

Draft Rule Change Report Title: Required Level and Reserve Capacity Security

Ref: RC_2010_12 Standard Rule Change Process

Date: 18 March 2011

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Independent Market Operator

Level 3, Governor Stirling Tower 197 St George's Terrace, Perth WA 6000 PO Box 7096, Cloisters Square, Perth WA 6850 Tel. (08) 9254 4300

Fax. (08) 9254 4399 Email: imo@imowa.com.au Website: <u>www.imowa.com.au</u>

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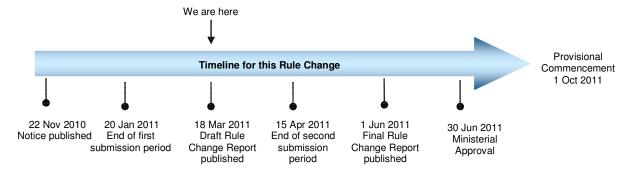
1. INTRODUCTION

On 17 November 2010, the Independent Market Operator (IMO) submitted a Rule Change Proposal regarding amendments to clauses 4.1.21, 4.1.27, 4.9.9, 4.10.3, 4.11.1, 4.13.1, 4.13.2, 4.13.3, 4.13.5, 4.13.8, 4.13.10, 4.13.10A, 4.13.11, 4.13.11A, 4.13.12, 4.20.1, 4.25.2, 4.25A.3, 4.26.1, 4.27.10A, 4.28.4, 4.28C.8, 4.28C.12 and new clauses 4.11.2A, 4.11.3B, 4.13.1A, 4.13.1B, 4.13.1C, 4.13.2A, 4.13.2B, 4.13.3A, 4.13.10B, 4.13.10C, 4.13.13, 4.13.14, 4.28C.8A, 4.28C.12A and the Glossary of the Wholesale Electricity Market Rules (Market Rules).

This proposal is being processed using the Standard Rule Change Process, described in section 2.7 of the Market Rules. The standard process adheres to the following timelines:



In accordance with clause 2.5.10 of the Market Rules the IMO decided to extend the end date for the first submission period and the timeframes for preparing the Draft Rule Change Report. Further details of the extensions are available on the IMO website. The key dates in processing this Rule Change Proposal, as amended in the extension notices, are:



Please note the commencement date is provisional and may be subject to change in the Final Rule Change Report.

The draft decision of the IMO Board is to accept the Rule Change Proposal as modified following the first submission period. In making its draft decision on the Rule Change Proposal, the IMO has taken into account:

- the Wholesale Market Objectives;
- the practicality and cost of implementing the proposal;
- the views of the Market Advisory Committee (MAC); and
- the submissions received.

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All documents related to this Rule Change Proposal can be found on the IMO website: http://www.imowa.com.au/RC 2010 12

2 CALL FOR SECOND ROUND SUBMISSIONS

The IMO invites interested stakeholders to make submissions on this Draft Rule Change Report. The submission period is 20 Business Days from the publication date of this report. Submissions must be delivered to the IMO by 5.00pm, **Friday 15 April 2011**.

The IMO prefers to receive submissions by email (using the submission form available on the IMO website: http://www.imowa.com.au/rule-changes) to: market.development@imowa.com.au

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

Independent Market Operator

Attn: General Manager, Development PO Box 7096 Cloisters Square, PERTH, WA 6850 Fax: (08) 9254 4399

3. THE RULE CHANGE PROPOSAL

3.1 Submission Details

Name:	Troy Forward
Phone:	(08) 9254 4300
Fax:	(08) 9254 4399
Email:	Troy.forward@imowa.com.au
Organisation:	IMO
Address:	Level 3, Governor Stirling Tower, 197 St Georges Tce, Perth
Date submitted:	17 November 2010
Urgency:	Standard Rule Change Process
Change Proposal title:	Required Level and Reserve Capacity Security
Market Rule affected:	Clauses 4.1.21, 4.1.27, 4.9.9, 4.10.3, 4.11.1, 4.13.1, 4.13.2,
	4.13.3, 4.13.5, 4.13.8, 4.13.10, 4.13.10A, 4.13.11, 4.13.11A,
	4.13.12, 4.20.1, 4.25.2, 4.25A.3, 4.26.1, 4.27.10A 4.28.4,
	4.28C.8, 4.28C.12 and new clauses 4.11.2A, 4.11.3B,
	4.13.1A, 4.13.1B, 4.13.1C, 4.13.2A, 4.13.2B, 4.13.3A,
	4.13.10B, 4.13.10C, 4.13.13, 4.13.14, 4.28C.8A, 4.28C.12A
	and the Glossary.

3.2 Summary details of the Proposal

The IMO noted in its proposal that after a comprehensive review of the administration of Reserve Capacity Security (RCS) several issues with the process have been identified, particularly as new and diverse facilities have begun commissioning and participating in the Wholesale Electricity Market (WEM). To enact the outcomes from the IMO's review, proposed solutions to each of the issues were developed in conjunction with the Market Advisory Committee (MAC).

A brief overview of the IMO's proposed solutions to each of the identified issues is presented below

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Issue identified in Rule Change Proposal	Proposed Solution		
Treatment of Facilities once the first Reserve	Updates to clarify that:		
Capacity Cycle has lapsed (Issue 1)	 RCS is to be either returned to the Market Participant or forfeited within the first Reserve Capacity Cycle. No further RCS obligation will apply to that Certified Reserve Capacity (CRC) thereafter, unless the Facility is upgraded at a later date; and 		
	 Replacement RCS is only required if the obligation to provide security extends beyond the period of the validity of the current security. 		
Treatment of Intermittent Facilities (Issue 2)	Development of the Required Level concept to ensure consistent treatment of all generation types. The Required Level concept is based on the 5 percent Probability of Exceedance of the three year expected generation output for the Facility (MW). Alternatively a Market Participant may provide the IMO a report prepared by one of the IMO's accredited experts that the Facility has been built to the specifications its certification was based on. The concept was supported by Senergy Econnect and McLennan, Magasnik and Associated (MMA), the independent experts appointed by the IMO to provide advice during the development of the Required Level concept.		
	The Required Level concept will also be used for the purposes of the Reserve Capacity Testing and Reserve Capacity refunds.		
Timing for return of RCS (Issue 3)	Updates to allow for the return of RCS when a Facility can operate at its Required Level and is considered by the IMO to be in Commercial Operation, regardless of whether this occurs before or after a Reserve Capacity Obligation Quantity (RCOQ) greater than zero applies.		
Treatment of upgraded Facilities (Issue 4);	Updates to clarify that for the purposes of returning RCS held for upgraded Facilities, the entire facility must pass the relevant test (either the 100 percent or 90 percent test)		
Treatment of Early Certification of Capacity (Issue 5)	Updates to ensure consistency of treatment of all capacity. Early Certified Reserve Capacity (ECRC) to be subject to the same requirements as capacity that enters the system via the normal process from the time and date specified in clause 4.1.14(a). A number of minor and typographical changes are also proposed to improve the integrity of the Market Rules.		
Clarification of rules surrounding return of non-cash RCS (Issue 6)	Updates to treat security provided as a non-cash deposit in the same manner as security provided as a cash deposit.		
Correction of a number of minor and typographical amendments (Issue 7)	A number of minor and typographical changes are also proposed to improve the integrity of the Market Rules.		

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Full details of the identified issues and the IMO's proposed solutions are contained in Appendix 1 of this report.

3.3 The Proposal and the Wholesale Market Objectives

In its proposal, the IMO considered that the amendments addressing each of the identified issues would have the following impacts on the Market Objectives:

Issue	Wholesale Market Objective Assessment
Treatment of Facilities once the first Reserve Capacity Cycle has lapsed (Issue 1)	Betters (b) and consistent with (a), (c), (d) and (e)
Treatment of Intermittent Facilities (Issue 2)	Betters (c) and consistent with (a), (b), (d) and (e)
Timing for return of RCS (Issue 3)	Betters (b) and consistent with (a), (c), (d) and (e)
Treatment of upgraded Facilities (Issue 4);	Betters (c) and consistent with (a), (b), (d) and (e)
Treatment of Early Certification of Capacity (Issue 5)	Betters (c) and consistent with (a), (b), (d) and (e)
Clarification of rules surrounding return of non-cash RCS (Issue 6)	Consistent with (a), (b), (c), (d) and (e)
Correction of a number of minor and typographical amendments (Issue 7)	Consistent with (a), (b), (c), (d) and (e)

Further details of the IMO's assessment of each of the solutions to the identified issues against the Wholesale Market Objectives are provided in the Rule Change Notice.

3.4 Amending Rules proposed by the IMO

The amendments to the Market Rules originally proposed by the IMO are presented in Appendix 2 of this report.

3.5 The IMO's Initial Assessment of the Proposal

The IMO decided to proceed with the proposal on the basis that its preliminary assessment indicated that the proposal was consistent with the Wholesale Market Objectives.

4. FIRST SUBMISSION PERIOD

The first submission period for this Rule Change Proposal was between 23 November 2010 and 20 January 2011. The timeframe for the first submission period was extended in accordance with the IMO's extension notice published on 22 November 2010.

4.1 Submissions received

The IMO received submissions from Alinta, Griffin Energy, Landfill Gas & Power (LGP), Perth Energy and Synergy during the first submission period. The main points raised in the submissions are summarised below. A copy of the full text of all submissions is

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available on the IMO website. Additional detail along with the IMO's response is contained in section 4.2 of this paper.

In summary, the submissions received from LGP, Perth Energy and Synergy all supported the proposed amendments, albeit suggesting a number of minor changes to the proposed Amending Rules. Alinta also supports the apparent intent of the proposal but notes a number of concerns around:

- the proposed method for identifying the Required Level of a Curtailable Load or Demand Side Programme (Clause 4.11.3B);
- the return of a Facility's RCS following the provision of a report to the IMO under clause 4.13.10C that specifies that at least 90 percent of the Facility has been built (Clause 4.13.10(b)); and
- the allocation of any surplus forfeited RCS to Market Customers in proportion to their monthly Individual Reserve Capacity Requirements (IRCRs).

Alinta also notes that it would appear that the proposed amendments, in conjunction with those proposed under the Rule Change Proposal: Partial Commissioning of Intermittent Generators (RC_2010_22) would result in Intermittent Facilities not being exposed to any refunds. Alinta also notes an inconsistency between the deleted text in clause 4.1.27 and the November 2010 version of the Market Rules.

Griffin Energy agrees with the majority of proposed solutions to the issues surrounding the administration of RCS proposed by the IMO (Issues 1, 4, 6 and 7). However, Griffin Energy considers that the proposed treatment of Intermittent Generators is complicated and messy (Issue 2). In Griffin Energy's opinion this highlights the inadequacy of aiming to treat all forms of capacity in a similar manner, when some forms of capacity are clearly different to others (a weakness Griffin Energy considers is also prevalent with respect to Demand Side Management (DSM)). Griffin Energy suggests that it would be easier for the IMO to manage the credibility of its list of accredited experts than to manage the complexities which the introduction of the concept of a Required Level and the determination of whether a facility is in Commercial Operation would imply.

Griffin Energy states, with regard to the changes proposed under RC_2010_22, that the failure to provide (a proportion of) capacity in a wind farm's first year of operation should result in (a proportionate amount of) the facility's capacity payments being refunded, rather than introducing complicated mechanisms to allow the facility to be held accountable on the same basis as a Scheduled Generator. Griffin Energy notes that while this is different to how a Scheduled Generator is treated, this is necessarily so, as the technologies are fundamentally different.

A summary of the assessment by the submitting parties as to whether the proposal would better the Wholesale Market Objectives is presented below.

Submitter	Wholesale Market Objective Assessment	
Alinta	Considers that once the issues with the proposed changes identified in Alinta's submission have been resolved it is likely that the amendments would be consistent with the Wholesale Market Objectives (and in any event are unlikely to be inconsistent with the Wholesale Market Objectives).	
Griffin Energy	Do not adversely impact on objectives, however is concerned at the level of complexity being introduced and suggests that simpler approaches specific to differing technologies are justified. While this may	

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Submitter	Wholesale Market Objective Assessment	
	mean adopting new approaches as new technologies are brought into the market, this would be preferable to adopting a one-size-fits-all approach which ends up producing poor incentives across the board.	
LGP	Agrees with the IMO's assessment	
Perth Energy	Better facilitates (b) and (c).	
Synergy	Better addresses (b) and (c).	

4.2 The IMO's response to submissions received during the First Submission Period

The IMO's response to each of the issues identified during the first submission period is presented in the table over the page:

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Clause/Issue	Submitter	Comment/Change Requested	IMO's response
4.1.27	Alinta	The wording of this clause presented in the Rule Change Proposal (as proposed to be deleted) differs from that in the November version of the Market Rules available from the IMO website.	presented section 7 of this report. The IMO notes that the original intent to
4.10.3(c)	Perth Energy	The drafting should be updated to reflect the following change " a proposed alternative value to that specified in clause 4.10.3(b), expressed in MW as a sent out value, to apply for the purposes of the Required Level, if in the opinion of the expert the value set out in (b) would not be a reasonable representation of the Required Level applicable; and"	The IMO has incorporated this into the proposed Amending Rules presented in Appendix 3.
Treatment of Intermittent Generators	Griffin Energy	The treatment of Intermittent Generators is complicated and messy, highlighting the inadequacy of aiming to treat all forms of capacity in a similar manner, when some forms of capacity are clearly different to others (this weakness is also prevalent with respect to DSM).	differently may be warranted in order to better reflect the unique characteristics of the different technologies types. The IMO however considers that the introduction of the common concept of a Required Level
			The IMO considers it preferable to create generic terms to be used throughout the Market Rules which will capture all potential situations to which a concept relates. This will ensure that separate sections of the Market Rules do not need to be developed for the purposes of specific projects and that concepts are consistenly applied throughout the Market Rules.
			The Required Level concept will provide a similar standard that Facilities will be required to achieve for the purposes of RCS and Reserve Capacity Testing, while still accounting for the differences among Scheduled Generators, Intermittent Generators and Demand Side Programmes. The IMO considers that this treatment is warranted for the purposes of the return

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Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			of RCS and Reserve Capacity Testing, as the WEM does not distinguish between Capacity Credits provided by different facility types. As such all technologies should be required to meet a similar standard level of output. The IMO also notes that this rationale forms the basis for the changes to capacity refunds for Intermittent Generators as proposed under RC_2010_22.
Treatment of Intermittent Generators	Griffin Energy	Griffin Energy considers that all new Intermittent Generator proponents should merely be required to provide evidence from an IMO accredited expert that the facility is complete as per the original specifications (or to identify any deviations from this). This is consistent with how it estimates its capacity factor before first being awarded Capacity Credits. Griffin Energy considers that it would be easier for the IMO to manage the credibility of its accredited experts than to manage the complexities the proposed changes seem to imply.	Participants to provide a report from an accredited expert to indicate the extent to which the Facility is capable of meeting its capacity obligations would place a potential financial burden on new entrants and existing Market Participants to obtain the report. The IMO notes that under the proposed new clause 4.13.10C Market Participants would be able to provide an expert report where they do not consider their Facility's output would be reflective of its actual ability to meet 90 percent of its Required Level. This will provide an option for a Market Participant to incur the costs of getting a report where
			The IMO considers that the proposed changes to implement the concept of a Required Level to be met will allow for a natural test of the Facility's ability to meet its capacity obligations. For a Market Participant which has installed its Facility to the specifications on which certification was originally based there would be no additional costs to prove to the IMO that the Facility can meet its obligations and should receive its RCS back. Additionally the assessment of all Facilities' performances against their Required Levels would ensure that all Facilities would be held to an equivalent standard for the purposes of the return of RCS and Reserve Capacity Testing.
Required Level (relates to clause 4.11.3B)	Griffin Energy	Griffin Energy prefers a simpler methodology based around the report of an accredited expert, rather than introducing concepts such as Required Level and Commercial Operation.	Refer to the above response.

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Clause/Issue	Submitter	Comment/Change Requested	IMO's response
Required Level (relates to clause 4.11.3B)	Griffin Energy	The proposed 5 percent POE methodology may seem reasonable in theory but it poses too many risks in practice to an Intermittent Generator. For instance, it is almost certain that in the first year of operation a wind farm will have a small quantity of its turbines out on a continual basis. Additionally there is always the risk that the wind resource does not meet its long term forecasts. Griffin Energy notes that variability is inherent with Intermittent Generators not only interval to interval, but across a whole year.	history of performance been available (to be used to calculate the CRC);
4.11.3B	Alinta	Alinta is concerned that the method for determining the Required Level for a Curtailable Load or Demand Side Programme risks misrepresenting the amount of capacity actually provided where actual predispatch consumption is lower that the Relevant Demand.	The IMO considers that this is a wider issue, associated with the use of a
4.11.3B	Alinta	The Market Rules effectively assume a Curtailable Load or Demand Side Programme is operating at its Relevant Demand before a Dispatch Instruction from	Refer to above response.

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Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		System Management would appear to create a potential misalignment between the objective of System Management in issuing a Dispatch Instruction (i.e. to achieve a specific system load reduction) and the (financial) incentive faced by a Market Participant that registered the Curtailable Load or Demand Side Programme (i.e. to minimise the actual load reduction). As a result it would appear that the proposed clause 4.11.3B would also lead to System Management being uncertain as to the effectiveness of issuing a Dispatch Instruction to Curtailable Loads or Demand Side Programmes to achieve a specific targeted load reduction	
4.11.3B(a)	Synergy	The drafting should be updated to reflect the following change: "temperature dependence information submitted to the IMO under clause 4.10.1(e)i- and converted"	The IMO has incorporated the minor amendment into the proposed Amending Rules presented in Appendix 3.
4.13.3(a)	Synergy	The drafting should be updated to reflect the following change: " be in an amount not less"	The IMO has incorporated the grammatical amendment into the proposed Amending Rules presented in Appendix 3.
4.13.10(a)	Synergy	The drafting should be updated to reflect the following change: " before the end of the relevant Capacity Year; or"	The IMO agrees that the proposed Amending Rules should be updated to clarify that the requirement for a Facility to have its RCS returned at the end of Year 3 relates to the Facility either meeting the 90 percent test (subclause 4.13.10(a)) or providing an expert report (sub-clause 4.13.10(b)): The IMO has incorporated the identified minor amendment into the proposed Amending Rules presented in Appendix 3.
4.13.10(a)	Perth Energy	Insert the word "or" immediately after the semicolon separating clauses 4.13.10(a) and 4.13.10(b).	Refer to the above response.
4.13.10(a)	Alinta	Omits the word "or" at the end of the sub-clause.	Refer to the above response.
4.13.10 (b)	Alinta	The requirement to provide a report under clause 4.13.10C, which specifies that at least 90 percent of the Facility has been built, is not consistent with the direction given by the MAC.	The IMO agrees that this is not consistent with the discussion held at the MAC. The IMO considers that the further proposed amendments presented in Appendix 3 will ensure that the proposed Amending Rules will ensure consistency with the discussion at the MAC.
4.13.10 (b)	Alinta	The drafting should, consistent with the direction	The IMO has amended the proposed Amending Rules, presented in

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Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		given by the MAC, be further amended as follows: "provides the IMO with a report under clause	Appendix 3, to require the report to outline that the Facility is capable of operating at 90 percent of its Required Level.
		4.13.10C, which specifies that at least 90 percent of the Facility has been built in accordance with the basis on which the Facility applied for, and was granted, Certified Reserve Capacity, in accordance with clause 4.10 and 4.11 respectively and was subsequently assigned Capacity Credits in accordance with clause 4.14; and"	Facility's Required Level, rather than to its capability to operate in accordance with the basis that it was granted CRC, will ensure that any advice from the IMO's accredited expert that a different output level should apply for the purposes of proving that a Facility can meet its capacity
			Additionally, the IMO notes that Alinta's suggested amendments would be moving away from the requirement for the Facility to achieve 90 percent of its Required Level – that is by requiring the Facility to essentially be capable of operating at 100 percent of the basis on which it was granted CRC. This would be inconsistent with the treatment of other generation types which would only be required to meet 90 percent of their Required Levels.
4.13.10 (b)	Alinta	It is not necessarily the case that building 90 percent of a Facility equates to that Facility being technically capable of delivering 90 percent of the Required Level, scaled to the level of Capacity Credits specified in clause 4.20.1(a).	producing 90 percent of its Required Level. The IMO considers that this will
		Alinta considers it undesirable to permit an RCS to be returned when a Market Participant only builds 90 percent of the Facility that was originally proposed when the Market Participant applied for, and was granted, Certified Reserve Capacity for the Facility. It would appear that to do so would potentially increase at the margin the risk that Market Customers might be exposed to the cost of Supplementary Reserve Capacity.	
4.13.10C	Synergy	The drafting should be updated to reflect the following change: "For a Facility certified under clause 4.11.2(b), a Market Participant may provide the IMO with a report, prepared by an independent	amendments, along with a clarification that the report is provided in accordance with the Reserve Capacity Procedure, into the proposed

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Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		expert accredited by the IMO in accordance with the Reserve Capacity Procedure, before the end of the relevant Capacity Year. The report must specify which specifies the"	
4.26.1	Alinta	The refund quantity to apply when an Intermittent Generator has not operated at 100 percent of its Required Level (Criteria 1) or provided the IMO with a report certifying that 100 percent of the Facility has been built (Criteria 2) is not defined in the proposed Amending Rules.	The IMO agrees that the quantity to be used in determining the capacity refund to apply in situations where a Facility does not meet either Criteria 1 or 2 but is in Commercial Operation needs to be defined in the proposed Amending Rules. The IMO's specific response to this identified issue is, however, presented in the Draft Rule Change Report for RC_2010_22.
		The amendments contemplated by RC_2010_22 would result in a partially commissioned Intermittent Generator not being exposed to any refunds. This is because the refund quantity would be based on the Facility's Reserve Capacity Obligation Quantity (which for an Intermittent Generator is equal to zero).	The changes made to the Amending Rules in RC_2010_22 are replicated in Appendix 3 of this proposal to ensure that all submitting parties have an opportunity to consider the changes proposed by both RC_2010_12 and RC_2010_22 during the second consultation period, given the overlaps between the two proposals.
		Alinta suggests amending clause 4.26.1A(a) to insert a new clause that would define how the quantity of the MW shortfall for the Intermittent Generator in any Trading Interval, relative to the quantity of Capacity Credits associated with that Facility, should be calculated where the Facility is in Commercial Operation but has not meet either criteria 1 or 2.	
4.26.1	Alinta	Considers that the IMO's proposed changes would be inconsistent with Market Objectives (a), (b), (c) and (d) because they provide a financial benefit for Intermittent Generators that are determined to be in Commercial Operation but that fail to provide the full quantity of Capacity Credits associated with the Facility.	The IMO agrees that by not defining the quantity to be used in determining the applicable capacity refund where a Facility does not meet either Criteria 1 or 2 but is considered by the IMO to be in Commercial Operation, the proposed changes would provide a perverse financial incentive which would be inconsistent with the Wholesale Market Objectives. However, as noted previously the IMO has responded specifically to this issue in the Draft Rule Change Report for RC_2010_22.
Capacity Refunds for Intermittent Generators	Griffin Energy	An Intermittent Generator is only offered around 35- 40 percent of its actual capacity value, even though it will be very likely to generate vastly more MWh and	The IMO agrees that in subsequent years, an Intermittent Generator's non-availability during the year will be taken into account when assigning Capacity Credits. The changes proposed under RC_2010_22 will however

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Clause/Issue	Submitter	Comment/Change Requested	IMO's response
(relates to clause 4.26.1)		operate more often at its installed capacity than most liquid peakers or DSM Facilities in any given year. Griffin Energy suggests that as a result of this capacity refunds are already somewhat implied in the commercial sense.	Intermittent Generator that has not meet its Required Level (or provided an expert report to the same effect), thereby significantly reducing the current
			The IMO considers that to remove the requirement for a new Intermittent Generator to make any capacity refunds prior to meeting 100 percent of its Required Level would fail to take into account the underlying intent of the capacity refund mechanism. That is, the incentives to make capacity available particularly during the Hot Season, where through the Refund Table (clause 4.26.1) that market values the capacity more, would be removed.
			The IMO considers that the proposed amendments under RC_2010_22 will improve this current mechanism. However, the ability to ensure that that an Intermittent Generator is not penalised twice for the failure to provide all of its capacity is limited by the current methodology used to assign Capacity Credits. As such the IMO considers that this wider issue is outside the scope of both RC_2010_12 and RC_2010_22.
Capacity Refunds for Intermittent Generators (relates to clause 4.26.1)	Griffin Energy	Failure to provide (a proportion of) capacity in the wind farm's first year of operation should result in (a proportionate amount of) the facility's capacity payments being refunded, rather than introducing complicated mechanisms to allow the facility to be held accountable on the same basis as a Scheduled	proportion of its capacity it failed to make available during the wind farm's first year of operation would fail to reflect the importance of making capacity available particularly during the Hot Season (as indicated by the sculptured
		Generator. Griffin Energy notes that while this is different to how a Scheduled Generator is treated, this is necessarily so, as the technologies are fundamentally different.	methodology please refer to the IMO's Draft Rule Change Report for
Rebate payment to Market Customers	Alinta	Basing rebate payments to Market Customers in proportion to their IRCRs in a single Trading Month ignores potential changes in the load of individual Market Customers through a Capacity Year, and therefore ignores the contribution Market Customers	Customers monthly IRCR value for the purposes of allocating the funds, as this potentially results in distortions in the share of SRCC allocated. However, the IMO notes that the risk of an SRC event occurring would last

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Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		have made to the cost of capacity throughout the year.	enter the market and meet its capacity obligations. This would need to be taken into account in any revised approach to the distribution of RCS.
		distributing any surplus RCS would be to make the	The IMO notes that further consideration of IRCR mechanism has been included in the wider review of the Reserve Capacity Mechanism currently being undertaken by the IMO. The IMO considers that the issue raised by Alinta should be addressed as part of this review and not RC_2010_12

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4.3 Public Forums and Workshops

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

4.4 Additional Amendments to the Amending Rules

Following the closure of the first consultation period, the IMO made additional changes to the proposed Amending Rules to:

- enact the advice received following external legal review of the proposal;
- reflect the suggestions received in submissions received during the first consultation period, where appropriate; and
- improve the integrity of the proposed Amending Rules.

These additional amendments are presented in Appendix 3 of this report.

5. THE IMO'S ASSESSMENT

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

Clause 2.4.2 outlines that the IMO "must not make Amending Rules unless it is satisfied that the Market Rules, as proposed to be amended or replaced, are consistent with the Wholesale Market Objectives". Additionally, clause 2.4.3 states, when deciding whether to make Amending Rules, the IMO must have regard to the following:

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

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

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

5.1 Wholesale Market Objectives

The IMO considers that the Market Rules as a whole, if amended, will be consistent with the Wholesale Market Objectives.

Who	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	Yes
(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	Yes

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Who	Consistent with objective	
	that reduce overall greenhouse gas emissions	
(d)	to minimise the long-term cost of electricity supplied to customers from the South West interconnected system	Yes
(e)	to encourage the taking of measures to manage the amount of electricity used and when it is used	Yes

Further, the IMO considers that the proposed amendments would not only be consistent with the Wholesale Market Objectives but would also allow the Market Rules overall to better address Wholesale Market Objectives (b) and (c). The IMO's assessment of the impacts of the proposed solutions to each of the identified issues is presented below:

Issue 1: Treatment of Facilities once the first Reserve Capacity Cycle has lapsed

The IMO considers the changes proposed to the treatment of Facilities once the first Reserve Capacity Cycle has lapsed would allow the Market Rules to better address Wholesale Market Objective (b):

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

By removing the current ambiguity around whether RCS may need to be provided beyond the initial Capacity Cycle, a potential perceived barrier to entry will be removed. This will encourage greater competition in the WEM, therefore promoting market objective (b).

The IMO considers the proposed amendments to implement the IMO's solution to Issue 1 are consistent with the other Wholesale Market Objectives.

Issue 2: Treatment of Intermittent Facilities

The IMO considers the changes proposed to the treatment of Intermittent Facilities would allow the Market Rules to better address Wholesale Market Objective (c).

Impact	Market Objectives
Allow the Market Rules to better address the objective.	С
Consistent with objective.	a, b, d, e
Inconsistent with objective.	

The introduction of a Required Level to be met by a Facility for the purposes of the return of RCS, Reserve Capacity Testing and capacity refunds will allow the Market Rules to better address Wholesale Market Objective (c), by ensuring equitable treatment of conventional and non-conventional technologies. This will remove a current potential discrimination against Intermittent Generation.

The IMO considers the proposed amendments to implement the concept of a Required Level and the IMO's other proposed changes to address Issue 2 are consistent with the other Wholesale Market Objectives.

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Issue 3: When should Facilities be entitled to have their RCS returned

The IMO considers the changes proposed to the timelines for when Facilities should be entitled to have their RCS returned would allow the Market Rules to better address Wholesale Market Objective (b).

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

The proposed amendments will potentially result in RCS being returned to a Market Participant by the IMO earlier where a Facility meets the necessary requirements. These monies could then be used by Market Participants as working capital, thereby promoting the efficient entry of new competitors.

The IMO considers the amendments proposed to address Issue 3 are consistent with the other Wholesale Market Objectives.

Issue 4: Treatment of upgraded Facilities

The IMO considers the changes proposed to the treatment of upgraded Facilities would allow the Market Rules to better address Wholesale Market Objective (c):

Impact	Market Objectives
Allow the Market Rules to better address the objective.	С
Consistent with objective.	a, b, d, e
Inconsistent with objective.	

The proposed changes would ensure equitable treatment of new Facilities and upgraded Facilities for the purposes of the provision and return of RCS. This will guarantee a level playing field for both new and existing Facilities. The IMO considers that the removal of this potential current discrimination under the Market Rules will promote Wholesale Market Objective (c).

The IMO considers the amendments proposed to address Issue 4 are consistent with the other Wholesale Market Objectives.

Issue 5: Treatment of Early Certification of Capacity

The IMO considers the amendments proposed to address Issue 5 are consistent with the Wholesale Market Objectives. The IMO notes that the proposed changes will ensure that ECRC is treated as far as is possible in the same way as capacity that follows the normal path for certification.

Issue 6: Clarification of rules surrounding return of non-cash RCS

The IMO considers that the proposed amendments to clarify the treatment of non-cash RCS are consistent with the Wholesale Market Objectives.

Issue 7: Typographical Amendments

The IMO considers the proposed minor and typographical amendments are consistent with the Wholesale Market Objectives.

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5.2 Practicality and Cost of Implementation

Cost: The proposed amendments will require changes to the Wholesale Electricity Market Systems operated by the IMO. The costs of these changes are closely linked with the costs of the changes contemplated by RC_2010_22:

If RC_2010_12 proceeds and RC_2010_22 doesn't proceed:

RC 2010 12: Approximately \$67,000

If both RC_2010_22 and RC_2010_12 proceed: (assuming 50/50 split of "shared" development/testing costs):

RC_2010_12: Approximately \$38,000 RC 2010 22: Approximately \$70,000

The proposed changes will not require any update to the systems operated by System Management. In addition there have been no identified changes to other Rule Participants' costs.

The IMO also notes that updates will be required to the RCS Market Procedure to outline the process for the provision and return of RCS. The IMO considers that these costs fall within the day to day operation of the IMO and therefore will not incur additional personnel costs.

Practicality:

The IMO has not identified any issues with the practicality of implementing the proposed changes.

5.3 Market Advisory Committee

The MAC discussed the proposal at the 12 May 2010, 11 August 2010 and 8 September 2010 MAC meetings. An overview of the MAC discussions is presented below. Further details are available in the MAC meeting minutes available on the IMO website: http://www.imowa.com.au/market-advisory-committee

May 2010 meeting

During the meeting the IMO presented its Concept Paper, noting that the paper had been developed following from a comprehensive internal process review.

The following additional points were raised:

- Discussion Point 1: Market Participants should be required to provide adequate RCS for each Reserve Capacity Cycle from the 2011 Reserve Capacity Cycle onward (2013/14 Reserve Capacity Year).
 - Mr Stephen MacLean suggested that the IMO propose a rule change to reflect the IMO's current operational practice. The MAC supported this proposal.
 - o Mr Shane Cremin noted that the amount of RCS required is large, but the MAC also needs to consider the risks involved, particularly regarding Supplementary Reserve Capacity. In order to reduce the risk of future defaults, Mr Cremin queried whether the IMO was able to strengthen the requirements to awarding CRC in regard to a Facility's committed status. Mr Forward noted that any issues are difficult to detect until the third year.

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- Mr Corey Dykstra questioned whether any participants would be subject to additional RCS requirements. Mr Forward noted that this would not be the case given the MAC's agreement to proceed with a rule change to remove the requirement for additional RCS.
- Discussion Point 2: All Facilities should be entitled to receive their RCS back when they can prove to the IMO that they can perform to the level at which their certification was based.
 - The MAC agreed that all Facilities should be treated equally and that all Facilities (conventional and non-conventional) should be entitled to get their RCS back when they prove to the IMO that they can meet their obligations.
- Discussion Point 3: Should a Facility be entitled to have its full RCS returned if it has reduced Reserve Capacity Obligations as a result of failing a test.
 - The MAC agreed that a Facility should not be entitled to have its full RCS back if it has reduced its obligation as a result of failing a test.
- Discussion Point 4: Should RCS be released before RCOQs apply when a Facility has entered the market early.
 - o Mr Ken Brown did not consider that one Trading Interval is sufficient time for a Facility to prove that it can meet its obligations if it has entered the market early. Additionally, both Mr Dykstra and Mr Cremin noted that the Facilities entering early already get the benefits from doing so.
 - Mr Derek McKay stated that there was no benefit in holding RCS that is no longer required and so the return of RCS should not be delayed provided the testing requirements are adequate.
 - The MAC agreed that Market Participants should be able to get their RCS released before their RCOQs apply if they enter the market early, subject to agreement as to the appropriate test level.
- Discussion Point 5: How should Facility upgrades be treated for the purposes of RCS.
 - Mr Cremin considered that if a Facility is upgraded then it should be treated as a single new Facility for the purposes of determining the required output level.
 - The MAC agreed that with regard to Facility upgrades, the whole Facility (as upgraded) should be tested for the purposes of RCS.
- Discussion Point 6: Should the IMO be able to cancel Capacity Credits rather than drawing down on RCS in the case of a default or failure to build the Facility.
 - The MAC noted that this issue is currently under consideration by the IMO.

August 2010 meeting

During the meeting the IMO presented its Pre Rule Change Discussion Paper, implementing the recommendations agreed by the MAC at the May 2010 meeting. Ms Fiona Edmonds noted that the proposal would introduce the concept of a Required Level for both conventional and non-conventional generation technologies. Ms Edmonds noted that in determining the Required Level to be met by Intermittent Generators the IMO had sought the views of its panel of experts and met with key stakeholders.

The following points were raised.

 Mr Stephen MacLean queried the use of the term "95 percentile", questioning whether the measurement was actually the "5 percentile". Mr Forward proposed that

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the term "95 percentile" be replaced with "5% POE". Mr MacLean agreed, though questioning whether the panel of independent experts had all understood the IMO's intended meaning of the term "95 percentile". Mr Ben Williams considered that this had been the case. The Chair advised that the IMO would confirm that the experts had a common understanding of the meaning of the term.

- Mr MacLean questioned whether the Required Level would always be achievable or whether a wind generator could conceivably not reach this level during the year. Mr Williams responded that the IMO had undertaken some modelling using available wind farm data and those generators had always been able to exceed their Required Level at least twice in any year.
- Mr Williams clarified that for wind farms the Required Level would be the 95 percentile of the estimated 3 year production output duration curve, not 95 percent of the nameplate capacity.
- Mr Dykstra questioned whether the proposal would allow for the return of RCS prior to the end of the Capacity Year for an Intermittent Generator. Mr Forward confirmed that this would be the case, noting that this was agreed at the May 2010 MAC meeting.
- Mr Dykstra queried why a generator should have to meet the 95 percentile level, asking why a developer that installs an Intermittent Generator should have to take risks on security. The Chair responded that a normal generator is expected to demonstrate that it can meet its capacity obligations. Mr Dykstra agreed but noted a Scheduled Generator has control over its output. The Chair considered that the proposal represented a concession to generators, allowing the early return of their RCS, but that generator would still need to demonstrate its capability.
- Mr Dykstra questioned whether the 95 percentile test could be used to facilitate an
 early return of RCS to Intermittent Generators while still retaining the current
 provisions for the return of RCS at the end of the Capacity Year. Mr Forward and Mr
 Williams explained that the proposal brought the treatment of an Intermittent
 Generator into alignment with that of a Scheduled Generator.
- Mr Cremin suggested an alternative approach, whereby the RCS for an Intermittent Generator would be returned once an independent engineer that confirmed that the equipment was installed. Mr Forward noted that it would be possible for the equipment to be installed but not working and considered that the IMO needed a way to check the operation of the Facility, not just the installation.
- Mr Forward noted that the IMO was attempting to standardise the approach used in the assessment of Reserve Capacity throughout the Market Rules by introducing the common concept of a Required Level. Mr John Rhodes referred to Point 8 of the expert report provided by MMA, suggesting the IMO was proposing to use different methodologies for certification (average output) and Required Level determination for Intermittent Generators (peak output).
- Mr Cremin considered that he would not like to see the 95 percentile approach applied to DSM. Ms Edmonds confirmed that this was not the case, with a separate methodology proposed for Curtailable Loads and Demand Side Programmes.
- Mr MacLean questioned whether the proposed Glossary definition of Commercial Operation should refer to the Reserve Capacity Market Procedure, on the basis that a higher level document should not contain a definition that is contained in a lower level document. The Chair advised that this issue would be addressed.
- Mr Peter Huxtable noted that proposed introduction of Civil Penalties for failures to provide RCS as required by clauses 4.13.3 and 4.13.4. Mr Huxtable questioned whether a Market Participant would be able to identify a change to their bank's Acceptable Credit Criteria status in time to avoid incurring a Civil Penalty. Mr

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- Williams responded that the onus on the Market Participant to provide appropriate security was a wider issue in the Market Rules.
- Dr Steve Gould queried the return of RCS that is not in the form of a cash deposit.
 Mr Williams committed to ensure that the return of this type of RCS was covered in the proposed amendments.
- Mr MacLean noted that the IMO's proposal allowed Intermittent Generator to recover their RCS earlier, but considered that the problem was that people did not understand the details. Mr Forward agreed for the IMO to provide more detail around the proposal at the next MAC meeting.

September 2010 meeting

During the meeting the IMO presented further detail of how the IMO proposed to calculate the Required Level for Intermittent Generators.

The following points were raised:

- Mr MacLean queried the meaning of the term "expected peak output". Mr Williams replied that the Required Level value was based on all intervals, not just Peak Trading Intervals.
- Mr Dykstra questioned in what sort of situations the IMO envisaged that the 5
 percent POE value would not be considered appropriate and that therefore an
 expert report could be provided. Ms Edmonds and Mr Williams replied that they
 expected this would occur when an expert's report provided by the Market
 Participant proposed an alternative approach and gave reasons why the standard
 approach was inappropriate for that Facility.
- Mr Dykstra suggested that a reference to the Market Procedure for RCS should be mentioned in the proposed amendments, e.g. "not appropriate as determined according to the RCS Procedure". Mr Cremin questioned whether it was reasonable that a report from a member of the IMO's panel of experts, submitted by a Market Participant, should not be accepted by the IMO.
- Mr MacLean questioned the need to create a new term for "Required Level" in the Market Rules, suggesting that it might be possible to simply refer to a test level. Ms Edmonds responded that the term had been created to allow the Required Level to be used in several places within the Market Rules. This would standardise the approach used in the assessment of Reserve Capacity throughout the Market Rules by introducing a common concept.
- Mr Dykstra considered that the proposed method for testing Intermittent Generators (based on peak output) was not quite consistent with the method used for certification (based on average output). Mr Williams responded that the certification of Intermittent Generators was based on averages, which took into account the need to operate at peak some percentage of the time. Mr Williams submitted that the failure of an Intermittent Generator to meet the proposed Required Level would probably indicate that its Reserve Capacity had been set too high. Mr MacLean considered that Market Participants should make sure that they can meet the three year profile presented for certification.
- Mr Dykstra suggested that the testing of Intermittent Generators could use the same statistical basis as that used for certification. Mr Dykstra noted that the certification process required the creation of a model to determine capacity. Mr Dykstra suggested that actual data could be run through the same model to assess whether the Facility is achieving its expected output.
- Mr Cremin suggested using an independent expert's report as a trigger for the return of RCS for an Intermittent Generator. The report would need to confirm that

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the Facility was installed and working to the specifications on which its certification was based. Mr Forward considered that there could be problems with this approach if a generator did not build its Facility exactly to the specifications provided for certification. Mr Cremin agreed that industry experts could occasionally provide unexpected results.

- Mr Dykstra considered that the IMO's proposal created a new risk for Market Participants. Currently the security for an Intermittent Generator would be returned if the Facility had been installed, but under the proposal there was a risk that a Market Participant would get nothing back.
- The Chair queried what would happen if there was an extremely bad year and an Intermittent Generator did not reach 90 percent of its Required Level. Mr Williams noted that the Market Participant would lose their security. The Chair questioned whether the risk was simply that the wind did not blow. Mr Cremin replied that the problem could also arise through bad luck, for example if the generator did not happen to have all its turbines running on the windiest days.
- Mr Cremin and Mr Dykstra both expressed concern that there was still risk of the security not being returned, agreeing that this would be a disincentive for potential investors. Mr Forward noted that this was also a risk for a Scheduled Generator.
- The Chair suggested that the proposed amendments could allow for an independent expert's report that confirmed that the Facility was installed and working to the specifications on which its certification was based to ensure the return of the security. Mr Forward queried whether the Market Customer representatives in the MAC were happy with this approach. Mr MacLean considered that Market Customers would be no better or worse off under the proposal. Dr Steve Gould suggested that this was not a substantial issue considering that the probability of an SRC situation arising from a wind farm failure was remote. Mr MacLean agreed with Dr Gould's suggestion.
- The Chair noted that Market Customers bear the risk of any non-delivery of capacity, and so if they were happy with the risk then an independent expert's report could be used. Mr Forward queried whether the report was to be provided as soon as the Facility was installed. Mr Dykstra suggested that a participant might seek a report about a month before the end of the Capacity Year, if it had not already satisfied the Relevant Level criteria. Mr Forward questioned why the report should not be provided up front if it was to be used as a backstop. Mr Cremin responded that the IMO should have a good idea of whether a new Facility was operating as expected.
- The Chair noted the concerns of MAC members that uncertainty about the return of RCS for an Intermittent Generator posed a risk to investment funding. The Chair agreed with Dr Gould that the risk of an installed Intermittent Generator failing and causing an SRC event is low.
- The Chair asked if the MAC was agreeable to the proposed amendments, if they
 were modified to include the use of an independent expert's report as a criterion for
 the return of RCS for an Intermittent Generator (in addition to the Required Level).
 The MAC endorsed this proposal.

5.4 Views Expressed in Submissions

The IMO received five submissions during the first submission period. Three of the submissions supported the Rule Change Proposal, albeit suggesting a number of amendments for consideration by the IMO. Alinta also supported the apparent intent of the proposal, but noted a number of wider concerns around the detail of the proposal. These concerns are outlined in further detail in section 4.2 of this report. Alinta also

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raised an issue with proposed amendments, in conjunction with those proposed under RC_2010_22, resulting in Intermittent Generators not being exposed to any refunds.

Griffin Energy agrees with most of the solutions proposed by the IMO to the issues surrounding the administration of RCS (Issues 1, 4, 6 and 7). However, Griffin Energy considers that the treatment of Intermittent Generators is complicated and messy (Issues 2, 3 and 5). Griffin Energy suggests that it would be easier for the IMO to manage the credibility of its list of accredited experts than to manage the complexities which the introduction of the concept of a Required Level and determining whether a facility is in Commercial Operation would imply.

The IMO's response to each of the issues raised in submissions is presented in section 4.2 of this report

6. THE IMO'S DRAFT DECISION

The IMO's draft decision is to accept the amendment of clauses 2.8.13, 4.1.21, 4.1.27, 4.9.9, 4.10.3, 4.11.1, 4.13.1, 4.13.2, 4.13.3, 4.13.5, 4.13.8, 4.13.10, 4.13.10A, 4.13.11, 4.13.11B, 4.13.12, 4.20.1, 4.25.1, 4.25.2, 4.25A.3, 4.25.4B, 4.26.1, 4.26.1A, 4.27.10A, 4.28.4, 4.28C.8, 4.28C.12 and new clauses 4.11.2A, 4.11.3B, 4.13.1A, 4.13.1B, 4.13.1C, 4.13.2A, 4.13.2B, 4.13.2C, 4.13.10B, 4.13.10C, 4.13.13, 4.13.14, 4.28C.8A, 4.28C.12A and the Glossary of the Market Rules as proposed in the Rule Change Proposal and amended following the first submission period.

6.1 Reasons for the decision

The IMO has made its decision on the basis that the Amending Rules:

- will allow the Market Rules to better address Wholesale Market Objectives (b) and (c);
- are consistent with the remaining Wholesale Market Objectives;
- had the general support of the MAC;
- enact the advice received following external legal review of the proposal; and
- have the support of the majority of submissions received during the first submission period.

Additional detail outlining the analysis behind the IMO's reasons is outlined in section 5 of this Draft Rule Change Report.

7. PROPOSED AMENDING RULES

The IMO proposes to implement the following Amending Rules (<u>added text</u>, deleted text)¹:

- 2.8.13. The following clauses are Protected Provisions:
 - (a) clauses 1.1 to 1.3 and 1.5 to 1.9;
 - (b) clauses 2.1 to 2.24, 2.28, 2.31.1, 2.31.3, 2.31.5(a), 2.31.6, 2.34.1 and 2.36.1;

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¹ The IMO notes that the proposed amendments also indicate the amendments proposed under RC_2010_12 to both clause 4.26.1 and 4.26.1A. This will allow Market Participants to review the proposed Amending Rules as they would stand following the IMO's draft decision for both RC_2010_12 and RC_2010_22.

- (c) clauses 3.15, 3.18.18 and 3.18.19;
- (d) clauses 4.1.4 to 4.1.12, 4.1.15 to 4.1.19, 4.1.21, 4.1.22, 4.1.24, 4.1.27, 4.5.10, 4.5.11, 4.5.15 to 4.5.20, 4.13.10, 4.13.10A, 4.13.10B, 4.13.11, 4.13.11A, 4.13.11B, 4.16, 4.24.1, 4.24.2 and 4.24.12;
- (e) clauses 5.2.3, 5.2.7 and 5.5.1;
- (f) clauses 9.16.3, 9.16.4 and 9.20.2; and
- (g) clauses 10.1.1, 10.1.2, 10.2.1, 10.3 and 10.4.
- 4.1.21. Not later than Following a request from a Market Participant under clause
 4.13.2A the IMO must recalculate the amount of Reserve Capacity Security
 required to be held by the IMO for a Facility in accordance with clause
 4.13.2(b) by 5 PM of the last Business Day falling on or before 23 December
 of Year 1 of a Reserve Capacity Cycle. The IMO must, in accordance with
 clause 4.13.10:
 - (a) notify a Market Participant that has provided a Reserve Capacity Security for a Facility that the Reserve Capacity Security is no longer required; and
 - (b) return any Reserve Capacity Security which was provided in the form of a cash deposit,

in the event that the Market Participant does not hold Capacity Credits for the Facility to which the Reserve Capacity Security relates in the relevant Reserve Capacity Cycle.

- 4.1.27. The IMO must in accordance with clause 4.13.10A notify a Market Participant that has requested the IMO to release a Reserve Capacity Security for a Facility, which the Market Participant considers to be in commercial operation and capable of meeting its Reserve Capacity Obligations, of its determination as to whether that Reserve Capacity Security is no longer required, and return any cash deposit that is no longer required, within 10 Business Days after receiving the Market Participant's request [Blank]
- 4.9.9. If the IMO assigns Certified Reserve Capacity to a Facility in respect of a Reserve Capacity Cycle, the IMO must advise the applicant:
 - of the amount of Certified Reserve Capacity assigned to the Facility in respect of the Reserve Capacity Cycle, as determined in accordance with clause 4.11 or clause 4.9.5(c) (as applicable);
 - (b) of the initial Reserve Capacity Obligations Quantity set for the Facility, as determined in accordance with clause 4.12 or clause 4.9.5(c) (as applicable);

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- (c) of any Reserve Capacity Security required as a condition of a Market Participant holding the Certified Reserve Capacity, as determined in accordance with clause 4.13.42 or clause 4.9.5(c) (as applicable);
- (d) in the case of Conditional Certified Reserve Capacity, that the certification is subject to the conditions in clause 4.9.5(a) and (b); and
- (e) of the calculations upon which the IMO's determinations are based-; and
- (f) whether the IMO accepted or rejected a proposed alternative value to be used in the calculation of the Required Level for a Facility for which a Market Participant nominated to use the methodology described in clause 4.11.2(b) in its application for certification, as determined in accordance with clause 4.11.2A, if applicable.
- 4.10.3. An application for certification of Reserve Capacity <a href="mailto:the-multi-the-multi
 - (a) an estimate of what the expert considers the Certified Reserve
 Capacity of the Facility would have been for the purposes of
 clause 4.11.2(b) had the history of performance been available;
 - (b) a value, expressed in MW as a sent out value, which equals the 5 percent probability of exceedance of expected generation output for the Facility for all the Trading Intervals that occurred within the last three years up to, and including, the last Hot Season, where this value is to be used in the calculation of the Required Level in clause 4.11.3B;
 - a proposed alternative value to that specified in clause 4.10.3(b), expressed in MW as a sent out value, to apply for the purposes of the Required Level, if in the opinion of the expert the value provided under clause 4.10.3(b) would not be a reasonable representation of the Facility's 5 percent probability of exceedance of expected generation output during its first year of operation; and
 - (d) the reasons for any proposed alternative value provided under clause 4.10.3(c).

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4.11.1. Subject to clause 4.11.7, the IMO must apply the following principles in assigning a quantity of Certified Reserve Capacity to a Facility for the Reserve Capacity Cycle to which the application relates:

. . .

- (e) the IMO must assign Certified Reserve Capacity to an Intermittent Generator that is yet to commence operation enter or re-enter service based on:
 - i.—the Certified Reserve Capacity estimate contained in any report provided by the applicant in accordance with clause 4.10.3, where:
 - 1. the report was produced by an expert accredited by the IMO in accordance with clause 4.11.6.; and
 - 2. the estimate reflects what the expert considers the Certified Reserve Capacity of the Facility would have been for the purposes of clause 4.11.2(b) had a history of performance been available.

<u>...</u>

- 4.11.2A. Where an applicant nominates under clause 4.10.3(c) to have the IMO use an alternative value to that specified in clause 4.10.3(b) the IMO:
 - (a) may reject the proposed alternative value if it does not consider the reasons provided in accordance with clause 4.10.3(d) provide sufficient evidence that an alternative value is required; and
 - (b) must use the alternative value in the calculation of the Required Level if it does not reject the proposed alternative value under paragraph (a).
- 4.11.3B The Required Level (which for an upgraded Facility is calculated for the Facility as a whole):
 - (a) for Facilities assigned Certified Reserve Capacity under clause

 4.11.1(a), is calculated by the IMO using the Metered Schedule
 and temperature dependence information submitted to the IMO
 under clause 4.10.1(e)(i) or provided in Standing Data (where
 available) and converted to a sent out basis to 41 ℃;
 - (b) for Facilities assigned Certified Reserve Capacity under clause 4.11.2(b), is either:
 - i. the value, expressed in MW as a sent out value, that equals the 5 percent probability of exceedance of expected generation output for the Facility, submitted to the IMO in the report described in clause 4.10.3(b);or
 - ii. the proposed alternative value, expressed in MW as a sent out value, provided in the report described in clause

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- 4.10.3(c), where the IMO has accepted the proposed alternative value under clause 4.11.2A; and
- (c) for Curtailable Loads and Demand Side Programmes, is calculated by the IMO using the Facility's Relevant Demand minus the Capacity Credits assigned to the Facility.
- 4.13.1. Where the IMO assigns Certified Reserve Capacity to a Facility (which for the purposes of this clause 4.13 includes part of a Facility and a Demand Side Programme) that is yet to be commissioned yet to enter service (or reenter service after significant maintenance or having been upgraded), the relevant Market Participant must ensure that the IMO holds the benefit of a Reserve Capacity Security in an amount not less than the amount determined under clause 4.13.2(a) by the date and time specified in clause 4.1.13.for the Reserve Capacity Cycle to which the Certified Reserve Capacity relates.
- 4.13.1A For the purposes of this clause 4.13, where an existing Facility is undergoing significant maintenance or being upgraded the requirement to provide Reserve Capacity Security applies only to the part of the Facility either undergoing significant maintenance or being upgraded.
- 4.13.1B The obligation under clause 4.13.1 to provide Reserve Capacity Security
 does not apply where the Market Participant has provided Reserve Capacity
 Security in relation to the same Facility for a previous Reserve Capacity
 Cycle, unless the Facility is an existing Facility undergoing significant
 maintenance or being upgraded.
- 4.13.1C For the purposes of this clause 4.13, a Facility includes part of a Facility, any upgrade or significant maintenance to an existing Facility, and a Demand Side Programme, unless otherwise stated.
- 4.13.2. The amount fFor the purposes of clause 4.13.1. the amount of Reserve Capacity Security is:
 - (a) at the time and date referred to in clause 4.1.13, twenty-five percent of the Maximum Reserve Capacity Price included in the most recently issued Request for Expressions of Interest at the time the Certified Reserve Capacity is assigned, expressed in \$/MW per year, multiplied by an amount equal to:
 - (ai.) the Certified Reserve Capacity assigned to the Facility; less
 - (bii.) the total of any Certified Reserve Capacity amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii):; and

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- (b) at the time and date referred to in clause 4.1.21, twenty-five percent of the Maximum Reserve Capacity Price included in the most recently issued Request for Expressions of Interest, expressed in \$/MW per year, multiplied by an amount equal to the total number of Capacity Credits provided by the Facility under clause 4.20.1(a).
- 4.13.2A A Market Participant may apply to the IMO for a recalculation of the amount of Reserve Capacity Security required to be held for a Facility using the formula in clause 4.13.2(b) after the time and date referred to in clause 4.1.21.
- 4.13.2B Within 10 Business Days receipt of a request from a Market Participant under clause 4.13.2A the IMO must recalculate the amount of Reserve Capacity

 Security required to be held by a Facility using the formula in clause

 4.13.2(b).If the amount recalculated by the IMO under clause 4.13.2 (b) is less than that originally calculated under clause 4.13.2 (a) then the IMO must:
 - (a) notify a Market Participant that has provided a Reserve Capacity
 Security for a Facility of the result of the calculation; and
 - (b) once the Market Participant has provided a replacement Reserve

 Capacity Security in accordance with clause 4.13.2C, return any
 excess Reserve Capacity Security.
- 4.13.2C Where under clause 4.13.2B the IMO notifies a Market Participant that excess

 Reserve Capacity Security is currently held, then a Market Participant may replace the existing Reserve Capacity Security with a replacement Reserve Capacity Security must:
 - (a) be in an amount not less than the amount required under clause 4.13.2(b); and
 - (b) become effective before the IMO returns any excess Reserve Capacity Security.
- 4.13.3. Where a Market Participant's existing Reserve Capacity Security is due to expire or terminate and after that termination the Market Participant will continue to have an obligation to ensure the IMO holds the benefit of a Reserve Capacity Security under clause 4.13.1, then that Market Participant must ensure that the IMO holds the benefit of a replacement Reserve Capacity Security in an amount not less than the level required under clause 4.13.2 that will become effective at the expiry of the existing Reserve Capacity Security . The replacement Reserve Capacity Security must:
 - (a) be an amount not less than the amount required under clause 4.13.2; and
 - (b) become effective before the termination of the existing Reserve Capacity Security.

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- 4.13.5. The Reserve Capacity Security for a Market Participant must be:
 - (a) an obligation in writing that:
 - is from a Reserve Capacity Security provider, who must be an entity which meets the Acceptable Credit Criteria and which itself is not a Market Participant;
 - ii. is a guarantee or bank undertaking in a form prescribed by the IMO;
 - iii. is duly executed by the Reserve Capacity Security provider and delivered unconditionally to the IMO;
 - iv. constitutes valid and binding unsubordinated obligations to the Reserve Capacity Security provider to pay to the IMO amounts in accordance with its terms which relate to the obligations of the relevant Market Participant under the Market Rules to pay compensation under clause 4.13.11A; and
 - v. permits drawings or claims by the IMO to a stated amount; or
 - (b) if the IMO in its discretion considers it an acceptable alternative in the circumstances to the obligation under clause 4.13.5(a), a cash deposit ("Security Deposit") made with the IMO (on terms acceptable to the IMO in its discretion) by or on behalf of the Market Participant.
- 4.13.8. The IMO must develop a Market Procedure dealing with:
 - (a) determining Reserve Capacity Security;
 - (b) assessing persons against the Acceptable Credit Criteria;
 - (c) Reserve Capacity Security arrangements, including:
 - i. the form of acceptable guarantees and bank undertakings;
 - ii. where and how it will hold cash deposits and how the costs and fees of holding cash deposits will be met;
 - iii. the application of monies drawn from Reserve Capacity
 Security in respect of amounts payable by the relevant Market
 Participant to the IMO under clause 4.13.11AB;
 - (d) other matters relating to clauses 4.13.3 to 4.13.7,and Market Participants and the IMO must comply with that Market Procedure.
- 4.13.10 A Market Participant is no longer required to ensure that the IMO holds the benefit of a Reserve Capacity Security after:
 - (a) in the case of a Reserve Capacity Security relating to a Facility that provides no Capacity Credits (as notified by the relevant Market

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- Participant under clause 4.20) the time and date specified in clause 4.1.21:
- (b) in the case of a new Facility that satisfies 100% of its Reserve
 Capacity Obligation Quantity for the Facility (as determined under
 clause 4.12.4 and before any adjustment made under clause 4.12.6) 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, the later of:
 - the date from which Reserve Capacity Obligations apply in accordance with clause 4.1.26 in respect of the Reserve Capacity Cycle;
 - ii. the first day on which a new Facility first satisfies its Reserve
 Capacity Obligations under clause 4.12.1(a) or (b) (as
 applicable) in respect of the Reserve Capacity Cycle.
- (c) in the case of a new Facility to which none of (a), (b), or clause 4.13.11A relate, the day from which Reserve Capacity Obligations cease to apply in accordance with clause 4.1.30 in respect of the Reserve Capacity Cycle.

If a Market Participant that provides Reserve Capacity Security in respect of a Facility:

(a) either:

- i. operates the Facility at a level which is at least 90 percent of its
 Required Level, adjusted to the level of Capacity Credits specified
 in clause 4.20.1(a), in at least two Trading Intervals before the end
 of the relevant Capacity Year; or
- <u>ii.</u> provides the IMO with a report under clause 4.13.10C, which specifies that the Facility can operate at at least 90 percent of its Required Level, adjusted to the level of Capacity Credits specified in clause 4.20.1(a); and
- (b) is considered by the IMO to be in Commercial Operation,
 then the IMO will return the Reserve Capacity Security to the Market
 Participant within 10 Business Days after the end of the relevant Capacity
 Year.
- 4.13.10A Where a Market Participant considers that clause 4.13.10 applies to it in relation to a Facility, the Market Participant may request the IMO to release the relevant Reserve Capacity Security. Within 10 Business Days after receiving such a request the IMO must:

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- (a) determine whether the need to maintain the Reserve Capacity Security has ceased:
- (b) notify the Market Participant of its determination; and
- (c) if the Reserve Capacity Security is a cash deposit that is no longer required to be held, refund the cash deposit (plus interest earned).

A Market Participant may request the IMO to determine that a Facility is in Commercial Operation for the purposes of Chapter 4 of these Market Rules.

- 4.13.10B On receipt of a request made under clause 4.13.10A the IMO must determine, within 20 Business Days, whether the Facility is in Commercial Operation. In making each such determination the IMO:
 - (a) must have regard to the following, if applicable:
 - i. whether the Facility has completed an approved

 Commissioning Test under clause 3.21A and

 subsequently produced energy for at least two Trading
 Intervals; and
 - ii. any formal advice received from the Market Participant
 that it has completed an approved Commissioning Test
 under clause 3.21A and is commercially operational; and
 - (b) <u>may have regard to any additional information the IMO considers</u> <u>relevant.</u>
- 4.13.10C For a Facility certified under clause 4.11.2(b), a Market Participant may provide the IMO with a report, in accordance with the Reserve Capacity

 Procedure, prepared by an independent expert accredited by the IMO before the end of the relevant Capacity Year. The report must specify the percentage of its Required Level, adjusted to the level of Capacity Credits specified in clause 4.20.1(a), at which the Facility can operate at the time that the report is prepared.
- 4.13.11 If a Market Participant that provides a Reserve Capacity Security in respect of a Facility under this clause 4.13 operates the Facility:
 - (a) at a level (expressed in MWh) that is at least 90% of one-half of the Reserve Capacity Obligation Quantity for the Facility (as determined under clause 4.12.4 and before any adjustment made under clause 4.12.6, expressed in MW) in at least one Trading Interval when the Reserve Capacity Obligation Quantity exceeds 0 MW; and
 - (b) the Trading Interval falls 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

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accordance with clause 4.1.30 in respect of the Reserve Capacity Cycle,

then, unless the IMO has already returned the Reserve Capacity Security to the Market Participant under clause 4.13.10A, the IMO will return the Reserve Capacity Security to the Market Participant within 20 Business Days after the end of the relevant Capacity Year.

If a Market Participant that provides a Reserve Capacity Security in respect of a Facility fails to operate that Facility in accordance with clause 4.13.10 before the end of the relevant Capacity Year then the Market Participant must pay to the IMO, as compensation to the market, an amount equal to the Reserve Capacity Security amount for that Facility within 20 Business Days after the end of the relevant Capacity Year.

- 4.13.11A If a Market Participant fails to operate a Facility in accordance with clause 4.13.11, then the Market Participant must pay to the IMO, as compensation to the market, an amount equal to the Reserve Capacity Security amount for that Facility. The payment obligation under clause 4.13.11 may be satisfied by the IMO drawing upon the Reserve Capacity Security for the Facility, 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.
- 4.13.11B The payment obligation under clause 4.13.11A may be satisfied by the IMO drawing upon the Reserve Capacity Security for the Facility, 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. [Blank]
- 4.13.12. If the Reserve Capacity Security drawn upon under clause 4.13.11_is a cash deposit, then the Market Participant forfeits the amount of the cash deposit.

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- 4.13.13 A Market Participant may apply to the IMO for the release of any Reserve

 Capacity Security held by the IMO, at any time prior to the end of the relevant

 Capacity Year, if the Reserve Capacity Security relates to a Facility that:
 - (a) has operated at 100 percent of its Required Level, adjusted to the level of Capacity Credits specified in clause 4.20.1(a), in at least two Trading Intervals prior to the end of the relevant Capacity Year; and
 - (b) is considered by the IMO to be in Commercial Operation.
- 4.13.14 Where the IMO receives an application made under clause 4.13.13 or clause 4.28C.12 it must, within 10 Business Days:
 - (a) determine whether the need to maintain the Reserve Capacity
 Security has ceased:
 - (b) notify the Market Participant of its determination;
 - (c) if the Reserve Capacity Security is a cash deposit that is no longer required to be held, return the cash deposit (plus interest earned); and
 - (d) if the Reserve Capacity Security is a non-cash deposit and is no longer required to be held, notify the provider that the IMO relinquishes any rights to draw on the Reserve Capacity Security.
- 4.20.1. Each Market Participant must, by the date and time specified in clause 4.1.20, notify the IMO of:
 - (a) the total number of Capacity Credits each Facility will provide during the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle; and
 - (b) the number of those Capacity Credits the Market Participant anticipates the IMO has acquired as a result of the Reserve Capacity Auction subject to paragraph (c);
 - (c) the total number of Capacity Credits provided by all the Market Participant's Facilities must be consistent with the sum of:
 - the quantity of Certified Reserve Capacity held by the Market Participant which the IMO has notified the Market Participant it can trade bilaterally under clause 4.14.9;
 - ii. the quantity of Certified Reserve Capacity held by the Market Participant scheduled by the IMO in the Reserve Capacity Auction, as published in accordance with clause 4.19.5(b);
 - iii. the quantity of Certified Reserve Capacity held by the Market Participant which remains the subject of pre-existing Long Term Special Price Arrangements and which the Market Participant does not intend to trade bilaterally; and

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- iv. the quantity of Certified Reserve Capacity held by the Market Participant for Facilities subject to Network Control Service Contracts-; and
- v. <u>the quantity of Capacity Credits held by the Market Participant</u> which was assigned under clause 4.28C.10.

. . .

- 4.25.1. The IMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing Capacity Credits:
 - (a) in the case of a generation system can, during the term the Reserve Capacity Obligations apply, operate at its maximum Reserve Capacity Obligation Quantity Required Level, adjusted to the level of Capacity Credits currently held, at least once during each of the following periods and such operation must be achieved on each type of fuel available to that Facility notified under clause 4.10.1(e)(v):
 - i. 1 October to 31 March; and
 - ii. 1 April to 30 September; and
 - (b) can, during the six months prior to the Reserve Capacity Obligations for the first Reserve Capacity Cycle taking effect, operate at its maximum Reserve Capacity Obligation Quantity at least once and, in the case of a generating system, such operation on each type of fuel available to that Facility notified under clause 4.10.1(e)(v). This paragraph (b) does not apply to facilities that are not commissioned prior to their Reserve Capacity Obligations coming into force.
 - (c) in the case of a Curtailable Load can, during the term the Reserve Capacity Obligations apply, operate at its maximum Reserve Capacity Obligation Quantity at least once during the period between 1 October to 31 March.
- 4.25.2. The verification referred to in clause 4.25.1 can be achieved:
 - (a) by the IMO observing the Facility operate at the <u>FRequired <u>ILevel</u>, adjusted to the level of Capacity Credits currently held, at least once as part of normal market operations in Metered Schedules specific to the Facility; or</u>
 - (b) by the IMO:
 - i. in the case of a generation system, requiring System

 Management in accordance with clause 4.25.7 to test the

 Facility's ability to operate at the required requi

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- ii. in the case of Interruptible Loads, Curtailable Loads and Dispatchable Loads, requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to reduce demand to the #Required #Level, adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval and the Facility successfully passing that test.
- 4.25A.3. The Verification Test is failed if a reduction in demand equal to at least 10% percent of the Required Level adjusted to the level of Capacity Credits currently held Capacity Credits is not identified from the Curtailable Load meter data.
- 4.25.4B In order for an application under clause 4.25.4A to be assessed by the IMO, it must:
 - (a) be in writing;
 - (b) relate to a Facility for which the IMO has notified the Market Participant, in accordance with clause 4.13.10A<u>14</u> of its determination that the need to maintain the Reserve Capacity Security for that Facility has ceased;
 - (c) detail the reasons for the reduction in the number of Capacity Credits; and
 - (d) indicate whether the application relates only to the current Reserve Capacity Year or includes subsequent Capacity Years.
- 4.26.1. If a Market Participant holding Capacity Credits associated with a generation system fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to the IMO calculated in accordance with the following provisions.

REFUND TABLE

Dates	1 April to 1 October	1 October to 1 December	1 December to 1 February	1 February to 1 April
Business Days Off-Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Business Days Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	1.5 x Y	1.5 x Y	4 x Y	6 x Y
Non-Business Days Off- Peak Trading Interval Rate (\$ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Non-Business Days Peak Trading Interval Rate (\$ per	0.75 x Y	0.75 x Y	1.5 x Y	2 x Y

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MW shortfall per Trading Interval)	
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).
Mhara	

Where:

For an Intermittent Facility Generator that has been commissioned:

- (a) either:
 - i. operated at 100 percent of its Required Level, adjusted to the level of Capacity Credits specified in clause 4.20.1(a), in at least two Trading Intervals; or
 - ii. provided the IMO with a report under clause 4.13.10C, where this report specifies that the Facility can operate at 100 percent of its Required Level; and
- (b) is, following a request to the IMO by a Market Participant, considered by the IMO to be in Commercial Operation:

Y equals 0.

For all other facilities, including Intermittent <u>Generators Facilities</u> that <u>following a request to the IMO by a Market Participant are not considered by the IMO to be in Commercial Operation have not been commissioned</u>: Y is determined by dividing the Monthly Reserve Capacity Price (calculated in accordance with clause 4.29.1) by the number of Trading Intervals in the relevant month.

For the purposes of this clause, an Intermittent Facility will be deemed to be commissioned when the IMO determines that the facility is fully operational. In this case the IMO must apply the principle that the Facility is fully operating in accordance with the basis on which the Facility applied for, and was granted, Certified Reserve Capacity, in accordance with clause 4.10 and 4.11 respectively and was subsequently assigned Capacity Credits in accordance with clause 4.14.

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

- (a) the sum over all Trading Intervals t in Trading Month m of the product of:
 - the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and
 - ii the Forced Outage Shortfall in Trading Interval t,

where the Forced Outage Shortfall for a Facility is equal to which ever of the following applies:

iii. if the Facility is required to have submitted a Forced Outage under clause 3.21.4, the Forced Outage in that Trading

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- Interval measured in MW; or
- iv. if the Facility is an Intermittent Facility Generator which is deemed to have not been commissioned not considered by the IMO to have been in Commercial Operation, for the purposes of clause 4.26.1, the number of Capacity Credits specified in clause 4.20.1(a) associated with the relevant Intermittent Facility; or
- ivA. if the Facility is an Intermittent Generator which is considered by the IMO to have been in Commercial Operation, but for which Y does not equal zero in the Refund Table in clause 4.26.1, the maximum of:
 - 1. RL- $(2 \times Max_2)$; or
 - 2. RL × (1-A)

Where

- RL is the Required Level, adjusted to the level of Capacity Credits specific in clause 4.20.1(a)
- Max₂ is the second highest value of the output for the
 Facility (MWh) achieved during a Trading Interval
 during the relevant Trading Month, as measured in
 Metered Data Submissions received by the IMO in
 accordance with clause 8.4, that has been
 achieved since the date the IMO determined the
 Facility to be in Commercial Operation, where this
 value must be set equal to or greater than the
 Max₂ applied by the IMO for the previous Trading
 Month
- A is the percentage detailed in the most recent report provided by the Market Participant for the Facility under clause 4.13.10C.
- where this value will be applied for the purposes of this clause for the relevant Trading Month; or
- v. if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system, the number of Capacity Credits associated with the relevant Facility; or

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- vi. if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is not yet undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system, the number of Capacity Credits associated with the relevant Facility; and
- (b) 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), less all Facility Forced Outage Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year.
- 4.27.10A. Market Participants holding Capacity Credits for Facilities that are yet to commence operation must file a report on progress with the IMO at least once every month between the commencement of the calendar year in which the date referred to in clause 4.10.1(c)(iii)(7) falls and the date the IMO has notified the Market Participant, in accordance with clause 4.13.1410A, of its determination, that the need to maintain the Reserve Capacity Security for the Facility has ceased.
- 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 any amount drawn under a Reserve Capacity Security by the IMO and distributed in accordance with clause 4.13.11<u>A(a)</u>; 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 4.13.11A(b)

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

4.28C.8. Within 30 Business Days of the applicant receiving notification by the IMO of the amount of Early Certified Reserve Capacity assigned to the Facility the

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applicant must ensure that the IMO holds the benefit of a provided Reserve Capacity Security equal to the amount specified in clause 4.28C.9., else the Early Certified Reserve Capacity assigned to the Facility will lapse.

- 4.28C.8A If a Market Participant does not comply with clause 4.28C.8 in full by the time specified in clause 4.28C.8, the Early Certified Reserve Capacity assigned to that Facility will lapse.
- 4.28C.12. The Reserve Capacity Security provided by the Market Participant under clause 4.28C.8 must, bPrior to the time and date specified in clause 4.1.13

 (a), in yYear 1 of the first Reserve Capacity Cycle specified in clause

 4.10.1(b), in which the Facility will commence operation enter service the IMO must-be recalculated the amount of Reserve Capacity Security to be provided by each Market Participant in accordance with clause 4.28C.9, and:
 - (a) If an additional amount of Reserve Capacity Security is required.

 the Market Participant must ensure that the IMO holds the benefit
 of the additional Reserve Capacity Security by the time and date
 specified in clause 4.1.13(a); and
 - (b) If a reduced amount of Reserve Capacity Security is required, the Market Participant may request the IMO to return any additional Reserve Capacity Security, in accordance with clause 4.13.14, provided that at all times the IMO holds a Reserve Capacity Security to the level determined in accordance with this clause 4.28C.12.

the difference paid to the IMO or refunded to the Market Participant as applicable.

4.28C.12A From the time and date specified in clause 4.1.13(a) in Year 1 of the first

Reserve Capacity Cycle in which the Facility will enter service, all of the provisions of clause 4.13 apply equally to the Reserve Capacity Security of Facilities with Early Certified Reserve Capacity.

Glossary

<u>Commercial Operation:</u> The status determined by the IMO under clause 4.13.10B that a Facility is operating in the Wholesale Electricity Market.

Reserve Capacity Security: The reserve capacity security to be provided for a Facility as calculated and re-calculated under clause 4.13 and clause 4.28C. Has the meaning given in clause 4.13.1.

Required Level: The level of output (expressed in MW) required to be met by a Facility or Demand Side Programme as determined in clause 4.11.3B.

Relevant Level: Has the meaning provided in clause 4.11.3A.

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APPENDIX 1: IMO'S RULE CHANGE PROPOSAL

Background

The IMO notes, in its proposal, that when a Market Participant has committed to the development of a new Facility, or a Facility upgrade, the Market Rules require the Market Participant to provide Reserve Capacity Security in respect of the Facility. This security is required after either:

- the Bilateral Trade Declaration for the Facility is made if the Market Participant indicates that it intends to bilaterally trade the Certified Reserve Capacity (CRC) associated with the Facility; or
- at the time the Reserve Capacity Auction Offer for the Facility is made if the CRC is to be offered into the Reserve Capacity Mechanism through the Reserve Capacity Auction process.

The Market Rules require Market Participants to provide a Reserve Capacity Security for a new Facility or upgrade to an existing Facility due to the greater delivery risk associated with the unproven capacity. Currently the IMO holds in excess of \$24 million dollars in Reserve Capacity Security.

Clause 4.13.10 of the Market Rules outlines that the Reserve Capacity Security is no longer required once:

- The Reserve Capacity Obligations commence; and
- The Facility has operated at 100 percent of its Reserve Capacity Obligation Quantity (RCOQ) for one Trading Interval within the Reserve Capacity Year. In this case the requirement ceases immediately, subject to a processing period; or
- The Facility has demonstrated that it has operated to a level of at least 90 percent (but not 100 percent) of its RCOQ within the Reserve Capacity Year. In this case the requirement for Reserve Capacity Security ceases following the end of the Reserve Capacity Year.

Note: if the Facility has an RCOQ of zero, the Reserve Capacity Security is to be returned at the end of the Reserve Capacity Year.

If a Facility fails to satisfy the obligations specified in clause 4.13.10 during the Reserve Capacity Year the Reserve Capacity Security is first used to fund any Supplementary Reserve Capacity required in that year, with the remainder distributed to Market Customers proportional to their Individual Reserve Capacity Requirement level.

Issues

The IMO notes that after a comprehensive review of the administration of Reserve Capacity Security a number of issues with the process have been identified. These issues have been further highlighted as new and diverse facilities have begun commissioning and started to participate in the WEM. Additionally, the recent failure of some Market Participants to meet their obligations has brought these issues to the forefront.

A paper outlining these issues was presented to the Market Advisory Committee (MAC) at its 12 May 2010 meeting. In preparing this Pre Rule Change Discussion Paper, the views expressed by the MAC have been taken into account.

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Reserve Capacity Security related issues have also been identified for the treatment of Demand Side Programmes, Load Reduction Curtailable Loads and Stipulated Default Loads. These issues will be addressed in a separate Rule Change Proposal regarding Curtailable Loads to be presented later this year.

Finally, there is no civil penalty currently associated with the failure to provide Reserve Capacity Security as required by clauses 4.13.3 and 4.13.4. The IMO considers that a contravention of these clauses should attract a civil penalty. For example, consider a Reserve Capacity Security provided by means of a Bank Undertaking from Bank X. If Bank X's Acceptable Credit Criteria status changes the obligation to provide the new Reserve Capacity Security is with the Market Participant. If the Market Participant fails to update the Bank Undertaking then currently no civil penalty will apply.

The IMO notes in its proposal that it will work with the Office of Energy to include these as civil penalty provisions in the Electricity (Wholesale Electricity Market) Regulations 2004. The IMO will recommend that the civil penalties associated with the failure to provide Reserve Capacity Security mirror those associated with the failure to provide Credit Support (clauses 2.38.2 and 2.38.3 of the Market Rules). These are both Category B civil penalty provisions and are set at:

- First contravention: \$25,000 plus a daily amount of \$5,000; and
- Subsequent contraventions: \$50,000 plus a daily amount of \$10,000.

Issue 1: Treatment of Facilities once the first Reserve Capacity Cycle has lapsed

Currently the Market Rules are ambiguous as to whether it is necessary to maintain Reserve Capacity Security after the end of the first Reserve Capacity Cycle. In particular, clause 4.13.1 and 4.1.13 require that Market Participants with Facilities that have been assigned Certified Reserve Capacity by the IMO provide Reserve Capacity Security to the IMO in August of Year 1 of the relevant Reserve Capacity Cycle. The Market Rules are silent as to whether this requirement is repeated for every Reserve Capacity Cycle that the Certified Reserve Capacity appears in for new capacity.

The practice since market start has been to only require Reserve Capacity Security to be provided for the first Reserve Capacity Cycle regardless of whether the Certified Reserve Capacity was delivered in full, partially or not at all.

Proposed Solution

Clause 4.13.1, in conjunction with the proposed new clauses 4.13.1A, 4.13.1B and 4.13.1C, is proposed by the IMO in its proposal to be amended to remove any doubt and clearly state that Reserve Capacity Security is to either be returned to the Market Participant or forfeited within the first Reserve Capacity Cycle and that no further Reserve Capacity Security obligation will apply to that Certified Reserve Capacity thereafter, unless a Market Participant decides to upgrade the Facility at a later date.

Clause 4.13.3 has also been proposed to be amended in the IMO's proposal to clarify that replacement Reserve Capacity Security is only required if the obligation to provide security extends beyond the period of the validity of the current security. For example, it would not be necessary to provide a replacement security if the existing security happens to expire a day after the end of Year 4 of the first Reserve Capacity Cycle for which the Market Participant applied for certification.

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Issue 2: Treatment of Intermittent Facilities

Clause 4.13.11A (via a reference to clause 4.13.11) stipulates that the Reserve Capacity Security provided will be forfeited for Facilities that cannot, at least once during the Capacity Year, operate at least at 90 percent of the RCOQ level, in a Trading Interval when the RCOQ for that Facility is greater than zero. Intermittent Facilities have an RCOQ level of zero at all times and it is therefore impossible for them to meet the requirements of clause 4.13.11A.

At the same time, clause 4.13.10(c), stipulates that the Facilities captured by that clause (which applies to Intermittent Facilities) should have their securities returned by the end of the Reserve Capacity Cycle irrespective of performance. This is in contrast to the requirements under clause 4.13.11A.

As agreed at the May 2010 MAC meeting, all Facilities (conventional and non-conventional) should be entitled to receive their Reserve Capacity Security back when they can prove to the IMO that they can perform to the level at which their certification is based.

Proposed Solution

The IMO contends that it is prudent to develop a criterion for the return of Reserve Capacity Security which would ensure consistent treatment of all generation types but at the same time take into account each generation type's unique characteristics (in particular Intermittent Generators). The IMO proposes to define a level of output a Facility is required to perform at (the "Required Level" outlined in new clause 4.13.10). The Required Level for each Facility type will be calculated by the IMO as follows:

- for Facilities assigned CRC under clause 4.11.1(a), using the Metered Schedule and Temperature Dependence Curves submitted to the IMO under clause 4.10.1(e)i. and converted to a sent out basis at 41 °C;
- for Facilities assigned CRC under clause 4.11.2(b), using either the:
 - a value which equals the 5 percent probability of exceedance (POE) of the 3-year expected generation output for the Facility, expressed in MW, provided to the IMO under clause 4.10.3; or
 - in the case where the value which equals the 5 percent POE is not considered to be appropriate by the IMO, an alternative value, expressed in MW, to that identified in the report provided under clause 4.10.3; and
- Curtailable Loads and Demand Side Management Programmes, using the Facility's Relevant Demand minus Capacity Credits assigned to that Facility.

The IMO notes in its proposal that a Facility will also be required to operate at the Required Level for a specified number of Trading Intervals (two for the purposes of the return of Reserve Capacity Security) and also be in Commercial Operation. For a Traditional Facility, CRC is assigned on a Facility's ability to meet a specified output level during a Capacity Year. However, a Facility assigned CRC under 4.11.2(b) would be certified based on an average output over a three year period, with no assumptions about output being achieved in consecutive intervals. Therefore for the purposes of the return of Reserve Capacity Security the intervals at which the Required Level must be achieved need not be consecutive. Under the IMO's proposed amendments a Facility will be required to meet a Required Level which mirrors the basis on which it was assigned CRC.

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Alternatively a Market Participant who does not consider that its Facility, that was assigned CRC under clause 4.11.2(b), will be able to met the 90 percent requirement prior to the end of the relevant Capacity Year, may provide to the IMO a report prepared by one of the IMO's accredited experts that specifies the Facility has been built to the specifications its certification was based on. In this case the security will also be returned to a Market Participant following the end of the Capacity Year.

The IMO proposes to define the term "Commercial Operation" in the Market Rules and the considerations that will taken into account in making its decision as to whether a Facility meets the criteria to be deemed in Commercial Operation. Further details will be specified in the Market Procedure for Reserve Capacity Security (see Appendix 1 of this proposal for further details). The IMO will also include details of its basis for determining whether an alternative value to the 5 percent POE should be accepted in the Market Procedure for Reserve Capacity Security.

In determining the Required Level to be met for Facilities assigned CRC under clause 4.11.2(b) (mainly Intermittent Generators), the views of the IMO's panel of independent experts were sought on:

- the appropriate number of Trading Intervals an Intermittent Facility should meet the Required Level for; and
- how to set the value for the Required Level for an Intermittent Facility.

Further details of this advice provided by Senergy Econnect and McLennan, Magasanik and Associates (MMA) are presented in Appendix 2 of the IMO's Rule Change Proposal. The IMO met with a number of key stakeholders while developing the proposed basis for calculating the Required Level for Intermittent Generators. The concerns expressed by these stakeholders have, where possible, been taken into account in developing this methodology.

Based on the advice received, using the 5 percent POE of the 3 year expected generation output will accurately represent the maximum output that a Facility should be able to achieve in at least two Trading Intervals over the year. For example, the use of the 5 percent POE percentile will not subject a wind farm to the risk that the wind does not blow (at least to the extent of achieving 90 percent of the Required Level).

In the case where an independent expert does not consider that the value corresponding to the 5 percent POE will be appropriate for a Facility, an alternative value may be proposed to the IMO for consideration when setting the Required Level (Clause 4.10.3(c)). The IMO will advise Market Participants of the Required Level that has been set for each of its Facilities certified under clause 4.11.2(b) following its determination (amended clause 4.9.9).

The introduction of a Required Level to be met by each type of generation will ensure equitable treatment of both conventional and non-conventional technologies. Clause 4.13.10 will be amended to refer to the 90 percent test having been achieved within the relevant Capacity Year, as previously contained in clause 4.13.11. New clause 4.13.13 will specify the requirements for the 100 percent test, as previously contained in clause 4.13.10. Both of these clauses will also be amended to specifically set out the requirement for a Facility to operate at its Required Level, as scaled to its level of Capacity Credits as assigned for the Capacity Year, for at least two Trading Intervals before its Reserve Capacity Security may be returned. The requirement to scale the Required Level to the level of Capacity Credits assigned for the Capacity Year will ensure that if the Capacity Credits for the Facility are reduced by the IMO (e.g. following a test) these will not be taken into account in determining whether Reserve Capacity Security can be returned.

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Reserve Capacity Testing and refunds

The concept of a Required Level will be also used for the purposes of Reserve Capacity Testing and Reserve Capacity refunds. Clause 4.26.1 is proposed to be amended by the IMO to link the IMO's decision that an Intermittent Facility is commissioned to when it has met 100 percent of its Required Level. This will be as scaled to the level of Capacity Credits assigned for the Capacity Year, in at least two Trading Intervals and is considered by the IMO to be in Commercial Operation. Further details of this proposed change and the introduction of partial commissioning of Intermittent Generators are discussed in issue 2.2.

The IMO proposes to scale the Required Level for the purposes of Reserve Capacity Testing to the level of Capacity Credits assigned to the Facility. By using the dynamic level of Capacity Credits, the level of Capacity Credits as amended by the IMO following any previous tests will be taken into account when undertaking any Reserve Capacity Testing. This proposal does not amend the requirement to meet the Required Level for at least one Trading Interval.

Issue 3: Timing for return of Reserve Capacity Security

The earliest opportunity for a Market Participant to prove it can met its capacity obligations and request the IMO to return the associated Reserve Capacity Security is once a RCOQ exceeding zero applies to the Facility (e.g. from 1 July in Year 3). Currently early commissioning of a Facility (which is allowed for under the Market Rules) does not entitle the Market Participant to have its Reserve Capacity Security returned earlier than the first date that the RCOQ's apply. The IMO considers that this treatment places an unnecessary financial burden on early commissioning Facilities.

Proposed Solution

As with the solution to issue 2.1, the IMO proposes that the Market Rules be amended (clause 4.13.10) to introduce the concept of a Required Level and allow for the return of the Reserve Capacity Security when a Facility can operate at this level and is considered by the IMO to be in Commercial Operation regardless of whether this occurs before or after an RCOQ greater than zero applies (clause 4.13.10 and new clause 4.13.13).

Issue 4: Treatment of upgraded Facilities

A Market Participant will be required to provide Reserve Capacity Security when it undertakes an upgrade of an existing facility (clause 4.13.1). However, for the purposes of determining whether to return any security, it is currently unclear how the IMO would assess that part of a Facility has performed at its Required Level (either 100 percent or 90 percent) where the upgrade is not independent of the rest of the plant.

It is particularly the application of the 90 percent requirement in clause 4.13.11 (to be amended to clause 4.13.10(c)) that presents difficulties with regard to upgraded Facilities. For example consider a Market Participant who upgrades its previous 100MW Facility by installing inlet cooling and increasing the output of the facility to 120MW. Currently it is unclear whether the Required Level of output for the return of any Reserve Capacity Security should be at:

- 118 MW (the existing 100MW Facility and 90 percent of upgrade);
- 108 MW (90 percent of the existing 100MW Facility and 90 percent of the upgrade); or

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108 MW (90 percent of the Facility as a whole).

Proposed Solution

As agreed at by the MAC, the IMO proposes to amend the Market Rules to clarify that, for the purposes of returning Reserve Capacity Security held for upgrades to Facilities, those Facilities as a whole must pass the relevant test in clause 4.13.13 (the 100 percent test) or clause 4.13.10 (the 90 percent test).

Issue 5: Treatment of Early Certification of Capacity

On 1 February 2010 the Rule Change Proposal "Early Certified Reserve Capacity" (ECRC) (RC_2009_10) was implemented. This provided an avenue to allow potential Reserve Capacity providers to certify capacity earlier than was previously possible under the Market Rules. The changes to the Market Rules were implemented via new clause 4.28C.

The IMO notes in its proposal that following the implementation of RC_2009_10 the following additional amendments to section 4.28C have been identified, including:

- Splitting clause 4.28C.8 (Reserve Capacity Security for ECRC) into two clauses. This will ensure consistency with the current drafting of clause 4.13.9 and uniformity in treatment between capacity that enters the market via the ECRC provisions and capacity that enters the market via the "normal" route. New clause 4.28C.8A will state that if a Market Participant does not comply with clause 4.28C.8 in full by the time specified in clause 4.28C.8, the ECRC assigned to that Facility will lapse.
- Clause 4.28C.12 deals with the transition of early Reserve Capacity Security provisions and Reserve Capacity Obligations to the starting point of the normal certification and security provisions. To ensure consistency in treatment of all capacity, ECRC should be subject to the same requirements as capacity that enters the system via the normal process from this point forward (i.e. the time and date specified in clause 4.1.14(a)).
- Amending the wording of clause 4.28C.12 to clarify that it is the IMO's
 responsibility to perform the calculation to determine whether the Reserve
 Capacity Security amount should be adjusted. The current wording only
 stipulates that a calculation must take place, without firmly identifying the party
 responsible for the calculation.
- If the calculation in 4.28C.12 results in a reduction in a Market Participant's required level of Reserve Capacity Security there is currently no explicit obligation for the IMO to return any excess Reserve Capacity Security within a stipulated timeframe. This part of the Market Rules should be consistent with the provisions that apply to capacity that is certified via the standard process. Therefore, a change is proposed to explicitly mandate that in the case when the calculation in 4.28C.12 results in a reduction in Reserve Capacity Security, any excess held by the IMO must be returned within 10 Business Days in accordance with clause 4.13.10A. This will ensure consistency with the provisions in clause 4.13.10A.
- There are a number of provisions in clause 4.13 that apply to "normal" capacity and the security for that capacity that were not mirrored in the drafting of clause 4.28C. To ensure consistency in the treatment of ECRC and "normal" capacity the following clauses from section 4.13 will also apply to ECRC:

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- Clause 4.13.3 expiration of security;
- Clause 4.13.4 non-valid or non-current security;
- Clause 4.13.5 acceptable security;
- Clause 4.13.6 any interest to accrue on cash provided as security;
- Clause 4.13.7 the acceptable credit criteria;
- Clause 4.13.8 establishing that the IMO must have a procedure in place and any special requirements for ECRC; and
- Clause 4.13.10 4.13.12 the criteria for the return of the security or forfeiting the security as the case may be.

Issue 6: Clarification of rules surrounding return of non-cash Reserve Capacity Security

Currently, clause 4.13.10A(c) stipulates that a Reserve Capacity Security in the form of a cash deposit must be returned within 10 Business Days. This is once the IMO has determined the Market Participant's facility has fulfilled the requirements of either the 100 percent test or the 90 percent test. The clause is silent as to the treatment of non-cash Reserve Capacity Security.

Proposed Solution

The IMO proposes to introduce new clause 4.13.14 to treat security provided as a non-cash deposit in the same manner as security provided as a cash deposit. The IMO notes that the current requirements of clause 4.13.10A around a Market Participant requesting the release of the relevant security and the IMO's obligations for its return have been incorporated into the new proposed clause 4.13.14.

Issue 7: Typographical amendments

A number of minor changes to the wording of the Reserve Capacity Security section of the Market Rules (section 4.13) are also proposed by the IMO in its proposal along with amendments to the structure of these clauses to follow a more logical sequence, particularly around the return of security.

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APPENDIX 2: PROPOSED AMENDING RULES IN THE RULE CHANGE PROPOSAL

The IMO proposed the following amendments to the Market Rules in its Rule Change Proposal (deleted text, added text):

The proposed amendments to clause 2.8.13 will remove clause 4.1.27 as being a Protected Provision and therefore requiring the Ministers approval for any changes to be made. The proposed removal of this clause is consistent with the IMO's intent to remove clause 4.1.27, as presented below.

The proposed amendments also account for the restructuring of section 4.13.10. In particular the details of the 90 percent test will be included in clause 4.13.10. The IMO considers that the requirements around the 90 percent test should remain a Protected Provision due to the IMO's potential conflict of interest.

The IMO proposes to remove clause 4.13.11B as this is proposed to become blank. The requirements currently specified under this clause around the satisfaction of payment obligations will be incorporated under amended clause 4.13.11A.

- 2.8.13. The following clauses are Protected Provisions:
 - (a) clauses 1.1 to 1.3 and 1.5 to 1.9;
 - (b) clauses 2.1 to 2.24, 2.28, 2.31.1, 2.31.3, 2.31.5(a), 2.31.6, 2.34.1 and 2.36.1;
 - (c) clauses 3.15, 3.18.18 and 3.18.19;
 - (d) clauses 4.1.4 to 4.1.12, 4.1.15 to 4.1.19, 4.1.21, 4.1.22, 4.1.24, 4.1.27, 4.5.10, 4.5.11, 4.5.15 to 4.5.20, 4.13.10, 4.13.10A, <u>4.13.10B,</u> 4.13.11, 4.13.11A, 4.13.11B, 4.16, 4.24.1, 4.24.2 and 4.24.12;
 - (e) clauses 5.2.3, 5.2.7 and 5.5.1;
 - (f) clauses 9.16.3, 9.16.4 and 9.20.2; and
 - (g) clauses 10.1.1, 10.1.2, 10.2.1, 10.3 and 10.4.

The proposed amendments to clause 4.1.21 will remove the substantive details around Reserve Capacity Security obligations from this clause. The amended clause 4.1.21 will provide details around the timelines for the IMO to calculate the amount of Reserve Capacity Security to be held following a request by a Market Participant for a recalculation under new clause 4.13.2A.

The IMO notes that the Pre Rule Change Discussion Paper: Certification of Reserve Capacity (PRC_2010_14) currently proposes an amendment to the timeframes around Reserve Capacity Security from 5pm on the last Business Day on or before 23 December to 10 September of Year 1. The IMO notes that any final drafting under this Rule Change Proposal will take into account the outcomes of the consultation on PRC 2010 14.

4.1.21. Not later than Following a request from a Market Participant under clause
4.13.2A the IMO must recalculate the amount of Reserve Capacity Security
required to be held by the IMO for a Facility in accordance with clause
4.13.2(b) by 5 PM of the last Business Day falling on or before 23 December

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- of Year 1 of a Reserve Capacity Cycle. The IMO must, in accordance with clause 4.13.10:
- (a) notify a Market Participant that has provided a Reserve Capacity Security for a Facility that the Reserve Capacity Security is no longer required; and
- (b) return any Reserve Capacity Security which was provided in the form of a cash deposit,

in the event that the Market Participant does not hold Capacity Credits for the Facility to which the Reserve Capacity Security relates in the relevant Reserve Capacity Cycle.

The proposed amendment to clause 4.1.27 will remove this clause as it duplicates the requirements specified in clause 4.13.10A. The IMO notes that section 4.1 provides timelines for Reserve Capacity Cycle, where as clause 4.1.27 provides details of the requirement for Reserve Capacity Security to be provided by a Market Participant which is replicated in section 4.13.

4.1.27. The IMO must in accordance with clause 4.13.10 notify a Market Participant that has provided a Reserve Capacity Security for a Facility that the Reserve Capacity Security is no longer required, and return any_cash deposit within five_Business Days of the first day that the Facility to which the Reserve Capacity Security relates is considered by the IMO to be in commercial operation and capable of meeting its Reserve Capacity Obligation. [Blank]

The proposed amendment to clause 4.9.9 will ensure that Market Participants with Facilities certified under clause 4.11.2(b) are advised of whether the IMO accepted or rejected the proposed alternative value to apply for the purposes of the Required Level for each of its Facilities.

- 4.9.9. If the IMO assigns Certified Reserve Capacity to a Facility in respect of a Reserve Capacity Cycle, the IMO must advise the applicant:
 - (a) of the amount of Certified Reserve Capacity assigned to the Facility in respect of the Reserve Capacity Cycle, as determined in accordance with clause 4.11 or clause 4.9.5(c) (as applicable);
 - (b) of the initial Reserve Capacity Obligations Quantity set for the Facility, as determined in accordance with clause 4.12 or clause 4.9.5(c) (as applicable);
 - (c) of any Reserve Capacity Security required as a condition of a Market Participant holding the Certified Reserve Capacity, as determined in accordance with clause 4.13.42 or clause 4.9.5(c) (as applicable);
 - (d) in the case of Conditional Certified Reserve Capacity, that the certification is subject to the conditions in clause 4.9.5(a) and (b); and
 - (e) the calculations upon which the IMO's determinations are based-; and
 - (f) whether the IMO accepted or rejected a proposed alternative value to be used in the calculation of the Required Level for a Facility which applied to be certified under clause 4.11.2(b) (if applicable).

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The proposed amendment to clause 4.10.3 will require the report provided by an independent expert for the purposes of CRC to include details of the value of the 5 percent POE of the 3-year expected generation output of the Facility. An alternative value may also be proposed to the IMO for consideration in the case where the independent expert does not consider the value corresponding with the 5 percent POE is appropriate. In proposing an alternative value the independent expert must provide reasons why the value is appropriate for the IMO's consideration under clause 4.13.10B.

The IMO notes that further amendments to the structure of this clause are being considered under the Pre Rule Change Discussion Paper: Certified of Reserve Capacity (PRC_2010_14).

- 4.10.3. An application for certification of Reserve Capacity that includes a nomination to use the methodology described in clause 4.11.2(b) for an Intermittent Generator Facility that is yet to enter service must include a report prepared by an expert accredited by the IMO, in accordance with the Reserve Capacity Procedure,-where this report is to be used to assign the Certified Reserve Capacity for that Facility in accordance with clause 4.11.1(e) and to determine the Required Level for that Facility in accordance with clause 4.11.3B. The report must include:
 - (a) an estimate of what the expert considers the Certified Reserve

 Capacity of the Facility would have been for the purposes of
 clause 4.11.2(b) had the history of performance been available;
 - (b) a value, expressed in MW as a sent out value, which equals the 5 percent probability of exceedance of expected generation output for the Facility for all the Trading Intervals that occurred within the last three years up to, and including, the last Hot Season, where this value is to be used in the calculation of the Required Level in clause 4.11.3B;
 - (c) a proposed alternative value to that specified in clause 4.10.3(b), expressed in MW as a sent out value, to apply for the purposes of the Required Level, if applicable; and
 - (d) the reasons for any proposed alternative value provided under clause 4.10.3(c).

The proposed amendment to clause 4.11.1 (e) will remove the specification of what the estimate from the expert accredited by the IMO will be based on. These details will be provided in the proposed amended clause 4.10.3. The IMO considers that this is a more appropriate place to specify the requirements for the report provided by expert on the Facility nominating to use the methodology under clause 4.11.2(b).

4.11.1. Subject to clause 4.11.7, the IMO must apply the following principles in assigning a quantity of Certified Reserve Capacity to a Facility for the Reserve Capacity Cycle to which the application relates:

. . .

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- (e) the IMO must assign Certified Reserve Capacity to an Intermittent Generator that is yet to commence operation enter service based on:
 - i.—the Certified Reserve Capacity estimate contained in any report provided by the applicant in accordance with clause 4.10.3, where:
 - the report was produced by an expert accredited by the IMO in accordance with clause 4.11.6.; and
 - the estimate reflects what the expert considers the Certified Reserve Capacity of the Facility would have been for the purposes of clause 4.11.2(b) had a history of performance been available.

<u>...</u>

The proposed new clause will specify that the IMO will accept or reject an alternative value for a Facility certified under clause 4.11.2(b) to be used in determining its Required Level.

- 4.11.2A. Where an applicant nominates under clause 4.10.3(c) to have the IMO use an alternative value to that specified in clause 4.10.3(b) the IMO:
 - (a) may reject the proposed alternative value if the IMO does not consider

 the reasons provided in accordance with clause 4.10.3(d) provide
 sufficient evidence that an alternative value is required;
 - (b) if it has not rejected the proposed alternative value under paragraph

 (a), the IMO must use the alternate value in the calculation of the

 Required Level under clause 4.11.3B.

The proposed new clause 4.11.3B outlines how the IMO will calculate the Required Level for each Facility. The Required Level will form the basis for the return of Reserve Capacity Security, Reserve Capacity Testing and determination of when an Intermittent Facility will be required to make Reserve Capacity refunds. The proposed new clause will also clarify that upgrades for existing Facilities will be tested as a whole for the purposes of the return of Reserve Capacity Security.

- 4.11.3B The Required Level (which for an upgraded Facility is calculated for the Facility as a whole):
 - (a) For Facilities assigned Certified Reserve Capacity under clause

 4.11.1(a), is calculated using the Metered Schedule and
 temperature dependence information submitted to the IMO under
 clause 4.10.1(e)i. and converted to a sent out basis to 41°C;
 - (b) For Facilities assigned Certified Reserve Capacity under clause 4.11.2(b), either:
 - (i) the value, expressed in MW as a sent out value, that equals the 5 percent probability of exceedance of expected

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- generation output for the Facility, submitted to the IMO in the report described in clause 4.10.3(b);or
- (ii) the proposed alternative value, expressed in MW as a sent out value, provided in the report described in clause 4.10.3(c), where the IMO has accepted the proposed alternative value under clause 4.11.2A; and
- (c) For Curtailable Loads and Demand Side Programmes, is calculated using the Facility's Relevant Demand minus the Capacity Credits assigned to that Facility.

The proposed amendments to clause 4.13.1, in conjunction with the proposed new clauses 4.13.1A and 4.13.1B, will clarify that Reserve Capacity Security will only be required for the first Reserve Capacity Cycle.

4.13.1. Where the IMO assigns Certified Reserve Capacity to a Facility (which for the purposes of this clause 4.13 includes part of a Facility and a Demand Side Programme) that is yet to be commissioned yet to enter service, the relevant Market Participant must ensure that the IMO holds the benefit of a Reserve Capacity Security in an amount not less than the amount determined under clause 4.13.2(a) by the date and time specified in clause 4.1.13.for the Reserve Capacity Cycle to which the Certified Reserve Capacity relates.

The proposed new clause 4.13.1A clarifies that an existing Facility undergoing significant maintenance or an upgrade must provide security for the part of the Facility either being upgraded or under going significant maintenance. This is irrespective of whether the Facility has previously provided security for the Facility.

4.13.1A. For the purposes of this clause 4.13, where an existing Facility is undergoing significant maintenance or being upgraded the requirement to provide Reserve Capacity Security only applies to the part of the Facility either undergoing significant maintenance or being upgraded.

The proposed new clause 4.13.1B clarifies that Reserve Capacity Security will only be required for the first Reserve Capacity Cycle that a Facility will receive Capacity Credits for unless the facility is upgraded.

4.13.1B. The obligation under clause 4.13.1 to provide Reserve Capacity Security
does not apply where the Market Participant has provided Reserve Capacity
Security in relation to the same Facility for a previous Reserve Capacity
Cycle, unless the Facility is an existing Facility undergoing significant
maintenance or being upgraded.

The proposed new clause 4.13.1C will clarify that an upgrade to an existing facility constitutes a Facility for the purposes of clause 4.13.

4.13.1C. For the purposes of this clause 4.13, a Facility includes part of a Facility, any upgrade or significant maintenance to an existing Facility, and a Demand Side Programme, unless otherwise stated.

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The proposed amendment to clause 4.13.2 clarifies that the amount of Reserve Capacity Security to be held by a Market Participant will be calculated by the IMO following a request by a Market Participant after the outcomes of the Auction and Bilateral Trade Declaration process. The amended value under clause 4.13.2(b) will be compared to that originally determined under clause 4.13.2(a) to determine whether any excess security needs to be returned to a Market Participant under clause 4.13.2B, when requested by a Market Participant. This will take into account the situation where a Facility offers Certified Reserve Capacity into both the Auction and Bilateral Trade Declaration but the Facility is only assigned Capacity Credits through one of these mechanisms (i.e. the Market Participants offer does not clear in the Auction).

- 4.13.2. The amount fFor the purposes of clause 4.13.1. the amount of Reserve Capacity Security is:
 - (a) at the time and date referred to in clause 4.1.13, twenty-five percent of the Maximum Reserve Capacity Price included in the most recently issued Request for Expressions of Interest at the time the Certified Reserve Capacity is assigned, expressed in \$/MW per year, multiplied by an amount equal to:
 - (ai.) the Certified Reserve Capacity assigned to the Facility; less
 - (bii.) the total of any Certified Reserve Capacity amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii).; and
 - (b) at the time and date referred to in clause 4.1.21, twenty-five percent of the Maximum Reserve Capacity Price included in the most recently issued Request for Expressions of Interest, expressed in \$/MW per year, multiplied by an amount equal to the total number of Capacity Credits provided by the Facility under clause 4.20.1(a).

The proposed new clause 4.13.2A will require a Market Participant who considers they hold more Reserve Capacity Security than needed following the outcomes of the Auction and Bilateral Trade Declaration process to apply to the IMO for a recalculation of the amount of security.

4.13.2A. A Market Participant may apply to the IMO for a recalculation of the amount of Reserve Capacity Security required to be held for a Facility using the formula in clause 4.13.2(b) after the time and date referred to in clause 4.1.21.

The proposed new clause 4.13.2B will clarify that following a request by a Market Participant under clause 4.13.2A if the IMO's recalculation indicates that an excess amount of Reserve Capacity Security is held for a Facility, then the IMO will return any excess Reserve Capacity Security to the Market Participant.

Note that a Facility which provides no Capacity Credits at the time and date specified in clause 4.1.21 will be able to apply to a recalculation of its required amount of Reserve Capacity Security in accordance with this clause.

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- 4.13.2B Within 10 Business Days receipt of a request from a Market Participant under clause 4.13.2A the IMO must recalculate the amount of Reserve Capacity

 Security required to be held by a Facility using the formula in clause

 4.13.2(b).If the amount recalculated by the IMO under clause 4.13.2 (b) is less than that originally calculated under clause 4.13.2 (a) then the IMO must:
 - (a) notify a Market Participant that has provided a Reserve Capacity
 Security for a Facility of the result of the calculation; and
 - (b) once the Market Participant has provided any replacement Reserve

 Capacity Security in accordance with clause 4.13.3A, return any
 excess Reserve Capacity Security.

The proposed amendment to clause 4.13.3 clarifies that replacement security will only be required if the obligation to provide security extends beyond the period of validity of the current security.

The IMO will include details around the requirement for the replacement Reserve Capacity Security to be in place at least 10 Business Days before the existing Reserve Capacity Security is due to terminate in the Market Procedure for Reserve Capacity Security.

- 4.13.3 Where a Market Participant's existing Reserve Capacity Security is due to expire or terminate and after that termination the Market Participant will continue to have an obligation to ensure the IMO holds the benefit of a Reserve Capacity Security under clause 4.13.1, then that Market Participant must ensure that the IMO holds the benefit of a replacement Reserve Capacity Security in an amount not less than the level required under clause 4.13.2 that will become effective at the expiry of the existing Reserve Capacity Security. The replacement Reserve Capacity Security must:
 - (a) be in an amount not less than the level required under clause 4.13.2; and
 - (b) become effective before the termination of the existing Reserve Capacity Security.

The proposed new clause 4.13.3A clarifies that where following a request by a Market Participant the IMO determines that excess security is currently held for a facility, the Market Participant must ensure that the IMO hold the benefit of the necessary amount of replacement security.

The proposed new clause applies to security which would otherwise remain current and valid, if not held in excess by the IMO.

- 4.13.3A. Where under clause 4.13.2B the IMO determines that excess Reserve Capacity

 Security is currently held for a Market Participant, then that Market Participant

 must ensure that the IMO holds the benefit of a replacement Reserve Capacity

 Security. The replacement Reserve Capacity Security must:
 - (a) be in an amount not less than the level required under clause 4.13.2(b); and
 - (b) become effective before the IMO returns any excess Reserve Capacity Security.

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The proposed amendments to clause 4.13.5 will update the reference to clause 4.13.11, the requirement for the Market Participant to payment compensation to the market if it fails to operate its facility to the 90 percent test level.

- 4.13.5. The Reserve Capacity Security for a Market Participant must be:
 - (a) an obligation in writing that:
 - is from a Reserve Capacity Security provider, who must be an entity which meets the Acceptable Credit Criteria and which itself is not a Market Participant;
 - ii. is a guarantee or bank undertaking in a form prescribed by the IMO:
 - iii. is duly executed by the Reserve Capacity Security provider and delivered unconditionally to the IMO;
 - iv. constitutes valid and binding unsubordinated obligations to the Reserve Capacity Security provider to pay to the IMO amounts in accordance with its terms which relate to the obligations of the relevant Market Participant under the Market Rules to pay compensation under clause 4.13.11A; and
 - v. permits drawings or claims by the IMO to a stated amount; or
 - (b) if the IMO in its discretion considers it an acceptable alternative in the circumstances to the obligation under clause 4.13.5(a), a cash deposit ("Security Deposit") made with the IMO (on terms acceptable to the IMO in its discretion) by or on behalf of the Market Participant.

The proposed amendments to clause 4.13.8 will update the reference to clause 4.13.11A. The proposed amendments will also increase the scope of the heads of power for the Market Procedure for Reserve Capacity Security to cover the entire process associated with the determination, provision and return of security. The IMO considers that this will allow for more operational details of the process such as the return of security to be specified in the Market Procedure thereby further enhancing the transparency of the process.

The IMO notes that any amendments to the Reserve Capacity Security Market Procedure will be developed in conjunction with the IMO Procedure Change and Development Working Group during the public consultation period for this Rule Change Proposal.

- 4.13.8. The IMO must develop a Market Procedure dealing with:
 - (a) determining Reserve Capacity Security;
 - (b) assessing persons against the Acceptable Credit Criteria;
 - (c) Reserve Capacity Security arrangements, including:

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- i. the form of acceptable guarantees and bank undertakings;
- ii. where and how it will hold cash deposits and how the costs and fees of holding cash deposits will be met;
- iii. the application of monies drawn from Reserve Capacity
 Security in respect of amounts payable by the relevant Market
 Participant to the IMO under clause 4.13.11AB;
- (d) other matters relating to clauses 4.13.3 to 4.13.7, and Market Participants and the IMO must comply with that Market Procedure.

The IMO proposed amended clause 4.13.10 will allow a Market Participant to receive its security back after the end of the relevant Capacity Year, provided that the Facility has operated the whole of the Facility (including for an upgrade of an existing Facility) in at least two Trading Intervals to at least 90 percent of the Required Level during the relevant Capacity Year and is considered by the IMO to be in Commercial Operation. This was previously covered under clause 4.13.11.

The IMO proposes to scale the Required Level for the purposes of Reserve Capacity Security under to the level of Capacity Credits originally assigned to the Facility. This will ensure that the Facilities obligations are measured against the Capacity Credits assigned to it for the Capacity Year. This will ensure that if the Capacity Credits for the Facility are reduced by the IMO (e.g. following a test) these will not be taken into account in determining whether Reserve Capacity Security can be returned.

Alternatively, a Market Participant who does not consider its Facility certified under clause 4.11.2(b) will be able to meet the 90 percent requirement prior to the end of the relevant Capacity Year, may provide a report prepared by one of the IMO's accredited experts that specifies the Facility has been built to the specifications its certification was based on. In this case the security will also be returned to a Market Participant following the end of the Capacity Year.

The IMO notes that the return of security where a Facility has met the 90 percent requirement will be amended from the current 20 Business Day timeframe to 10 Business Days after the end of the relevant Capacity Year. This will ensure consistency with the requirements of clause 4.13.14.

- 4.13.10. A Market Participant is no longer required to ensure that the IMO holds the benefit of a Reserve Capacity Security after:
 - (a) in the case of a Reserve Capacity Security relating to a Facility that provides no Capacity Credits (as notified by the relevant Market Participant under clause 4.20) the time and date specified in clause 4.1.21;
 - (b) in the case of a new Facility that satisfies 100% of its Reserve
 Capacity Obligation Quantity for the Facility (as determined under
 clause 4.12.4 and before any adjustment made under clause 4.12.6) 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

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in accordance with clause 4.1.30 in respect of the Reserve Capacity Cycle, the later of:

- i. the date from which Reserve Capacity Obligations apply in accordance with clause 4.1.26 in respect of the Reserve Capacity Cycle;
- ii. the first day on which a new Facility first satisfies its Reserve

 Capacity Obligations under clause 4.12.1(a) or (b) (as

 applicable) in respect of the Reserve Capacity Cycle.
- (a) in the case of a new Facility to which none of (a), (b), or clause 4.13.11A relate, the day from which Reserve Capacity Obligations cease to apply in accordance with clause 4.1.30 in respect of the Reserve Capacity Cycle.

If a Market Participant that provides Reserve Capacity Security in respect of a Facility either:

- (a) operates the Facility at a level which is at least 90 percent of its

 Required Level, scaled to the level of Capacity Credits specified in

 clause 4.20.1(a), in at least two Trading Intervals before the end of
 the relevant Capacity Year;
- (b) provides the IMO with a report under clause 4.13.10C, which specifies that at least 90 percent of the Facility has been built; and
- (c) is considered by the IMO to be in Commercial Operation,

then the IMO will return the Reserve Capacity Security to the Market Participant within 10 Business Days after the end of the relevant Capacity Year.

The proposed amended clause 4.13.10A will specify the requirement for a Market Participant to request the IMO to determine whether it is in Commercial Operation for the purposes of the Reserve Capacity Mechanism.

The current specifications relating to the return of security under clause 4.13.10A are proposed to be removed and will be incorporated into new clause 4.13.14. The IMO considers that this will ensure that the integrity of the Market Rules is maintained.

- 4.13.10A. Where a Market Participant considers that clause 4.13.10 applies to it in relation to a Facility, the Market Participant may request the IMO to release the relevant Reserve Capacity Security. Within 10 Business Days after receiving such a request the IMO must:
 - (a) determine whether the need to maintain the Reserve Capacity Security has ceased;
 - (b) notify the Market Participant of its determination; and
 - (c) if the Reserve Capacity Security is a cash deposit that is no longer required to be held, refund the cash deposit (plus interest earned).

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A Market Participant may request the IMO to determine that a Facility is in Commercial Operation for the purposes of the Chapter 4 of these Market Rules.

The proposed new clause 4.13.10B will provide details of how the IMO will determine that a facility is in Commercial Operation following a request from a Market Participant. The IMO notes that new Facilities that commission under a Resource Plan will be able to provide the IMO will any supporting documentation for consideration.

Further details of the information required to be provided by Market Participants to allow the IMO to make its determination will be specified in the Reserve Capacity Market Procedure.

- 4.13.10B. On receipt of a request made under clause 4.13.10A the IMO must determine, within 20 Business Days, whether the Facility is in Commercial Operation. In making each such determination the IMO must, if applicable, have regard to:
 - (a) whether the Facility has completed an approved Commissioning

 Test under clause 3.21A and subsequently produced energy for at least two Trading Intervals; and
 - (b) any formal advice received from the Market Participant that it has completed an approved Commissioning Test under clause 3.21A and is commercially operational.

The IMO may also have regard to any additional information the IMO considers relevant.

The proposed new clause 4.13.10C will allow a Market Participant to provide the IMO with a report from an independent expert outlining that the Facility has been installed as was originally proposed to be built during certification (as used in the report provided under clause 4.10.3). Alternatively the report can specify that a equivalent percentage of the Facility has been installed. Note that a Market Participant may provide multiply updates of the report as necessary This report will be taken into account by the IMO when returning a Facility's security under clause 4.13.10 and in determining whether partial refunds should apply for the facility (refer to the Rule Change Proposal: Partial Commissioning for Intermittent Generators (RC 2010 22) for further details).

4.13.10C. For a Facility certified under clause 4.11.2(b), a Market Participant may provide the IMO with a report prepared by an independent expert accredited by the IMO in accordance with the Reserve Capacity Procedure before the end of the relevant Capacity Year which specifies the equivalent percentage of the Facility described in the report provided under clause 4.10.3 that has been built.

The proposed amendment to clause 4.13.11 will remove the current requirements relating to the 90 percent test for the return of security which will be included in the amended clause 4.13.10. The amended clause 4.13.11 will clarify that a Market Participant who fails to meet the 90 percent test level will be required to pay within 20 Business Days of the end of the relevant Capacity Year the IMO the amount of its

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security as compensation to the market. This requirement is currently provided under clause 4.13.11A. The IMO does not propose any material amendments to this requirement.

The IMO considers that the restructuring of these clauses will maintain the integrity of the Market Rules.

- 4.13.11. If a Market Participant that provides a Reserve Capacity Security in respect of a Facility under this clause 4.13 operates the Facility:
 - (a) at a level (expressed in MWh) that is at least 90% of one-half of the Reserve Capacity Obligation Quantity for the Facility (as determined under clause 4.12.4 and before any adjustment made under clause 4.12.6, expressed in MW) in at least one Trading Interval when the Reserve Capacity Obligation Quantity exceeds 0 MW; and
 - (b) the Trading Interval falls 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, unless the IMO has already returned the Reserve Capacity Security to the Market Participant under clause 4.13.10A, the IMO will return the Reserve Capacity Security to the Market Participant within 20 Business Days after the end of the relevant Capacity Year.

If a Market Participant fails to operate a Facility in accordance with clause 4.13.10 then the Market Participant must pay to the IMO, as compensation to the market, an amount equal to the Reserve Capacity Security amount for that Facility within 20 Business Days after the end of the relevant Capacity Year.

The proposed amendment to clause 4.13.11A will remove the current reference to the requirement to paid compensation to the market if a Market Participant fails to operate a facility to at least the 90 percent test level (this is covered under amended clause 4.13.11). The amended clause will specify how the payment obligations under clause 4.13.11 will apply (these are currently provided under clause 4.13.11B). The IMO does not propose any material amendments to this requirement.

The IMO considers that the restructuring of these clauses will maintain the integrity of the Market Rules.

4.13.11A. If a Market Participant fails to operate a Facility in accordance with clause 4.13.11, then the Market Participant must pay to the IMO, as compensation to the market, an amount equal to the Reserve Capacity Security amount for that Facility. The payment obligation under clause 4.13.11 may be satisfied by the IMO drawing upon the Reserve Capacity Security for the Facility, and applying the amount claimed (after meeting the IMO's costs associated with doing so) so as to:

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- (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.

The proposed amendment to clause 4.13.11B will remove the current details specified in this clause. These will be provided in the proposed amended clause 4.13.11A.

- 4.13.11B. The payment obligation under clause 4.13.11A may be satisfied by the IMO drawing upon the Reserve Capacity Security for the Facility, 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. [Blank]

The proposed amendment to clause 4.13.12 will update the reference from clause 4.13.11 to 4.13. The IMO notes that there is no need to update this clause to refer to a non-cash deposit. This is because in the case where a Market Participant fails to meet 90 percent of its Required Level and currently holds a non-cash deposit, the non-cash deposit (e.g. bank undertaking) will still continue to operate according to its terms.

4.13.12. If the Reserve Capacity Security drawn upon under clause 4.13.11_is a cash deposit, then the Market Participant forfeits the amount of the cash deposit.

The proposed new clause 4.13.13 will allow for the return of security once the Required Level of output has been met regardless of whether this occurs before or after an RCOQ of greater than zero applies. This will allow for Facilities which have commissioned early to receive their security back on the day where they meet the IMO's Required Level for two Trading Intervals and are considered by the IMO to be in Commercial Operation. For example if a Facility is commissioned and meets its Required Level before 30 November for Reserve Capacity Cycles up to an including 2009 or 1 October for the 2010 Reserve Capacity Cycle and are determined by the IMO to be in Commercial Operation onwards they will be entitled to have their security returned.

The IMO proposes to scale the Required Level for the purposes of Reserve Capacity Security under sub-clause (b) to the level of Capacity Credits originally assigned to the Facility. This will ensure that the Facilities obligations are measured against the Capacity Credits assigned to it for the Capacity Year. This will ensure that if the Capacity Credits for the Facility are reduced by the IMO (e.g. following a test) these will not be taken into account in determining whether Reserve Capacity Security can be returned.

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- 4.13.13. A Market Participant may apply to the IMO for the release of any Reserve

 Capacity Security held, earlier than the end of the relevant Capacity Year, if
 the Reserve Capacity Security relates to a Facility that:
 - (a) has operated at 100 percent of its Required Level, scaled to the level of Capacity Credits specified in clause 4.20.1(a), in at least two Trading Intervals prior to the end of the relevant Capacity Year; and
 - (b) is considered by the IMO to be in Commercial Operation.

The proposed new clause 4.13.14 clarifies that non-cash Reserve Capacity Security will be treated in the same manner as Reserve Capacity Security provided via a cash deposit. The IMO notes that this new clause will provide the same details as currently contained under clause 4.13.10A, albeit with a typographical change from "refund the cash deposit" to "return the cash deposit".

The IMO also proposes to specify the process for returning Reserve Capacity Security following the outcomes of the 100 percent requirement (clause 4.13.13) and for early certified facilities the IMO's recalculation under clause 4.28C.12 (b).

- 4.13.14. Where the IMO receives an application made under clause 4.13.13 or clause 4.28C.12 it must, within 10 Business Days:
 - (a) determine whether the need to maintain the Reserve Capacity
 Security has ceased;
 - (b) notify the Market Participant of its determination;
 - (c) if the Reserve Capacity Security is a cash deposit that is no longer required to be held, return the cash deposit (plus interest earned); and
 - (d) if the Reserve Capacity Security is a non-cash deposit and is no longer required to be held, use reasonable endeavours to relinquish any rights to draw on the Reserve Capacity Security.

The proposed amendment to clause 4.20.1 will clarify that when notifying the IMO of the total number of Capacity Credits provided by all the Market Participant's Facilities Capacity Credits assigned by the IMO under clause 4.28C.10 will also be included. This will ensure that when the IMO scales the Required Level to the level of Capacity Credits assigned to a Facility that ECRC will also be included.

- 4.20.1. Each Market Participant must, by the date and time specified in clause 4.1.20, notify the IMO of:
 - (a) the total number of Capacity Credits each Facility will provide during the Capacity Year commencing on 1 October of Year 3 of the Reserve Capacity Cycle; and
 - (b) the number of those Capacity Credits the Market Participant anticipates the IMO has acquired as a result of the Reserve Capacity Auction subject to paragraph (c);

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- (c) the total number of Capacity Credits provided by all the Market Participant's Facilities must be consistent with the sum of:
 - the quantity of Certified Reserve Capacity held by the Market Participant which the IMO has notified the Market Participant it can trade bilaterally under clause 4.14.9;
 - ii. the quantity of Certified Reserve Capacity held by the Market Participant scheduled by the IMO in the Reserve Capacity Auction, as published in accordance with clause 4.19.5(b);
 - iii. the quantity of Certified Reserve Capacity held by the Market
 Participant which remains the subject of pre-existing Long Term
 Special Price Arrangements and which the Market Participant
 does not intend to trade bilaterally; and
 - iv. the quantity of Certified Reserve Capacity held by the Market Participant for Facilities subject to Network Control Service Contracts-; and
 - v. the quantity of Capacity Credits held by the Market Participant which was assigned under clause 4.28C.10.

. . .

The proposed amendment to clause 4.25.1 is to refer to the Required Level established under clause 4.10.13B in place of the maximum Reserve Capacity Obligation Quantity.

The IMO proposes to scale the Required Level to the level of Capacity Credits. This will ensure that for the purposes of Reserve Capacity Testing the level of Capacity Credits as amended by the IMO following any previous tests will be taken into account.

- 4.25.1. The IMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing Capacity Credits:
 - (a) in the case of a generation system can, during the term the Reserve Capacity Obligations apply, operate at its maximum Reserve Capacity Obligation Quantity Required Level, scaled to the level of Capacity Credits currently held, at least once during each of the following periods and such operation must be achieved on each type of fuel available to that Facility notified under clause 4.10.1(e)(v):
 - i. 1 October to 31 March; and
 - ii. 1 April to 30 September; and
 - (b) can, during the six months prior to the Reserve Capacity Obligations for the first Reserve Capacity Cycle taking effect, operate at its maximum Reserve Capacity Obligation Quantity at least once and, in the case of a generating system, such operation on each type of fuel available to that Facility notified under clause 4.10.1(e)(v). This paragraph (b) does not apply to facilities that are not commissioned prior to their Reserve Capacity Obligations coming into force.

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(c) in the case of a Curtailable Load can, during the term the Reserve Capacity Obligations apply, operate at its maximum Reserve Capacity Obligation Quantity at least once during the period between 1 October to 31 March.

The proposed amendment to clause 4.25.2 is to refer to the Required Level established under clause 4.10.13B. This clause provides clarification around how the IMO determines the Required Level previously referenced in this clause. This is currently only contained in the Market Procedure for Reserve Capacity Testing.

- 4.25.2. The verification referred to in clause 4.25.1 can be achieved:
 - by the IMO observing the Facility operate at the <u>FRequired ILevel</u>, scaled to the level of Capacity Credits currently held, at least once as part of normal market operations in Metered Schedules specific to the Facility; or
 - (b) by the IMO:
 - i. in the case of a generation system, requiring System

 Management in accordance with clause 4.25.7 to test the
 Facility's ability to operate at the required requir
 - ii. in the case of Interruptible Loads, Curtailable Loads and Dispatchable Loads, requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to reduce demand to the #Required #Level, scaled to the level of Capacity Credits currently held, for not less than one Trading Interval and the Facility successfully passing that test.

The proposed amendment to clause 4.25A.3 is to refer to the Required Level for the purposes of determining whether a Verification Test has been successful.

4.25A.3. The Verification Test is failed if a reduction in demand equal to at least 10% percent of the Required Level scaled to the level of Capacity Credits currently held Capacity Credits-is not identified from the Curtailable Load meter data.

The proposed amendment to clause 4.25.4B is to reference the requirements of the IMO following a request from a Market Participant to release its security. These requirements are proposed to be removed from clause 4.13.10A and included in new clause 4.13.14.

- 4.25.4B. In order for an application under clause 4.25.4A to be assessed by the IMO, it must:
 - (a) be in writing;
 - (b) relate to a Facility for which the IMO has notified the Market Participant, in accordance with clause 4.13.10A14 of its determination

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- that the need to maintain the Reserve Capacity Security for that Facility has ceased:
- (c) detail the reasons for the reduction in the number of Capacity Credits; and
- (d) indicate whether the application relates only to the current Reserve Capacity Year or includes subsequent Capacity Years.

The proposed amendment to clause 4.26.1 is to refer to the Required Level established under clause 4.10.13B or alternatively the receipt of a report by an independent expert that the facility has been built in accordance with the information provided to the IMO during certification, in place of Intermittent Generators being deemed commissioned by the IMO. The IMO proposes to insert the same scaling factor to Capacity Credits assigned at the beginning of the Capacity Year as used for the purposes of the return of Reserve Capacity Security.

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

REFUND TABLE

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

Where:

For an Intermittent Facility that has:

(a) has operated at 100 percent of its Required Level, scaled to the level of Capacity Credits specified in clause 4.20.1(a), in at least two Trading Intervals; or

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- (b) has provided the IMO with a report under clause 4.13.10C, where this report specifies that 100 percent of the Facility certified under clause 4.11.2(b) has been built; and
- (c) is following a request to the IMO by a Market Participant, considered by the IMO to be in Commercial Operation been commissioned:

Y equals 0

For all other facilities, including Intermittent Facilities that <u>following a request to the IMO by a Market Participant are not considered by the IMO to be in Commercial Operation</u> have not been commissioned: Y is determined by dividing the Monthly Reserve Capacity Price (calculated in accordance with clause 4.29.1) by the number of Trading Intervals in the relevant month.

For the purposes of this clause, an Intermittent Facility will be deemed to be commissioned when the IMO determines that the facility is fully operational. In this case the IMO must apply the principle that the Facility is fully operating in accordance with the basis on which the Facility applied for, and was granted, Certified Reserve Capacity, in accordance with clause 4.10 and 4.11 respectively and was subsequently assigned Capacity Credits in accordance with clause 4.14.

The proposed amendment to clause 4.26.1A will update the reference in subclause 4.26.1A(a)(iv) to not have been deemed in Commercial Operation rather than commissioned. This is consistent with the proposed amendments to clause 4.1.21.

- 4.26.1A. The IMO must calculate the Forced Outage refund for each Facility **Forced Outage Refund**") as the lesser of:
 - (a) the sum over all Trading Intervals t in Trading Month m of the product of:
 - i the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and
 - ii the Forced Outage Shortfall in Trading Interval t,

where the Forced Outage Shortfall for a Facility is equal to which ever of the following applies:

- iii. if the Facility is required to have submitted a Forced Outage under clause 3.21.4, the Forced Outage in that Trading Interval measured in MW; or
- iv. if the Facility is an Intermittent Facility which is deemed to have not been commissioned in Commercial Operation, for the purposes of clause 4.26.1, the number of Capacity Credits associated with the relevant Intermittent Facility; or
- v. if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is undergoing an approved Commissioning Test and, for the purposes of permission

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sought under clause 3.21A.2, is a new generating system, the number of Capacity Credits associated with the relevant Facility; or

- vi. if, from the Trading Day commencing on 30 November of Year 3 for Reserve Capacity Cycles up to and including 2009 or 1 October of Year 3 for Reserve Capacity Cycles from 2010 onwards, the Facility is not yet undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system, the number of Capacity Credits associated with the relevant Facility; and
- (b) 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), less all Facility Forced Outage Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year.

The proposed amendment to clause 4.27.10A will update the reference to new clause 4.13.14, where the IMO informs a Market Participant that the need to maintain security has ceased.

4.27.10A. Market Participants holding Capacity Credits for Facilities that are yet to commence operation must file a report on progress with the IMO at least once every month between the commencement of the calendar year in which the date referred to in clause 4.10.1(c)(iii)(7) falls and the date the IMO has notified the Market Participant, in accordance with clause 4.13.1410A, of its determination, that the need to maintain the Reserve Capacity Security for the Facility has ceased.

The proposed amendment to clause 4.28.4 will update the references to the amended clause 4.13.11A from clause 4.13.11. This will correct a current inconsistency with the reference to the 90 percent test rather than the payment obligations.

- 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 any amount drawn under a Reserve Capacity Security by the IMO and distributed in accordance with clause 4.13.11<u>A</u>(a); less
 - (b) the Capacity Cost Refunds for that Trading Month; less

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- (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<u>A(b)</u>

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

The proposed amendment to clause 4.28C.8 and new clause 4.28C.8A will clearly define the implications of not complying with clause 4.28C.8. This will also ensure consistency in treatment between capacity that enters the market via the early certification route and that which enters the market during the standard route.

- 4.28C.8. Within 30 Business Days of the applicant receiving notification by the IMO of the amount of Early Certified Reserve Capacity assigned to the Facility the applicant must ensure that the IMO holds the benefit of a provided Reserve Capacity Security equal to the amount specified in clause 4.28C.9., else the Early Certified Reserve Capacity assigned to the Facility will lapse.
- 4.28C.8A. If a Market Participant does not comply with clause 4.28C.8 in full by the time specified in clause 4.28C.8, the Early Certified Reserve Capacity assigned to that Facility will lapse.

The proposed amendment to clause 4.28C.12 will clarify that in the case when the calculation of clause 4.28C.12 results in a reduction in Reserve Capacity Security, any excess held by the IMO must be returned within 10 Business Days (in accordance with clause 4.13.14). The proposed amendment also clarifies that it is the IMO's responsibility to perform the re-calculation.

- 4.28C.12. The Reserve Capacity Security provided by the Market Participant under clause 4.28C.8 must, bBy the time and date specified in clause 4.1.13 (a), in yYear 1 of the first Reserve Capacity Cycle specified in clause 4.10.1(b), in which the Facility will commence operation enter service the IMO must be recalculated the amount of Reserve Capacity Security to be provided by each Market Participant under clause 4.28C.8 in accordance with clause 4.28C.9, and:
 - (a) If an additional amount of Reserve Capacity Security is required,
 the Market Participant must ensure that the IMO holds the benefit
 of the additional Reserve Capacity Security; and
 - (b) If a reduced amount of Reserve Capacity Security is required, the
 Market Participant may request the IMO to return any additional
 Reserve Capacity Security, in accordance with clause 4.13.14,
 provided that at all times the IMO holds a Reserve Capacity
 Security to the level determined in accordance with this clause
 4.28C.12.

the difference paid to the IMO or refunded to the Market Participant as applicable,

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The proposed new clause 4.28C.12A will ensure consistent treatment of Facilities which enter the market via the early certification route with regard to the provision and return of Reserve Capacity Security in accordance with clause 4.13.

4.28C.12A. From the time and date specified in clause 4.1.13(a) in Year 1 of the first

Reserve Capacity Cycle in which the Facility will enter service, all of the provisions of clause 4.13 apply equally to the Reserve Capacity Security of Facilities with Early Certified Reserve Capacity.

Glossary

<u>Commercial Operation:</u> The status determined by the IMO under clause 4.13.10B that a Facility is operating in the Wholesale Electricity Market.

Reserve Capacity Security: Is the reserve capacity security to be provided for a Facility as calculated and re-calculated under clause 4.13 and clause 4.28C. Has the meaning given in clause 4.13.1.

Required Level: The level of output (expressed in MW) required to be met by a Facility or Demand Side Programme as determined in clause 4.11.3B.

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APPENDIX 3: ADDITIONAL AMENDMENTS MADE BY THE IMO FOLLOWING THE FIRST SUBMISSION PERIOD

The IMO has made some amendments to the Amending Rules following the first submission period. These changes are as follows (deleted text, added text):

The proposed minor and typographical amendments will improve the integrity of clause 4.9.9.

- 4.9.9. If the IMO assigns Certified Reserve Capacity to a Facility in respect of a Reserve Capacity Cycle, the IMO must advise the applicant:
 - (a) of the amount of Certified Reserve Capacity assigned to the Facility in respect of the Reserve Capacity Cycle, as determined in accordance with clause 4.11 or clause 4.9.5(c) (as applicable);
 - (b) of the initial Reserve Capacity Obligations Quantity set for the Facility, as determined in accordance with clause 4.12 or clause 4.9.5(c) (as applicable);
 - (c) of any Reserve Capacity Security required as a condition of a Market Participant holding the Certified Reserve Capacity, as determined in accordance with clause 4.13.2 or clause 4.9.5(c) (as applicable);
 - (d) in the case of Conditional Certified Reserve Capacity, that the certification is subject to the conditions in clause 4.9.5(a) and (b);
 - (e) of the calculations upon which the IMO's determinations are based;
 and
 - (f) whether the IMO accepted or rejected a proposed alternative value to be used in the calculation of the Required Level for a Facility <u>for</u> which a Market Participant applied to be certified nominated to use the methodology described in under-clause 4.11.2(b) in its application for certification (if applicable)., as determined in accordance with clause 4.11.2A, if applicable.

The proposed amendment will improve the integrity of clause 4.10.3(c) by further clarifying that the proposed alternative value could be provided where the expert does not consider that the 5 percent probability of exceedance of expected generation output for the Facility during the last three years would be appropriate.

The IMO also proposes some typographical amendments to improve the integrity of the proposed Amending Rules and to clarify that the report is provided in accordance with the Reserve Capacity Procedure and not the independent experts accreditation.

4.10.3. An application for certification of Reserve Capacity that includes a nomination to use the methodology described in clause 4.11.2(b) for a Facility that is yet to enter service must include a report, in accordance with the Reserve Capacity Procedure, prepared by an expert accredited by the IMO, in accordance with the Reserve Capacity Procedure. The IMO will use the, where this report is to be used to assign the Certified Reserve Capacity for

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that the Facility in accordance with clause 4.11.1(e) and to determine the Required Level for that the Facility in accordance with clause 4.11.3B. The report must include:

- (a) an estimate of what the expert considers the Certified Reserve Capacity of the Facility would have been for the purposes of clause 4.11.2(b) had the history of performance been available;
- (b) a value, expressed in MW as a sent out value, which equals the 5 percent probability of exceedance of expected generation output for the Facility for all the Trading Intervals that occurred within the last three years up to, and including, the last Hot Season, where this value is to be used in the calculation of the Required Level in clause 4.11.3B;
- (c) a proposed alternative value to that specified in clause 4.10.3(b), expressed in MW as a sent out value, to apply for the purposes of the Required Level, if in the opinion of the expert the value provided under clause 4.10.3(b) would not be a reasonable representation of the Facility's 5 percent probability of exceedance of expected generation output during its first year of operation applicable; and
- (d) the reasons for any proposed alternative value provided under clause 4.10.3(c).

The proposed amendment will clarify that the IMO must apply the outlined principles when assigning CRC to a Facility which has also previously operated in the market but which has undertaken significant maintenance or an upgrade and so will be technically "re-entering service".

4.11.1. Subject to clause 4.11.7, the IMO must apply the following principles in assigning a quantity of Certified Reserve Capacity to a Facility for the Reserve Capacity Cycle to which the application relates:

. . .

(e) the IMO must assign Certified Reserve Capacity to an Intermittent Generator that is yet to enter <u>or re-enter</u> service based on the Certified Reserve Capacity estimate contained in any report provided by the applicant in accordance with clause 4.10.3, where the report was produced by an expert accredited by the IMO in accordance with clause 4.11.6.

. . .

The proposed typographical updates to clause 4.11.2A will improve the overall integrity of the proposed new clause.

4.11.2A. Where an applicant nominates under clause 4.10.3(c) to have the IMO use an alternative value to that specified in clause 4.10.3(b) the IMO:

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- (a) may reject the proposed alternative value if the IMO-it does not consider the reasons provided in accordance with clause 4.10.3(d) provide sufficient evidence that an alternative value is required; and
- (b) must use the alternative value in the calculation of the Required Level if it has does not rejected the proposed alternative value under paragraph (a), the IMO must use the alternate value in the calculation of the Required Level under clause 4.11.3B.

The proposed updates to clause 4.11.3B will clarify that the IMO will calculate the Required Level for Facilities assigned CRC under clause 4.11.3B(a) and for Curtailable Loads and Demand Side Programmes. The IMO also proposes a number of typographical amendments to improve the integrity of the proposed Amending Rules.

The IMO also has incorporated changes to sub-clause (a) to clarify that the IMO will use any updated temperature dependence information provided as Standing Data to determine the Required Level for a Facility assigned CRC under clause 4.11.1(a).

- 4.11.3B The Required Level (which for an upgraded Facility is calculated for the Facility as a whole):
 - (a) Ffor Facilities assigned Certified Reserve Capacity under clause 4.11.1(a), is calculated by the IMO using the Metered Schedule and temperature dependence information submitted to the IMO under clause 4.10.1(e)(i) or provided in Standing Data (where available) and converted to a sent out basis to 41 °C;
 - (b) Ffor Facilities assigned Certified Reserve Capacity under clause 4.11.2(b), is either:
 - (i). the value, expressed in MW as a sent out value, that equals the 5 percent probability of exceedance of expected generation output for the Facility, submitted to the IMO in the report described in clause 4.10.3(b);or
 - (ii). the proposed alternative value, expressed in MW as a sent out value, provided in the report described in clause 4.10.3(c), where the IMO has accepted the proposed alternative value under clause 4.11.2A; and
 - (c) Ffor Curtailable Loads and Demand Side Programmes, is calculated by the IMO using the Facility's Relevant Demand minus the Capacity Credits assigned to that the Facility.

The proposed amendment to clause 4.13.1 will clarify that the obligation also relates to a Facility that has previously operated in the market but will be re-entering the market following significant maintenance or upgrade and would have security obligations by virtue of clause 4.13.1B.

4.13.1. Where the IMO assigns Certified Reserve Capacity to a Facility that is yet to enter service (or re-enter service after significant maintenance or having been upgraded), the relevant Market Participant must ensure that the IMO holds the benefit of a Reserve Capacity Security in an amount determined under clause 4.13.2(a) by the date and time specified in clause 4.1.13.

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The proposed amendment to clause 4.13.1A will clarify that the obligation to provide a RCS applies only to the part of the Facility being upgraded or undergoing significant maintenance. The IMO considers that this will improve the integrity of the proposed Amending Rules.

4.13.1A For the purposes of this clause 4.13, where an existing Facility is undergoing significant maintenance or being upgraded the requirement to provide Reserve Capacity Security enly applies only to the part of the Facility either undergoing significant maintenance or being upgraded.

The proposed amendment to clause 4.13.2B will be amended to improve the integrity of the language used in the clause and allow for the option for a Market Participant to provide a replacement RCS.

- 4.13.2B Within 10 Business Days <u>after receipt</u> of a request from a Market Participant under clause 4.13.2A the IMO must recalculate the amount of Reserve Capacity Security required to be held by a Facility using the formula in clause 4.13.2(b).If the amount recalculated by the IMO under clause 4.13.2 (b) is less than that originally calculated under clause 4.13.2 (a) then the IMO must:
 - (a) notify a the Market Participant that has provided a Reserve Capacity Security for a Facility of the result of the calculation;
 - (b) offer the Market Participant the opportunity to replace the Reserve
 Capacity Security in accordance with clause 4.13.2C; and
 - (bc) ence-if the Market Participant provides has provided any replacement a replacement Reserve Capacity Security in accordance with clause 4.13.3A4.13.2C, return any excess Reserve Capacity Security.

The proposed new clause 4.13.2C will replicate the previous requirements in clause 4.13.3A. The IMO considers that this improvement to the ordering of the clauses in section 4.13 of the Market Rules will improve their integrity.

Further the proposed changes will allow Market Participants with an option to provide a replacement RCS. The IMO considers that this option to provide a replacement RCS will taken into account incidences where the current RCS might only be a few dollars greater than that required under the replacement RCS – which case the Market Participant may decide to not replace the RCS.

- 4.13.2C Where under clause 4.13.2B the IMO notifies a Market Participant that excess

 Reserve Capacity Security is currently held, then a Market Participant may replace the existing Reserve Capacity Security with a replacement Reserve Capacity Security. The replacement Reserve Capacity Security must:
 - (a) be in an amount not less than the amount required under clause 4.13.2(b); and
 - (b) become effective before the IMO returns any excess Reserve Capacity Security.

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The proposed amendment to sub-clause 4.13.3(a) to refer to the amount of security required under clause 4.13.2. The IMO considers that this will improve the consistency of the language used throughout section 4.13. The IMO also proposes a grammatical amendment to this sub-clause to improve its overall integrity.

- 4.13.3 Where a Market Participant's existing Reserve Capacity Security is due to terminate and after that termination the Market Participant will continue to have an obligation to ensure the IMO holds the benefit of a Reserve Capacity Security under clause 4.13.1, then that Market Participant must ensure that the IMO holds the benefit of a replacement Reserve Capacity Security. The replacement Reserve Capacity Security must:
 - (a) be in-an amount not less than the level amount required under clause 4.13.2; and
 - (b) become effective before the termination of the existing Reserve Capacity Security.

The proposed removal of clause 4.13.3A is consistent with the IMO's proposed inclusion of these requirements, albeit amended to make the provision of a replacement RCS optional, in new clause 4.13.2C.

- 4.13.3A. Where under clause 4.13.2B the IMO determines that excess Reserve Capacity Security is currently held for a Market Participant, then that Market Participant must ensure that the IMO holds the benefit of a replacement Reserve Capacity Security. The replacement Reserve Capacity Security must:
 - (a) be in an amount not less than the level required under clause 4.13.2(b); and
 - (b) become effective before the IMO returns any excess Reserve Capacity Security.

The proposed amendment to the structure of clause 4.13.10 will improve the clarity of the requirements to either operate the facility at at least 90 percent of its Required Level or provide an expert report stating that the Facility can operate at at least 90 percent of its Required Level and be considered by the IMO to be in Commercial Operation. The IMO considers that the amendments will improve the integrity of the Amending Rules.

The IMO also proposes to amend clause 4.13.10 to specify that the report provided under clause 4.13.10C would need to specify that the Facility was capable of meeting 90 percent of its Required Level rather than simply 90 percent of the Facility having been built. This will ensure that in an extreme situation where the last 10 percent of the Facility which was not built is required to allow the Facility to export to the WEM (for example a transformer is not built).

The IMO also proposed to amend the reference to "...scaled to the level of Capacity Credits..." to state "...adjusted to the level of Capacity Credits...". The IMO considers that this will better reflect the mathematical adjustment process that will be used to adjust the Facility's Required Level to the amount of Capacity Credits originally assigned to the Facility. The IMO notes that this adjustment process reflects the ability of a Market Participant to choose a more conservative level of Capacity Credits than originally applied for under clause 4.20.1(a).

4.13.10. If a Market Participant that provides Reserve Capacity Security in respect of a Facility-either:

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- (a) <u>either:</u>
 - i. operates the Facility at a level which is at least 90 percent of its Required Level, scaled adjusted to the level of Capacity Credits specified in clause 4.20.1(a), in at least two Trading Intervals before the end of the relevant Capacity Year; or
- (b) ii. provides the IMO with a report under clause 4.13.10C, which specifies that the Facility can operate at at least 90 percent of its Required Level, adjusted to the level of Capacity Credits specified in clause 4.20.1(a) of the Facility has been built; and
- (e) (b) is considered by the IMO to be in Commercial Operation, then the IMO will return the Reserve Capacity Security to the Market Participant within 10 Business Days after the end of the relevant Capacity Year.

The proposed amendment to clause 4.13.10A will improve the integrity of the Market Rules.

4.13.10A. A Market Participant may request the IMO to determine that a Facility is in Commercial Operation for the purposes of the Chapter 4 of these Market Rules.

The proposed amendment to clause 4.13.10B will restructure the proposed Amending Rules to improve their integrity.

- 4.13.10B. On receipt of a request made under clause 4.13.10A the IMO must determine, within 20 Business Days, whether the Facility is in Commercial Operation. In making each such determination the IMO-must, if applicable, have regard to:
 - (a) must have regard to the following, if applicable:
 - i. must whether the Facility has completed an approved Commissioning Test under clause 3.21A and subsequently produced energy for at least two Trading Intervals: and
 - (b) <u>ii.</u> any formal advice received from the Market Participant that it has completed an approved Commissioning Test under clause 3.21A and is commercially operational; and
 - (b) The IMO may also have regard to any additional information the IMO considers relevant.

The proposed amendment to clause 4.13.10C will clarify that the report will specify the percentage of its Required Level that the Facility can operate at the time that the report is prepared. The IMO also proposes a number of minor grammatical amendments to

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improve the integrity of clause 4.13.10C and to clarify that the report is provided in accordance with the Reserve Capacity Procedure and not the independent experts accreditation.

4.13.10C. For a Facility certified under clause 4.11.2(b), a Market Participant may provide the IMO with a report, in accordance with the Reserve Capacity Procedure, prepared by an independent expert accredited by the IMO in accordance with the Reserve Capacity Procedure_before the end of the relevant Capacity Year. The report must specify the percentage of its Required Level, adjusted to the level of Capacity Credits specified in clause 4.20.1(a), at which the Facility can operate at the time that the report is prepared. which specifies the equivalent percentage of the Facility described in the report provided under clause 4.10.3 that has been built.

The proposed amendment to clause 4.13.11 will better clarify that the requirements to meet the 90 percent test (via either observation or a report from an expert) must be met before the end of the relevant Capacity Year. The IMO considers that the proposed amendments will improve the integrity of the Amending Rules.

4.13.11. If a Market Participant that provides a Reserve Capacity Security in respect of a Facility fails to operate a that Facility in accordance with clause 4.13.10 before the end of relevant Capacity Year then the Market Participant must pay to the IMO, as compensation to the market, an amount equal to the Reserve Capacity Security amount for that Facility within 20 Business Days after the end of the relevant Capacity Year.

The proposed amendment to clause 4.13.13 will clarify that a Market Participant may apply to the IMO for the release of a RCS relating to that Facility which_is held by the IMO. The proposed changes will also improve the integrity of the proposed Amending Rules.

The IMO also proposes to amend the reference to "...scaled to the level of Capacity Credits..." to state "...adjusted to the level of Capacity Credits...". The IMO considers that this will better reflect the mathematical adjustment process that will be used to adjust the Facility's Required Level to the amount of Capacity Credits originally assigned to the Facility.

- 4.13.13. A Market Participant may apply to the IMO for the release of any Reserve Capacity Security held by the IMO, at any time prior to earlier than the end of the relevant Capacity Year, if the Reserve Capacity Security relates to a Facility that:
 - (a) has operated at 100 percent of its Required Level, scaled adjusted to the level of Capacity Credits specified in clause 4.20.1(a), in at least two Trading Intervals prior to the end of the relevant Capacity Year; and
 - (b) is considered by the IMO to be in Commercial Operation.

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The proposed amendment to clause 4.13.14 will better reflect the obligation on the IMO to return a non-cash deposit.

- 4.13.14. Where the IMO receives an application made under clause 4.13.13 or clause 4.28C.12 it must, within 10 Business Days:
 - (a) determine whether the need to maintain the Reserve Capacity Security has ceased;
 - (b) notify the Market Participant of its determination;
 - (c) if the Reserve Capacity Security is a cash deposit that is no longer required to be held, return the cash deposit (plus interest earned); and
 - (d) if the Reserve Capacity Security is a non-cash deposit and is no longer required to be held, use reasonable endeavours notify the provider that the IMO relinquishes any rights to draw on the Reserve Capacity Security.

The proposed amendment to clause 4.25.1 will amend the reference to "...scaled to the level of Capacity Credits..." to state "...adjusted to the level of Capacity Credits...". The IMO considers that this will better reflect the mathematical adjustment process that will be used to adjust the Facility's Required Level to the amount of Capacity Credits originally assigned to the Facility.

- 4.25.1. The IMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing Capacity Credits:
 - (a) in the case of a generation system can, during the term the Reserve Capacity Obligations apply, operate at its Required Level, scaled adjusted to the level of Capacity Credits currently held, at least once during each of the following periods and such operation must be achieved on each type of fuel available to that Facility notified under clause 4.10.1(e)(v):
 - i. 1 October to 31 March; and
 - ii. 1 April to 30 September; and
 - (b) can, during the six months prior to the Reserve Capacity Obligations for the first Reserve Capacity Cycle taking effect, operate at its maximum Reserve Capacity Obligation Quantity at least once and, in the case of a generating system, such operation on each type of fuel available to that Facility notified under clause 4.10.1(e)(v). This paragraph (b) does not apply to facilities that are not commissioned prior to their Reserve Capacity Obligations coming into force.
 - (c) in the case of a Curtailable Load can, during the term the Reserve Capacity Obligations apply, operate at its maximum Reserve Capacity Obligation Quantity at least once during the period between 1 October to 31 March.

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The proposed amendment to clause 4.25.2 will amend the reference to "...scaled to the level of Capacity Credits..." to state "...adjusted to the level of Capacity Credits...". The IMO considers that this will better reflect the mathematical adjustment process that will be used to adjust the Facility's Required Level to the amount of Capacity Credits originally assigned to the Facility.

- 4.25.2. The verification referred to in clause 4.25.1 can be achieved:
 - (a) by the IMO observing the Facility operate at the Required Level, scaled adjusted to the level of Capacity Credits currently held, at least once as part of normal market operations in Metered Schedules specific to the Facility; or
 - (b) by the IMO:
 - i. in the case of a generation system, requiring System
 Management in accordance with clause 4.25.7 to test the
 Facility's ability to operate at the Required Level, scaled
 adjusted to the level of Capacity Credits currently held, for not
 less than 60 minutes and the Facility successfully passing that
 test; and
 - ii. in the case of Interruptible Loads, Curtailable Loads and Dispatchable Loads, requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to reduce demand to the Required Level, scaled adjusted to the level of Capacity Credits currently held, for not less than one Trading Interval and the Facility successfully passing that test.

The proposed amendment to clause 4.25A.3 will amend the reference to "...scaled to the level of Capacity Credits..." to state "...adjusted to the level of Capacity Credits...". The IMO considers that this will better reflect the mathematical adjustment process that will be used to adjust the Facility's Required Level to the amount of Capacity Credits originally assigned to the Facility.

4.25A.3. The Verification Test is failed if a reduction in demand equal to at least 10 percent of the Required Level scaled adjusted to the level of Capacity Credits currently held is not identified from the Curtailable Load meter data.

The proposed amendment to clause 4.26.1 is consistent with the updates to the structure of clause 4.13.10 and will ensure that the requirements to meet the 100 percent test (either via Facility output levels or the provision of an expert report). The IMO notes that the Amending Rules in RC_2010_22 will also be updated to reflect this revised structure.

The IMO also proposes to amend clause 4.26.1 to specify that the report provided under clause 4.13.10C would need to specify that the Facility was capable of meeting 100 percent of its Required Level rather than simply 100 percent of the Facility having been built. The IMO notes that this is consistent with the proposed amendments to clause 4.13.10.

The IMO also proposes to amend the reference to "...scaled to the level of Capacity Credits..." to state "...adjusted to the level of Capacity Credits...". The IMO considers

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that this will better reflect the mathematical adjustment process that will be used to adjust the Facility's Required Level to the amount of Capacity Credits originally assigned to the Facility.

The IMO notes that it has also reflected its further proposed changes to amend the reference to an "Intermittent Facility" to an "Intermittent Generator" contained in the Draft Rule Change Report for RC_2010_22.

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

REFUND TABLE

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

Where:

For an Intermittent FacilityGenerator that has:

(a) has either:

- i. operated at 100 percent of its Required Level, scaled adjusted to the level of Capacity Credits specified in clause 4.20.1(a), in at least two Trading Intervals; or
- (b) <u>ii.</u> has provided the IMO with a report under clause 4.13.10C, where this report specifies that the Facility can operate at 100 percent of its Required Level the Facility certified under clause 4.11.2(b) has been built; and
- (e)(b) is following a request to the IMO by a Market Participant, considered by the IMO to be in Commercial Operation:

Y equals 0

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For all other facilities, including Intermittent Facilities Generator that following a request to the IMO by a Market Participant are not considered by the IMO to be in Commercial Operation: Y is determined by dividing the Monthly Reserve Capacity Price (calculated in accordance with clause 4.29.1) by the number of Trading Intervals in the relevant month.

The proposed amendments to clause 4.28C.12. will clarify the timelines associated with the requirements to provide additional RCS. That is the IMO must calculate the requirements prior to the time and date specified in clause 4.1.13(a) and the Market Participant must have provided any additional required RCS by the time and date specified in clause 4.1.13(a).

The IMO also proposes to remove the unnecessary reference to clause 4.28C.8 as the timelines in this clause would have already occurred prior to any recalculation occurring under clause 4.28C.12.

- 4.28C.12. By Prior to the time and date specified in clause 4.1.13 (a), in Year 1 of the first Reserve Capacity Cycle specified in clause 4.10.1(b), in which the Facility will enter service the IMO must-recalculate the amount of Reserve Capacity Security to be provided by each Market Participant under clause 4.28C.8 in accordance with clause 4.28C.9 and:
 - (a) If an additional amount of Reserve Capacity Security is required, the Market Participant must ensure that the IMO holds the benefit of the additional Reserve Capacity Security by the time and date specified in clause 4.1.13(a); and
 - (b) If a reduced amount of Reserve Capacity Security is required, the Market Participant may request the IMO to return any additional Reserve Capacity Security, in accordance with clause 4.13.14, provided that at all times the IMO holds a Reserve Capacity Security to the level determined in accordance with this clause 4.28C.12.

The proposed new definition of Relevant Level in the Glossary will provide clarification of the definition of this term. The IMO notes that the proposed amendment will need to take into account any potential restructuring of the Amending Rules surrounding the calculation of the Relevant Level resulting from either of the Rule Change Proposals surrounding the calculation of the capacity value of Intermittent Generation (RC_2010_25 and RC_2010_37). Further details of the proposed amendments under both of these Rule Change Proposals are available on the following webpage: http://www.imowa.com.au/under development

Additionally the IMO has proposed a typographical amendment to the definition of Reserve Capacity Security to improve its integrity.

Glossary

Relevant Level: Has the meaning provided in clause 4.11.3A.

Reserve Capacity Security: ls the The reserve capacity security to be provided for a Facility as calculated and re-calculated under clause 4.13 and clause 4.28C.

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