holding a SRC auction may be increased. As the cost of supplementary capacity is uncapped, the cost to the market for SRC may be higher than the cost of having Certified Reserve Capacity available on time.

Since this proposal has the potential to increase the risk of SRC being required, with uncapped liability, the IMO considers the proposal may be detrimental to, and inconsistent with, the achievement of market objective (e).

6.2 Practicality and cost of implementation

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 implementation costs are currently being investigated by the IMO, however, as this change would involve reverting back to largely what was in place in 2007, in respect of seasonal caps, the costs are not considered to be significant. No other implementation costs have been identified during the first round of public submissions.

The IMO notes that while the implementation costs (one-off) are considered to be low, there will be higher ongoing costs due to the additional complexity in the settlement systems.

6.3 Views expressed in submissions

In accordance with Clause 2.4.3(c) of the Market Rules, in deciding whether or not to make Amending Rules, the IMO must have regard to the views expressed in submissions on the Rule Change Proposal.

Of the four parties responding to the IMO's call for submissions, Alinta, LGP and Synergy did not support the proposal. The main reasons for their lack of support are outlined in section 5.

Griffin considers the current mechanism to naturally discriminate against assets more likely to incur very high refund costs, such as new entrant plant and specifically capital intensive new entrant plant.

The IMO contends that the Reserve Capacity Mechanism treats all types of generation equally. The IMO considers the mechanism to be transparent and clear in its outworking and the refunds which apply when a plant, regardless of type or size, fails to complete commissioning before 30 November. This is both a financial risk and a project schedule risk, born by the project owner and, as confirmed by members of the RCM working group, accounted for in all projects.

Griffin contends that the Rule Change Proposal retains the interval and seasonal specific incentive mechanism of the current capacity refund mechanism. The IMO notes that all members of the working group (except Griffin) disagreed with this assessment and concluded that, if anything, Griffin's proposal would reduce the incentives in the refund mechanism and potentially reduce system security in the hot season.

Griffin concludes that the capacity and capacity refund mechanisms require significant review as a mechanism for incentivising a diverse range of capacity into the market on a timely basis and in line with system security and legislative objectives.

After consideration of Griffin's submission, the IMO has decided to include a review of the capacity and capacity refund mechanism as an issue for consideration the medium to long term market evolution plan. The IMO has a number of reviews on its evolution plan, these reviews will need to be prioritised at the MAC.

The IMO further outlines its response to the Rule Change Proposal and Griffin's submission in section 6.6 of this paper.

6.4 Views expressed by the MAC

In accordance with clause 2.4.3(d) of the Market Rules, in deciding whether or not to make Amending Rules, the IMO must have regard to the views expressed by the Market Advisory Committee (MAC), where MAC met to consider the Rule Change Proposal.

MAC assessed Griffin's proposal at its October 2008 meeting. At the meeting, one MAC member made the point that the main tenet of risk management is to pass on a risk to the entity which can best manage it. The member expressed its opinion that the proposed rule change may be unduly harsh on retailers with respect to SRC risk.

Griffin submitted that an existing generator and a new generator have quite different risk profiles and face dissimilar incentives. Griffin also submitted that different types of generators face different incentives, explaining that an open-cycle gas turbine would be highly incentivised by capacity payments, which is not the case for a base load generator which is financed by a contract with another party.

The discussion then turned to the determination of a sufficient penalty to generators which are late in commissioning given the fact that they are not incentivised by capacity plant. The point was made that regardless of how long it takes for a plant to be built, a commitment is made at the time of finalising Reserve Capacity two years prior that the plant would be available.

Griffin also made the point that once a late-commissioning generator comes online, the refunds that it has been paying as a result of not being available are all sunk costs which will never be recouped.

MAC also discussed the proposal at its December 2008 meeting. It was noted that the original rule change proposal requested that this rule change be progressed via the fast track mechanism. The IMO decision was that it did not meet the criteria to be fast-tracked.

The IMO noted that, given the complexity of the rule change, it was determined that the RCM working group be reconvened to ensure that sufficient consideration be given to the complexities and financial implications associated with the proposal. It was agreed that detailed discussion on the rule change proposal should be reserved for the working group.

The MAC considered the deliberations from the working group at its February 2009 meeting. At this meeting the MAC requested that the IMO consider obtaining a separate economic review of this Rule Change Proposal. The results from this technical study are outlined in section 6.5 of this paper.

6.5 Technical Study

In accordance with clause 2.4.3(e) of the Market Rules, in deciding whether or not to make Amending Rules, the IMO must have regard to any technical studies that the IMO considers are necessary to assist in assessing the Rule Change Proposal.

The IMO engaged McLennan Magasanik Associates (MMA) to undertake an independent technical study of the proposed rule changes. This was initiated by the MAC in response to the mixed views expressed during the first submission period with regards to the impact of the proposed changes on the Market Objectives and on the stability of the governance of the Market. A copy of MMA's report is available on the IMO website.

In its report, MMA concluded that the proposed rule change makes no significant improvement in meeting the market objectives and has scope for a small detrimental effect on supply reliability. For this reason MMA does not support RC_2008_35.

MMA contended that seasonal caps might be useful to spread the incentive to manage performance over the year, but noted that it has not been established that seasonal caps would materially reduce the financial risk of delayed commissioning in a way that balances the costs of recovery from project delays, the costs of SRC and the costs imposed on customers from inadequate reliability. Furthermore, MMA noted that there is the risk of an unintended consequence of reducing the incentives for return of peaking plant from outages later in the seasons when the cap on Capacity Payment Refunds would be effective. This would reduce reliability and increase the risk of the need for SRC.

In view of the concern about successive changes to the processes around the Refund Table and the insufficient evidence of the efficiency or otherwise of the current arrangements, MMA considered that there is no immediate need to reimpose seasonal caps without reference to a reliability assessment and consideration of the impact of lead time on the refund processes. MMA noted that it is likely that the current refund profile that caps out between 5.5 and 10.3 months depending on the start time is not optimal but nor is it significantly inefficient to warrant the changes proposed by Griffin Energy.

In assessing the proposed rule changes against the Wholesale Market Objectives, MMA developed a Multi-Criteria Analysis framework. A summary of the MMA's assessment of RC_2008_35 against the identified core and non-core criterion (which related to the Market Objectives) is provided below:

- Efficiency – Slight impact due to delayed return to service of peaking plant. In particular, MMA assessed that the major impact for efficiency would be through allocative efficiency and how it would affect the incentives to return plant to service as quickly as possible toward the end of the season when a Capacity Payment Refund is capped.

- Safety – No effect on physical safety.

- Reliability – Some reduction in late season supply reliability. MMA noted that given that the proposed rules have the effect of capping capacity payment refunds during the hot and peak seasons, the proposed rule changes may diminish reliability late in these seasons. MMA note that Griffin has not demonstrated and that no submissions received during the first submission period have provided support that the proposed seasonal caps will provide investment incentives to deliver a schedule of new capacity that provide an optimal mix of technology with timings that meet reliability targets.

- Competition – The proposed rule change has not been demonstrated to have a material impact on the market's competition objective.

- Non-discriminatory market arrangements – MMA does not agree with Griffin that the current regime discriminates against capital intensive base-load equipment relative to open cycle gas turbine and therefore favours peaking plants. MMA notes that none of the submissions received from other Market Participants support Griffin's claims and there is no evidence that the stated development risks cause costs to increase in a manner that undermines investment. MMA also note that there has been no evidence provided that current market revenues would fail to provide adequate economic return for those affected units once commissioned.

- Long-term cost – Slightly increased risk of SRC cost. MMA noted that although it is possible that the introduction of seasonal caps may have the effect of lowering the expected building costs to new entrant generators, it is also the case that the outcomes of any realised lower costs due to delayed commissioning may be greater energy costs due to expected capacity being unavailable. MMA considers that without evidence it is unclear whether the proposed rule change will lower or raise expected long-run costs to customers arising from the development of base load plants. MMA also noted that there is the small effect that delays in return to service of a peaking plan arising from seasonal caps would increase the risk of calling Supplementary Reserve Capacity that may not be recovered from Capacity Payment Refunds.

- Demand Management – No or Neutral impact on incentives to offer demand management initiatives to the market.

- Practicality and cost of implementing the rule change– MMA considers that as it has not been made aware that the rule change will impose a significant implementation cost or that the potential impact of reintroducing seasonal caps on existing contracts or agreements was not identified or demonstrated by participants in their submissions there will be no impact on implementability.

6.6 Response to Griffin's Proposal and Submission

The Griffin's Rule Change Proposal asserts that the Refund Table "attempts to codify in one application a catch-all for all types of capacity and scenarios", in particular Griffin noted the Refund Table makes no distinction between:

- existing generators and new entrant generators and their different risk profiles; and
- different types of generators, i.e. peaking, mid merit and baseload and their different drivers for ensuring availability.

The IMO, while noting these points, is of the view that the current rules function as was intended by the 2007 Working Group. The current rules were subject to extensive consultation with the industry, both within the 2007 RCM working group and during the two submission periods on the Rule Change Proposal RC_2007_08 (Calculation of

Reserve Capacity Refund) which was derived from the 2007 RCM Working Group's deliberations – altogether a process that spanned nearly 12 months.

Griffin Rule Change Proposal argues that the Refund Table does not make the distinction between different types of generators and scenarios (i.e. new entrant vs existing). The IMO's assessment is that the proposed Amending Rules do not identify or address the unique risks faced by each new entrant generator.

The IMO recognizes that all Market Participants have different risk profiles, these arise due to differences in a number of factors, such as:

- capital structure;
- fuel supply contracts and arrangements;
- ownership structures;
- plant age;
- fuel type;
- staff arrangements; and
- operational structures.

The IMO's view is that each Market Participant has to manage different risks regarding the Reserve Capacity Mechanism, but and once a participant commits to the Reserve Capacity Mechanism, it is treated on an equal footing with all other participants with regard to the allocation of Capacity Credits and their ability to sell bilaterally, for example.

Additionally, the technical review by MMA noted that in its opinion, the current regime does not discriminate against capital intensive base-load equipment relative to open cycle gas turbine and therefore favour peaking plants.

Griffin contends that adequate consideration was not given to new entrant generators when developing the current Refund Table. The IMO notes that Alinta (a new entrant at the time) was a member of the 2007 Working Group, and submitted on the Rule Change Proposal (providing a further suggestion that the IMO circulated for additional consultation at the time). Griffin (as well as NewGen and all other potential new entrants) had an opportunity to submit on RC_2007_08 as all other participants and interested stakeholders, but made no submission.

The IMO notes that after examining a number of options relating to the Capacity Refund Mechanism, the 2007 Working Group considered it desirable that the selected option should give rise to only minimum changes to the Market Rules. This was considered important to maintain stable market arrangements so as to encourage investors and facilitate understanding of the Market. It was also considered important by the 2007 Working Group to avoid further complexity and simplify the Market Rules as far as practicable.

The IMO considers that this remains a valid concern and that changing the rules for the benefit of a specific situation, when the overall benefit to the market is questionable, is not an optimal outcome. The 2008/2009 RCM working group noted, and the IMO agreed, that there is no evidence that this Rule Change Proposal would solve a problem or error with the current rules. There is considerable regulatory risk if the refund table is amended so soon after the previous change, the result, may be compromising to the credibility of the Market Rules.

One of the fundamental aspects of the Reserve Capacity Mechanism is to encourage availability during December - March. By capping the refunds for late commissioning plant, the Griffin proposal limits the financial incentive in the Reserve Capacity Mechanism for plants to be available in time. The IMO also notes that, under the current refund mechanism, a plant must have a 100% forced outage from 30 November to the end of March in order to reach full capacity refunds.

The Reserve Capacity Mechanism has been developed to ensure that capacity is reliably provided over periods when demand is expected to be highest. This is evidenced through the application of the planning criterion outlined in clause 4.5.9 (a) of the Market Rules which states:

"4.5.9 The Planning Criterion to be used by the IMO in undertaking a Long Term PASA study is there should be sufficient available capacity in each Capacity Year during the Long Term PASA Planning Horizon to:

(a) meet the forecast peak demand (including transmission losses and allowing for Intermittent Loads) supplied through the SWIS plus a reserve margin equal to the greater of:

i. 8.2% of the forecast peak demand (including transmission losses and allowing for Intermittent Loads); and
ii. the maximum capacity, measured at 41°C, of the largest generating unit;

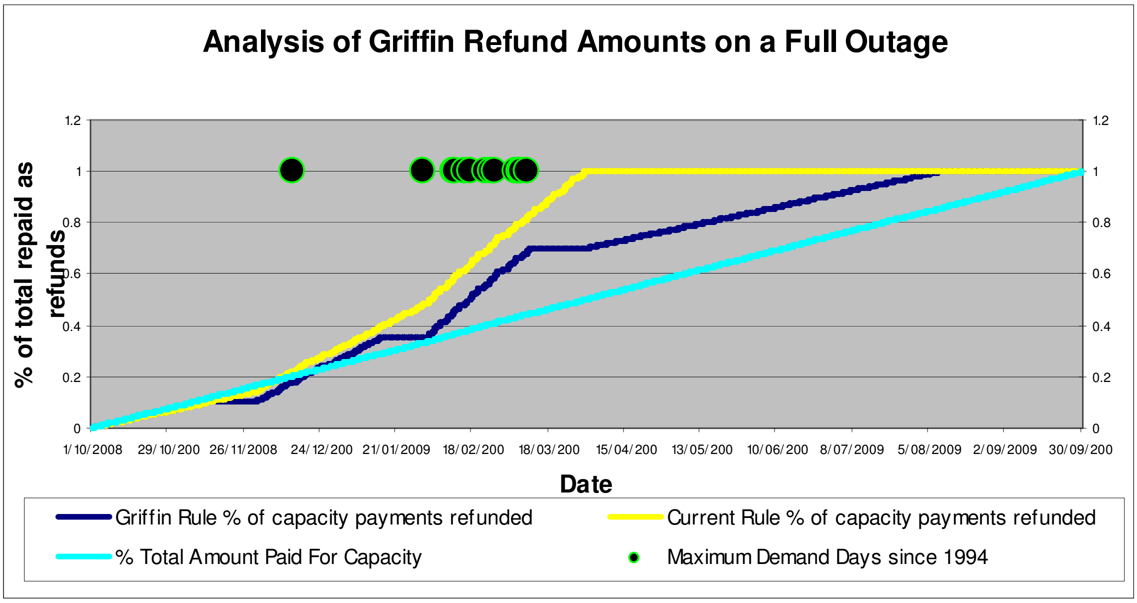
while maintaining the Minimum Frequency Keeping Capacity for normal frequency control. The forecast peak demand should be calculated to a probability level that the forecast would not be expected to be exceeded in more than one year out of ten;

…"

Clause 4.5.9 (b) further includes an un-served energy criterion, which has not historically been the binding component of the Planning Criterion.

The effect of introducing Griffin's Rule Change Proposal is shown in the figure below. The refund payments are plotted as a proportion of the total value of Capacity Credits. The yellow line shows the current arrangements while the dark blue line shows the arrangements as proposed under this Rule Change Proposal.

Superimposed on this are the times of year at which peak demand events have been experienced over the last 15 years. It can be seen that the latest peak demand event over the last 15 years occurred on 10 March.



The current Market Rules require that a Market Participant that fails to provide the capacity it committed to must repay the total value of its Capacity Credits by mid March. This is near the end of the Hot Season.

RC_2008_35 has the effect of extending the period over which a facility on a total Forced Outage is required to pay refunds back to the market (for failing to make available the capacity it had committed to provide to the market). Under the Rule Change Proposal, refunds are only made in its entirety by around August each year, much after the end of the Hot Season. The IMO considers that the proposal therefore compromises the effectiveness of the refund mechanism.

Ensuring capacity is available for the Hot Season was supported by the 2007 Working Group in developing the current rules. No support has been expressed for a change to a different mechanism either by the MAC, the 2008/09 Working Group or any other summiting party other than the Griffin.

The IMO acknowledges that developing appropriate incentives for Market Participant behaviour is a key design issue. However, Griffin has provided no evidence provided in its proposal or subsequent submission that would suggest that the current incentives are insufficient, and no evidence or convincing arguments have been presented to indicate that the Rule Change Proposal would result in a better mechanism.

Finally, in its proposal Griffin concluded that the capacity and Capacity Refund Mechanisms require significant review as a mechanism for incentivising a diverse range of capacity into the market on a timely basis and in line with system security and legislative objectives. The IMO has incorporated this request into its medium–to-long term market evolution plan. This further emphasises the regulatory risk (investors perceiving further changes to the refund table as a sign of market governance instability) and consequential loss of market confidence in the refund mechanism if short term adjustments are made to the Market Rules.

7. IMO'S DRAFT DECISION

Based on the matters set out in this report, the IMO's draft decision, in accordance with Market Rule 2.7.7(f), is to reject the Rule Change Proposal.

7.1 Reasons for the decision

In summary, the substantive reason for the IMO's decision to reject the Rule Change Proposal is that there is a risk that the proposed Amending Rules will reduce the incentive for both new and existing generators on outage to make available capacity during the Hot Season, when it is needed the most. This has the potential to reduce overall system reliability at a time when demand is expected to be highest.

There are a number of supporting reasons for the IMO's decision, these are:

- It is not satisfied that the Market Rules, as proposed to be amended, are consistent with market objectives. While the proposed amendment may be consistent with market objectives (b), (c) and (d) the IMO considers that it will be inconsistent with market objectives (a) and (e);

- The technical study, undertaken by MMA, did not support the Rule Change Proposal because it found that the proposal would make no significant improvement in terms of meeting the market objectives and has scope for a small detrimental effect on supply reliability;

- The proposed Amending Rules do not address the stated objective of recognising the unique risks faced by new entrant generators;

- Three of four respondents (the fourth being the proposer) in the first submission period did not support the proposal;

- There is no evident benefit to the entire market from amending the rules as proposed;

- All members of the RCM working group, except Griffin:

    - did not support the proposal; and
    - agreed that the current refund mechanism works as intended; and
    - Agreed that the current refund mechanism has support from the majority of the industry; and

- The original rules had the support of industry, went through the public consultation process and the IMO consider are operating as intended.

8. PROPOSED AMENDING RULES

The IMO proposes not to amend the Market Rules.

9. 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.

APPENDIX 1: SUPPORTING INFORMATION FOR THE RULE CHANGE PROPOSAL (FROM GRIFFIN RULE CHANGE PROPOSAL)

Text Box 1 as submitted by Griffin

In a bilateral energy market, to finance the construction of an energy producing generator (rather than a reserve margin generator which relies on payments for making capacity available), a developer must be able to bilaterally contract the output of the facility on the basis of its Long Run Marginal Cost – comprising the energy and the capacity. How the output price is apportioned between these two amounts is arbitrary. Capacity payments in the WEM are based on the fixed costs of a liquid fuelled peaking facility. This does not bear any relevance to the fixed and variable costs of a base load facility. The capacity market simply creates a demand for an abstract financial instrument (capacity credits) that is met by the award of a right to generate capacity credits by the IMO to a generator. While the value of a generator's output is affected by whether it is granted this right, the ***quantum of this value*** to any generator which sells a product that is composed of more than capacity alone[6] is arbitrary and is simply required to complete a settlement loop. The generator effectively has two separate commitments for contracted availability. The first is to its off take counterparty for the delivery of the (real) output of the plant. The second is to the IMO to meet the requirement for the award of an (abstract) capacity credit. A new entrant generator is incentivised to meet its project delivery dates by its contractual off take obligations. ***The capacity refund mechanism, by refunding capacity credits at higher rate than being granted them, simply becomes an arbitrary financial penalty***[7] – or a cost additional to the cost of meeting the contracted commitments. If a new generator expects that it might incur additional costs for not delivering on time (where as a new entrant generator it is at its most vulnerable to construction risk and force majeure, which are largely non-controllable risks), it will 'manage this risk' by pricing the cost of these refunds into the project development as an additional contingency. This is a commercial reality of project development, where financiers protect their investments as a priority. The cost of financing the additional risk premium is a cost that is then borne by the market through higher wholesale electricity prices – whether the generator incurs the capacity penalties or not. While the generator, though poorly equipped to manage this risk, is probably still the best placed to do so, Griffin contends that the risk itself should not be there in the first place, as there is little additional return to the cost imposed in managing it.

The argument that: if the generator does not price in this cost, then others in the market (i.e. retailers) will price it in, is flawed. This is only applicable if the late delivery of a generator actually leads to higher market costs. Higher costs may be incurred through calling for supplementary reserve capacity (SRC) and through replacing the expected generation with higher cost generation in the market. Griffin does not believe there is sufficient evidence to suggest that forcing a generator to price in the potential refund penalty cost of each project development (regardless of whether it incurs penalties) – and pass that cost on through higher wholesale pricing, is more efficient (cost effective) than incurring costs relating to SRC on an infrequent basis[8]. The second potential market cost impost; that of higher priced electricity for the marginal unit not produced by the generator, will primarily be ***borne by the generator in a bilateral market*** (through its supply obligations) and is actually their main driver for ensuring timely delivery.

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[6] For a pure peaking plant (or one that provides capacity to meet only the marginal MWh of demand in the system), the LRMC of production is equivalent to the fixed capital cost. In this case, the price paid for capacity is important.

[7] The IMO describes capacity refund repayments as a 'refund' only and is careful not to use the term 'penalty'. If the repayments to the IMO were made at the same rate at which the capacity payments were made (or at a reduced rate), then the term refund (or partial refund) would be sensible. As the repayments are made at a rate that is higher than payments; and, importantly, for a generator that has contracted off take obligations to transfer capacity rights, as the difference between payments an repayments is unable to be recouped once the plant is available again, then the capacity repayments made above the level of capacity payments received can only logically be viewed as a penalty.

[8] The fact that SRC is potentially uncapped would appear a flaw in an otherwise price regulated market

Figure 1 below compares the proposed refund profile with the current refund profile for Participants that are unable to meet their capacity obligations for the whole year (i.e. the worst case scenario).

Figure 1 Capacity refund profiles as submitted by Griffin

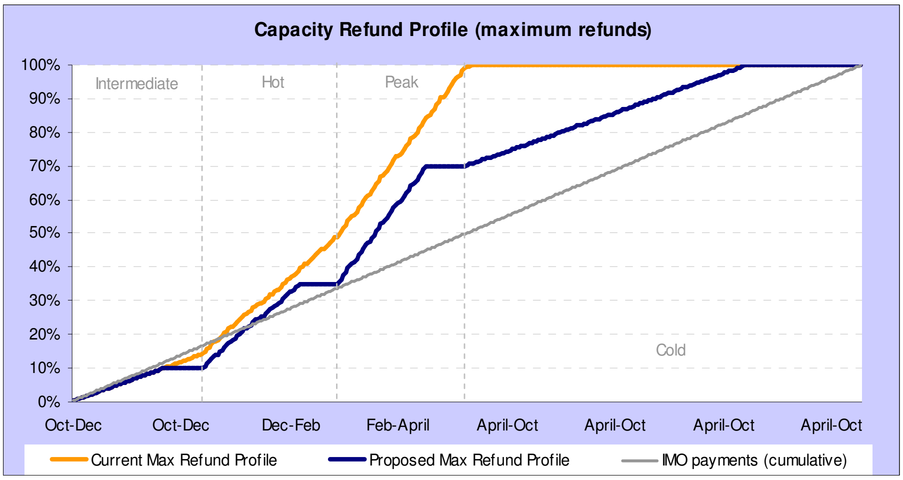

Figure 2 shows the average daily refunds (of a long-term outage) as a ratio of capacity payments. The daily refunds are weighted over peak and non peak intervals and differentiated by business and non-business days.

Figure 2 Average daily capacity refund ratios as submitted by Griffin

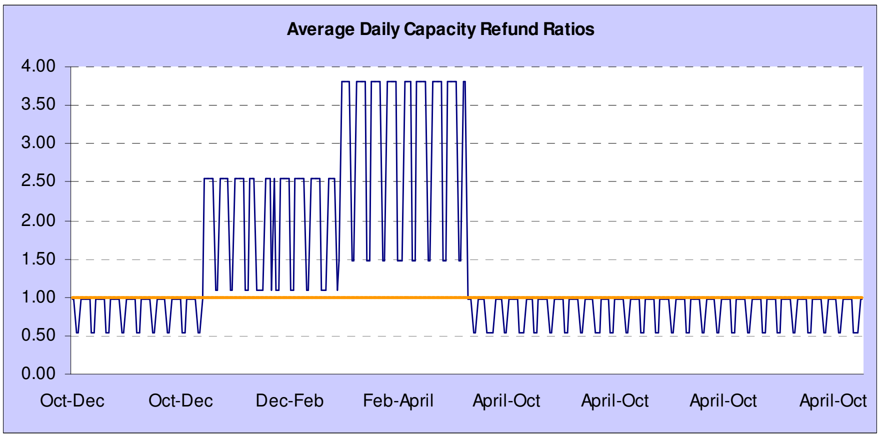

Figure 3 compares the proposed refund profile with the current refund profile for Participants that are unable to meet their capacity obligations for the Hot and Peak seasons only. This is when new entrant generators that have experienced delays are expected to begin their capacity obligations. For an existing generator that is on a long term outage from the start of the capacity year (01 October), there is a small surplus of payments to refunds (i.e. a net benefit) throughout the Intermediate season (see Figure 1: Oct-Dec). This is not available to new entrant generators. Figure 3 clearly shows that new entrant generators are immediately exposed to high penalties. Griffin suggested that the 'Proposed Refund Profile' (blue line):

- represents an efficient incentive regime;
- is consistent with the intent of the Market Rules; and

- meets the Office of Energy caveat of not being unduly harsh on any single Market Participant or group of Market Participants.

The area between the 'Proposed Refund Profile' (blue line) and the 'Current Refund Profile' (orange line – and the area above the orange line) is, according to Griffin, an inefficient cost that will be passed through to consumers as higher long-term wholesale electricity prices. Griffin considered this to be manifestly inconsistent with the market objectives.

Figure 3 Hot and Peak season capacity refund profiles as submitted by Griffin