



**Independent Market Operator**

**Final Market Rule Change  
Report**

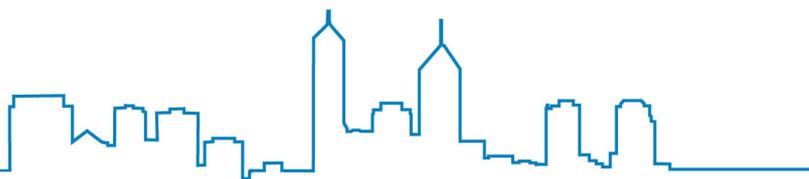
**Title: Capacity Refund  
Mechanism - New  
Generators**

**Ref: RC\_2008\_35**

**Date: 22 May 2009**

## Contents

1. INTRODUCTION .....	4
2. THE RULE CHANGE PROPOSAL .....	5
2.1 Submission Details .....	5
2.2 Details of the Proposal.....	5
2.3 The Proposal and the Wholesale Market Objectives .....	9
2.4 The Amending Rules Proposed by Griffin Energy.....	10
2.5 The IMO's Initial Assessment of the Proposal.....	11
3. THE RESERVE CAPACITY REFUND MECHANISM WORKING GROUP .....	12
4. FIRST SUBMISSION PERIOD.....	12
4.1 Submissions received.....	13
4.1.1 Submission from Alinta .....	13
4.1.2 Submission from Griffin Energy.....	13
4.1.3 Submission from Landfill Gas and Power.....	14
4.1.4 Submission from Synergy.....	15
5. THE IMO'S DRAFT ASSESSMENT.....	15
6. THE IMO'S DRAFT DECISION.....	16
6.1 Reasons for the IMO's draft decision .....	16
7. SECOND SUBMISSION PERIOD.....	17
7.1 Submissions received.....	17
7.2 Submission from Alinta .....	17
7.3 Submission from Griffin and the IMO's response.....	18
7.4 Submission from LGP.....	25
7.5 Submission from Perth Energy.....	25
7.6 Submission from Synergy.....	25
8. THE IMO'S FINAL ASSESSMENT .....	26
8.1 Market Objectives .....	26
8.2 Practicality and cost of implementation .....	27
8.3 Views expressed in submissions.....	28
8.3.1 First submission period.....	28
8.3.2 Second submission period .....	28
8.4 Views expressed by the Market Advisory Committee .....	29
9. THE IMO'S FINAL DECISION.....	30
10. AMENDING RULES .....	31
11. GENERAL INFORMATION ABOUT RULE CHANGE PROPOSALS.....	31
APPENDIX 1: SUPPORTING INFORMATION FOR THE RULE CHANGE PROPOSAL.....	33
APPENDIX 2: IMO DRAFT RULE CHANGE REPORT ASSESSMENT .....	36
IMO's Draft assessment against the Wholesale Market Objectives.....	36
IMO's Draft Assessment of the practicality and cost of implementation .....	37
Views expressed in first round of submissions.....	38
Views expressed by the MAC.....	39
Technical Study commissioned by the IMO during the first submission period .....	39
The IMO's Draft response to Griffin's proposal and first submission .....	41

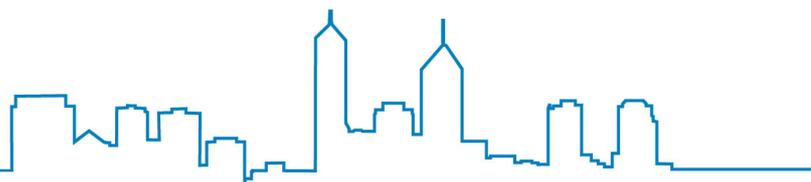


## DOCUMENT DETAILS

IMO Notice No.: RC\_2008\_35  
Report Title: Capacity Refund Mechanism – New Generators  
Release Status: Public  
Confidentiality Status: Public domain  
Published in accordance with Market Rule 2.7.8

### Independent Market Operator

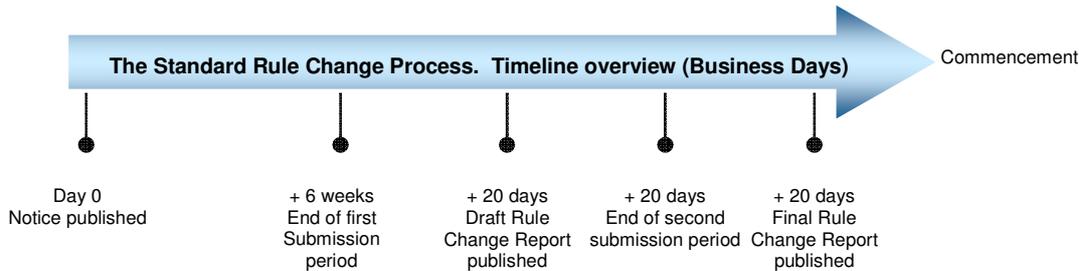
Level 3, Governor Stirling Tower  
197 St George's Terrace, Perth WA 6000  
PO Box 7096, Cloisters Square, Perth WA 6850  
Tel. (08) 9254 4300  
Fax. (08) 9254 4399  
Email: [imo@imowa.com.au](mailto:imo@imowa.com.au)  
Website: [www.imowa.com.au](http://www.imowa.com.au)



## 1. INTRODUCTION

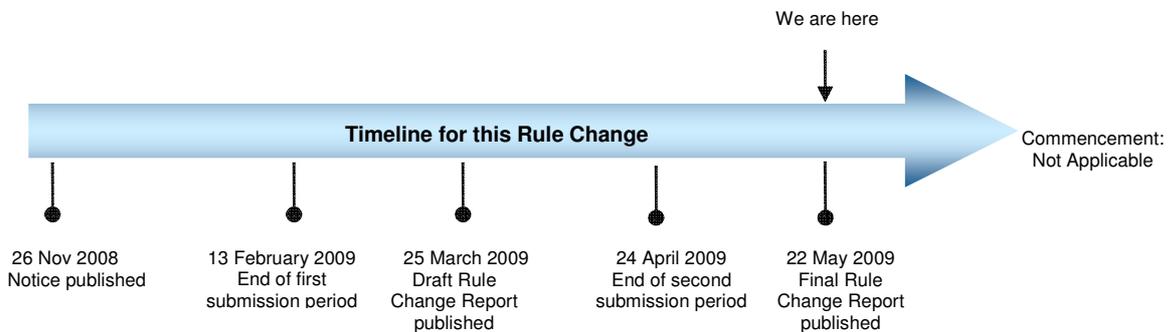
On 14 November 2008 Griffin Energy submitted a Rule Change Proposal regarding changes to clause 4.26.1 of the Wholesale Electricity Market Rules (Market Rules).

This Proposal was 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 final 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 (working group) assessment;
- the results of the technical study commissioned by the IMO regarding this Rule Change Proposal; and
- the submissions received.

The IMO's final decision is to reject the Rule Change Proposal. The detailed reasons for the IMO's final decision are set out in section 9.1 of this paper.

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

## 2. THE RULE CHANGE PROPOSAL

### 2.1 Submission Details

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

### 2.2 Details of the Proposal

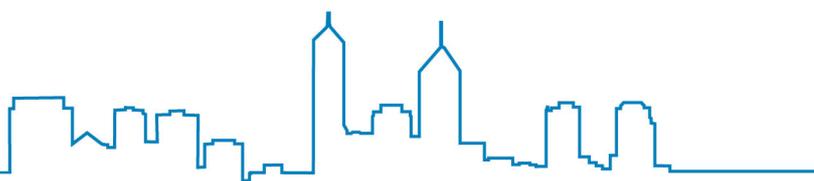
Griffin submitted that section 4.26 of the Market Rules deals with the calculation of capacity refunds applied to Participants that do not meet their Reserve Capacity Obligations. The intent of this section is to provide an appropriate incentive to Participants to ensure they are able to meet their capacity 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 inadequate consideration was 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.

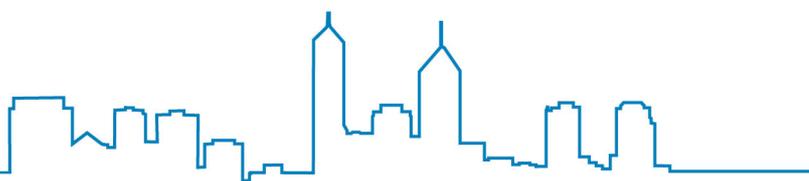
#### **Aligning the Refund Table with the intent of Section 4.26.1**

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<sup>1</sup>, 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

---

<sup>1</sup> Griffin notes 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



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<sup>2</sup>. Griffin says that this has the effect, contrary to the market 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<sup>3</sup>), it can be expected that new generation costs will include provisions for such potential significant penalties. Griffin believes 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)<sup>4</sup>. The remit for the Industry to again review this issue came with the specific direction from the Office of Energy that:

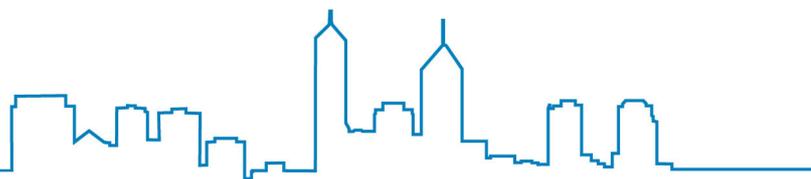
*“The Market Advisory Committee will be asked to consult with industry and to develop a solution to the issues with Rules that relate to Capacity Cost Refunds that were identified by the IMO in developing its IT Systems, and to ensure that these Rules achieve their intent **without being unduly harsh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

---

<sup>2</sup> 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 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.

<sup>3</sup> 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.

<sup>4</sup> 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.



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.

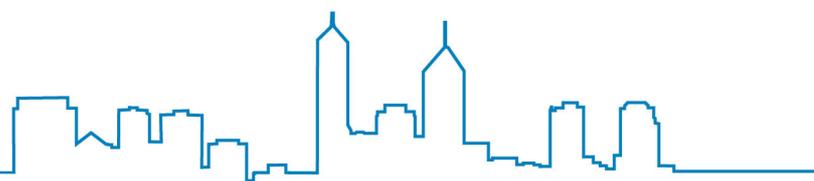
Griffin also submitted that the purpose of capacity credit refunds is to incentivise reliability and availability. While this may be effective for peaking generation, which has little other incentive to maintain availability, base load generators are less inclined to see these penalties as their main 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 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<sup>5</sup>. 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 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.

### 2.3 The Proposal and the Wholesale Market Objectives

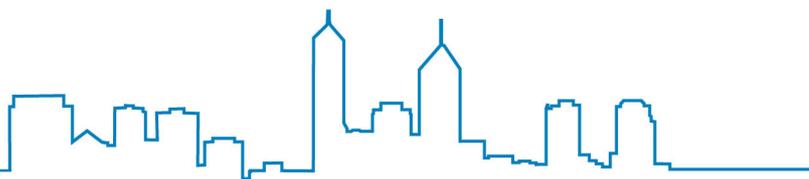
Griffin submitted that its Rule Change Proposal better achieves market objectives (a), (c) and (d) than the current Market Rule 4.26.1 and has a neutral affect on objectives (b) and (e).

(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

<sup>5</sup> Griffin noted this was not immediately apparent in the original Market Rules.



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.

## 2.4 The Amending Rules Proposed by Griffin Energy

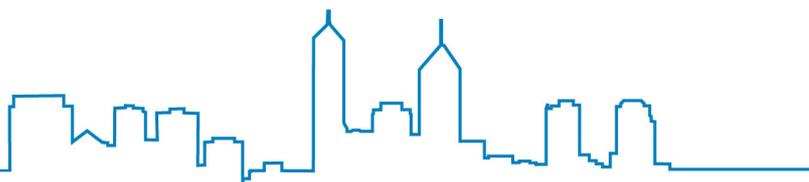
Griffin proposed the following amendments to the Market Rules (~~deleted text~~, added text):

### 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)	<u>0.30 x A</u>	<u>0.10 x A</u>	<u>0.25 x A</u>	<u>0.35 x A</u>
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).				

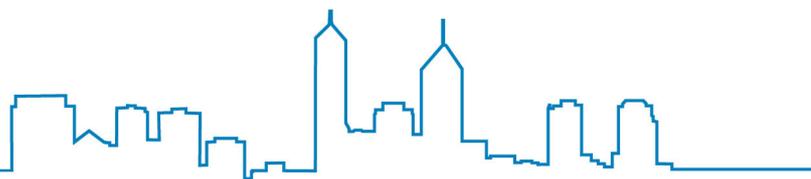
## 2.5 The IMO's Initial Assessment of the Proposal

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.

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.

### 3. 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](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:

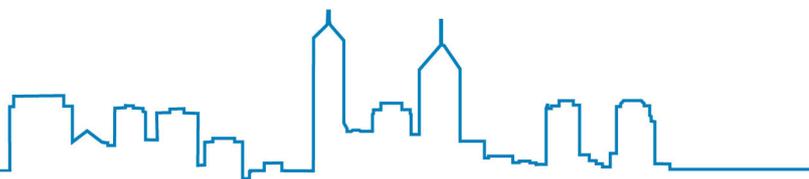
- The proposal, of itself, does not appear to better the market objectives, as a whole.
- On balance, there seemed to be little net change, or no clear benefit for the market as a whole, if this rule change were to proceed.
- The proposal, if implemented, may change the profile of the existing incentives 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.

### 4. 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.

#### **4.1 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](http://www.imowa.com.au/Attachments/RuleChange/RuleChange_2008_35.html).

##### **4.1.1 Submission from Alinta**

Alinta's submission did not support the Rule Change Proposal. Alinta considered 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.

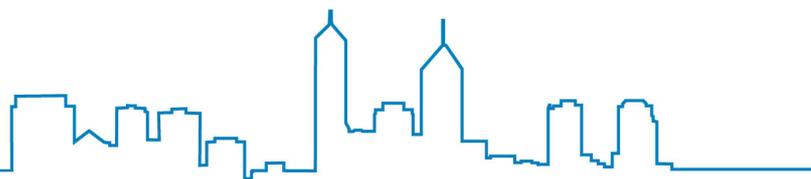
Further, Alinta noted that imposing seasonal caps on Capacity Cost Refunds is likely to benefit only new Facilities that experience extended Forced Outages and may, at the margin, weaken the financial incentive in the Market Rules for new facilities to be available on time (i.e. by 1 December).

Alinta also submitted 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).

Alinta considered that there is no evidence that the proposal will further any of the Wholesale Market Objectives. Alinta noted that 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.

##### **4.1.2 Submission from Griffin Energy**

Griffin's submission maintained 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 considered 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 noted 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 concluded 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 Wholesale Market Objectives (a) and (d) and, to a lesser extent, objectives (b) and (c).

#### **4.1.3 Submission from Landfill Gas and Power**

LGP's submission did not support the proposal.

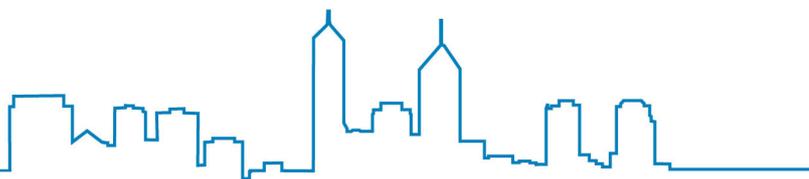
Fundamentally, LGP agreed with many of Griffin's assertion, including:

- 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 submitted that Market 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 welcomed initiatives to improve the current capacity mechanism, it concluded that the current mechanism does nonetheless achieve the desired outcomes.

Further, LGP noted 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 considered 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 perceived 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 considered that the Wholesale Market Objectives are not better achieved by means of this proposal.

#### **4.1.4 Submission from Synergy**

Synergy's submission did not support the proposal. It submitted 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 Wholesale 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 Wholesale Market Objectives.

Synergy added that it would have supported the proposed rule change if it could be shown that it promoted 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 considered 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 considered 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.

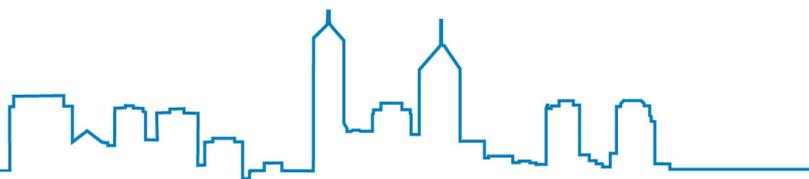
Synergy is also concerned that reducing the incentive for facilities to arrive as expected potentially exposes the market to the possibility of creating SRC costs for market participants by either causing a SRC or by requiring System Management to exercise SRC capacity.

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 concluded 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.

## **5. THE IMO'S DRAFT ASSESSMENT**

In preparing its Draft Rule Change Report, the IMO assessed the Rule Change Proposal in light of clause 2.4.2 and had regard to clause 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 noted that there has not been any applicable policy direction from the Minister in respect of this Rule Change Proposal.

The IMO’s assessment, as contained in its Draft Rule Change Report, is outlined in Appendix 2. Alternatively, the entire Draft Rule Change Report can be viewed on the IMO’s website: [http://www.imowa.com.au/Attachments/RuleChange/RuleChange\\_2008\\_35.html](http://www.imowa.com.au/Attachments/RuleChange/RuleChange_2008_35.html)

## 6. THE IMO’S DRAFT DECISION

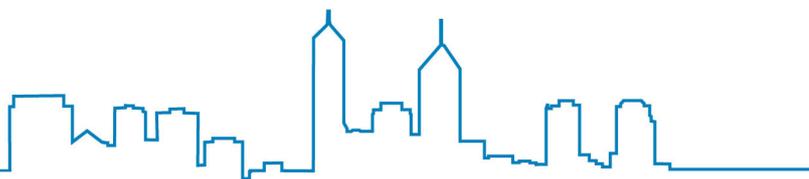
Based on the matters set out in the Draft Rule Change Report, the IMO’s draft decision, in accordance with Market Rule 2.7.7(f), was to reject the Rule Change Proposal. A summary of the reasons for the IMO’s draft decision are provided below in section 6.1

### 6.1 Reasons for the IMO’s draft decision

In summary, the substantive reason for the IMO’s draft decision to reject the Rule Change Proposal was that there was 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 were 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 Reserve Capacity Mechanism (RCM) working group, except Griffin:
  - did not support the proposal;
  - 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 the Rules are operating as intended.

## 7. SECOND SUBMISSION PERIOD

Following the publication of the Draft Rule Change Report on the IMO website, the second submission period was between 26 March 2009 and 24 April 2009.

### 7.1 Submissions received

The IMO received five submissions on the Draft Rule Change Report, from:

- Alinta;
- Griffin;
- LGP;
- Perth Energy; and
- Synergy.

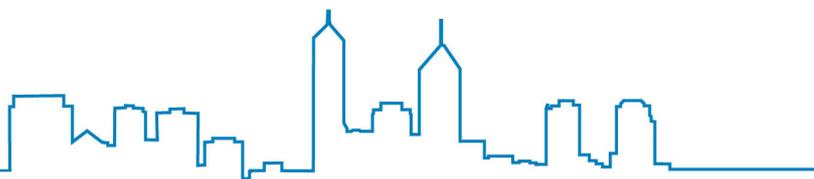
The submissions are summarised below. The full text of each submission is available on the IMO website:

[http://www.imowa.com.au/Attachments/RuleChange/RuleChange\\_2008\\_35.html](http://www.imowa.com.au/Attachments/RuleChange/RuleChange_2008_35.html).

### 7.2 Submission from Alinta

Alinta does not support RC\_2008\_35 (as noted in its initial submission). Alinta notes that its views on the proposal have not changed in light of the information contained in the IMO's Draft Rule Change Report and the report prepared by MMA for the IMO.

Alinta supports the IMO's draft decision to reject RC\_2008\_35 on the basis that it would reduce incentives for both new and existing generators on outage to make available capacity during the



Hot Season, which has the potential to reduce overall system reliability at a time when demand can be expected to be highest.

Alinta submits that it supports the IMO's draft decision to reject RC\_2008\_35 on the basis that the proposal is not consistent with Wholesale Market Objectives (a) and (e).

Alinta does not consider that the changes to the Market Rules contemplated by the proposal, if they were to be implemented, would have required it to change its IT or business systems.

### **7.3 Submission from Griffin and the IMO's response**

Griffin does not support the IMO's draft decision to reject RC\_2008\_35. The details of Griffin's submission and the IMO's response to each of the main issues raised by Griffin are below:

#### *Framework for assessing the Rule Change Proposal:*

- In its submission Griffin notes disappointment in the way which the arguments outlined in the Rule Change Proposal have been assessed. Griffin considers that this proposal should have been against the Wholesale Market Objectives using a more realistic commercial framework rather than a rigid theoretical basis.
- Griffin argues that commercial impacts need to be considered when assessing proposals against the Wholesale Market Objectives to prevent sub-optimal market outcomes.

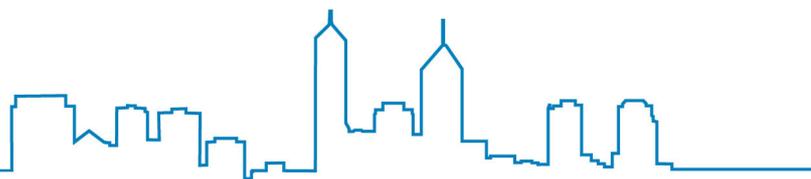
The IMO notes these issues are very complex in nature with many varied and often opposing views put forward to the IMO. The IMO has taken these into consideration when assessing the matter by:

- Assessing and considering all formal submissions received from Market Participants engaged in the commercial operation of the market;
- The engagement of an independent expert to assess the matters raised; and
- Re-establishing an industry-based advisory/working group to assess the commercial out workings and implications of the proposed rule change.

#### *Implications of a bilateral market:*

- Griffin notes that, unlike a gross pool market, additional costs in a bilateral market cannot be passed on to customers and are worn by the generator. Griffin highlights two implications of this:
  1. There is unlikely to be any new energy producing generation investment in the Wholesale Electricity Market (WEM) based on merchant finance in the foreseeable future (with pure capacity plays being the only way to finance a project without an off-take contract in the current market);

The IMO notes that Perth Energy, a current new entrant generator based on merchant finance, has recently brought to the market new merchant project



scheduled for delivery in the 2010/11 Reserve Capacity Year. Perth Energy supports the draft decision taken by the IMO to reject the Rule Change Proposal

2. Competition among new generators in a bilateral market will require static investment decisions based on long term dynamic pricing variables. The contracted price required to make a return on any new investment is set, with the prevailing risk costs built into that price. Any additional costs added to the investment cannot be passed through and are borne by the generator. This has the effect of eroding generator returns.

The IMO is conscious of the potential regulatory risk placed on participants, and where possible signals change to both Market Participants and potential investors.

The IMO notes that market evolution is a feature of the market design and that participants will be required to assess a number of variables during their decision making processes. The IMO considers that all participants will factor in contingencies to manage change in the market (such as market rules evolution affects of climate change policy and changes in financial markets, amongst other things).

#### *Reliability:*

- Griffin notes the IMO assertion that applying refunds to generators will better incentivise generators to manage the risk of Forced Outage. Based on Griffin's anecdotal assessment, in its submission, it contends that the refund mechanism does little to incentivise generators to manage Forced Outages.

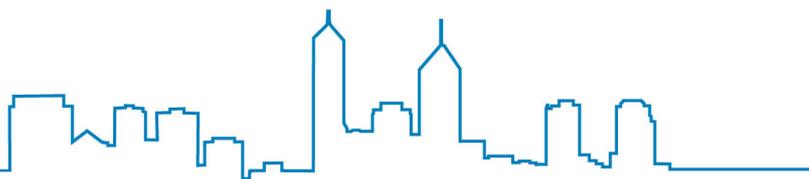
While not specifically related to this Rule Change Proposal, the IMO notes that Verve Energy<sup>6</sup> considers that "the current market rules already provide adequate and significant incentives for participants to ensure their plant is made available to the market".

The very nature of Forced Outages means that at times operators may have limited control, however the IMO contends that to the extent that there is an opportunity to limit outages, the Refund Table does provide an incentive to minimise especially during the time when capacity is needed the most.

- Griffin's contends that while interval specific penalties may encourage a plant, at the margins, to make a commercial decision to remain on when the Facility should rightly be shut down for maintenance, in the case of new entrant generators who are late in commissioning – and as a result are not available at any interval for extended periods of time, the refund mechanism provides little incentive. Griffin's submission then details the differing incentives for a capacity only Facility versus an energy producing Facility.

---

<sup>6</sup> Verve Energy Submission RC\_2008\_34 (22 December 2008)



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 is still of the view that the current rules and inherent incentives within function as was intended. This view has been further supported by the working group and in the submissions received on the Rule Change Proposal.

#### *Market Costs:*

- Griffin notes MMA's comments that if there was a slight decrease in reliability from implementing the Rule Change Proposal (a contention which Griffin does not consider to be valid), then there might be a slight increase in costs to customers from SRC risk. Griffin notes that it does not follow this argument given the real commercial aspects of the Reserve Capacity Mechanism in the WEM. These being:
  - Capacity is customer driven;
  - Capacity is not 100% firm;
  - Statistically, there will always be a need for a mechanism for SRC; and
  - The frequency of an SRC event occurring depends partially on price signals to make capacity available and greatly on the reserve margin employed.

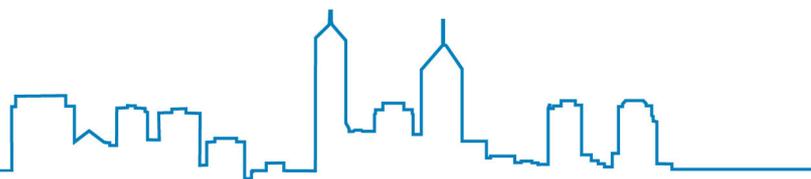
The IMO acknowledges there are different views around the outworkings of market costs. It must be noted however that the Market Rules place an obligation on the IMO to seek to acquire SRC if in its opinion, inadequate Reserve Capacity will be available in the SWIS to satisfy the reliability criterion.

Plant availability is one of the factors that is taken into consideration when the IMO makes this determination. The IMO has previously been required to utilise SRC provisions where inadequate Reserve Capacity was available, in part due to plant being unavailable. Had the procured SRC been dispatched, the cost would have been borne by Market Customers.

- It is Griffin's opinion that generators shouldn't compensate customers for SRC costs or unserved energy (especially when the refund mechanism deals with non supply of contracted capacity), and that Market Customers should price in the impacts of SRC.

The IMO notes the funding of SRC is the subject of RC\_2008\_34, which is currently out for its second round of submissions (closing 20 May 2009).

- Griffin was concerned that the MMA report seemingly referred to RC\_2008\_34 as if it were a *fait accompli*.



The IMO notes that RC\_2008\_34 was developed by a working group, has undergone a rigorous assessment throughout the Rule Change Process including a public workshop and two independent expert reports. At the time of writing this report, the RC\_2008\_34 process is still underway. For more information please refer to the IMO website: [http://www.imowa.com.au/Attachments/RuleChange/RuleChange\\_2008\\_34.html](http://www.imowa.com.au/Attachments/RuleChange/RuleChange_2008_34.html)

- With respect to the potential increased costs to customers of SRC or unserved energy Griffin considers that the additional revenue earned by customers from generators over a 10 year period, where capacity refunds are incurred whilst there is a surfeit of capacity in the market – hence no additional capacity costs are incurred by customers needs to be taken into account.
- Griffin contends that unserved energy costs should be factored into a customers pricing structure, but customers already receive annual revenue from generators equivalent to this cost (and likely far greater than it considering the high value attached to unserved energy the WEM).
- Griffin notes that while customers will make some allowance in their pricing structure for expected SRC costs on most occasions, this additional revenue earned from generators is not passed through to end users. Griffin contend that Market Customers seem to believe that under the customer driven capacity mechanism, retailers should be kept whole and not subject to risk while generators should bear the costs of unserved energy through capacity refunds; and end users, who are the ones eventually cut off from supply once the theoretical unserved energy price is breeched, should not be compensated for being so.

The IMO notes that SRC and unserved energy costs are dealt with under other Rule Change Proposals and other work already underway.

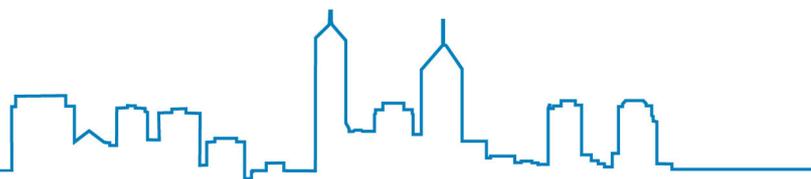
The IMO considers that a fundamental premise is that a Market Generator should not be relieved from its obligations to provide the capacity that it has been credited for.

#### *Discrimination:*

- Griffin deems that while the current refund mechanism is equally applied to base load and peaking plant, it implicitly discriminates against new entrants (particularly base load plant) subject to construction risk. Griffin note where the construction timeframe and tasks are longer and more involved than others, generators will face a higher probability of delay.

The Reserve Capacity Mechanism is designed to provide capacity from all types of generators and does not discriminate between providers of this capacity.

- Griffin also contends that while a peaking plant, with no other material source of revenue other than capacity, will suffer greater financial disadvantage with a similar delay in commissioning, a similar delay is much less likely to occur.



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 peak demand.

The Reserve Capacity Mechanism purchases capacity as a homogeneous product. This is supplied by different plant, with different risk profiles. The IMO's view is that each Market Participant has to manage their own differing risk profiles regarding the Reserve Capacity Mechanism, but once a participant commits to the Reserve Capacity Mechanism, it is treated on an equal footing with all other providers of capacity.

- Griffin considers that base load capacity should be valued more highly in the market and notes that while the IMO states "the Reserve Capacity Mechanism treats all types of generation equally" the MMA report may support its claim ("*The impact of an unexpected shortage of base-load capacity could have a greater impact on the market than a delay affecting peaking capacity*" pg 42).

The IMO, while noting these views, is of the view that the current rules and inherent incentives within function as was intended. This view has been further supported by the working group and submissions received on the Rule Change Proposal.

The IMO reiterates its point made in the Draft Rule Change Report, in that it recognises that all Market Participants have different risk profiles and that these arise due to differences in a number of factors, such as:

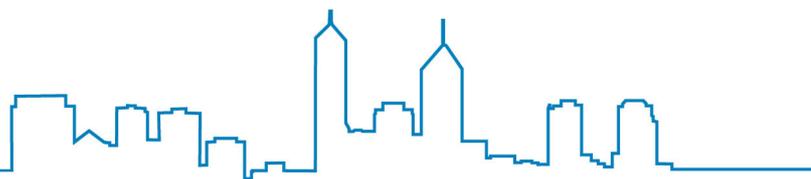
- capital structure;
- fuel supply contracts and arrangements;
- ownership structures;
- plant age;
- fuel type;
- staff arrangements; and
- operational structures.

The IMO's view it is the responsibility of each Market Participant to manage its various risks regarding the Reserve Capacity Mechanism. However, 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 its 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.

#### *Other Issues:*

- Griffin notes that one of the IMO's reasons for rejecting the proposed Amending Rules was that it does not address the stated objective of recognising the unique risks faced by new entrant generators. Griffin note that the proposal itself comprehensively addressed this issue, but the Amending Rules, as laid out in the proposal, were intentionally drafted to apply to all participants.



The IMO notes that this was one of many supporting reasons for the IMO's draft decision to reject the Rule Change Proposal and that the IMO's proposition to reject RC\_2008\_35 was not based solely on this point. The substantive reason for the IMO's draft decision to reject the Rule Change Proposal was that there is a risk that the proposed Amending Rules will reduce the incentive for 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.

The IMO also asserts that the working group and the technical review assessed the proposal in its entirety, not just the Amending Rules.

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.

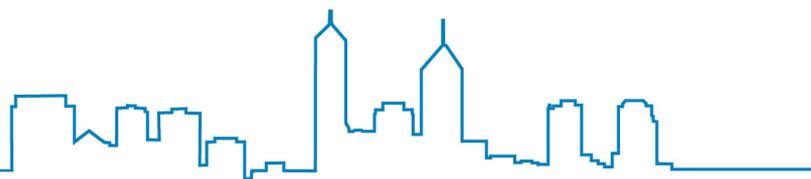
- Griffin notes its disappointment in that the IMO did not investigate ways to improve the Rule Change Proposal to better achieve the Wholesale Market Objectives. Griffin notes that the IMO has previously proposed modifications to proposed Amending Rules which, in its opinion, allow the proposal to better achieve the Wholesale Market Objectives.

The IMO considers that the proposal itself 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. The IMO is not aware of any support having been expressed for a change to a different mechanism by either the MAC, the 2008/09 working group or any other sumitting party (with the exception of Griffin).

- Griffin notes the IMO's statement that "the original rules had the support of industry, went through the public consultation process and the IMO consider are operating as intended". Griffin contends that the IMO has not qualified this with the fact that opposition to the existing refund mechanism has been expressed by other generators (including a significant submission by the largest generator in the SWIS – Verve Energy and a dissenting view in the Working Group by the other generation representative TransAlta).

The IMO notes that Verve Energy's submission of RC\_2007\_08: Calculation of Reserve Capacity Refund stated that it did not support the methodology chosen and preferred a market/risk based solution that would result in refunds being made proportional to demand on the system or proportional to the generation capacity reserve margin at the time of an outage. This concept, amongst a range of others, was discussed by the RCM working group but rejected due to concerns that this methodology would increase the uncertainty, and therefore risk to generators and investors as to the expected level of its refunds.

The MAC, in its meeting on 9 May 2007, noted that the market could move towards Verve's preferred solution (or something similar) in the longer term. It was also noted at



this meeting that the IMO intended to review the Reserve Capacity Mechanism after 2010. This is consistent with the IMO's current position.

The IMO notes that TransAlta expressed concerns regarding the original Rule Change Proposal at the MAC meeting on 11 July 2007, and intended to submit regarding this. The IMO did not receive a submission to this affect, and the MAC, as a whole supported the progression of the Rule Change Proposal.

The IMO notes that the submissions received on the Draft Rule Change Report for RC\_2007\_08 were all in favour of the Rule Change Proposal.

- Griffin notes that “The fact that virtually all generators in the WEM oppose the existing refund mechanism and have some level of support for Griffin’s proposed amendment should be noted – even if regrettably a lack of submissions did not certify”.

The IMO received no supportive submissions on this Rule Change Proposal during either of the submission periods, other than from Griffin itself.

- Griffin contends that the entire market is not required to benefit from rule changes but that it achieves market objectives better. Griffin use RC\_2007\_08 as an example. Furthermore, Griffin suggested that the IMO can't reject RC\_2008\_35 on the premise that the entire market is required to benefit.

The IMO's draft decision was not to reject RC\_2008\_35 on the sole premise that the entire market is required to benefit. The IMO's reason for its draft decision are outline in section 6.1 of this paper.

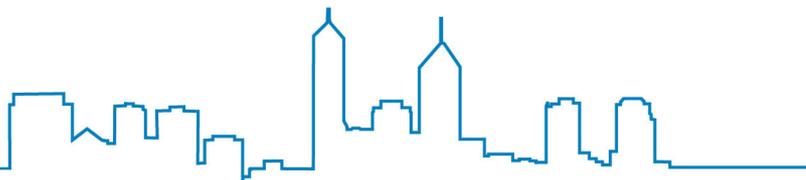
*Proposal against the Wholesale Market Objectives:*

- Griffin considers that a more significant reform of the Reserve Capacity Mechanism must be undertaken to better achieve the desired market outcomes, including incentivising timely investment in new capacity and ensuring a diverse mix of energy producing fuel types in line with system security objectives and mandated renewable and emissions legislation.

The IMO agrees, and expects that the review will be undertaken in the 2009/2010 year, noting that this is subject to prioritisation by the MAC.

- Griffin contend that based on the current mechanism, on balance (rather than in it entirety), the Rule Change Proposal should better achieve Wholesale Market Objectives (a), (b), (c) and (d).

The IMO's complete assessment against the Market Objectives is contained in section 8.1 of this paper.



#### **7.4 Submission from LGP**

LGP's submission notes its participation in the working group reviewing the Rule Change Proposal and acknowledges the extensive process, diverse range of participants and their considered contributions under the facilitation of the IMO. LGP also notes that both the working group and the IMO's consultants appointed to investigate the proposal did not support it.

LGP supports the IMO's decision to disallow the proposal for the various reasons specified in the Draft Rule Change Report. LGP also supports the IMO's intention to include a broader review of the Reserve Capacity Mechanism in the Evolution Plan.

#### **7.5 Submission from Perth Energy**

Perth Energy supports the IMO's draft decision to reject the Rule Change Proposal. Perth Energy notes that setting seasonal caps would decrease the incentive of generators to ensure that all reasonable measures are taken to bring new plant into service as soon as possible.

Perth Energy note that Griffin has made the point that *"new entrant plant is susceptible to one-off construction risk where the timeframe for completing commissioning for extended periods beyond the control of the generator"*. Perth Energy considers that this is precisely the reason why the Rule Change Proposal, which would lessen the commercial pressure on new generators, is inappropriate. Rather, Perth Energy notes, that Griffin's comment strengthens the case for changing the required in-service date for new generators as has been proposed by the IMO under RC\_2009\_08: Updates to Commissioning Provisions.

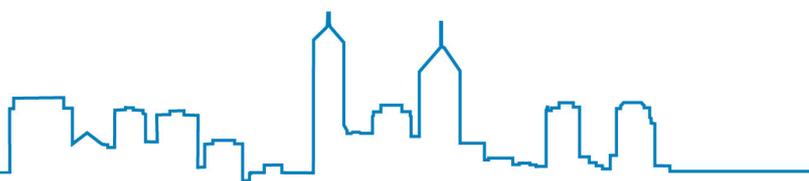
#### **7.6 Submission from Synergy**

Synergy notes that, as a result from the working group discussions, it cannot argue that the Rule Change Proposal improves market outcomes as expressed by the Wholesale Market Objectives. Synergy considers that any potential improvement would be at best be marginal and could also result in some negative outcomes. Synergy note that on balance the proposed rule change does not appear to further the Wholesale Market Objectives.

Synergy submits that it would have supported the proposal if it was shown that it reduced generation cost. Synergy notes that conclusions resulting from the working group discussion and the MMA report are that this is not the case for any type of generation technology or technology size. Synergy sees the incentive inherent in the current rule as it applies to summer refunds applying to Facilities already expected to arrive late as being superior to the proposed change by encouraging them to minimise that lateness. Synergy notes that unfortunately the Rule Change Proposal may reduce this incentive for already late facilities 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 of the rule change process. Based upon comment related to negative external perception resulting from changing rules shortly after a major review with no case established for change, Synergy suggests there is no argument for accepting the proposed rule change.

Synergy notes MMA’s comment that creating good rules should be the basis for rule change decisions not simply precedence or external perception.

Further Synergy notes the findings of the MMA report that do not support the rule change due to a lack of evidence of the benefits to the market.

## 8. THE IMO’S FINAL ASSESSMENT

In preparing this Final 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. This is outlined in the following sections.

### 8.1 Market Objectives

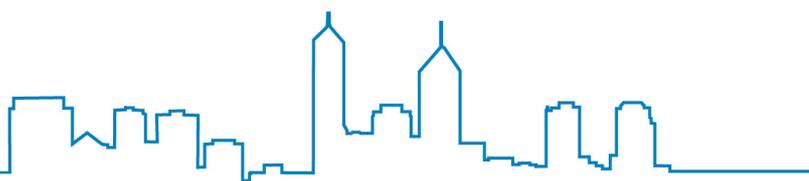
According to clause 2.4.2 of the Market Rules *“the IMO must not make Amending Rules unless it is satisfied that the Market Rules, as proposed to be amended or replaced, are consistent with the Wholesale Market Objectives”*.

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	No
(e) to encourage the taking of measures to manage the amount of electricity used and when it is used	Yes

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, e



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;*

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 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.

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 (all members except Griffin) of the RCM working group agreed that any Amending 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).

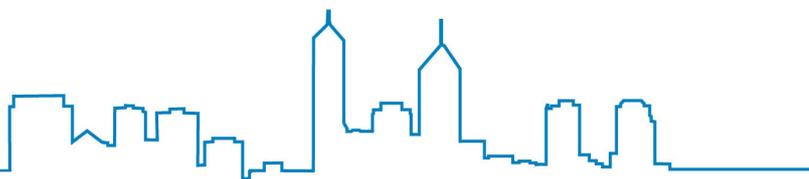
- (e) *to minimise the long-term cost of electricity supplied to customers from the South West interconnected system*

By reducing the incentive for generators 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).

## **8.2 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 amendments will require changes to the Wholesale Electricity Market Systems operated by the IMO. The system change would involve reverting back to largely what was in place in 2007, in respect of seasonal caps; therefore the costs are not considered to be significant. 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.

Both Alinta and Synergy, while supporting the IMO's draft decision to reject the Rule Change Proposal, note that there are no substantial cost implications and/or requirements to change their IT or business systems (should the proposal be implemented).

Griffin notes that as a developer of significant generation facilities, this proposal will lead to lower risk related development costs and as a retailer, this proposal will likely reduce (non-forecast) income via the capacity refund mechanism settlement process.

### **8.3 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.

#### **8.3.1 First submission period**

Of the four parties responding to the IMO's call for submissions during the first submission period, Alinta, LGP and Synergy did not support the proposal. The main reasons for their lack of support are outlined in section 4 of this Final Rule Change Report.

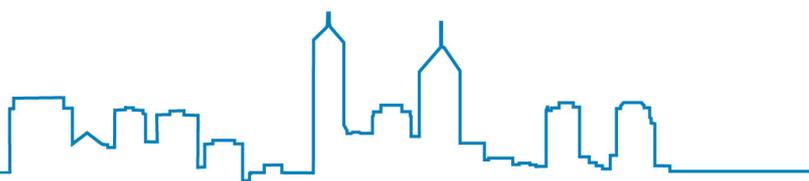
Griffin supported its Rule Change Proposal. In particular noting that it considers the current mechanism to naturally discriminate against assets more likely to incur very high refund costs, such as new entrant plant and specifically capital intensive new entrant plant. Griffin contended that the Rule Change Proposal retains the interval and seasonal specific incentive mechanism of the current capacity refund mechanism. 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's response to the Rule Change Proposal and Griffin's submission is outlined in section 6.6 of its Draft Rule Change Report (and reproduced in Appendix 2 of this paper).

#### **8.3.2 Second submission period**

Of the five parties responding to the IMO's call for submissions during the first submission period, Alinta, LGP, Perth Energy and Synergy supported the IMO's draft decision to reject the Rule Change Proposal. The main reasons for this are the proposal:

- Would reduce incentives for both new and existing generators on outage to make available capacity during the Hot Season, which has the potential to reduce overall system reliability at a time when demand can be expected to be highest;



- Is not consistent with Wholesale Market Objectives (a) and (e);

Additionally, it was noted in the submissions received in the second round of submissions that:

- Griffin's point that "*new entrant plant is susceptible to one-off construction risk where the timeframe for completing commissioning for extended periods beyond the control of the generator*" is considered to be precisely the reason why the Rule Change Proposal, which would lessen the commercial pressure on new generators, is inappropriate (Perth Energy);
- The benefits to the market from the proposal will be at best marginal and could also potentially result in some negative outcomes.
- By reducing the incentive for Facilities to arrive as expected potentially exposes the market to the possibility of creating SRC costs for Market Participants; and
- Making a further significant rule change shortly after completing an extensive consultation process on refund allocation, which gained broad market participant approval, reduces confidence external observers would have of the rule change process.

Griffin did not support the IMO's decision to reject RC\_2008\_35. The details of Griffin's submission and the IMO's response to each of the main issues are outlined in section 7.3 of the Draft Rule Change Report.

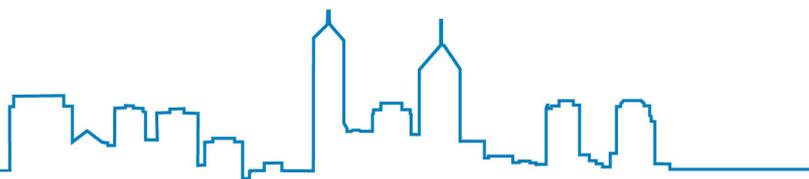
#### **8.4 Views expressed by the Market Advisory Committee**

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 MAC, where MAC met to consider the Rule Change Proposal.

The 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, if approved, may be unduly harsh on retailers with respect to SRC risk.

Griffin stated that an existing generator and a new generator have quite different risk profiles and face dissimilar incentives. Griffin also stated 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 may 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 the Draft Rule Change Report (and reproduced in Appendix 2 to this paper).

## 9. THE IMO'S FINAL DECISION

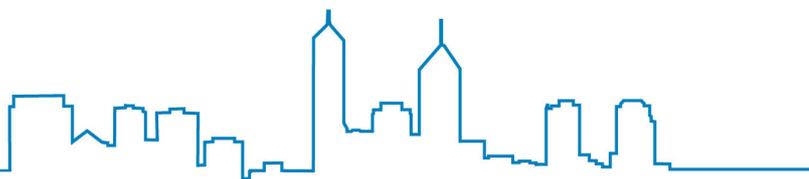
The IMO's final decision is to reject the proposed amendments to clause 4.26.1 of the Market Rules as proposed in Griffin's Rule Change Proposal.

### 9.1 Reasons for the decision

In summary, the substantive reason for the IMO's draft 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 during the first submission round, 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;



- Four of the five respondents (the fifth being the proposer) in the second submission period did not support the proposal;
- No additional/new evidence was presented in the second submission period;
- There is no evident benefit to the entire market from amending the rules as proposed;
- All members of the Reserve Capacity Mechanism (RCM) working group, except Griffin:
  - did not support the proposal;
  - 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.

Additional detail outlining the analysis behind the IMO's reasons is outlined in section 8 of this Final Rule Change Report.

## 10. AMENDING RULES

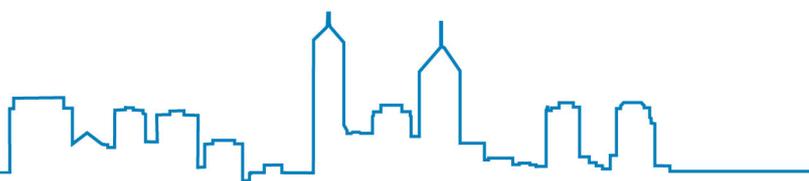
The IMO has rejected the proposed Amending Rules.

## 11. 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<sup>7</sup> 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<sup>8</sup>** – 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<sup>9</sup>. 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.

<sup>7</sup> 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.

<sup>8</sup> 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 and 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.

<sup>9</sup> The fact that SRC is potentially uncapped would appear a flaw in an otherwise price regulated market

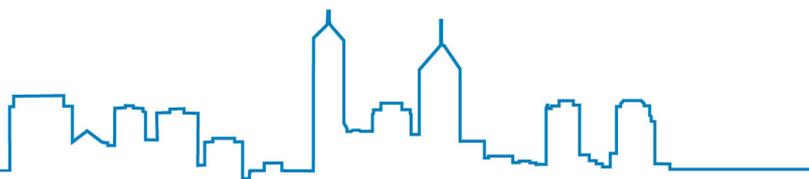


Figure 1 below compares the proposed refund profile with the current refund profile for Participants that are unable to meet their capacity obligations for the whole year (i.e. the worst case scenario).

**Figure 1 Capacity refund profiles as submitted by Griffin**

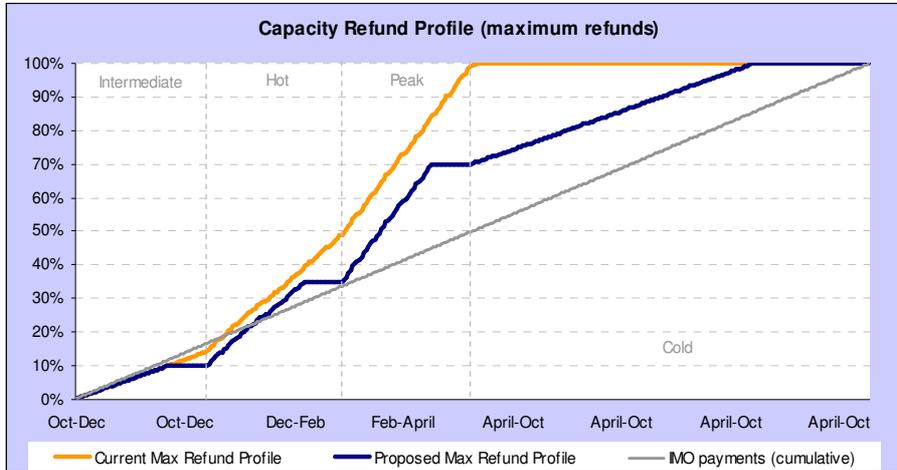


Figure 2 shows the average daily refunds (of a long-term outage) as a ratio of capacity payments. The daily refunds are weighted over peak and non peak intervals and differentiated by business and non-business days.

**Figure 2 Average daily capacity refund ratios as submitted by Griffin**

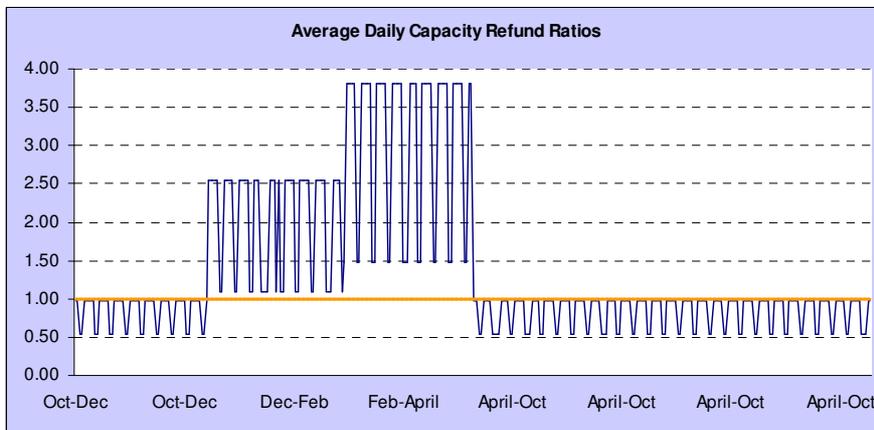


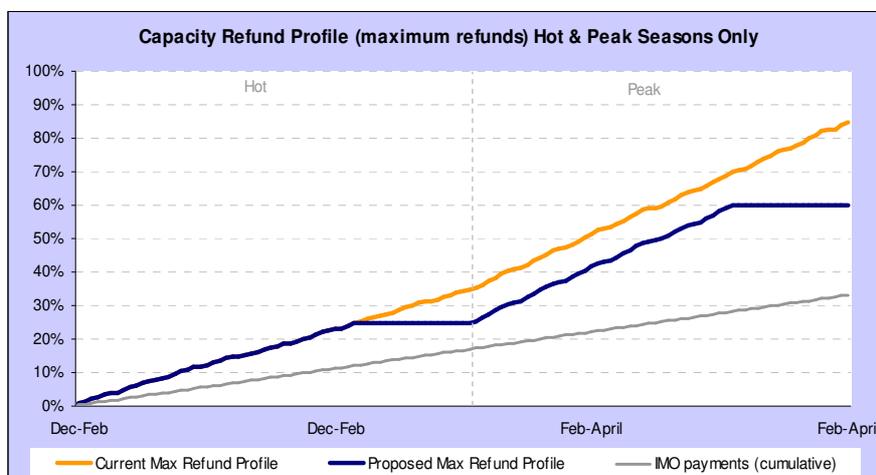
Figure 3 compares the proposed refund profile with the current refund profile for Participants that are unable to meet their capacity obligations for the Hot and Peak seasons only. This is when new entrant generators that have experienced delays are expected to begin their capacity obligations. For an 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**



## APPENDIX 2: IMO DRAFT RULE CHANGE REPORT ASSESSMENT

The following is an excerpt from the IMO's Draft Rule Change Report, outlining its draft assessment.

### ***IMO's Draft assessment against the 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
(f) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system	No
(g) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors	Yes
(h) 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
(i) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system	No
(j) to encourage the taking of measures to manage the amount of electricity used and when it is used	Yes

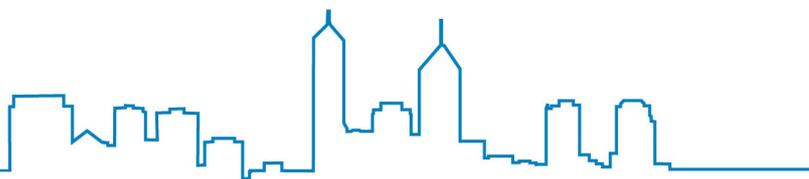
On balance, the IMO considers that the Market Rules, as proposed to be amended, will not be consistent with the Wholesale Market Objectives.

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, e
Inconsistent with objective	a, d

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).

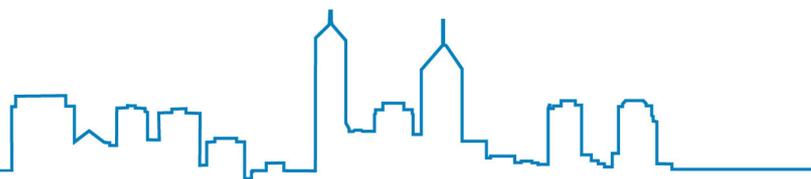
(d) *to minimise the long-term cost of electricity supplied to customers from the South West interconnected system*

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).

***IMO's Draft Assessment of the 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.

### ***Views expressed in first round of 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.

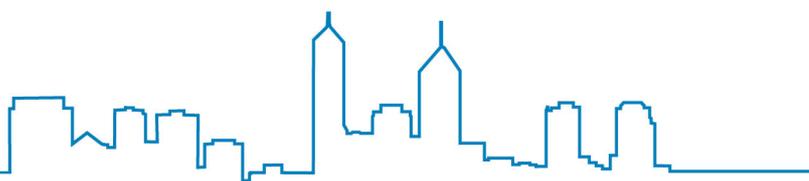
The IMO contends that the Reserve Capacity Mechanism treats all types of generation equally. The IMO considers the mechanism to be transparent and clear in its outworking and the refunds which apply when a plant, regardless of type or size, fails to complete commissioning before 30 November. This is 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.



### ***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.

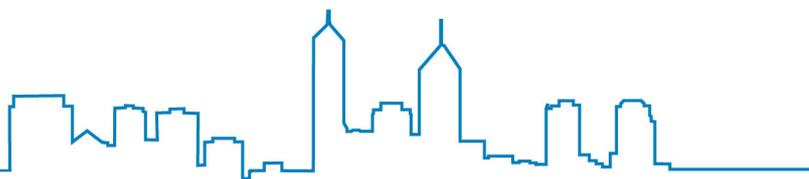
MAC also discussed the proposal at its December 2008 meeting. It was noted that the original rule change proposal requested that this rule change be progressed via the fast track mechanism. The IMO decision was that it did not meet the criteria to be fast-tracked.

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.

### ***Technical Study commissioned by the IMO during the first submission period***

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.

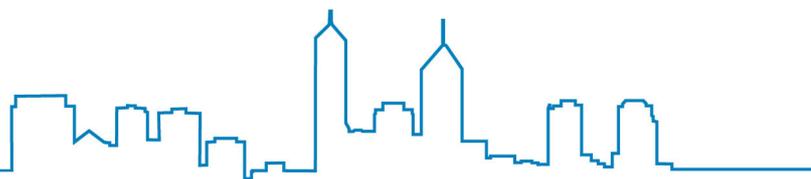
In its report, MMA concluded that the proposed rule change makes no significant improvement in meeting the market objectives and has scope for a small detrimental effect on supply reliability. For this reason MMA does not support RC\_2008\_35.

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.



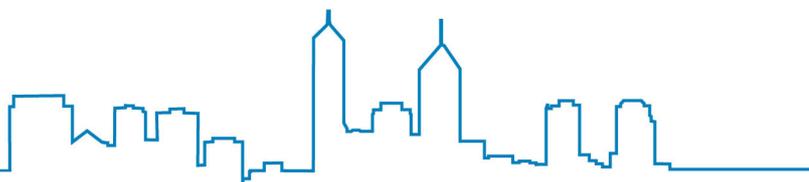
- Non-discriminatory market arrangements – MMA does not agree with Griffin that the current regime discriminates against capital intensive base-load equipment relative to open cycle gas turbine and therefore favours peaking plants. MMA notes that none of the submissions received from other Market Participants 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 plant 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.

### ***The IMO's Draft response to Griffin's proposal and first 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.

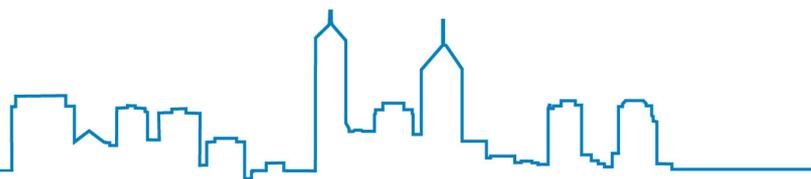
Additionally, the technical review by MMA noted that in its opinion, the current regime does not discriminate against capital intensive base-load equipment relative to open cycle gas turbine and therefore favour peaking plants.

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;*

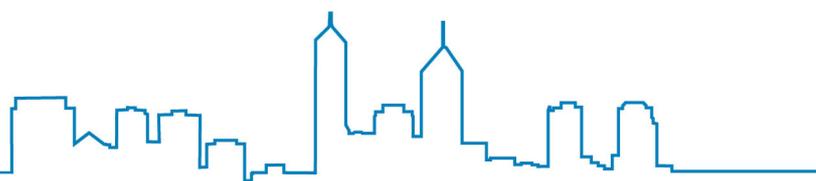
*while maintaining the Minimum Frequency Keeping Capacity for normal frequency control. The forecast peak demand should be calculated to a probability level that the forecast would not be expected to be exceeded in more than one year out of ten;*

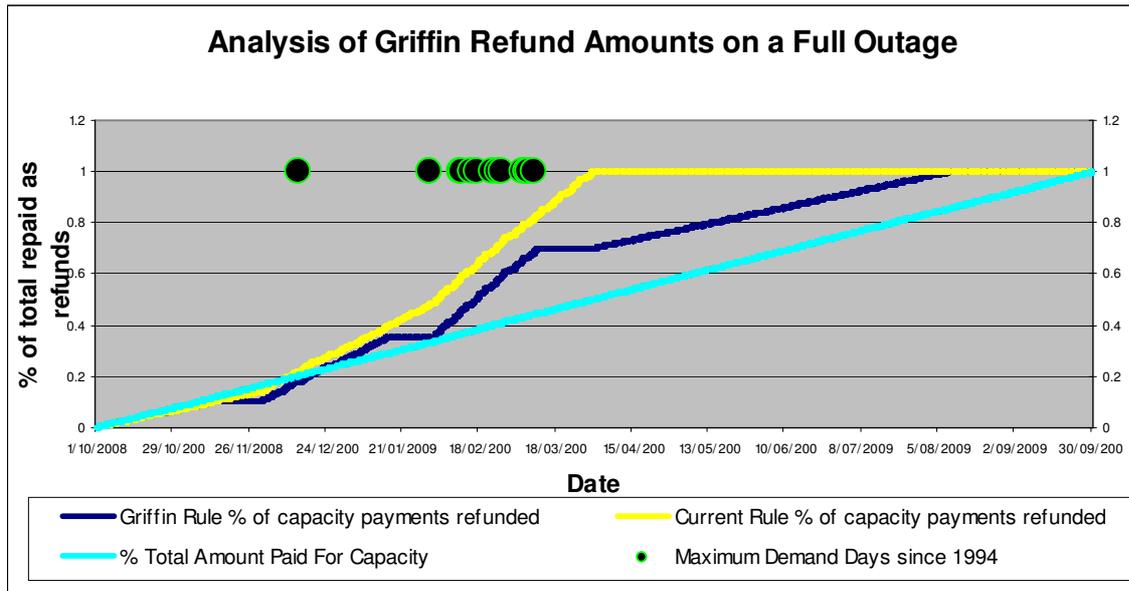
*...”*

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 sumitting 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.

