Draft Report to

Independent Market Operator

Rule Change #34: Allocation of Supplementary Reserve Capacity Cost as a Shared Reserve Capacity Cost

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VERSION

Version	Date	Comment	Approved
Draft 0.1	10 February 2009	Initial working draft for review by IMO	Ross Gawler
Draft 0.2	11 February 2009	Added some comments on Meeting market objectives	Ross Gawler
Draft 0.3	10 March 2009	Added further summary on the discussion	Ross Gawler
Draft 0.4	10 March 2009	Removed detailed analysis of discount options for extended outages	Ross Gawler
Draft 0.5	10 March 2009	Minor editorial amendments to replace penalty with refund where applicable	Ross Gawler
Draft 0.6	11 March 2009	Amendments to reflect intention for an additional penalty for foreseeable forced outages that lead to SRC acquisition	Ross Gawler
Draft 0.7	12 March 2009	Additions by IMO on the intent of the Rule Change	Ross Gawler

1 INTRODUCTION

McLennan Magasanik Associates has previously assisted the IMO by acting as an independent expert to assess whether the proposed Rule Change 27 supports the achievement of the Market Objectives. The Rule Change 27 effectively removes the net payments made by the IMO under any Supplementary Capacity Contracts from the Targeted Reserve Capacity Cost and including these in the Shared Reserve Capacity Cost. This had the advantage of removing adverse risks for less well established retailers in the event of the coincidence of a shortage of Capacity Credits requiring supplementary acquisition of credits and a shortage of bilateral cover relative to the retailers capacity obligation.

As part of the Rule 27 Review, the Working Group identified some additional changes that would be beneficial by ensuring that new entrant or incumbent generators that fail to deliver the registered capacity with sufficient availability first bear the cost of Supplementary Capacity Reserve before any residual costs are shared among the market customers.

There is provision in the Market Rules for Capacity Payments to be forfeited when incumbent plants are unavailable. These Capacity Credit refunds are distributed among all Market Customers in accordance with their capacity obligation[1]. (Rules : 4.26.1) An analysis of the values as shown in Table 1-1 indicates that if a plant were out for the whole year, the refund for non-performance would be 146.5% of the Capacity Payment otherwise received; except that there is a cumulative cap of 100% of the Capacity Payment which is applied over the whole year of the capacity cycle. The Table shows:

- In the upper box the ratios in the Market Rules that determine the magnitude of the Capacity Payment that is refunded for non-performance
- In the middle box the distribution of the Capacity Payment into the various periods having regard to the equal split into 12 months irrespective of the number of days in the month
- In the lower box the proportion of the Capacity Payments that are at risk in each period. Note that 71.7% of the Capacity Payment is at risk in the business day peak period from 1 December until 1 April which is the high temperature, peak demand period of the year.

This report examines the proposed Rule Change, comments on the public submissions and analyses the basis for the different treatment of "extended forced outage" and delay of commissioning of new plant. The report provides an assessment of the proposed Rule Change with respect to the Market Objectives. As much as possible this report amends current proposals within the apparent intent of those proposals without making new

[1] Rule 4.26.1 specifies the basis for refund of Capacity Payments during plant outages.

Table 1-1 Capacity Payment at Risk

From	**1-Apr**	**1-Oct**	**1-Dec**	**1-Feb**	
To	**1-Oct**	**1-Dec**	**1-Feb**	**1-Apr**	
	Ratio of Monthly Capacity Payment				**Average**
Bus Off-Peak	0.25	0.25	0.5	0.75	0.375
Bus Peak	1.5	1.5	4	6	2.667
Off-peak	0.25	0.25	0.5	0.75	0.375
Non-Bus Peak	0.75	0.75	1.5	2	1.083
	Proportion of the Capacity Payment Available				**Total**
Bus Off-Peak	15.0%	5.0%	5.0%	5.2%	30.3%
Bus Peak	21.0%	7.0%	7.1%	7.3%	42.4%
Off-peak	5.8%	1.9%	1.9%	1.8%	11.4%
Non-Bus Peak	8.1%	2.7%	2.7%	2.5%	16.0%
					100.0%
	Proportion of the Capacity Payment at Risk				**Total**
Bus Off-Peak	3.8%	1.3%	2.5%	3.9%	11.4%
Bus Peak	31.6%	10.5%	28.2%	43.5%	113.8%
Off-peak	1.5%	0.5%	1.0%	1.3%	4.2%
Non-Bus Peak	6.1%	2.0%	4.0%	4.9%	17.1%
					146.5%

detailed changes, although some other changes are recommended for further consideration.

1.1 Conclusions

It is concluded that:

- The proposed Rule Change, as it currently stands, introduces some ambiguities and complications that require further consideration. Accordingly, MMA does not recommend that they are ready for approval.
- The intent behind the Rule Change proposal is to associate Supplementary Reserve Capacity costs to Market Participants where those costs are directly attributable to that Market Participant.. In particular, in the event that a capacity shortfall of long duration occurs that can be attributed to a Market Participant, whether due to an extended forced outage, the failure of a Reserve Capacity test, or due to the Market Participant requesting a reduction in the number of Capacity Credits it holds for a Facility, the current Rules do not require the Market Participant to fully compensate the market for the receipt of capacity credits that are not in the end delivered. An insufficient refund of this type can have the effect of undermining the market mechanism by encouraging capacity to be offered to the market which may be in excess of what is realistically available, thereby contributing to inefficient investment signals, diminishing reliability and raising cost risks for retailers and end-users. On the other hand an excessively punitive refund which amounts to a net penalty will add

to the insurance costs and risks of new entrants that would disadvantage market customers with higher wholesale prices.

- While the proposed Rule Change does correct for this insufficient refund arrangement, thereby assisting the achievement of the Market Objectives, as it is proposed, it introduces some ambiguity and complication that diminishes the performance of other Rules, and which should be corrected. Specifically:
  - The use of the term "Extended Forced Outage" is not defined, nor is it distinguished from the existing term "Forced Outage". It is not clear in the proposed Rule Change whether this is intended as a new and mutually exclusive class of forced outage;
  - If indeed the proposed Rules do anticipate a new class of forced outage that is mutually exclusive, then all other Rules will require review to ensure consistency with what would be two classes of forced outage. For example, section 4.26.2 (net STEM shortfall) may need adjustment to accommodate the recognition of an "Extended Forced Outage".
  - If the Extended Forced Outage is intended to be a subset of normal forced outages (given this potential and other comments made by Market Participants in their submissions), it will be necessary to either remove the term extended, whereby an enhanced mechanism will be required to manage the exposure level of SRC to non-performing Market Generators, or to define this new class of outage, and in the process also adjust other Market Rules to ensure that they appropriately treat the alternative potential for a Forced Outage or an Extended Forced Outage.
  - If indeed it is intended that Market Generators will only be exposed to SRC in the event of long outages which are foreseeable in their future extent (such as delayed commissioning or multiple major plant repairs), then a definition is required to parameterise the conditions in which an outage becomes an "Extended Forced Outage". Further, in the case of this new class of forced outage, there will also need to be a review of potential behaviour and incentives near the boundary threshold where a forced outage becomes an extended forced outage, as well as a consideration of incentives and penalties that may be required to encourage truthful ex-ante declarations of extended forced outages. At the very least there will need to be further consideration of the elements that make an outage responsible for the IMO to exercise its opinion that SRC is required.
- A discount for Extended Forced Outages was originally intended to remove perceived double counting of refunds which does not occur under the proposed Rule Change. The discount is not recommended because it would provide perverse incentives for generators to over-state the risks of future outages and delays so as to reduce their exposure to penalties. This would cause IMO to incur additional expenditure for Supplementary Reserve Capacity that would then not be fully required. This would impose additional costs on Market Customers.

- Alinta's concern about the treatment of DSM resources associated with customer churn should be addressed in finalising the Rule Change. A transfer of a generation resource or a DSM resource among Market Participants under a DSM program should not give rise to a refund under Clauses 4.28.4 to 4C unless the DSM capability is disabled due to the transfer. In such a case the refund should be attributable to the retailer causing the disablement of the DSM capability.
- The proposed changes should be finalised and implemented before 1 May 2009 when Expressions of Interest are requested for the next Reserve Capacity Cycle.

2 PROPOSAL FOR RULE CHANGE

2.1 Background

The following background was provided by IMO in its Rule Change Report. It has been adapted by MMA for the purposes of this report.

Rule Change Proposal RC_2008_27: Funding of Supplementary Reserve Capacity, which is yet to complete its rule change process would, if implemented, remove the net payments to be made by the IMO under Supplementary Capacity Contracts from the Targeted Reserve Capacity Cost and include it as a component in the Shared Reserve Capacity Cost.

The Shared Reserve Capacity Cost is the cost of Reserve Capacity to be shared amongst all Market Customers for the Trading Month. If the change under rule change RC_2008_27 is implemented this cost will encapsulate the cost for funding Supplementary Capacity Contracts, that is, the cost for funding Supplementary Reserve Capacity (SRC).

The Supplementary Reserve Capacity Working Group, which held its final meeting on 22 September 2008, resolved that additional changes would have to be implemented to the funding of Supplementary Capacity Contracts to address the objectives of the market rules.

The majority view of the Working Group was that if a Market Participant has its capacity credits reduced, which results in a shortfall and SRC is called, the cost of SRC should be targeted at the Market Participant. That is, the market participant should pay to the IMO compensation due to capacity credits not being available to the market. This change is implemented by the insertion of Clause 4.28.4(aA)(ii) in the Rule Change proposal.

The proposed new clause 4.28.4A stipulates how much a market participant must pay the IMO where the number of capacity credits held by that market participant for a facility have been reduced and caused the need for Supplementary Reserve Capacity (SRC). Clause 4.28.4A(a) specifies that the amount to be paid must equal the cost of funding Supplementary Capacity Contracts for the capacity shortfall stemming solely from the unavailability of the Market Participant's capacity credits. Clause 4.28.4A(b) limits the amount to the total value of capacity credit payments that would have been associated with the reduced capacity credits. This in effect results in a potential maximum cash flow reversal of twice the annual Capacity Payments which is used to offset the cost of SRC cost.

In addition, the Working Group resolved that a Market Participant holding capacity credits for a facility undergoing an "extended forced outage" should also recompense the market by an amount equal to the cost of funding Supplementary Capacity Contracts associated with a capacity shortfall brought on by the extended forced outage. Special provision for Extended Forced Outages is included in Clause 4.28.4B in the Rule Change proposal. However, there is as yet no definition and no clarity on the lead time and expected duration associated with such events, nor on the functional triggers that would qualify a facility for this new class of outage. It is anticipated that for a facility to qualify for an extended forced outage, there would need to be some form of ex-ante declaration of extended forced outage by the responsible Market Participant, combined with a facility either experiencing, or expected to experience, an approved type of technical, contractual or other defined regulatory outage of an appropriate duration and extent.

This Extended Forced Outage would also include new facilities which are not fully commissioned by 30 November of the Relevant Capacity year and thus experience an Extended Forced Outage until properly commissioned.

Clause 4.28.4B(b) limits this amount to half of the total value of capacity credit payments associated with the capacity experiencing the delay or the forced outage. The basis for this discount is unclear and is further analysed in this MMA Report.

In the case where a number of factors have contributed to a capacity shortfall, new clause 4.28.4C would require the IMO to proportion the total cost of funding the Supplementary Capacity Contracts in such a way that each relevant Market Participant only pays the portion which is attributable to its capacity being unavailable to the market.

2.2 Issues to be considered

The questions that need to be considered in this review are as follows:

1. What problem is the proposed Rule Change addressing?
2. Is the concept of Extended Forced Outage relevant to managing a shortage of capacity credits?
3. What is the importance of treating extended forced outages differently for new plants as compared to established plants? What benefits does this afford the market?
4. What is an extended forced outage? How do you separate it from a normal forced outage? There is no particular definition in the current Market Rules. It is only applied in relation to fuel storage requirements for dual fuelled plants in Clause 4.12.2(d).
5. Are there any particular impacts on other rules of special treatment for extended forced outages for new plants with reduced refund payments.
6. Given that DSM is the primary source of Supplementary Capacity Credits due to lead time constraints, are there any particular consequences for DSM? Could retailers be disadvantaged if their DSM holding customer were to defect to another retailer?
7. What would be the best time to implement the Rule Change, assuming it is aligned with Rule Change 27?

2.3 What problem is the proposed Rule Change seeking to address?

The intent behind the Rule Change proposal is to associate Supplementary Reserve Capacity costs to Market Participants where those costs are directly attributable to that Market Participant.. In particular, in the event that a capacity shortfall occurs that can be attributed to a Market Participant, whether due to an extended forced outage, the failure of a Reserve Capacity test, or due to the Market Participant requesting a reduction in the number of Capacity Credits it holds for a Facility, the current Rules do not require the Market Participant to fully compensate the market for the receipt of capacity credits that are not in the end delivered. An insufficient refund of this type can have the effect of undermining the market mechanism by encouraging capacity to be offered to the market which may be in excess of what is realistically available, thereby contributing to inefficient investment signals, diminishing reliability and raising cost risks for retailers and end-users. On the other hand an excessively punitive refund which amounts to a net penalty will add to the insurance costs and risks of new entrants that would disadvantage market customers with higher wholesale prices.

The proposed rules therefore seeks to address this insufficient refund arrangement by requiring that Market Participants, in relation to their affected Facilities, compensate the IMO to a greater extent for the receipt of capacity credits that are not in the end delivered. The impact is to potentially double the reversal of Capacity Payments so as to make a greater contribution toward the funding of Supplementary Reserve Capacity cost.

2.4 Long-term versus many short-term outages

The proposed rule change seems to give more favourable treatment to long-term outages with foreseeable duration (termed as "Extended Forced Outages") on the market. The concept of Extended Forced Outage is not yet fully developed in the proposed Rule Change. The more favourable treatment arises from a proposed 50% discount on the additional contribution toward SRC cost.

MMA was advised by the IMO that the original proposal for a 50% discount on Capacity Cost Refunds was made on the misapprehension that refunds may be double counted for extended forced outages attributed to new entrants. Whilst MMA has examined the possibilities of ascribing a lower level of refund for long-term outages for which notice is given, it has become apparent that this was not the intent of Rule Change 34 and such matters are not considered in this report.

MMA has confirmed that the Capacity Cost Refunds based on the Clause 4.26.1 would apply equally to outages caused by delayed commissioning or by Extended Forced Outages of incumbents. MMA has been advised that there was no intention by the IMO Working Group to give more favourable treatment to new entrants with respect to Capacity Cost Refunds. The continuing changes to the application of the Refund Table is of concern to Market Participants as a matter of regulatory risk and therefore any further changes must provide the market with substantial benefits in achieving the Market Objectives.

The proposed rule change (4.28.4B(b)) limits the compensation payable to IMO due to an Extended Forced Outage (long-term outage) to 50% of annual Capacity Cost. This discount is unnecessary as there is no double counting of refunds.

There remains the need for clarity as to what kinds of outages would be deemed Extended Forced Outages. It would only be necessary to define them if SRC is triggered under Rule 4.24.1. SRC can only be triggered between 6 months and 12 weeks prior to when the shortage is expected to occur. There is nothing in Rule 4.24.1 that specifies particular triggers for SRC. It is a matter of the IMO's opinion which could result, for example, from a series of multiple extended outages failures or type failures on related units that required additional scheduled outages for recovery of performance. Therefore MMA considers that if "Extended Forced Outages" can result in additional contributions from Market Participants to fund SRC, there ought to be a clear linkage between the SRC trigger and the specific events to ensure consistency of application of the Rule. At the very least there will need to be further consideration of the elements that make an outage responsible for IMO to exercise its opinion that SRC is required.

2.5 Reserve Capacity Security Deposit

The current Market rules prescribe a penalty in the event that a new Facility is either unregistered or experiencing Forced Outage, and is unable to meet 90% of its Reserve Capacity Obligations in at least one Trading Interval between the date when Reserve Capacity Obligations apply, and the date when they cease to apply.

In particular, the affected Participant will:

1. forfeit a proportion of its Reserve Capacity Security, as per section 4.3.11 of the Market Rules:

> *4.13.11. If a Market Participant provides a Reserve Capacity Security in respect of a Facility under this clause 4.13, and the relevant Facility does not operate at a level (expressed in MWh) that is at least 90% of one-half of the Reserve Capacity Obligation Quantity for the Facility (expressed in MW), in at least one Trading Interval when the Reserve Capacity Obligation Quantity exceeds 0 MW occurring between the date from which Reserve Capacity Obligations apply in accordance with clause 4.1.26 and the day from which Reserve Capacity Obligations cease to apply in accordance with clause 4.1.30 in respect of the Reserve Capacity Cycle, then the Market Participant must pay to the IMO, as compensation to the market, an amount equal to the Reserve Capacity Security amount, which obligation may be satisfied by the IMO drawing upon the Reserve Capacity Security, and applying the amount claimed (after meeting the IMO's costs associated with doing so) so as to:*
>
> *a) firstly, offset the cost of funding Supplementary Capacity Contracts for any capacity shortage stemming entirely or in part from the Facility not being available; and*
>
> *b) secondly, once all costs to which paragraph (a) refers are covered, make a rebate payment to Market Customers in proportion to their Individual Reserve Capacity Requirements during the Trading Month in accordance with Chapter 9.*

and

2. be required to pay a Capacity Cost Refund in accordance with section 4.26.3 of the Market Rules:

> *4.26.3 For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("Capacity Cost Refund") to be applied for Trading Month m. The Capacity Cost Refund is the lesser of:*
> *a) the Maximum Participant Refund determined in accordance with the Refund Table, less all Capacity Cost Refunds applicable to the Market Participant in previous Trading Months falling in the same Capacity Year as Trading Month m; and*
> *b) the Participant Forced Outage Refund plus the sum over all Trading Intervals t in Trading Month m of the Net STEM Refund,*
> *where the Net STEM Refund is the product of:*
> *i. the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and*
> *ii. the Net STEM Shortfall in Trading Interval t.*

MMA has questioned whether this is consistent with the intent of the Market Rules, and has noted that it provides differential treatment for new entrants relative to existing market participants. MMA was assured by IMO that it is the intention of the Market Rules to provide this penalty on new entrants as an added incentive to deliver their capacity in full. This is evidenced by the fact that Reserve Capacity Security only applies to new capacity entering the Reserve Capacity Mechanism and not to incumbent generators.

2.6 Capacity Credits associated with Demand Side Management

Alinta has identified a potential problem that could occur if a retailer had Capacity Credits associated with a Demand Side Management (DSM) facility that were lost due to customer churn and then subsequently replaced. It would be expected that if a DSM facility were associated with a customer load, then the loss of the load and its contribution to the DSM program would at worst leave a retailer with no change in capacity obligation overall. However if the Reserve Capacity associated with the DSM program were treated entirely as if it were a supply-side resource, then it could create an exposure to SRC cost.

It is difficult to conceive of a curtailable load at peak times that would be greater than the peak demand obligation for the retailer. Therefore if the customer load is lost to a retailer that event should reduce the retailer's total net Reserve Capacity Obligation and not create a Targeted exposure to Supplementary Reserve Cost if the loss of Reserve Capacity is matched to the associated load reduction. MMA agrees that IMO should ensure that transfer of a DSM facility from one Market participant to another should not create a Targeted exposure to Supplementary Reserve Capacity Cost. It should be noted that different provisions apply to individual loads assigned capacity credits for DSM versus DSM programs which offer more flexibility to Market Customers operating a portfolio of

DMS loads. It may create an exposure to Targeted SRC for the receiving retailer if it does not have Capacity cover for the new load and the ability to activate the DSM capability.

Therefore, a transfer of a generation resource or a DSM resource among Market Participants under a DSM program should not give rise to a refund under Clauses 4.28.4 to 4C unless the DSM capability is disabled due to the transfer. In such a case the refund should be attributable to the retailer causing the disablement of the DSM capability.

2.7 Analysis of Rule Change

Table 2-1 illustrates the currently proposed components of the Shared Capacity Reserve Cost with the net payments for Supplementary Reserve Costs made up of the total Supplementary Reserve Costs less the offsets obtained under Clauses 4.28.4A and 4.28.4B. However, there is no reference to 4.28.4A in the current Clause 4.28.4 and this appears to be an over-sight. This has been recognised by IMO and a correction has been provided in the course of preparing this report.

A suggested amendment which incorporates the omitted reference to Clause 4.28.4A is shown in Exhibit 2-1. We have also proposed that an outage would need to exceed one month in duration (defined for convenience as 31 days) to qualify as an Extended Forced Outage. This could mean that a large number of short outages could in theory trigger SRC without activating Extended Forced Outages under Clause 4.28.4B. In that case the available funding for SRC may be less than if an equivalent number of extended forced outages had occurred.

2.8 Timing of Implementation

The implementation of Rule Change 27 and 34 needs to be aligned for consistent application of the intent of both changes. There is no particular obvious reason to delay the change and it would be preferred to have the change committed before Expressions of Interest submissions for the next Reserve Capacity Cycle which are by 1 May 2009.

IMO has advised that this process has already commenced.

Table 2-1 Structure of Shared Capacity Reserve Costs as Proposed by IMO (4.28.4)

Item	Components Added	Defining Clauses	Components Subtracted	Defining Clauses	Apparent Purpose
4.28.4 (a)	Recover the cost of Capacity Credits purchased that are in excess of that required to meet the Reserve Capacity Requirement.	4.28.1(b)			Distributes the cost of any surplus Capacity Credits to all Market Customers. This recognises the value of higher reliability from surplus capacity to all Market Customers
4.28.4 (aA) (i) and (ii)	Recover net payments to be made by the IMO under Supplementary Capacity Contracts.		Less the amount drawn under a Reserve Capacity Security by the IMO for failure to deliver Reserve Capacity above 90% of the Capacity Obligation (for a new Facility)	4.13.11 (a)	This represents a forfeiture of the Security payment by a new Facility for inadequate performance in the first Capacity Cycle, below 90% of the committed Capacity.
			Less amount received by the IMO for compensation to cover Supplementary Capacity Contracts for Extended Forced Outages up to the value of half the Capacity Credits for the Facility	4.28.4B	Attributes a portion of the Supplementary Capacity Cost to generators that are attributable to Extended Forced Outages (which yet need to be defined). This payment is in addition to deductions under 4.26.3. MMA proposes that the half factor be removed.

Item	Components Added	Defining Clauses	Components Subtracted	Defining Clauses	Apparent Purpose
4.28.4 (b)			Less the **Capacity Cost Refunds** from Market Participants based on (short-term) forced outages and failure to deliver required capacity in the STEM.	4.26.3	This reflects the loss of Capacity Payments from the operation of the Refund Table and measurements of bids in the STEM, if they are more severe than the documented forced outages. This must be mutually exclusive from deductions under 4.28.4B.
4.28.4 (bA)			Less the Intermittent Load Refunds from Market Participants where Intermittent Load exceeds its registered value with adjustments for planned outages and temperature above 41C if applicable.	4.28A.1 2.30B.3 (b) (i)	Allows for the impact on capacity for embedded loads associated with generation having capacity credits. If intermittent load is higher, the value of capacity is reduced accordingly.
4.28.4 (c)			Less any amount drawn under a Reserve Capacity Security by the IMO which is surplus to recovery of the Supplementary Reserve Cost and is distributed to Market Customers	4.13.11 (b)	Any retention of Reserve Capacity Security amount which more than recovers the Supplementary Capacity Cost is refunded to Market Customers through this component.

Exhibit 2-1 Proposed Amended Rule Change

4.28.4. For each Trading Month, the IMO must calculate a Shared Reserve Capacity Cost being the sum of:

(a) the cost defined under clause 4.28.1(b); and

(aA) the net payments to be made by the IMO under Supplementary Capacity Contracts less:

(i) any amount drawn under a Reserve Capacity Security by the IMO and distributed in accordance with clause 4.13.11(a); less

(ii) any amount paid to the IMO in accordance with clause 4.28.4A; less

(iii) any amount paid to the IMO in accordance with clause 4.28.4B; less

(b) the Capacity Cost Refunds for that Trading Month; less

(bA) the Intermittent Load Refunds for that Trading Month; less

(c) any amount drawn under a Reserve Capacity Security by the IMO and distributed in accordance with clause 4.13.11(b)

and the IMO must allocate this total cost to Market Customers in proportion to each Market Customer's Individual Reserve Capacity Requirement.

4.28.4A. Where the number of Capacity Credits held by a Market Participant for a Facility have been reduced in accordance with clause 4.25.4 or 4.25.4C, the Market Participant must pay to the IMO, as compensation to the market, an amount:

(a) equal to the cost of funding Supplementary Capacity Contracts for any capacity shortfall stemming entirely from the reduced Capacity Credits not being available to the market; and

(b) not greater than the total value of the Capacity Credit payments associated with the reduced Capacity Credits that would have been paid 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 these Capacity Credits and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(d).

4.28.4B. Where a Facility, including a new Facility, suffers a Forced Outage exceeding 31 days in duration, the Market Participant holding Capacity Credits for that Facility must pay to the IMO, as compensation to the market, an amount:

(a) equal to the cost of funding Supplementary Capacity Contracts for any capacity shortfall stemming entirely from the capacity suffering the Forced Outage not being available to the market; and

(b) not greater than of the total value of the Capacity Credit payments associated with the capacity experiencing the forced outage that are due 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 these Capacity Credits and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(d):

Exhibit 2-1 Proposed Amended Rule Change (continued next page)

Exhibit 2-1 Proposed Amended Rule Change (continued from previous page)

4.28.4C. For the purpose of clauses 4.28.4A and 4.28.4B, where there are a number of factors contributing to the expected amount of a shortfall determined in accordance with clause 4.24.1, the IMO must proportion the total cost of funding Supplementary Capacity Contracts (acquired by the IMO to address the shortfall) so that the amount paid by the Market Participant under clause 4.28.4A or 4.28.4B offsets only that portion of the total cost stemming entirely from the relevant capacity not being available.

3 REVIEW OF RESPONSES

Table 3-1 provides a tabular analysis of the submissions provided to the Rule Change proposal, including MMA's assessment of the issues and the discussion. Among the Market Participants which submitted to the review process, there is divided opinion as to whether the proposed changes will support the market objectives. Verve Energy and Griffin believe that the current arrangements provide sufficient incentives to manage plant performance and do not agree with the need to provide additional penalties on generators for capacity outages. The other market participants agree with the proposed changes because they are in line with the causer pays principle whereas the costs of funding SRC are targeted to those market participants that caused the shortfall. Each participant's views are summarised in relation to the Market Objectives:

- Impact on market efficiency
- Impact on market competition
- Impact on the risk of discrimination against particular energy options and technologies
- Impact on wholesale electricity costs
- Impact on the management of demand of electricity

In regards to the proposed change 4.28.4A, Griffin and Alinta raised a few important points. Griffin identified that the current Market Rules over-looked a situation where generators that have reduced their capacity credits in a capacity year have mitigated the risk of incurring capacity credit refund penalties. These generators have also participated in the capacity market and been allocated capacity credits that are now not being made available to the market. It is reasonable that SRC costs associated with these situations are allocated to those generators, since the shortfall must have been directly caused by them by withdrawing Capacity Credits from the market.

Alinta raised concerns regarding facilities offering DSM programs that they might be treated unfairly. The proposed rule changes run the risk of creating a situation where the mere changing of loads that were registered as Curtailable Load could expose the Market Participants to potential SRC costs. This could occur if supply side supply of Reserve Capacity is not matched to the Capacity Obligation at the same time. A transfer of a generation resource or a DSM resource among Market Participants should not give rise to a refund under Clauses 4.28.4 to 4C unless the DSM capability is disabled due to the transfer. In such a case the refund should be attributable to the retailer causing the disablement of the DSM capability. Where the DSM capability is assigned to a particular load rather than a retailer's DSM program, there is no risk of exposure to SRC cost.

A couple of points were raised in regards to the proposed change 4.28.4B. Alinta pointed out that the term Extended Forced Outage is not properly defined in the Market Rules - although the term is also used in Market Rule 4.12.2(d). Griffin does not believe that allocating SRC costs to generators undergoing a forced outage will better facilitate any of the market objectives, which is explained in detail in Table 3-1.

Table 3-1 Analysis of Responses to Proposed Rule Change

Proposition on Market Impact of Change	Alinta	Griffin	Land Fill Gas and Power	Synergy	Verve	MMA View
Overall support for Rule Change 34	Supported but considered that further clarifications required.	Supported for the scenario where a participant has its capacity credits reduced, but not for forced outages. Makes current mechanism redundant.	Supported, conditional on the implementation of RC_2008_27.	Supported.	Does not agree with the rule change. It considers that the current penalties for capacity outages are sufficient compensation to Market Customers.	The Rule Change in its present form requires further amendment to work as intended. The treatment of new entrants is intentionally less favourable than incumbents due to the Reserve Capacity Security and the provision for additional contributions toward SRC cost for delayed commissioning and outages of long duration.

Proposition on Market Impact of Change	Alinta	Griffin	Land Fill Gas and Power	Synergy	Verve	MMA View
Primary justification	Potential risk associated with retailers offering DSM products being exposed to the SRC costs, even where there been no net change in the number of Capacity Credit available to the market.	Causer pays principle whereas the costs of SRC targeted to those market participants that caused the shortfall due to capacity credits reduction. The allocation of SRC costs to generators that undergo a forced outage is not a sensible outcome for the market and renders the current capacity refund mechanism redundant.	More equitable allocation of the costs of SRC to causers and thereby provides financial signals to motivate compliance with the intent of the Capacity Credit obligation.	Consistency with the underlying causer pays principle and also the majority view of the SRC Working Group that if a Market Participant had its capacity credits reduced, which results in a shortfall and Supplementary Reserve Capacity is called, the cost of that capacity should be targeted at that Market Participant.	The current market rules already provide adequate and significant incentives, thus the imposition of further penalties proposed under this rule change is an unnecessary and punitive measure that is unlikely to reduce the occurrence of extended forced outages or capacity credit reductions.	To ensure that Market Participants that cause a need for Supplementary Reserve Capacity make an appropriate contribution to its costs. Any residual costs are then shared by Market Customers. Griffin's claim "renders current mechanism redundant" is not correct. The revised scheme only applies when SRC is required and only when specific events occur that are attributable to an identifiable party and cause excessive costs for replacement capacity.

Proposition on Market Impact of Change	Alinta	Griffin	Land Fill Gas and Power	Synergy	Verve	MMA View
Discount for Extended Forced Outage	No comment	No comment	No comment	Supports the discount of Credit Refunds for extended forced outages.	Believes that the upper limit for compensation should be set at the same level irrespective of the duration of Forced Outage. Both capacity reductions and extended forced outages are likely to have the same effect on the need for Supplementary Capacity.	Not recommended because it would provide perverse incentives to over-state long outages which would result in additional costs for Supplementary Reserve Capacity.

Proposition on Market Impact of Change	Alinta	Griffin	Land Fill Gas and Power	Synergy	Verve	MMA View
Other comments	Concerned that churn of DSM facilities may create exposure to Supplementary Reserve Capacity Cost.	Suggests that only a portion of the Capacity Refunds should be refunded back to Customers, proportional to the STEM volume share of the market. The balance should be retained for funding SRC.			Suggests separating out the availability and activation costs of SRC with the latter based on trading interval events. Verve is also concerned about the incentive for inefficient activation of SRC.	Linkage between outages of long duration and the calling of SRC could be clarified. Definition of qualifying outages also needs to be confirmed.

Proposition on Market Impact of Change	Alinta	Griffin	Land Fill Gas and Power	Synergy	Verve	MMA View
Effect on market efficiency.	Taken together, RC_2008_27 and RC_2008_34 are likely to promote market efficiency.	New entrant generators will price in the cost of meeting SRC events whether they are triggered or not, thus increasing wholesale costs and reducing market efficiency.	Allocating the costs of SRC to the causers will motivate them to comply with their capacity contracts, which will increase efficiency.	The broadening of the pool of eligible services for SRC will assist in providing the least cost outcome from the SRC processes.	Strong incentives for participants to apply for realistic capacity credit levels and commissioning schedules, which promotes efficiency.	Agree with market participants' positions in favour of supporting market efficiency. MMA is of the view that in conjunction with RC_2008_27, the proposed rules do promote the better achievement of market efficiency, albeit with some concerns that should be addressed. It is generally accepted that new facilities present a higher risk to the market than incumbent generators.

Proposition on Market Impact of Change	Alinta	Griffin	Land Fill Gas and Power	Synergy	Verve	MMA View
The impact on competition in the retail market and market power generally, including new entry.	Taken together, RC_2008_27 and RC_2008_34 are likely to promote market competition.	The allocation of costs to facilities undergoing a forced outage may add a barrier to entry to smaller potential new generation entrants	No comment.	No comment.	No comment.	In its present form may create a small barrier to entry for smaller generation projects. Increases competition in retail by more equitably sharing the exposure to Supplementary Reserve Capacity Costs. The change reduces a cost risk for retailers that has the effect of lowering the cost of market entry.

Proposition on Market Impact of Change	Alinta	Griffin	Land Fill Gas and Power	Synergy	Verve	MMA View
In relation to the risk of discrimination against particular energy options and technologies.	The rule change may discourage retailers from offering DSM products since they may be exposed to SRC costs, even where there been no net change in the number of Capacity Credit available to the market.	New entrant generation that is more likely to incur costs through late commissioning are discriminated by this proposed rule change in that they are more likely to incur the SRC costs and more likely to require ex-ante risk financing.	No comment.	No comment.	No comment.	Some additional risks to new entrant generators at small scale where there are additional risks to fuel supply. Risk could be mitigated by seeking less than the full capacity in Capacity Credits. DSM facility transfers under a DSM program should not expose Participants to Targeted Supplementary Reserve Capacity Costs.

Proposition on Market Impact of Change	Alinta	Griffin	Land Fill Gas and Power	Synergy	Verve	MMA View
Effect on the long-term wholesale electricity costs.	The cost of electricity is likely to increase if DSM products are not offered.	New entrant generators will price in the cost of meeting SRC events whether they are triggered or not, which will potentially lead to higher wholesale electricity costs.	No comment.	No comment.	No comment.	Additional exposure to SRC costs for new entrant generators will increase costs of wholesale power but make the system more reliable. This additional attention to reliability is likely to have some economic benefits but may be more expensive than demand side management procured in a timely manner.

Proposition on Market Impact of Change	Alinta	Griffin	Land Fill Gas and Power	Synergy	Verve	MMA View
The impact on the management of demand for electricity.	Discourages retailers offering DSM products, which will discourage the taking of measures to manage demand of electricity.	No comment.	No comment.	No comment.	May lead to inefficient production as customers have a reduced incentive to manage demand if SRC is procured solely as a result of a capacity credit reduction or extended forced outage	If less DSM is procured overall in the form of Supplementary Reserve Capacity, the demand side involvement in the market may be reduced.

LGP and Alinta pointed out that RC_2008_34 should be taken together with the impending RC_2008_27. LGP supports the proposed changes conditional on RC_2008_27 being implemented and Alinta suggests that RC_2008_27 and RC_2008_34 be implemented coincidentally due to the linkages.

MMA considers that the Rule Change 34 provides some support toward meeting the Market Objectives by:

- better targeting the costs of reduced capacity toward those parties that cause the loss of reliable capacity and thereby encouraging efficient allocation of resources to maintaining plant reliability and development programs on schedule; and
- increasing competition in retail services by sharing the risks of high Supplementary Capacity Cost among all Market Customers, thereby lowering the cost risk for retail businesses, and therefore also the cost of market entry.

However the Rule Change in its present form may have some detrimental effects on the Market Objectives:

- The definition and treatment of Extended Forced Outages is incomplete and it results in increased potential penalties for new entrants in addition to those refunds of Capacity Payments calculated by the Refund Table in Clause 4.26.1. This may reduce new entry competition and add to wholesale electricity costs and prices.
- The 50% discount applied to the Extended Forced Outages is inconsistent with the treatment of capacity reductions and may create perverse incentives to declare such outages rather then seek capacity credit reductions. This may favour delayed commissioning of new plant relative to a major plant failure for an incumbent but have the same effect on system reliability. This discriminates in favour of new entrants for an equivalent plant failure event and potentially discriminates against new entrants as it is treated as additional to the Capacity Cost Refund. There is little support for or justification for the discount, so it may be removed.
- There is some potential for higher wholesale costs depending on how the Extended Forced Outage event category is treated in finalising the Rule Change. The current statement of the Rule Change is incomplete.

We have also noted that the forfeiture of the Reserve Capacity Security Deposit for reduced capacity may also duplicate the penalties under Clause 4.26.1 using the Refund Table. This is not a matter for the current Rules Change but is a feature of the existing Market Rules for which MMA understands there is support among Market Participants.

4 CONCLUSIONS

It is concluded that:

- The proposed Rule Change, as it currently stands, introduces some ambiguities and complications that require further consideration. Accordingly, MMA does not recommend that they are ready for approval.
- The intent behind the Rule Change proposal is to associate Supplementary Reserve Capacity costs to Market Participants where those costs are directly attributable to that Market Participant.. In particular, in the event that a capacity shortfall occurs that can be attributed to a Market Participant, whether due to an extended forced outage, the failure of a Reserve Capacity test, or due to the Market Participant requesting a reduction in the number of Capacity Credits it holds for a Facility, the current Rules do not require the Market Participant to fully compensate the market for the receipt of capacity credits that are not in the end delivered. An insufficient refund of this type can have the effect of undermining the market mechanism by encouraging capacity to be offered to the market which may be in excess of what is realistically available, thereby contributing to inefficient investment signals, diminishing reliability and raising cost risks for retailers and end-users. On the other hand an excessively punitive refund which amounts to a net penalty will add to the insurance costs and risks of new entrants that would disadvantage market customers with higher wholesale prices.
- While the proposed Rule Change does correct for this insufficient refund arrangement, thereby assisting the achievement of the Market Objectives, as it is proposed, it introduces some ambiguity and complication that diminishes the performance of other Rules, and which should be corrected. Specifically:
    - The use of the term "Extended Forced Outage" is not defined, nor is it distinguished from the existing term "Forced Outage". It is not clear in the proposed Rule Change whether this is intended as a new and mutually exclusive class of forced outage;
    - If indeed the proposed Rules do anticipate a new class of forced outage that is mutually exclusive, then all other Rules will require review to ensure consistency with what would be two classes of forced outage. For example, section 4.26.2 (net STEM shortfall) may need adjustment to accommodate the recognition of an "Extended Forced Outage".
    - If the Extended Forced Outage is intended to be a subset of normal forced outages (given this potential and other comments made by Market Participants in their submissions), it will be necessary to either remove the term extended, whereby an enhanced mechanism will be required to manage the exposure level of SRC to non-performing Market Generators, or to define this new class of outage, and in the process also adjust other Market Rules to ensure that they appropriately treat the alternative potential for a Forced Outage or an Extended Forced Outage.

- If indeed it is intended that Market Generators will only be exposed to SRC in the event of long outages which are foreseeable in their future extent (such as delayed commissioning or multiple major plant repairs), then a definition is required to parameterise the conditions in which an outage becomes an "Extended Forced Outage". Further, in the case of this new class of forced outage, there will also need to be a review of potential behaviour and incentives near the boundary threshold where a forced outage becomes an extended forced outage, as well as a consideration of incentives and penalties that may be required to encourage truthful ex-ante declarations of extended forced outages. At the very least there will need to be further consideration of the elements that make an outage responsible for IMO to exercise its opinion that SRC is required.

- A discount for Extended Forced Outages was originally intended. to remove perceived double counting of refunds which does not occur under the proposed Rule Change. The discount is not recommended because it would provide perverse incentives for generators to over-state the risks of future outages and delays so as to reduce their exposure to penalties. This would cause IMO to incur additional expenditure for Supplementary Reserve Capacity that would then not be fully required. This would impose additional costs on Market Customers.

- Alinta's concern about the treatment of DSM resources associated with customer churn should be addressed in finalising the Rule Change. A transfer of a generation resource or a DSM resource among Market Participants under a DSM program should not give rise to a refund under Clauses 4.28.4 to 4C unless the DSM capability is disabled due to the transfer. In such a case the refund should be attributable to the retailer causing the disablement of the DSM capability.

- The proposed changes should be finalised and implemented before 1 May 2009 when Expressions of Interest are requested for the next Reserve Capacity Cycle.