imo
Independent Market Operator

Independent Market Operator

Final Rule Change Report: Curtailable Loads and Demand Side Programmes

Ref: RC_2010_29

Date: 17 June 2011

CONTENTS

DOCUMENT DETAILS

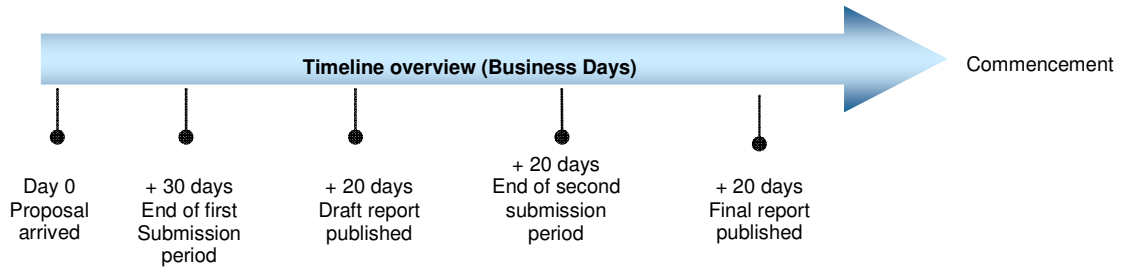
IMO Notice No.:	RC_2010_29
Report Title:	Final Rule Change Report: Curtailable Loads and Demand Side Programmes
Release Status:	Public
Confidentiality Status:	Public domain, published in accordance with Market Rule 2.7.8

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

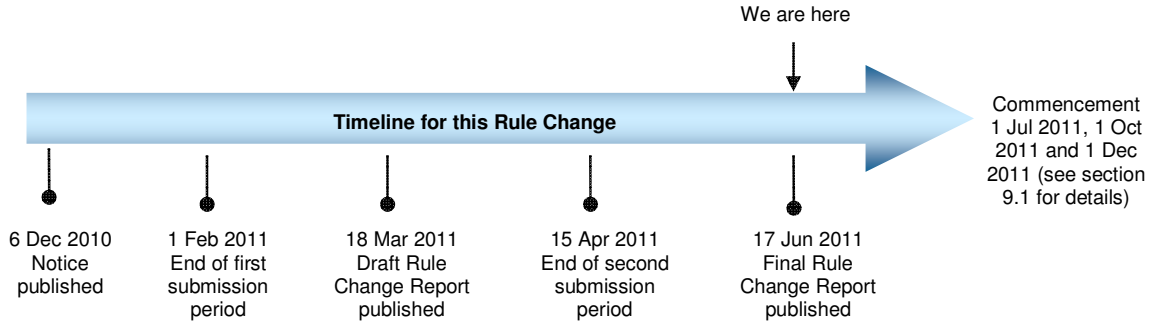
1. INTRODUCTION

On 2 December 2010, the Independent Market Operator (IMO) submitted a Rule Change Proposal regarding amendments to clauses 2.27.1, 2.27.1A, 2.27.2, 2.27.4, 2.29.1, 2.29.5, 2.29.8A, 2.29.8B, 2.29.9A, 2.29.9B, 2.29.9C, 2.30.3, 2.30B.2, 2.30B.5, 2.33.1, 2.33.4, 2.35.1, 3.14.1, 3.17.5, 4.8.3, 4.10.1, 4.11.1, 4.11.4, 4.11.4A, 4.12.1, 4.12.4, 4.12.8, 4.14.1, 4.18.1, 4.18.2, 4.25.1, 4.25.2, 4.25.4, 4.25.4E, 4.25.4F, 4.25.9, 4.25.10, 4.25A.1, 4.25A.2, 4.25A.3, 4.25A.4, 4.25A.5, 4.26.1A, 4.26.1C, 4.26.2, 4.26.2C, 4.26.2D, 4.26.3A, 4.26.4, 6.3A.2, 6.5A.1, 6.11.1, 6.11.2, 6.11A.1, 6.12.1, 6.15.2, 6.16.1, 6.16.2, 6.17.6, 7.1.1, 7.2.2, 7.6.10, 7.7.3, 7.7.4, 7.7.4A, 7.7.10, 7.13.1, 9.3.3, 9.3.4, 9.3.7, 9.13.1, 10.5.1, the Glossary, Appendix 1 and Appendix 3, and new clauses 2.29.1A, 2.29.5A, 2.29.5B, 2.29.5C, 2.29.5D, 2.29.5E, 2.29.5F, 2.29.5G, 2.29.5H, 4.26.2CA, 4.26.2CB and 4.26.2CC of the Wholesale Electricity Market Rules (Market Rules).

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



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



The IMO's final decision is to accept the Rule Change Proposal in a modified form. The detailed reasons for the IMO's decision are set out in section 7 of this report.

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

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

- the submissions received.

All documents related to this Rule Change Proposal can be found on the IMO website: http://www.imowa.com.au/RC_2010_29

2. THE RULE CHANGE PROPOSAL

2.1 Submission Details

Name:	Ben Williams
Phone:	9254 4300
Fax:	9254 4399
Email:	ben.williams@imowa.com.au
Organisation:	IMO
Address:	Level 3, Governor Stirling Tower, 197 St Georges Terrace
Date submitted:	2 December 2010
Urgency:	Standard Rule Change Process
Change Proposal title:	Curtailable Loads and Demand Side Programmes
Market Rules affected:	Clause 2.27.1, 2.27.1A, 2.27.2, 2.27.4, 2.29.1, 2.29.5, 2.29.8A, 2.29.8B, 2.29.9A, 2.29.9B, 2.29.9C, 2.30.3, 2.30B.2, 2.30B.5, 2.33.1, 2.33.4, 2.35.1, 3.14.1, 3.17.5, 4.8.3, 4.10.1, 4.11.1, 4.11.4, 4.11.4A, 4.12.1, 4.12.4, 4.12.8, 4.14.1, 4.18.1, 4.18.2, 4.25.1, 4.25.2, 4.25.4, 4.25.4E, 4.25.4F, 4.25.9, 4.25.10, 4.25A.1, 4.25A.2, 4.25A.3, 4.25A.4, 4.25A.5, 4.26.1A, 4.26.1C, 4.26.2, 4.26.2C, 4.26.2D, 4.26.3A, 4.26.4, 6.3A.2, 6.5A.1, 6.11.1, 6.11.2, 6.11A.1, 6.12.1, 6.15.2, 6.16.1, 6.16.2, 6.17.6, 7.1.1, 7.2.2, 7.6.10, 7.7.3, 7.7.4, 7.7.4A, 7.7.10, 7.13.1, 9.3.3, 9.3.4, 9.3.7, 9.13.1, 10.5.1, the Glossary, Appendix 1 and Appendix 3, and new clauses 2.29.1A, 2.29.5A, 2.29.5B, 2.29.5C, 2.29.5D, 2.29.5E, 2.29.5F, 2.29.5G, 2.29.5H, 4.26.2CA, 4.26.2CB and 4.26.2CC.

2.2 Summary Details of the Proposal

The IMO noted in its proposal that after a comprehensive review of the Market Rules a number of issues relevant to Curtailable Loads (CLs) were identified. To enact the outcomes from the IMO's review, proposed solutions to each of the issues were developed in conjunction with the MAC.

A brief overview of the IMO's proposed solutions to each of the identified issues is presented below. The full details of the Rule Change Proposal are available in Appendix 1 of this report.

Issue identified in the Rule Change Proposal	Proposed Solution
Registration of CLs (Issue 1)	Updates to remove the concept of a CL as a Registered Facility from the Market Rules and replace this with the concept of the Demand Side Programme (DSP) being the Registered Facility. The DSP will have Non-Dispatchable Loads (NDLs) associated with it for the purposes of capacity obligations, dispatch and settlements.
Facility Definition (Issue 2)	Solved via the solution outlined to Issue 1, i.e. if a DSP is the Registered Facility, System Management will be able to dispatch the Facility itself and not each of the CLs comprising the DSP. Updates to allow for the possibility that a programme will be over-subscribed. This solution is outlined in further detail in the proposed solution to Issue 4 below.
Market Fees (Issue 3)	No updates to the current Market Rules are required as the MAC agreed that DSPs should not be required to pay Market Fees. Presented for completeness only.
Measurement of CL Performance (Issue 4);	Solved via the solutions to Issues 1 and 2 (which will ensure that only the DSP is visible to the market and not the comprising loads) combined with the Relevant Demand (RD) level being calculated based on the aggregated output of the DSP (not by aggregating the RD of each CL associated with a DSP). This will ensure the correct measurement of the DSP as a whole.
Capacity Cost Refunds (Issue 5)	Updates to ensure a DSP consisting of one or more CLs is liable to pay refunds (for the amount by which the DSP falls short of its capacity requirements) if at any time the DSP is not filled completely, including times where a component Facility is on a Forced Outage.
Reserve Capacity Security (Issue 6)	No updates to the Market Rules proposed under RC_2010_29. Updates to ensure that a DSP is considered as a single Facility for the purpose of evaluating a request for the return of Reserve Capacity Security has been incorporated by the IMO in the Rule Change Proposal: Required Level and Reserve Capacity Security (RC_2010_12). Presented for completeness only.
Stipulated Default Loads (SDLs) (Issue 7)	Updates to combine the concept of a CL and Stipulated Default Load (SDL) into the DSP concept.
Potential Double Payment (Issue 8)	Updates to ensure that a DSP is not paid for any energy reduced during either a Reserve Capacity test or Verification Test.

2.3 The Proposal and the Wholesale Market Objectives

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

Issue	Wholesale Market Objective Assessment
Registration of CLs (Issue 1)	Betters (a) and consistent with (b), (c), (d) and (e)
Facility Definition (Issue 2)	Betters (a), (b) and (e) and consistent with (c) and (d)
Market Fees (Issue 3)	No proposed amendments under RC_2010_29
Measurement of CL Performance (Issue 4);	Betters (c) and consistent with (a), (b), (d) and (e)
Capacity Cost Refunds (Issue 5)	Betters (a) and consistent with (b), (c), (d) and (e)
Reserve Capacity Security (Issue 6)	No proposed amendments under RC_2010_29
SDLs (Issue 7)	Betters (a) and consistent with (b), (c), (d) and (e)
Potential Double Payment (Issue 8)	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.

2.4 The Amending Rules Proposed by the IMO

The amendments to the Market Rules proposed by the IMO in its Rule Change Proposal are presented in Appendix 2 of this report.

2.5 The IMO's Initial Assessment of the Proposal

The IMO decided to proceed with the proposal on the basis that Market Participants should be given an opportunity to provide submissions as part of the rule change process.

3. FIRST SUBMISSION PERIOD

The first submission period for this Rule Change Proposal was between 7 December 2010 and 1 February 2011. The timeframe for the first submission period was extended in accordance with the IMO's extension notice published on 6 December 2010.

3.1 Submissions received

The IMO received submissions from Alinta, Energy Response, EnerNOC, Landfill Gas & Power (LGP), System Management and Synergy during the first submission period. The main points for each of the issues addressed in RC_2010_29, along with a summary of the assessment by the submitting parties during the first submission period:

- against the Wholesale Market Objectives; and
- on costs associated with implementing the proposed changes and the timeframe to implement the rule change,

is provided in Appendix 3 of this report. A copy of the full text of all submissions is available on the IMO website.

Overall, the submissions received from Energy Response, EnerNOC, LGP, System Management and Synergy supported the majority of the proposed solutions to the identified issues. Energy Response, EnerNOC and Synergy did not support some aspects of RC_2010_29. Alinta did not support the proposed changes as it did not consider it necessary or desirable to proceed with RC_2010_29 at this time. Additionally Alinta, Energy Response and EnerNOC all raised concerns with the proposed static RD calculation methodology based on IRCR intervals (Issue 4).

3.2 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 Appendix 4 of this report.

3.3 Public Forums and Workshops

No public forums or workshops were held in relation to this Rule Change Proposal during the first submission period.

3.4 Additional Amendments to the Amending Rules

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

- create a heads of power for a Market Procedure outlining the process for the transfer of CLs to DSPs;
- reflect the suggestions received in submissions during the first consultation period, where appropriate; and
- improve the integrity of the proposed Amending Rules.

These additional amendments are presented in Appendix 5 of this report.

3.5 Cost Benefit Analysis

To determine whether the benefits associated with RC_2010_29 would exceed any identified costs (including the system costs of approximately $200,000), the IMO undertook a qualitative cost benefit analysis of the proposed solutions (as a whole) against the status quo. The results of the IMO's cost benefit analysis are presented in Appendix 7 of this report.

4. THE IMO'S DRAFT ASSESSMENT

The IMO's draft assessment, against clauses 2.4.2 and 2.4.3 of the Market Rules, and analysis of the Rule Change Proposal can be viewed in the Draft Rule Change Report (available on the IMO's website).

5. THE IMO'S DRAFT DECISION

The IMO's draft decision was to accept the Rule Change Proposal as modified by the amendments outlined in section 3.4 and specified in Appendix 5 of this report. The IMO noted that its draft decision to accept the amendments to the static RD methodology (to be based on the Individual Reserve Capacity Requirement (IRCR) intervals) was subject to any future decision on whether a static or dynamic baseline methodology should be adopted.

The IMO made its decision on the basis that:

- the Amending Rules:
    - will allow the Market Rules to better address Wholesale Market Objectives (a), (b), (c) and (e);
    - are consistent with Wholesale Market Objective (d);
    - have the general support of the MAC; and
    - have the support of the majority of submissions received during the first submission period; and
- further cost benefit analysis undertaken by the IMO illustrated that the benefits associated with the Rule Change Proposal exceeded any costs that may arise.

6. SECOND SUBMISSION PERIOD

Following the publication of the Draft Rule Change Report on the IMO website, the second submission period was between 21 March 2011 and 15 April 2011.

6.1 Submissions received

The IMO received submissions from Alinta, EnerNOC, Energy Response, Synergy and System Management in the second submission period. The main points for each of the issues addressed in RC_2010_29 are summarised below. A copy of the full text of all submissions is available on the IMO website. Additional detail along with the IMO's response is contained in section 6.2 of this report.

Submitter	Registration of Curtailable Loads (Issue 1)	Facility Definition (Issue 2)	Market Fees (Issue 3)	Measurement of CL Performance (Issue 4)	Capacity Cost Refunds (Issue 5)	Reserve Capacity Security (Issue 6)	SDLs (Issue 7)	Potential Double Payment (Issue 8)
Alinta	Does not support.	Does not support.	Does not support.	Does not support, noting that adopting a dynamic baseline measure may be more consistent with the Market Objectives.	Does not support.	Does not support.	Does not support.	Does not support.
Energy Response	Supports.	Supports.	Supports.	Does not support the static IRCR RD methodology, noting that the issue of measurement of CL performance should be referred to the RCM review for a more extensive examination of alternative methodologies.	Supports.	Supports.	Supports.	Supports.
EnerNOC	Supports.	Supports.	Supports.	Does not support the static IRCR RD methodology instead recommending that: • the RD measure be amended to a dynamic profile baseline methodology; • the IMO undertake the development of a new dynamic methodology with a view to implementation in the 2012/13 Capacity Year; and • the existing static baseline methodology	Supports.	Supports.	Supports.	Supports.

Submitter	Registration of Curtailable Loads (Issue 1)	Facility Definition (Issue 2)	Market Fees (Issue 3)	Measurement of CL Performance (Issue 4)	Capacity Cost Refunds (Issue 5)	Reserve Capacity Security (Issue 6)	SDLs (Issue 7)	Potential Double Payment (Issue 8)
				remain in place (i.e. no amendment to IRCR intervals) until this time.				
Synergy	Continues to support.	Continues to support.	Remains unchanged from draft report. (“*Considers it opportune to now consider a mechanism by which DSM providers pay fees to the market.”*)	Supports continuing with static baseline RD methodology (IRCR intervals), noting the significant amount of work required to consider a dynamic baseline.	Continues to support.	Continues to support.	Continues to support.	Remains unchanged from draft report. *(“Dispatch Instruction Payments (DIPs) to CLs should be removed as appropriate compensation already received through Capacity Credit mechanism.”)*
System Management	Considers the IMO should reconsider the creation of a new separate Market Participant class.	Considers the IMO should reconsider having blocks for capacity but no blocks for dispatch. System Management notes that the issue with having programmes without a minimum dispatch size has not been addressed.	*None provided.*	*None provided.*	*None provided.*	*None provided.*	*None provided.*	*None provided.*

Overall, the submissions received from Energy Response, EnerNOC and Synergy support the majority of the proposed solutions to the identified issues[1]. In particular, Synergy notes that the IMO's assessment of the qualitative benefits was a worthwhile exercise as it presents a structured assessment of the impact of the proposals, thereby providing a more informed basis on which to make a judgement concerning the merits of proceeding with the rule change.

Alinta does not support the proposed changes, noting that it does not consider it necessary or desirable to proceed with RC_2010_29 at this time for the following reasons.

- The IMO has engaged the services of a consultant to assist it in reviewing the Reserve Capacity Mechanism (RCM), and to provide it with recommendation on any practical changes to the RCM to deliver economically efficient outcomes. The scope of work specifically requires consideration of whether the RCM is delivering the optimal mix of generation and DSM capacity. It appears very likely that substantial changes to the RCM will be recommended and as such it is premature to amend the Market Rules as proposed by RC_2010_29 prior to the recommendations of the review being considered by the MAC.
- Changing the manner in which RD is measured to use IRCR intervals, rather than the current 32 Peak Trading Intervals, entrenches the existing static baseline for measuring the extent to which DSPs meet their obligations under the Market Rules. Alinta considers that there appeared to be a general consensus at the public workshop held by the IMO on 8 April 2011 that adopting a dynamic baseline may be more consistent with the Market Objectives.
- To the extent that the IMO has developed a workable approach for DSM that is permissible within the current Market Rules, there appears to be no practical need for amending the Market Rules as proposed by RC_2010_29.

Alinta also notes a number of aspects of the drafting of the proposed Amending Rules that require further clarification and/or amendment.

In its submission, System Management notes the following issues along with proposed solutions:

- registration of DSPs as a Market Customer;
- dispatch of DSPs, including the removal of blocks for the purposes of dispatch and minimum dispatch sizes; and
- monitoring compliance of DSPs under clause 7.10.1.

In response to the IMO's request for submissions on the best pathway forward for considering whether a static or dynamic baseline RD methodology should be adopted, the following points were raised by submitting parties.

- Synergy considers that the IMO should proceed with its proposed static baseline methodology using the IRCR intervals, as significant work is still required prior to progressing with a dynamic baseline. Synergy notes its concerns that while there appears to be sufficient merit to warrant further exploration of a dynamic baseline methodology, the market is not yet fully conversant with the implications of adopting such an approach.

[1] While System Management remains silent as to its views on the proposed solutions, the IMO notes its support during the first submission period for the proposed solutions to Issues 1, 2, 4, 5, 7 and 8. System Management did not wish to comment on the solutions proposed to Issues 3 and 6 during the first submission period.

- Energy Response considers that further exploration of a dynamic baseline methodology should be referred to the RCM review and the current RD methodology should be retained in the interim.
- EnerNOC notes that the public workshop indicated widespread support for the dynamic baseline methodology. However, EnerNOC recognizes that further work is required to develop a dynamic RD methodology in a timely fashion with a view to implementation during the 2012/13 Capacity Year.
- Alinta does not consider that RC_2010_29 should (in its entirety) proceed, as the IMO's proposed RD methodology entrenches the existing static baseline concept. Alinta notes that there appeared to be a general consensus at the public workshop that adopting a dynamic baseline measure may be more consistent with the Wholesale Market Objectives.

A summary of the assessment by the submitting parties against the Wholesale Market Objectives is presented below:

Submitter	Wholesale Market Objective Assessment
Alinta	Until the RCM is reviewed the IMO cannot be satisfied that RC_2010_29 is consistent with the Wholesale Market Objectives, and in any event that it is unlikely to be inconsistent with the Wholesale Market Objectives. To the extent that the amendments contemplated by RC_2010_29 reinforce the status quo, Alinta believes the outcome is likely to be inconsistent with Wholesale Market Objectives (a), (b), (c) and (d).
Energy Response	The proposed solution to Issue 4 would be inconsistent with Wholesale Market Objectives (a), (b), (c) and (d).
EnerNOC	The proposed amendments to change the calculation of RD to be based on the aggregated output of the DSP (portfolio basis), together with the ability to oversubscribe programmes, will allow the Market Rules to better address Wholesale Market Objectives (a), (b) and (d). The proposed amendments to the calculation for RD (Issue 4): • to use IRCR intervals will be inconsistent with Wholesale Market Objectives (a), (c), (d) and (e); while • to use a dynamic profile baseline will promote Wholesale Market Objectives (a), (c) and (d) and (e). The proposed amendments to limit a DSP's Reserve Capacity Obligation Quantity (RCOQ) to those intervals within which the DSP has outlined its availability will allow the Market Rules to better address Wholesale Market Objective (c).
Synergy	Providing investors in DSP projects with a clear market investment signal will address a fundamental value that underwrites the market.
System Management	The proposed changes with the suggestions from System Management address the concerns expressed.

An overview of participant submissions on the costs associated with implementing these changes and the timeframe to implement the rule change is presented below:

Submitter	Identified Costs	Implementation Timeframe
Alinta	None identified.	None identified.
Energy Response	More information is required on the process and conditions for substitution due to System Management request to assess the economic impact in the next Reserve Capacity Cycle. For the 2012/13 Capacity Year Energy Response foresees significant difficulties in fulfilling its capacity obligations under the proposed methodology. Failure to register its additional capacity will result in losses of approximately $4 million through forfeiture of the relevant Reserve Capacity Security. Long term contraction of the dispatchable DSR capacity market anticipated under the proposed RD methodology. If RD methodology similar to existing Market Rules, IT costs would be immaterial.	Immediate if methodology similar to existing Market Rules.
EnerNOC	Changes to the static RD measurement calculation will require changes to existing systems; these are estimated to be small. Alignment of the RD measure with IRCR intervals will impact on EnerNOC's portfolio management. The impact of this is expected to be significant. Higher funding and operational costs for all Market Participants and end users are envisaged due to an increased risk of capacity overestimation and a reduction in the size of the DSM market.	It may take approximately three months to implement the changes proposed by the IMO. EnerNOC forecasts that longer term changes to the makeup and structuring of its DSM portfolio would also be likely. Portfolio construction requirements for the 2013/14 Capacity Year are likely to be impacted, together with restructuring requirements for the 2012/13 Capacity Year.
Synergy	None identified.	Immediately.
System Management	Changes to IT systems will be required to accept the new class of facility registration and new type of Dispatch Instruction[2]. These costs have not yet been evaluated by System Management as there is no IMO Interface specification to cost to;	The expected implementation date has not been estimated as there is no IMO Interface Specification to cost to. It is expected that modifications will be able to be made prior to the Rule Change commencement date.

[2] The IMO notes that these costs are estimated assuming that System Management's proposed amendments are adopted.

	they are however expected to be minimal.	

6.2 The IMO's response to submissions received during the second submission period

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

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
Market Participant Registration (Issue 1)	System Management	Does not understand why this (*registering a DSP as a type of Rule Participant)* is more complex. System Management understands that the DSP provider is providing "another electricity related service" as contemplated under clause 2.28.13, however this is no different to an Ancillary Service Provider class of Market Participant. A DSP provider clearly does not fit the description of a Market Customer who "sells electricity to customers".	The IMO considered two options to support the concept of specialist DSM Aggregators in the WEM: • creating a new Rule Participant class for DSP Providers; and • registering specialist DSM Aggregators as Market Customers and incorporating additional restrictions in the Market Rules where necessary (e.g. to clause 2.33.1(h)). The IMO rejected the former option in favour of the latter, for two main reasons. Firstly, the former option was significantly more expensive in terms of IT and drafting costs. Secondly, the IMO found that the former option did not provide a significant improvement to the clarity of the Market Rules. This is because most of the clauses applicable to DSP Providers are also applicable to Market Customers, Market Generators or (frequently) both. In most cases any requirements for distinct treatment are made obvious by a reference to the Demand Side Programme Facility type. The IMO notes that the Ancillary Service Provider class is only mentioned explicitly in clauses 9.9.2, 9.9.3 and 9.9.4 of the Market Rules (apart from the clauses that define the class itself). The IMO has identified that in all three clauses the reference to Ancillary Service Providers alone is incorrect, since Ancillary Services can be also be provided under contract by Market Customers and Market Generators. The IMO has corrected these errors in the Rule Change Proposal: Cost_LR (RC_2010_33).
Market Participant Registration (Issue 1)	System Management	By allowing a DSP provider to register in the Market Customer class the IMO would be inadvertently allowing the DSP provider to participate in other areas of the Market. For example it could be a counter party to bilateral submissions and also participate in the STEM. System Management contends that this is an unintended consequence that could be avoided by specifying a new class of Rule Participant. There would be no prohibition in a	Refer above. The IMO also notes that currently a participant can be registered as a Market Customer because it simply *intends* to sell electricity. These Market Customers could also, in theory, participate in the STEM. If it became necessary to formally restrict participation in bilateral trading or the STEM to active generators and retailers, then this would not be achieved by the creation of a new class of Rule Participant. The IMO considers that the introduction of such a restriction is not within the

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		company being a Market Customer and a DSP provider if they qualify - just as now a company can be both Market Customer and Market Generator.	scope of RC_2010_29.
Market Participant Registration (Issue 1)	System Management	Given that the DSP provider is not intended to pay Market Fees or Balancing or Ancillary Service costs, all of which are currently faced by Market Customers, it would improve the integrity of the Market Rules and the commercial risk position of participants who only provide DSP to have a separate class of Rule Participant.	Refer above. Market Fees, Ancillary Service costs and Balancing Settlement Amount costs are currently allocated on the basis of the quantities of energy generated or consumed by Market Participants. Since specialist DSM aggregators neither generate nor consume energy in the market, the IMO does not consider that the proposed amendments involve any increase to the commercial risk position of these participants. The IMO notes that the question of whether DSPs should be required to pay Market Fees has been logged as an issue for further discussion (following initial discussion at the November 2010 MAC meeting).
Market Participant Registration (Issue 1)	System Management	If the IMO were to find that there is no need to distinguish between rule classes who are able to register different classes of facilities then this would raise the question: is there a need for both Market Generator and Market Customer classes and would it not be more efficient to simply have Market Participants that share the costs and benefits of the market.	Refer above. The IMO considers that the selection of Rule Participant classes should be governed by practical considerations. Separate classes have been used for Market Generators and Market Customers since the commencement of the WEM, and appear to be warranted by the number of situations in which their treatment varies under the Market Rules. However, the IMO notes the frequency with which the term "Market Participant" is used to refer to members of either class. The IMO notes that there are no practical considerations that demand the introduction of a new Rule Participant class for DSP Providers.
Market Participant Registration (Issue 1)	System Management	Understand that IMO IT system changes are required which means there is added cost but not complexity. System Management contends that the IMO should reconsider the creation of a new participant class for DSP providers.	Refer above.
Dispatch of DSPs (Issue 2)	System Management	Unclear how there can be a separation between having 3 blocks in Reserve Capacity but no blocks in	The proposed amendments would enable a Market Participant to nominate up to three blocks of capacity within a DSP (clause

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		dispatch. Presumably for Reserve Capacity purposes each block can have a different characteristic such as the number of times it can be interrupted. Assuming this to be the case, and given that the IMO is required to provide System Management with details of the Reserve Capacity Obligations to enable System Management to dispatch the DSP and that System Management issues directions to the DSP in accordance with this information, it is not possible to have differing arrangements for Reserve Capacity and Dispatch.	4.10.1(f)(i)) and to make separate Reserve Capacity Offers for each block in a Reserve Capacity Auction, where one is held, to reflect different price quantity pairs for each block (clause 4.18.1(c)). However, the proposed amendments would require that a single set of dispatch and availability parameters would apply to all the blocks offered for a DSP. A DSM Aggregator that wishes to provide DSM capacity with two (or more) different sets of dispatch parameters will be required to certify two (or more) distinct DSPs. The IMO considers that this distinction will make it easier for System Management to dispatch DSPs.
Dispatch of DSPs (Issue 2)	System Management	Contends that the IMO should reconsider having blocks for capacity but no blocks for dispatch.	Refer above.
Dispatch of DSPs (Issue 2)	System Management	During recent curtailments it was also found that many facilities in the Dispatch Merit Order (DMO) had a zero MW capability. Under the current Market Rules System Management is still required to issue Dispatch Instructions to these Facilities. This issue also arises when having to check the compliance of Curtailable Loads, requiring System Management to perform needless tasks.	The IMO confirms that currently CLs and Intermittent Generators with RCOQs equal to zero are included on the DMO. As the Capacity Credits of a Registered Facility and its actual capability do not always align, the DMO is designed to be reflective of the capability of all Registered Facilities (as required under clause 6.12.1). Further the IMO notes that at the time of determining the DMO the RCOQ for each Facility is unknown to the IMO, as the schedule of all Dispatch Instructions to Registered Facilities is not provided by System Management until two days after the event (clause 7.13.1(c)). At the time of issuing Dispatch Instructions to DSPs (currently CLs) System Management is the only party (other than the DSP) with visibility of whether a Dispatch Instruction has been provided in the last two days. As such the IMO considers that System Management is the party best able to manage the risk of issuing a Dispatch Instruction to a DSP that has been dispatched on each of the previous two days and which subsequently has no RCOQ. Whether a further review of this arrangement is required is outside of the scope of RC_2010_29.
Dispatch of DSPs (Issue 2)	System Management	Believes that the number of times that a DSP can be curtailed should appear with other Curtailable Load data sitting in section h of the Standing Data, rather	The IMO agrees and has incorporated System Management's proposed amendment into the Amending Rules. Refer to Appendix 8 for further details.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		than section k.	
Dispatch of DSPs (Issue 2)	System Management	Considers that the issue of having DSPs without a minimum dispatch size (10 MW as suggested in the first submission period) has not been addressed. Notes that further to the MAC recommendation a meeting was held between itself and the IMO on Thursday 7 April 2011. These discussions however did not resolve the need for System Management to potentially need to call a large number of small Curtailable Loads. System Management still believes that DSPs should have a minimum size in order to reduce this burden.	The IMO and System Management met to discuss further the options for implementing dispatch groups for DSM on 7 April 2011. During the discussion it was agreed to wait until after any Amending Rules resulting from RC_2010_29 commence to determine whether the amendments to allow System Management to issue Dispatch Instructions to the DSP rather than each individual load would remove this issue. It was however acknowledged that a DSP could potentially comprise a single Load and therefore System Management could continue to have an issue dispatching a number of small DSPs. This potential issue has been included in the Market Rule Change Log and will be revisited in conjunction with System Management following the next DSP dispatch event (where the Amending Rules to allow for DSPs to be dispatched have commenced). The IMO notes that specifying a minimum size for each DSP would potentially introduce a discrimination against DSM as there are currently no restrictions on the minimum size of a Scheduled Generator for dispatch. Any future proposal to amend the minimum dispatch sizes for DSPs would need to ensure consistency with the Wholesale Market Objectives, and in particular Wholesale Market Objective (c).
Monitoring Compliance of DSPs	System Management	Contends it is impossible to monitor compliance for a DSP as there are no SCADA facilities associated with a DSP and only in special circumstances are there SCADA facilities for the individual loads associated with a DSP. As such System Management believes the IMO should amend clause 7.10.4 as follows: "System Management must monitor the behaviour of Market Participants with Registered Facilities to assess whether they are complying with clause	The IMO agrees that is it not possible for System Management to monitor the real time compliance of DSPs, given that only a few large loads will have SCADA information available. The IMO notes that it is not necessarily cost effective to require all Associated Loads to install the necessary equipment for System Management to be able to undertake this monitoring activity. As such the IMO has incorporated System Management's proposed amendment into the Amending Rules. Refer to Appendix 8 for further details.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		7.10.1 in accordance with the Monitoring and Reporting Protocol, except where it relates to a Demand Side Programme."	
Treatment of Issue 4	Alinta	Does not consider it necessary or desirable to proceed with RC_2010_29 at this time, given that changing the manner in which Relevant Demand is measured for CLs and/or DSPs to use their IRCR, rather than the 32 Peak Trading Intervals as is currently the case, entrenches the existing static baseline for measuring the extent to which CLs and/or DSPs meet their obligations under the Market Rules. There appeared to be general consensus at the workshop held by the IMO on 8 April 2011 that adopting a dynamic baseline to measuring the extent to which Curtailable Loads and/or DSPs meet their obligations under the Market Rules may be more consistent with the Market Objectives.	The IMO notes that the changes originally proposed to the RD methodology under RC_2010_29 were twofold: • firstly, to remove the issue associated with double payment of DSPs; and • secondly, to ensure that the performance of DSPs can be better measured. As agreed by the MAC during its August 2010 meeting, the IMO has proposed that the RD level be a static baseline measure, calculated on the IRCR intervals. This decision to use IRCR intervals was made on the basis of analysis provided by Data Analysis Australia (DAA), which indicated that the most reliable indicator of the available capacity at peak times was the IRCR method (i.e. the median of the 12 Peak Trading Intervals for each Hot Season). Since the IMO proposed a variant of the current static RD methodology, EnerNOC has presented a discussion paper to the MAC (February 2011 meeting) proposing the introduction of a dynamic baseline methodology. A copy of the discussion paper is available on the following webpage: http://www.imowa.com.au/MAC_35. The IMO sought views during the second submission period on whether a static or dynamic baseline methodology should be adopted and in particular whether to: • continue with the proposed amendments to maintain a static baseline methodology based on the 12 IRCR periods as part of RC_2010_29 (as originally proposed); or • remove the proposed amendments from RC_2010_29, with the MAC to consider the static and dynamic model options further.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			The IMO also held a public workshop on 8 April 2011 to inform the submissions of interested parties on the approach to be adopted with regard to the best pathway forward on this issue. An overview of the discussion during the public workshop is presented in section 6.3 of this report. In general, the submissions received during the second submission period favoured the option of removing the proposed amendments from RC_2010_29, with further consideration of a dynamic model to be undertaken by the IMO. The IMO notes that this preferred approach is consistent with the views of the majority of attendees at the public workshop. An overview of the specific views of submitting parties is provided in section 6.1 of this report. The IMO considers it is appropriate to remove the proposed amendments, including the proposed removal of substitutions, from RC_2010_29 and consider the options for a dynamic baseline RD methodology at a later date. In making this determination the IMO has taken into account: • the potential merits of a dynamic baseline methodology in measuring the performance of DSPs, albeit noting that further consideration of the approach is required; • the views of the majority of submitting parties; • the discussion at the public workshop; • the inappropriateness of potentially making two changes to the RD methodologies in quick succession. This is because it is likely (assuming that at a later date a dynamic baseline methodology is implemented) that any associated benefits would not be able to accrue over a long enough period to justify the associated costs of amending the RD methodology to be based on a static IRCR baseline for a short period of time; and • the potential for further changes to the IRCR methodology as

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			a result of the current RCM review. The IMO notes that despite the proposed changes to the RD methodology not progressing, updates to IT systems will still be required to amend the current RD calculation to be based on DSPs and not CLs.
Treatment of Issue 4	Synergy	The dynamic baseline methodology has sufficient merit to warrant a further consideration to explore, amongst other things, options and variations that simplify the methodology without compromising its key deliverable of providing an increased level of assurance about capacity available from DSPs.	Refer above.
Treatment of Issue 4	Synergy	In summary, Synergy sees merit in proceeding with RC_2010_29 as set out in the draft report as it will implement changes that have been refined and improved as the result of a number of reviews by the MAC. Synergy does acknowledge that an alternative methodology (dynamic baseline) to assess DSP performance has recently been discussed, but is of the view that significant development work is required before it can be further considered by the market. Synergy notes, as has been the case with the development of this rule change, that the market may require a new methodology, such as the dynamic baseline, to undergo an extended iterative process prior to final consideration. Given this Synergy considers that the market should not give up an opportunity to implement the well considered changes in the form of RC_2010_29 on account of the prospect of considering another methodology that is in the early development stage and may ultimately be rejected by the market.	Refer above. The IMO disagrees, noting the inappropriateness of potentially making two changes in quick session (as noted previously) and the ability to amend the static RD methodology via a further Rule Change Proposal should an appropriate dynamic measure not be identified.
Treatment of Issue 4	Synergy	Synergy has concerns that the market is not yet fully conversant with the implications of adopting a dynamic baseline methodology as a basis for measuring DSP performance. It would therefore be	Refer above.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		premature to considering adopting it without further study and analysis of how it might work in practice.	
Treatment of Issue 4	Synergy	Synergy is also aware that other Market Participants have raised concerns that the dynamic baseline methodology would mean that a DSP's Required Level would no longer be fixed and that this would introduce a new risk into managing capacity delivery from a DSP portfolio.	Refer above. The IMO notes that this issue would need consideration during the investigation phase for any potential dynamic baseline methodology.
Treatment of Issue 4	Synergy	In Synergy's view, the dynamic baseline methodology is also complicated in comparison with current arrangements and when taken together with the prospect of a variable Required Level may reduce the willingness of loads to participate in providing capacity.	Refer above. The IMO notes that this issue would need consideration during the investigation phase for any potential dynamic baseline methodology.
Treatment of Issue 4	Synergy	A dynamic baseline methodology would require that the DSP aggregator institute systems and processes to closely monitor the performance of its loads to determine its position relative to its obligations at any point. Synergy notes the inherent complexity of the dynamic baseline approach together with the requirement for a monitoring capability may represent a barrier to entry and result in a loss of efficiency for the market as a whole.	Refer above. The IMO notes that this issue would need consideration during the investigation phase for any potential dynamic baseline methodology.
Treatment of Issue 4	EnerNOC	It is recommended that the existing RD methodology remain in place until such time as it can, in order of priority, be replaced by a dynamic measure or clarity surrounding how capacity charges may be distributed within the WEM is available.	Refer above.
Treatment of Issue 4	EnerNOC	While EnerNOC has not reiterated its previous arguments on the dangers of conflating the two measures, EnerNOC remains firm in its belief that the IMO's proposed approach to DSP performance measurement will create significant risks for DSM capacity provision and lead to greater instability and higher costs for the market as a whole.	Refer above. The IMO acknowledges that linking the RD calculation to the IRCR intervals could reduce the amount of DSM capacity offered by some customers into the market. This issue however relates to the current determination of the IRCR methodology which is under consideration as part of the RCM review.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
Treatment of Issue 4	EnerNOC	Believes that the ability for any individual NDL to provide an immediate system capacity service as well as a longer term capacity reduction service appears to be a philosophical argument that requires resolution within the WEM.	Refer above.
Treatment of Issue 4	EnerNOC	The operational function of the RD measure lends itself to investigation and a determination of any changes to the existing methodology independent of any proposed considerations relating to the entire RCM. That is, regardless of the outcome of potential amendments to the RCM that may arise from the review process currently underway, it is incumbent upon the IMO to determine a measure that accurately reflects DSP performance independently of other considerations as such as how the demand side resources may initially enter the RCM or the Availability Classes that such resources may be subject to.	Refer above. The IMO agrees that it is not appropriate to incorporate a review of the options for a dynamic RD methodology into the current RCM review.
Treatment of Issue 4	EnerNOC	Recommends that: • the RD measure be amended to a dynamic profile baseline methodology; • the IMO seek to undertake the necessary research and consultation required to develop a new dynamic RD methodology in a timely fashion and with a view for implementation during the 2012/13 Capacity Year; and • the existing RD measure remain in place prior to the required investigation and analysis needed to determine the most appropriate dynamic RD methodology.	Refer above. The IMO notes that the implementation provisions associated with any future amendments to the RD methodology (including the timing of these implementations) will be considered as part of the further development process.
Treatment of Issue 4	EnerNOC	Considers that the feedback received during the IMO's public workshop indicated widespread and wholesale support from Market Participants for adopting a dynamic RD measurement and moving away from the existing static approach. EnerNOC	Refer above.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		recognises that further analysis and discussion are required prior to adopting any particular type of dynamic baseline and we look forward to actively participating in this process.	
Treatment of Issue 4	Energy Response	While other Market Participants might assume that DSR commissioning is not technically complex, in fact the registration and commissioning of these programmes requires the interaction with potentially hundreds of different parties. As such, an acceptable methodology must be settled on for the next capacity cycle, as soon as possible.	Refer above. The IMO notes that the implementation provisions associated with any future amendments to the RD methodology (including the timing of these implementations) will be considered as part of the further development process.
Treatment of Issue 4	Energy Response	The level of sophistication of this electricity market requires a great deal of education for our providers. Also, as most providers have long-term contracts, it is not suitable to change the methodology in increments. Energy Response requests that any substantive change of the methodology be comprehensively reviewed, with the intent of arriving at a stable, long term solution.	Refer above.
Treatment of Issue 4	Energy Response	The existing Relevant Demand calculation is the most appropriate methodology for now, while a long-term solution that fairly values DSR capacity is being sought. It provides a robust method, where load levels across four different months are used to estimate the level of capacity that would be available if the programme were to be dispatched in the next summer.	Refer above. The IMO notes that the IRCR static baseline methodology was supported by DAA.
Treatment of Issue 4	Energy Response	Supports that all the IMO recommendations in this Rule Change Proposal be accepted, excluding those pertinent to Issue 4, and that Issue 4 be referred to the RCM review for a more extensive examination of alternative methodologies. The results of the RCM review are very relevant in determining the value of dispatchable DSR capacity, particularly as the proposed methodology seeks to align it to the	Refer above. The IMO considers it is most appropriate to independently consider the dynamic baseline options for better measuring the performance of DSM. As such the IMO will not be incorporating a review of the options for a dynamic RD methodology into the current RCM review. The RCM review is primarily focused on the broader issues of the

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		relevant unadjusted peak capacity cost.	appropriate price and quantity of capacity to deliver economically efficient market outcomes while maintaining adequate investment signals and incentives. While the review will be considering the incentives that exist for both generators and DSM providers, it will not consider the method in which Facilities deliver their capacity to the market or the way in which the capacity is measured. However, the IMO notes that the RCM review is assessing the IRCR methodology, which may influence the consideration of baseline methodologies.
Treatment of Issue 4	Energy Response	The value attributed to peak demand reduction must be considered alongside any review of the value of dispatchable DSR capacity, an issue which is introduced in the RCM review. It is not equitable that the effect of peak demand management, which only covered 2.5% of the total DSR programme availability, should lead to a discount in the value of the DSR capacity for the entire capacity cycle. As part of the RCM review, it is worth considering some mechanisms that capture IRCR reduction programmes. This would provide more reliable estimates of peak demand reduction in the next year, and allow an avenue for Reserve Capacity refunds to apply during those periods where DSR component loads were actively managing their peak demand.	Refer above. The IMO acknowledges that a baseline method for measuring DSM performance may over-value or under-value the capacity being delivered. However, the IMO considers that the RCM review should proceed on the assumption that an accurate baseline method is employed and DSM capacity is valued accordingly. As noted above, the IMO considers that the choice of baseline method is outside of the scope of the RCM review, which is considering the broader issues of the appropriate price and quantity of capacity to deliver economically efficient market outcomes while maintaining adequate investment signals and incentives. Rather, the IMO considers that it is most appropriate to independently consider the dynamic baseline options for better measuring the performance of DSM. Such consideration will include the relationship between the baseline methodology and the Reserve Capacity refund mechanism. The IMO notes that the RCM review is assessing the IRCR methodology, which may influence the consideration of baseline methodologies.
Static baseline (IRCR) (Issue 4)	Energy Response	The methodology used to value dispatchable DSR capacity will have implications on this industry's market size, relative value against other forms of	Refer above. The IMO acknowledges that linking the RD calculation to the IRCR

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		capacity, and more broadly on the diversity and reliability of our isolated electricity system. ER posits that the proposed methodology will have unintended negative consequences on these factors.	intervals could reduce the amount of DSM capacity offered by some customers into the market. This issue however relates to the current determination of the IRCR methodology which is under consideration as part of the RCM review.
Static baseline (IRCR) (Issue 4)	Energy Response	Sees IRCR reduction and dispatchable DSR capacity as two distinct market services – each important in its own right. Using the same metric to determine peak demand and dispatchable DSR, however, will cannibalise dispatchable DSR capacity, to the detriment of market efficiency, fuel diversity and system reliability.	Refer above. The IMO questions the overall benefit of a "market service" consisting of a customer lowering its consumption for a few targeted peak intervals only. Such reductions may not necessarily occur at the times when they would provide the most value to the market, and are unlikely to have any significant impact on the overall Reserve Capacity Requirement or on the amount of energy used in the SWIS. Further, the IRCR costs avoided by the customer must then be borne by other customers. The IMO acknowledges that linking the RD calculation to the IRCR intervals could reduce the amount of DSM capacity offered by some customers into the market. However, as noted earlier the IMO has decided to not progress with its proposed amended static baseline methodology as part of RC_2010_29 but rather to undertake a wider review of the options for adopting a dynamic baseline RD methodology.
Static baseline (IRCR) (Issue 4)	Energy Response	Aligning the unadjusted IRCR to the RD sends a signal to the market that random, uncontrollable peak demand reduction is more valuable than measurable dispatchable capacity. This is because the vast majority of loads within the SWIS are considered to be Temperature Dependent Loads. Thus under the proposed methodology, a reduction in peak load, as measured by IRCR, would generally be compensated at a rate of 40 percent higher than the provision of the same capacity as a dispatchable reduction in response to System Requirements. When faced with a choice between both products, customers will invariably choose to reduce their	Refer above. The IMO notes that currently peak demand reduction (to reduce IRCR) will generally be more valuable to a NDL than targeting an increase in RD (dependent on any contracting arrangements between the NDL and the DSM aggregator). For example, if an NDL's contribution to system peak (based on the median of the 12 IRCR intervals) was 1 MW, then: • the potential CC benefit to the NDL (through association with a DSP) would be the equivalent of the cost of a CC; but • the IRCR cost to the NDL, based on the TDL_Ratio, would be approximately 1.4 times the cost of a CC.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		IRCR component. This must be an unintended consequence, as DSR is clearly more valuable: it is predictable, controllable, and, due to the penalties for non-performance, reliable.	The value of the TDL_Ratio is linked to the ratio between: • the Reserve Capacity Requirement for the current Capacity Year, predicted 2 years previously and based on the 1 in 10 year peak demand forecast; and • the sum of IRCR calculated from the previous Hot Season. In essence, it compares measured demand, just under the peak (as it is the median of 12 intervals) in one year with a 1-in-10 year peak demand forecast plus additional margin. The key factors that can cause the TDL_Ratio to vary are: • high forecasted demand growth from one year to the next will create a higher TDL ratio; • cooler IRCR days in the previous Hot Season will result in lower consumption on those days and thus a higher TDL ratio; and • if more Loads are classified as NTDL then the TDL ratio will increase. The IMO notes that the TDL_Ratio can vary each month but has been displaying a generally increasing trend. Since mid-2007, the TDL_Ratio has been above 1.4 and as high as 1.59 (May 2011).
Static baseline (IRCR) (Issue 4)	Energy Response	DSR could respond to any number of unidentified capacity requirements in the future. It is simplistic to assume that these capacity requirements will always align with peak demand.	Refer above. The IMO agrees that a DSP may be dispatched at any time of year, subject to its placement on the DMO, and for a number of reasons (e.g. transmission issues) not restricted to capacity shortfalls. However, the IMO notes that given the restrictions on availability of DSPs it is most likely that System Management would call them during periods of peak demand (as to do otherwise would risk System Management not being able to call them in any subsequent peak demand events).

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
Static baseline (IRCR) (Issue 4)	Energy Response	Programmes that target a reduction in IRCR cannot be relied on year by year. They are unmonitored, and rely on the voluntary reduction in demand during intervals in which the programme operators estimate there will be high peaks. System Management does not know how sophisticated these estimates are, or the limits which apply to curtailment by providers in the programme. Hence the IRCR reduction can vary widely and unpredictably year to year.	Refer above. As noted earlier, the IMO agrees that a Load reducing its consumption in only a few selected intervals to minimise its IRCR is not providing a reliable Capacity reduction service to the market. The IMO has decided to not progress with its proposed amended static baseline methodology as part of RC_2010_29 but rather to undertake a wider review of the options for adopting a dynamic baseline RD methodology. The RCM review is assessing the IRCR methodology, which may influence the consideration of baseline methodologies
Static baseline (IRCR) (Issue 4)	Energy Response	The operator of an IRCR reduction programme must forecast the parts of the year in which the highest loads are likely to occur, allocating their budget of curtailment periods across the most likely candidates. If unexpectedly high loads were to occur towards the end of summer, the operator may be unable to respond, having already used the curtailment periods available to them under their agreements with providers. In that case, nothing could be recovered from the programme operator, and any Supplementary Reserve Capacity could come at much higher cost, as the capacity shortfall would occur from unexpected high demand.	Refer above.
Static baseline (IRCR) (Issue 4)	Energy Response	Recognises that when peak demand reduction coincides with a DSR dispatch, the value of DSR capacity may be overstated, as System Management may have already accounted for the expected relevant incremental load reduction. DSR capacity should fairly represent the expected load that would have occurred had a dispatch request not been made for that programme.	Refer above. The IMO notes System Management's confirmation that in preparing its load forecasts it does not take into account expected reductions resulting from IRCR management. The IMO notes Energy Response's view that the capacity provided to DSPs should reflect their expected load.
Static baseline (IRCR) (Issue 4)	EnerNOC	The RD measure is an operational tool and should not be confused with other determinants used within	The IMO agrees with EnerNOC's observation that the RD measure is intended to be an operational tool rather than a system planning tool.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		the WEM for system planning purposes. The specific intent of the RD measure is to quantify the immediate forecast and post-event delivery of DSM capacity. By adopting this intent and parallel with generation resources, further clarity is provided with regards to the operational nature of the RD – measures used to quantify generator output do not support system planning needs but simply operational concerns only.	
Static baseline (IRCR) (Issue 4)	Synergy	The proposal to alter the measurement basis of RD (which sets the maximum level of Capacity Credits that can be assigned to a DSP) is to be applauded, as it aligns the capacity reserved for an underlying load to that which it can subsequently provide by reducing its demand.	Refer above.
Double payment (Issue 4)	Synergy	Basing the RD calculation on the peak demand periods, as measured by the IRCR process, identifies the capacity allocated to or reserved for and paid by Loads and therefore also identifies the capacity that can be made available by those loads should they elect to reduce their demand. Continuing with the current RD calculation (based on 32 Peak Trading Intervals), or indeed adopting a dynamic baseline approach would not address the potential for a difference to arise between the RD quantum (which sets the maximum Capacity Credits a DSP can claim) and its IRCR quantum (which sets the capacity reserved for a DSP).	As noted earlier the IMO has decided to not progress with its proposed amended static baseline methodology as part of RC_2010_29 but rather to undertake a wider review of the options for adopting a dynamic baseline RD methodology. The IMO acknowledges that maintaining the current static baseline methodology will result in the continued double payment issue. The IMO however considers that it would be inappropriate to potentially make two changes to the RD methodology in quick succession.
Double payment (Issue 4)	Synergy	In Synergy's view, promoting arrangements that contemplate an outcome whereby CCs claimed by a DSP exceed its associated IRCR would be highly undesirable. It would, in effect, be sanctioning an outcome where capacity not allocated to, or reserved for, a DSP could be claimed as capacity that the DSP can seek a payment for through the RCM. This raises considerable equity issues as it is definitely	Refer above.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		arguable as to whether the DSP has any disposition rights to capacity which was not allocated to or reserved for it. There is little doubt that customers would object to paying for capacity from a DSP where that DSP did not initially reserve or pay for that capacity; customers would perceive that they would, in effect, be paying twice for the same capacity.	
Double Payment (Issue 4)	EnerNOC	In effect the IMO is proposing that the provision of both services – dispatchable capacity and non-dispatchable peak load reduction – when provided coincidentally will be paid for by the market (independently and for both services). However, where these services are provided non-coincidentally no such payment will be made available for the provision of dispatchable capacity.	Refer above.
Double Payment (Issue 4)	EnerNOC	Philosophically, EnerNOC believes dispatchable capacity and non-dispatchable (voluntary) peak load reduction are two separate and valuable system services that can be provided by loads and their associated DSPs.	Refer above. The IMO notes that the dual incentive of reducing peak demand and increasing the supply of DSM capacity in the WEM is currently inefficient as it creates a double payment stream. The intent of its proposed amendments to the static RD methodology to be based on IRCR intervals was to allow an end use customer to make a decision over which payment stream they wish to target. Consideration of a dynamic RD methodology will need to take into account this double payment stream.
Double Payment (Issue 4)	EnerNOC	It is indeed true that a load which reduces its IRCR may signal that a reduction in peak system capacity is also required. However, since overall capacity requirements are based on complex forecasts and not simply the summation of all IRCRs, this is not a one-for-one reduction. Moreover, this reduction is a system benefit generated by a load undertaking voluntary actions. In fact, if practiced by enough customers, the overall load factor and efficiency of	Refer above.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		the entire system would be improved. It is because this benefit is generated by the reducing load that efficient payment mechanisms should ascribe the benefit to the participating load.	
Double Payment (Issue 4)	EnerNOC	It is not true to propose that this same signal is defective or inappropriate where a load exceeds its demand recorded during system peak intervals at other times during the year. System capacity requirements are properly determined around system peak requirement – planning measures for future system capacity correctly ignore load demand during non-peak periods).The WEM's winter peak has no bearing on the quantity of reserve capacity procured to enable reliability during the system's peak period of summer. Were this not the case, under this flawed argument loads that intelligently shift their peak demands to off-peak periods should be ascribed a higher capacity charge than they currently face.	Refer above. The IMO notes that the current IRCR methodology considers only 12 Peak Trading Intervals within a Capacity Year, and so it is possible that the consumption of a Load during these intervals may not reflect its consumption level in the majority of summer peak periods. The IMO reiterates that the IRCR mechanism is currently under consideration as part of the RCM review. It is inaccurate to suggest that forecasts of future peak demand are based exclusively on a small number of historic peak intervals. A much large set of Trading Intervals is considered when determining the correlation between temperature and electricity demand.
Double Payment (Issue 4)	EnerNOC	To artificially limit the amount of capacity a DSP can offer to the WEM based on its consumption during IRCR intervals, and irrespective of its actual ability to provide capacity when called upon, diverges from the treatment generators receive and inherently discriminates against DSM resources.	Refer above. The IMO notes that the dual incentive of reducing peak demand and increasing the supply of DSM capacity in the WEM is currently inefficient as it creates a double payment stream. In essence the IRCR amount paid by a Market Customer acts as compensation for the availability of capacity during peak intervals (from DSPs and other generation types). The IMO notes the interrelated nature of both mechanisms. Further consideration of this will be required as part of the development of any potential dynamic RD methodology.
Double Payment (Issue 4)	EnerNOC	Strongly refutes arguments that loads reducing their IRCR are "free riders" and obtain a capacity subsidy from other end-users. End-users who respond to peak pricing signals are, in fact, undertaking economically rational decision making, and one would be hard pressed to find a creditable market economist describing it as some form of rent-	Refer above. The IMO reiterates that the issue of double counting will be further considered in the context of the wider review of introducing a dynamic RD methodology.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		seeking. References to subsidies provided to loads which reduce their peak demands make no sense at all except in an anti-competitive, purely static system of regulated monopoly utilities.	
Double Payment (Issue 4	EnerNOC	Loads that voluntarily choose to curtail their usage at peak times increase net social welfare. The individual loads are better off as the value of peak load compensation outweighs any inconvenience in curtailing their usage, and all other loads are also better off because the peak curtailment reduces the incremental cost of continuing to serve all, while holding the possibility of losses of load and blackouts, to pre-determined optimal levels. Society also benefits from the reduction because it defers or entirely puts off the cost of constructing additional generating plant and/or conserves the characteristically heavy use of fuel by peaking generators.	Refer above.
Providing dual services (Issue 4)	EnerNOC	The assumption that because a customer managed its IRCR in the previous year that it can be assumed in the current year to have already curtailed or be likely to curtail demand when System Management would otherwise dispatch it is erroneous.	As noted earlier the IMO has decided to not progress with its proposed amended static baseline methodology as part of RC_2010_29 but rather to undertake a wider review of the options for adopting a dynamic baseline RD methodology given the potential merits of increased certainty around the output of the DSP prior to being issued a Dispatch Instruction. The IMO notes that the market currently provides greater incentives for a Facility to reduce its IRCR[3].
Providing dual services (Issue 4)	EnerNOC	It is also erroneous to argue that a load attempting to offer more demand response they can reduce when called on by System Management is attempting to sell more capacity than it has purchased. The total amount of capacity purchased on behalf of customers is completely unrelated to any and all	Refer above.

[3] Based on the TDL_Ratio the IRCR cost to a NDL is approximately 1.4 x the cost of a Capacity Credit however the CC benefit to a NDL is 1MW of CC's.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		customers' IRCRs. While it might be true that the customer has sought to sell more capacity than that which has been allocated to it, this is purely a cost allocation issue, not a reliability question.	
Providing dual services (Issue 4)	EnerNOC	Peak load reduction and demand response are both laudable and harmonious undertakings that can and should coexist. EnerNOC supports incentives for loads to provide the dual services of dispatchable capacity provision and voluntary peak load reduction. EnerNOC does not believe there are any clear arguments relating to economic efficiency to suggest that such a dual provision of services would lead to anything but a more efficient outcome for all electricity users.	Refer above. The IMO disagrees noting that in essence the IRCR amount paid by a Market Customer acts as compensation for the availability of capacity during peak intervals (from DSPs and other generation types). The IMO notes the interrelated nature of both mechanisms and the subsequent inappropriateness of a dual payment stream from an economic efficiency point of view.
Substitution due to maintenance (Issue 4)	Energy Response	For this methodology to be reflective of the level of capacity, the clause which allows for substitution due to maintenance must continue to be applied, where the provider can prove that its capacity value is lower than can be reasonably expected for the next year.	As noted earlier the IMO has decided to not progress with its proposed amended static baseline methodology as part of RC_2010_29 but rather to undertake a wider review of the options for adopting a dynamic baseline RD methodology, given the potential merits of increased certainty around the output of the DSP prior to being issued a Dispatch Instruction. In removing the proposed solution to Issue 4 from RC_2010_29 the current ability to request the IMO to include substitutions during intervals where maintenance was being performed will be maintained. Additionally, Energy Response suggests in its submission that the IMO could substitute intervals as a result of reductions due to storms and Christmas Eve. The IMO notes that under the proposed Amending Rules it has the discretion to substitute an alternative value for a Trading Interval if it considers the metered consumption value to be inappropriate.
Substitution due to maintenance (Issue 4)	Energy Response	The IMO already is able to determine what constitutes maintenance under the existing methodology. Energy Response proposes that the IMO use its own judgement to ensure the capacity	Refer above.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		value is reflective of what a load is likely to be available to dispatch.	
Substitution due to maintenance (Issue 4)	Energy Response	A static baseline must have some flexibility to provide substitution for events such as those described, so that the Relevant Demand more accurately represents the DSP's capacity under normal operating circumstances in the following year. A move to a profile baseline would undoubtedly remove this requirement.	Refer above.
Dynamic Baseline (Issue 4)	Energy Response	EnerNOC's alternative methodology provides an interesting alternative to the static baselines previously contemplated. It is more closely consistent with the treatment of generation capacity, because it can more closely reflect reductions against expected load with hourly and seasonal adjustments.	Refer above.
Dynamic Baseline (Issue 4)	Energy Response	It is in the long-term interest of the industry that the capacity value reflects the value it provides as an alternative to generation capacity. At the same time, Energy Response recognises that any changes to the existing systems and rules to accommodate a more flexible valuation must bring a net economic benefit to the market. The framework for testing, capacity valuation, capacity refunds, Security Deposit return and a host of other inter-related aspects needs to be defined in order to perform an economic valuation.	Refer above.
Dynamic Baseline (Issue 4)	Energy Response	Recommends that a profile methodology should be included in the RCM review for evaluation and requests that System Management provide a presentation on the calculation of load forecasts. This will allow a better understanding of how the divergent methodologies perform against *"expected load that would have occurred had the dispatch request not been made for that programme".*	Refer above. The IMO considers it is most appropriate to independently consider the dynamic baseline options for better measuring the performance of DSM. The RCM review is primarily focused on the broader issues of the appropriate price and quantity of capacity to deliver economically efficient market outcomes while maintaining adequate investment

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			signals and incentives. While the review will be considering the incentives that exist for both generators and DSM providers, it will not consider the method in which Facilities deliver their capacity to the market or the way in which the capacity is measured.
Dynamic Baseline – Sustainability of DSM (Issue 4)	EnerNOC	Contrary to any commentary that might imply that EnerNOC seeks to utilise a dynamic baseline approach to simplify or make easier our provision of DSM capacity, the opposite is in fact true. EnerNOC has not conducted any analysis on our existing portfolio to determine any net capacity benefit that might be obtained through adopting a dynamic measure. Indeed, we firmly believe such adoption would make DSM capacity provision more challenging than is currently the case, and our unparalleled experience operating in other markets under both static and profile baseline measures supports this view. EnerNOC's intent with moving forward with the proposal is to secure the long term sustainability of DSM resources within the WEM by adopting accurate performance measures and thereby ensuring that the WEM can count on the value of DSM resources within an operational context far into the future.	As noted earlier the IMO has decided to not progress with its proposed amended static baseline methodology as part of RC_2010_29 but rather to undertake a wider review of the options for adopting a dynamic baseline RD methodology given the potential merits of increased certainty around the output of the DSP prior to being issued a Dispatch Instruction. This point raised by EnerNOC will be further considered in the context of the wider review of introducing a dynamic RD methodology. The IMO will undertake a balanced assessment of the costs and benefits of potentially adopting a dynamic baseline as part of its wider consideration of this issue.
Dynamic Baseline - Capacity Obligations (Issue 4)	EnerNOC	Switching the RD calculation from a static measure to a dynamic profile methodology will only impact the measurement of DSP performance and will not look to change other aspects of DSM participation in the RCM. Static requirements such as the quantity of Capacity Credits assigned to any individual DSP will not fluctuate under a dynamic baseline as some appear to believe. All that will change is that DSPs will be required to physically provide what they have been paid for by the WEM, and are not simply able to meet performance standards via incidental or phantom performance. In this manner, the	Refer above. This point raised by EnerNOC will be further considered in the context of the wider review of introducing a dynamic RD methodology. The IMO will undertake a balanced assessment of the costs and benefits of potentially adopting a dynamic baseline as part of its wider consideration of this issue.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		commitments of DSPs – their availability and associated RCOQs – will very much remain under the dynamic baseline proposal, as will the level of capacity payments received. Rather the proposed changes seek only to amend how performance is measured against these static requirements.	
Dynamic Baseline – Nature of the Capacity Market (Issue 4)	EnerNOC	Concern has been expressed that the two year forward nature of the RCM makes the use of a dynamic RD either unworkable or less attractive than a static measure. This concern betrays confusion between the planning requirements embedded within the RCM and the operational needs of system managers. Were the logic to be extended, it might be argued that the RD measure would need to be fixed more than 2 years in advance of delivering DSM resources, making a mockery of DSP performance assessment. Moreover, the concerns fail to recognise that other liberalised electricity markets with significant demand response penetration combine forward capacity markets with dynamic profile baseline DSM measurement approaches.	The IMO agrees that the choice between a static and a dynamic baseline approach to determine RD is not affected by the two year forward nature of the RCM.
Dynamic Baseline - Sufficient arrangements at market start (Issue 4)	EnerNOC	It has been argued that a dynamic baseline would make it more difficult for the IMO to ensure a DSP provider has sufficient arrangements in place at market start to deliver on their capacity commitments. EnerNOC considers that compliance under an inaccurate static baseline measurement scheme may be easier to determine, however, it provides little reassurance of a DSP's actual capability to provide capacity when dispatched by System Management. Moreover, EnerNOC holds that such static registration requirements can easily accommodate a dynamic baseline measurement through adopting approaches such as individual load curtailment nominations, periodic meter data audits,	Refer above. This point raised by EnerNOC will be further considered in the context of the wider review of introducing a dynamic RD methodology. The IMO will undertake a balanced assessment of the costs and benefits of potentially adopting a dynamic baseline as part of its wider consideration of this issue.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		and/or utilising existing verification processes.	
Dynamic Baseline – reliability of security of supply forecasts	EnerNOC	A fundamentally flawed argument has been made to suggest that a dynamic baseline would impact the IMO's security of supply forecasts. The reverse is very much the case, as a dynamic baseline does not create uncertainty as to whether the DSP provider has sufficient capacity, but actually increases the confidence that they truly have the ability to provide the capacity they are obligated to, and that meeting this commitment has not be undertaken through phantom loads and incidental performance. In reality, a dynamic baseline provides additional confidence to the IMO's security of supply forecast, since it can forecast the true ability of a DSP to provide capacity when dispatched by System Management.	Refer above. This point raised by EnerNOC will be further considered in the context of the wider review of introducing a dynamic RD methodology. The IMO will undertake a balanced assessment of the costs and benefits of potentially adopting a dynamic baseline as part of its wider consideration of this issue.
Requirement for DSPs to log Forced Outages (Issue 4)	Energy Response	The IMO has information on the terms of DSR capacity, and this rule change's requirement for declaration of Forced Outages can be built into effective planning.	Under the Market Rules only those Loads which are listed on the equipment list need to log Forced Outages. The IMO notes that the vast majority of Loads are not included on the Equipment List as they have a Standing Data nameplate capacity of less than 10 MW (clause 3.18.2A) and System Management has not under clause 3.18.2(c)(iv) determined that they should be included on the list. The IMO notes that RC_2010_29 does not propose to change the requirements for DSPs to be included on the Equipment List and therefore to have to log Forced Outages.
Load ramp rates (Issue 4)	Energy Response	There must be an allowance for load ramp-down and ramp-up periods, outside of the System Management dispatch period. Otherwise a site which was only doing what System Management requested will be unfairly penalised.	The proposed Relevant Demand methodology allows for the IMO to use consumption estimates in its calculations where a Market Customer provides satisfactory evidence that an Associated Load was operating at below capacity due to its consumption being reduced at the request of System Management. This could apply to Trading Intervals before or after the actual period of a Dispatch Instruction, if the evidence provided clearly indicates a consumption reduction resulting from the Dispatch Instruction.
Progression of RC_2010_29	Alinta	Does not consider it necessary or desirable to proceed with RC_2010_29 at this time, given that the	The IMO notes that RC_2010_29 is intended to fix a number of issues identified with the current Market Rules, and does not intend to

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		IMO has engaged a consultant to review the RCM and provide it with recommendations on any practical changes to the RCM to deliver economically efficient outcomes, including ensuring appropriate investment signals and incentives for the right mix of Facilities. The scope of works specifically requires that the consultant consider whether the RCM is delivering the optimal mix of generation and DSM capacity. Alinta considers it very likely that substantial changes to the RCM will be recommended following this review. For this reason, Alinta considers that it appears premature to amend the Market Rules as proposed by RC_2010_29 ahead of the recommendations of the review being considered by the MAC.	consider the optimal mix of generation and DSM capacity in the WEM. Consideration of whether the RCM is delivering the optimal mix of generation and DSM capacity, including a review of the Availability Classes, has been included in the wider review of the RCM currently being undertaken by the IMO. The IMO's wider review of the RCM will not be completed until mid 2011, with any subsequent Rule Change Proposals unlikely to enter the process until early 2012. The IMO considers in this case the existence of other work streams/reviews should not be a reason in itself to unnecessarily delay work already compiled. Given the operational issues identified in the current Market Rules the IMO considers that progressing with the proposed amendments is warranted at this time and should not be delayed subject to the potential outcomes of the RCM wider review. This view is also supported by Synergy in its second submission.
Progression of RC_2010_29	Synergy	Notes that it has been suggested that the proposed changes should be held in abeyance because the review of the RCM currently being undertaken may give rise to implications in respect of the treatment of DSPs in the RCM. As it is uncertain what the review will deliver in respect of DSPs and if, or when, this may transition into rule changes, Synergy does not support forestalling the progress of RC_2010_29 as it proposes solutions to a number of much discussed and agreed issues.	Refer above.
Progression of RC_2010_29	Alinta	Does not consider it necessary or desirable to proceed with RC_2010_29 at this time given that to the extent the IMO has developed a workable approach that is permissible within the current Market Rules, there appears to be no practical need for amending the Market Rules as proposed by RC_2010_29. Alinta notes that the IMO advised the MAC of a	As noted above, there are a number of operational issues in the current Market Rules relating to CLs that need to be addressed. The IMO considers that it is important for the integrity of the market that these operational issues be corrected as soon as possible, so that all Market Participants can have confidence in the operation of the Market Rules relating to DSM. To ensure that there are sufficient benefits associated with progressing with RC_2010_29 at this time (given the IT costs

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		number of perceived issues associated with CLs and DSM in May 2010. In the intervening period, the IMO has successfully completed a Reserve Capacity Cycle assigning a significant number of new CCs to DSPs.	associated with the proposed changes) the IMO undertook a qualitative cost benefit analysis of the proposed amendments against the status quo (presented in the Draft Rule Change Report) and updated this analysis following the closure of the second submission period. The outcomes of the IMO's updated cost benefit analysis indicate that there are sufficient benefits to outweigh the costs associated with progressing RC_2010_29 at this time. For further details refer to section 7.5 of this report.
Drafting detail	Alinta	While the proposed amendments would appear to suit parties seeking to aggregate multiple small loads that are curtailable to a single DSP, Alinta is concerned that the deletion of clause 4.8.3 has the potential to significantly increase the risk to parties seeking to contract with large loads that are curtailable. This is because rather than the DSP simply being a place holder for multiple, as yet unidentified loads that are curtailable, parties seeking to contract with large loads will need to contact with these loads at the time the DSP is registered. Not to do so would create significant commercial risk as, unlike parties seeking to aggregate multiple small loads that are curtailable into a single DSP, it would be significantly more difficult to source replacement large loads.	The IMO considers that overall the proposed amendments will provide a more flexible framework for DSP providers than exists under the current arrangements. DSP providers will have a greater choice in how they fill their programmes, and will be able to oversubscribe their programmes and replace individual Loads when necessary. This should allow them to better comply with their capacity obligations and so reduce their commercial risks. The IMO notes that not all Market Customers will want to operate as DSM aggregators, and so would rather simply have one Load associated with a DSP. To the extent that a Market Customer is unable to contract in advance to meet the capacity requirements for the relevant DSP in these cases, this is a commercial risk that is most appropriately borne by the DSM provider. The IMO notes that where a large load cannot be procured it will be still possible for the Market Customer to associate multiple smaller loads to meet the RCOQ of the DSP. The IMO acknowledges that this may have operational impacts on the Market Customer (who would operate as an aggregator in this case), but notes that the ability to restructure DSM portfolios during the interim period will allow for these risks to be partially mitigated.
Drafting detail	Alinta	There may be an unintended misalignment between the 10 Business Day delay in the IMO associating a load with a DSP under clause 2.29.5E and a further 10 Business Day delay in resetting the Relevant Demand in clause 2.29.5H after a load is associated with the DSP. Alinta is concerned that the delay in	The IMO notes that the RD for a DSP will be recalculated by the IMO for each Trading Day. Any changes in the association of a Load with a Demand Side Programme will be reflected in the RD calculation on the effective day of the change. The Amending Rules presented in Appendix 8 have been amended accordingly

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		resetting the Relevant Demand by 10 Business Days after the load is associated with the DSP has the potential to create issues if the DSP were to be dispatched within this period. It appears that the resetting of the Relevant Demand should be occurring in the original 10 Business days allowed for the IMO to associate the IMO with the DSP.	
Drafting detail	Alinta	It appears that the deletion of clause 2.33.4(d)(iii) would mean that a DSP may only be deregistered with six months notice, whereas currently a CL, which may comprise the entire programme, can be deregistered with one month notice.	The IMO has updated the Amending Rules presented in Appendix 8 to only require one month's notice to de-register a DSP. This is in line with the current timelines for de-registering a CL. The IMO considers that there is no need to require a longer notice period for the de-registration of a DSP than the one month period currently applicable to CLs.
Drafting detail	Alinta	Currently, Intermittent Loads are not permitted to be included in a DSP, but if clause 4.8.3(a) were to be deleted as proposed, this would no longer be the case.	The IMO has updated the clause 2.29.5E presented in Appendix 8 to preclude the association of an Intermittent Load with a DSP.
Drafting detail	Alinta	Clause 4.8.3(e) currently requires that loads comprising the DSP have the same availability as the block that is applied for (e.g. 24 hours or 48 hours). This appears not to have been covered in the amended Market Rules or in the new procedure.	The IMO notes that under the proposed amendments it will be the DSM aggregator's responsibility to ensure it has Loads associated with its DSP that can ultimately deliver the correct availability requirements. Should a DSP have Loads associated with it which have a lower availability than the overall DSP then this is their risk to manage. The IMO considers that it is the DSM aggregator's responsibility to ensure that the associated Loads are capable of meeting its availability requirements at all times.
Drafting detail	Alinta	The reasons that clause 4.11.4, which specifies the hours of availability, is being deleted is unclear.	Refer above. The IMO notes that under the proposed changes the concept of blocks will only apply for the purposes of bidding into the Reserve Capacity Auction. Each block of capacity will simply reflect a different price quantity pair, with a single set of dispatch and availability parameters to apply for a DSP (that is each block within a DSP must have the same availability parameters). A DSM Aggregator that wishes to provide DSM capacity with two (or

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			more) different sets of dispatch parameters will be required to register two (or more) distinct DSPs.
Drafting detail	Alinta	The reference in clause 4.25.1(c) to a DSP operating at its maximum RCOQ is unclear, as this quantity is simply the difference between its Relevant Demand and its Required Level (i.e. should it be operating at its Relevant Demand?)	The IMO notes that a DSP needs to demonstrate a reduction that reflects its RCOQ. The IMO has amended the Amending Rules presented in Appendix 8 to clarify this requirement.
Drafting detail	Alinta	Clause 4.25.2(a) contains a reference to "Metered Schedules" which should instead be a reference to "sent out energy non loss adjusted".	A DSP does not have a loss factor, but rather the associated Loads. As such the IMO considers that all calculations undertaken for a DSP should be based on non-loss adjusted output to ensure consistent treatment of the output of DSPs. The IMO also notes that this is consistent with the basis under which Capacity Credits are assigned to all Facilities. The IMO has revised the requirements of clause 4.25.2 to clarify that a DSP would be required to operate at its required level (as measured by metered consumption) following a self-activation. Further details of the process will be specified in the Market Procedure for Reserve Capacity Testing.
Drafting detail	Alinta	It appears that clause 4.25.3B assumes that the "activation" of the DSP would be for the complete amount of capacity offered by the DSP. Alinta understands it is possible, although perhaps unlikely, that a DSP might only be partially "activated". In such circumstances, it appears that the second Reserve Capacity test would still be required.	The IMO has amended the Amending Rules presented in Appendix 8 to ensure that a partial activation of a DSP would not be considered a second Reserve Capacity test.
Drafting detail	Alinta	The reference to "current Scheduling Day" in clause 4.25.4 is unclear and must be more specific. For example "… on the second Trading Day following the day on which the IMO validate results…"	The IMO has amended the Amending Rules presented in Appendix 8 to reflect this clarification.
Drafting detail	Alinta	Clause 4.26.2C contains an incorrect reference to clause 4.26.CC rather than clause 4.26.2CC.	The IMO notes that it has amended the clauses around the calculation of the Relevant Demand for a DSP, given its decision to remove the proposed amendments to be based on the 12 IRCR intervals.
Drafting detail	Alinta	Suggests that the reference in clause 4.26.2C(a) to	Refer above.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		"…the start of a Reserve Capacity Year…" might be better amended to "…the start of each Reserve Capacity Year…"	
Drafting detail	Alinta	It appears that clauses 4.26.2C(a) and 4.26.2C(c) are effectively the same clause as the content of clause 2.29.5H, to which clause 4.26.2C(c), is the same as the content of clause 4.26.2C(a).	Refer above, The IMO notes that it has removed the clarifications around when the RD for a DSP will be calculated as the calculation will be completed daily to take account any substitutions or churn in Associated Loads.
Drafting detail	Alinta	Notes that clause 4.26.2D(iii) currently results in a level of refunds that is greater than Capacity Credits assigned (-2 * meter data + Capacity Credits - Relevant Demand). This error should be corrected.	The IMO has amended the Amending Rules presented in Appendix 8 to correct for this error. The IMO notes that the intent is that refunds will be capped at the level of Capacity Credits assigned to the DSP.
Drafting detail	Alinta	The new clause 4.26.3A(b)(ii) appears to add MW to $?	The IMO notes that sub-clauses (i) and (ii) add together the costs associated with a DSP failing to provide sufficient capacity when issued a Dispatch Instruction (under subclause (i)) and as a result on not procuring sufficient capacity (under subclause (ii)). The IMO has however identified further issues with the Facility Reserve Capacity Deficit Refund being a monthly value and so not needing to be summed for all Trading Intervals during a Trading Month. The IMO has corrected for this issue in Appendix 8.
Drafting detail	Alinta	In respect of clause 6.12.1(h), Alinta notes that loads and DSPs do not have "sent out capacity"	The IMO notes that this is an existing issue with the clause 6.12.1(h) not taking into account Loads and DSPs. The IMO has included this issue in its Market Rule Issue Log as it considers that this issue requires further consideration and is outside the scope of RC_2010_29.
Drafting detail	Alinta	Clause 6.17.6(d)(i)(2) appears to incorrectly refer to clause 7.1.13(eC) rather than clause 7.13.1(eC). It also appears that this clause will conflict with changes to clause 6.17.6(d)(i) following RC_2008_20, which commences on 1 October 2011 and changes the dispatch quantity.	The IMO notes that the amendments to clause 6.17.6 reflect the amendments to this clause that will commence on 1 October 2011 as a result of RC_2008_20 and are intended to over write the resultant amendments to the Dispatch Instruction Payments for DSPs. This was explicitly noted in the IMO's original proposal as a point of clarification. The IMO has updated the Amending Rules to reflect the correct clause reference.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
Drafting detail	Alinta	Clause 6.17.6(d)(i) appears to incorrectly use both MW and MWh in determining the extent to which a DSP reduces its consumption. Sub-clauses 1 and 2 convert MW into MWh by dividing MW by 2, where as subclause 3 converts MWh to MW by multiplying by 2. Further Alinta notes that the calculation appears to have no floor, whereas it appears necessary to limit the reduction to nill.	The IMO has amended this issue in the Amending Rules presented in Appendix 8.

6.3 Public Workshop

The IMO held a public workshop on 8 April 2011, to give stakeholders an opportunity to discuss the issue of whether a revised static or dynamic baseline RD methodology should be adopted and assist the IMO in its consideration of an appropriate methodology for measuring the performance of DSPs.

The workshop was attended by representatives from:

- Alinta
- Economic Regulation Authority
- EnerNOC
- Energy Response
- ERM Power
- Griffin Energy
- IMO
- Metro Power Company
- Perth Energy
- Synergy
- System Management
- Water Corporation
- Wes Resources

The main points raised in discussions are summarised below.

- EnerNOC supported a dynamic baseline approach, noting its sophistication compared to the current static baseline methodology.
- Alinta supported a dynamic baseline approach in principle, suggesting that the IMO should not proceed with RC_2010_29 but rather investigate in further detail adopting a dynamic approach.
- Water Corporation supported a static baseline approach on the basis that it provides greater certainty and ensures that DSPs do not increase load during dispatch periods.
- Synergy noted that the costs of adopting a dynamic baseline approach are unknown and that a move to a dynamic methodology would be premature. Synergy considered that RC_2010_29 would solve the majority of identified issues with the current measurement of the performance of DSM. Synergy proposed that the IMO proceed with RC_2010_29 while continuing to assess the dynamic approach at the same time.
- System Management noted concerns around the transparency of the two methodologies. The impact of moving to a dynamic baseline methodology and the associated visibility of DSM operation would need to be understood. System Management noted that it is currently very difficult for them to make sophisticated use of DSM in real time while trying to manage the operating state.
- Energy Response noted that any change should be made at a single point in time as multiple changes would create uncertainty in the market.
- It was agreed that as the volume of DSM capacity in the market increases, the issue of reliability and efficient dispatch of DSM is likely to become more prominent. Overall, attendees of the public workshop considered that the IMO should investigate a dynamic baseline approach in more detail at a later date (subject to resource availability).

6.4 Additional Amendments to the Amending Rules

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

- refine the process to apply during the interim period for the transfer of CLs to DSPs, including updating the heads of power for the new interim Market Procedure (refer to section 6.4.1 for further details);
- reflect the suggestions received in submissions during the second consultation period, where appropriate;
- allow for Interruptible Loads to be associated with a registered Demand Side Programme, provided that they do not hold Capacity Credits for the relevant periods;
- remove the IMO's proposed amendments to the current static RD methodology to be based on 12 IRCR intervals;
- correct a number of errors in the Capacity Cost Refund calculations; and
- improve the integrity of the proposed Amending Rules.

These additional amendments are presented in Appendix 8 of this report.

6.4.1 Process for the pre-registration of DSPs

Following the publication of the Procedure Change Proposal: Transitional arrangements for the Registration of Demand Side Programmes and the association of Non-Dispatchable Loads (PC_2011_03) the IMO identified a number of issues with the pre-registration process outlined in the proposed Market Procedure[4].

While developing the proposed amendments to the Market Procedure to correct the identified issues, the IMO also identified a number of clarifications to the proposed transitional Amending Rules to better assist impacted Market Customers in transitioning to the proposed new arrangements. Further details of the revisions to the proposed Amending Rules are presented in Appendix 8.

A basic overview of the revised pre-registration process, as presented in both the revised Market Procedure and Amending Rules, is provided below:

- Creation of DSP Facilities
    - The IMO develops a transitional plan for a DSM portfolio, including any alternative options for revising the transitional plan and Reserve Capacity Security implications.
    - Market Customer notifies the IMO of any requested changes to transitional plan (consistent with alternative options that have been identified).
    - The IMO confirms transitional plan (including any revisions).
    - The IMO creates required DSP Facility names in the WEMS.
- Pre-Registration of DSPs (optional for Market Customer)
    - Market Customer provides completed application form, including required Standing Data.
    - The IMO determines whether to approve pre-registration (in consultation with System Management).

[4] For further details of the identified issues refer to the Public Notice available on the following webpage: http://www.imowa.com.au/PC_2011_03

- Association of CLs, NDLs and ILs with a pre-registered DSP (optional for Market Customer)
    - Market Customer provides completed application form, including required supporting evidence.
    - IMO determines whether to approve the association.

For further details refer to the following webpage:http://www.imowa.com.au/PC_2011_03

7. THE IMO'S FINAL ASSESSMENT

In preparing its Final Rule Change Report, the IMO must assess the Rule Change Proposal in light of clauses 2.4.2 and 2.4.3 of the Market Rules. 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 in respect of this Rule Change nor has it commissioned a technical review in respect of this Rule Change Proposal.

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

7.1 Market Objectives

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

Wholesale Market Objective		Consistent with objective
(a)	to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system	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 that reduce overall greenhouse gas emissions	Yes
(d)	to minimise the long-term cost of electricity supplied to customers	Yes

Wholesale Market Objective		Consistent with objective
	from the South West interconnected system	
(e)	to encourage the taking of measures to manage the amount of electricity used and when it is used	Yes

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

Issue 1: Registration of a Curtailable Load

The IMO considers the changes proposed to remove the concept of a CL as a Registered Facility from the Market Rules and replace this with the concept of the DSP being the Registered Facility will have the following impact on the Wholesale Market Objectives.

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

Through the allocation of the risks associated with determining appropriate Loads for inclusion in DSP from the IMO to the DSM providers (the correct party to manage these) greater economic efficiency will be promoted (Wholesale Market Objective (a)).

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: Facility Definition

The IMO considers the changes proposed to allow for the registration of a DSP as a Registered Facility will have the following impact on the Wholesale Market Objectives:

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

Allowing System Management to issue a Dispatch Instruction to the DSP provider, who would then decide how to deliver the requested curtailment will improve the allocative efficiency of System Management's resources. This will promote Wholesale Market Objective (a).

The proposed amendments will also promote Wholesale Market Objective (b) by ensuring that DSM can be used more effectively as a competitive product. The IMO considers that by removing a potential barrier to System Management being able to effectively dispatch a DSP provider's portfolio of NDLs and Interruptible Loads, System Management will be able to more effectively rely on the provision of load reduction services as an alternative to generation. This will promote greater competition between generators and DSM providers in the WEM.

The proposed amendments, which:

- allow System Management to issue a Dispatch Instruction to the DSP provider; and
- allow DSM to be used more effectively as a competitive product,

will also promote Wholesale Market Objective (e), as these effects combined will further encourage the taking of measures to manage the amount of electricity used and when it is used.

The IMO considers that the proposed amendments to implement the IMO's solution to Issue 2 are consistent with the other Wholesale Market Objectives.

Issue 3: Market Fees

The IMO notes that following the agreed position of the MAC, it does not propose any amendments to the current Market Fee requirements for DSPs.

Issue 4: Measurement of Curtailable Load performance

The IMO considers that the proposed amendments to the RD calculation to be determined at the DSP level, rather than for each individual Load, will have the following impact on the Wholesale Market Objectives.

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

Considering the consumption of a DSP at the aggregated level (rather than for each individual Load) will result in DSPs being treated equivalently with Market Generators whose output is currently measured at one connection point (which incorporates behind the fence load). This will promote Wholesale Market Objective (c).

The IMO notes that it has determined not to progress with the proposed amendments to the current static baseline RD methodology based on 12 IRCR intervals or to remove substitutions. For further details of the IMO's decision refer to section 6.2 of this report.

Issue 5: Capacity Cost refunds

The IMO considers that the changes which will require a Market Participant to make Capacity Credit refunds where its DSP has not been filled will have the following impact on the Wholesale Market Objectives:

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

The proposed amendment would promote Wholesale Market Objective (a) by requiring a DSP which fails to meet its capacity obligations to pay refunds to the level at which it did not meet its obligations. The IMO contends that for the Reserve Capacity Mechanism to operate effectively, it is essential there are the correct incentives for a DSP to be fully available during contracted times (particularly during the Hot Season and peak times).

The requirement for a DSP to make refunds at any time when it would not be able to deliver its certified level of capacity reduction will better reflect the incentive structure the refund mechanism was intended to provide. The proposed amendments therefore promote the reliable supply of energy in the SWIS.

The IMO considers the proposed amendments to implement the IMO's solution to Issue 5 are consistent with the other Wholesale Market Objectives.

Issue 6: Reserve Capacity Security

The IMO notes that it does not propose any amendments to the Reserve Capacity Security provisions for DSPs. These amendments are contained in RC_2010_12: Required Level and Reserve Capacity Security.

Issue 7: Stipulated Default Loads

The IMO considers that using the current RD calculation provisions for CLs, rather than SDLs will have the following impact on the Wholesale Market Objectives:

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

The proposed amendments would promote Wholesale Market Objective (a) by ensuring that a more rigorous and accurate estimate of a DSP's reduction in consumption is obtained. This will ensure that the Capacity Credits assigned to a Facility will more accurately reflect the true availability of the DSP (by basing the DSP's level of Capacity Credits on the most recent summer's data instead of data from two years previously), thereby ensuring that the safe and reliable supply of electricity can be maintained by System Management.

The IMO considers that the proposed amendments to implement the IMO's solution to Issue 7 are consistent with the other Wholesale Market Objectives.

Issue 8: Potential Double Payment

The IMO considers that the proposed amendments to address Issue 8 by clarifying that DSPs are not to be paid for any energy reduced during either a Reserve Capacity test or Verification Test will be consistent with the Wholesale Market Objectives.

7.2 Practicality and cost of implementation

Cost:

Identified IT change costs

The proposed amendments will require changes to the Wholesale Electricity Market Systems operated by the IMO. The costs of these changes are estimated to be $260,000 AUD. The IMO notes that the IT solution will not be able to be fully automated until up to 6 months from the commencement of the Amending Rules on 1 October 2011.

During the first submission period, EnerNOC identified that its existing systems would require amendments to reflect the proposed changes to the RD measurement calculation. These costs are anticipated to be small. System Management also identified that the proposed changes will require updates to the IT systems operated by System Management, to accept the proposed new class of Facility registration and the new type of Dispatch Instruction. While the IMO acknowledges that System Management has been unable to provide an estimate of the costs of the changes to its IT systems, the IMO notes System Management's contention that these are expected to be minimal and considers that on balance there is sufficient merit in continuing with the proposed amendments.

In its second submission, Energy Response identified that the IMO's proposed amendments to the RD measurement calculation would require changes to its IT systems. However, these were anticipated to be immaterial if the methodology is structurally similar to the current Market Rules. The IMO notes its decision to not amend the RD methodology to be based on 12 IRCR intervals.

Updates to Market Procedures

The IMO also notes that updates will be required to the following IMO and System Management Market Procedures as a result of RC_2010_29:

- Determining Loss Factors (IMO);
- Monitoring Protocol (IMO);
- Information Confidentiality (IMO);
- Facility Registration, de-registration and transfer (IMO);
- Certification of Reserve Capacity (IMO);
- Declaration of bilateral trades and the Reserve Capacity Auction (IMO);
- Reserve Capacity Testing (IMO);
- Settlement (IMO);
- Dispatch (System Management);
- Monitoring and Reporting (System Management): and
- Data Cleansing (System Management).

A new Market Procedure to cover the process for applying to register a DSP and associating existing CLs, ILs and NDLs is also currently being developed by the IMO.

The IMO considers that these costs fall within the day to day operation of the IMO and System Management and therefore will not incur additional personnel costs.

Cost implications of adopting revised static RD calculation

In both its first and second period submissions, EnerNOC notes that the alignment of the RD and IRCR intervals under the proposed RD methodology would impact on its portfolio management. EnerNOC forecasts that existing and new DSM capable loads would be likely to target their IRCR charges, resulting in a reduction in their capacity potential. Such results would potentially impact the ability of EnerNOC to acquire sufficient capacity. EnerNOC notes that the magnitude of the impact is currently unclear but expected to be potentially significant.

Energy Response notes in its second period submission that in the Capacity Year beginning October 2012, it would encounter significant difficulties in fulfilling its capacity

obligations for that cycle. This is due to the consequence of severely limiting the available market by excluding any user that actively manages their peak demand, or has an unreflective value of its dispatchable capacity. Failure to register Energy Response's additional capacity for the 2012/13 Capacity Year would result in losses of approximately $4 million through forfeiture of its relevant Reserve Capacity Security. Additionally, Energy Response notes that more information is required on the process and conditions for substitutions following a request from System Management to curtail in order to assess the economic impact in the next capacity cycle.

The IMO notes its decision to not progress with amending the current static RD baseline methodology to be based on 12 IRCR Trading Intervals or removing the ability to substitute periods where maintenance was being undertaken (Issue 4). As such the IMO considers that Energy Response should not encounter any practical issues associated with failing to register additional capacity and forfeiting its Reserve Capacity Security.

Practicality:

Commencement of proposed revised static RD calculation changes

EnerNOC requested in its first period submission that if the IMO were to proceed with its proposed RD methodology, any changes should be scheduled for implementation and used no earlier than the 2012/13 Capacity Year. In its second submission EnerNOC estimates that, were the IMO's proposed changes to the RD calculation to proceed, it may take approximately 3 months to implement the changes, with the main requirements of systems and contracts changes requiring this period for implementation.

Similarly in its second period submission, Energy Response notes that an acceptable RD methodology must be settled on for the next capacity cycle as soon as possible. As most providers have long term contracts it is not suitable to change the methodology in increments. Energy Response requests that any substantive change to the methodology be comprehensively reviewed, with the intent of arriving at a stable long-term solution.

In response to these issues the IMO notes its decision to not progress with amending the current static RD baseline methodology to be based on 12 IRCR Trading Intervals but rather to consider the options for a dynamic RD baseline methodology. As such the IMO does not perceive that there will be issues with the timelines for implementation of the previously proposed solution to Issue 4. The IMO has not identified any further issues with the practicality of implementing the proposed changes.

7.3 Views expressed in submissions

The IMO received six submissions during the first submission period, five of which supported the majority of the proposed solutions, albeit with Energy Response, EnerNOC and Synergy not supporting some aspects of RC_2010_29. Alinta did not support the proposed changes, considering that it is not necessary or desirable to proceed with RC_2010_29 at this time. Alinta, Energy Response and EnerNOC all raised concerns with the proposed static RD calculation methodology based on IRCR intervals (Issue 4). The IMO's response to each of the issues raised in the submissions received during the first submission period is presented in Appendix 4 of this report.

During the second submission period the IMO received five submissions, four of which supported the Rule Change Proposal (excluding the IMO's proposed solution to issue 4), albeit with System Management not commenting on a number of aspects of RC_2010_29. Alinta continued to not support the proposed changes. A summary of the issues raised in submissions received during the second submission period along with the IMO's response is presented in section 6.2 of this report.

With respect to the treatment of issue 4, Alinta, Energy Response and EnerNOC all supported not progressing with the amendments to the static RD baseline to be based on IRCR periods. Synergy recommended that the IMO continue with its proposed solution and consider a dynamic baseline methodology at a later date. Details of the IMO's decision to remove the proposed amendments, including the removal of substitutions and consideration of a dynamic RD baseline methodology at a later date, is presented in section 6.2 of this report.

7.4 Views expressed by the Market Advisory Committee

The MAC discussed the proposal at the 12 May, 16 June, 11 August, 8 September and 10 November 2010 MAC meetings. A summary of the discussion of the MAC is presented below. Further details are available in Appendix 7 of this report.

During its discussions on RC_2010_29 the MAC endorsed the following recommendations.

- **12 May 2010 MAC meeting**
    - Allow a Market Participant other than the Market Customer to contract for the Reserve Capacity associated with CLs.
    - Allow for the registration of a DSP as a registered facility. This allows for the dispatch of a DSP instead of dispatching each CL within a DSP.
    - Specify and operationalise the ability for DSPs to be over-subscribed.
    - A DSP should not be required to pay Market Fees.
    - A DSP should have the same obligations as a Market Generator, therefore a DSP consisting of one or more CLs will be liable to pay refunds if at any time the programme is not filled completely.
    - A DSP should be entitled to have its security returned immediately if it operates at 100 percent of its RCOQ, or at the end of the relevant Capacity Year if it operates at 90 percent of its RCOQ. Otherwise the Reserve Capacity Security associated with that DSP will be forfeited. Note that this amendment has been incorporated into RC_2010_12.
- **11 August 2010 meeting**
    - The RD calculation methodology should be changed to be calculated on the IRCR intervals;
    - The exclusion due to maintenance clause in the RD calculation methodology should be removed; and
    - The RD level should be calculated based on the aggregated output of the DSP.

7.5 Cost Benefit Analysis

In making its draft decision the IMO undertook a qualitative cost benefit analysis of the proposed solutions (as a whole) against the status quo (presented in Appendix 7 of this report). Given the IMO's subsequent decision to remove the proposed changes to the RD methodology (Issue 4), as presented in section 6.2 of this report, the IMO has undertaken a revised cost benefit assessment.

The approach undertaken by the IMO in undertaking its revised cost benefit analysis is consistent with that applied in the cost benefit analysis undertaken for the purposes of the Draft Rule Change Report.

The outcomes of the IMO's revised assessment of the costs and benefits of the proposed solutions to the identified issues (as a whole) are presented in the following two tables.

Table 1: Costs associated with RC_2010_29

Cost	*Description of costs (relative to current situation)*	*Impact*
Set-up Costs	The proposed changes to the Market Rules would involve updates to the IMO's IT system which are estimated to cost approximately $260,000. These costs when compared to the overall costs to the market associated with DSM provision (estimated to be approximately $85 million for the 2012/13 Capacity Year) are reasonably small. The IMO also notes that they constitute a one-off cost that will result in significant improvements to the treatment of DSM options under the Market Rules, There will also be updates required to the IT systems operated by System Management to enact the proposed amendments to how DSPs are registered (Issues 1 & 2). While System Management has not been able to provide the IMO with a firm estimate of these costs it has estimated that these will be minimal. The IMO notes that given its decision to not progress with the proposed amendments to the RD methodology to be based on 12 IRCR intervals and remove the ability to apply to the IMO for substitutions there should be minimal costs to Market Participants' IT systems identified. This is because the RD calculation in essence will remain the same but be calculated at the DSP level rather than the Load level.	Major
Transition Costs	There will be costs in terms of IMO staffing during the transitional period for any Amending Rules commencing. The majority of these costs will be associated with the entry of DSPs/CLs into the market prior to the date that the Amending Rules commence (provisionally 1 October). The IMO will have to undertake its current registration processes to register each individual CL that enters the market before 1 October 2011, therefore the majority of the registration costs would be borne regardless of this proposal. Any new entrants (and existing Market Customers with DSM assets) will be able to use the transitional Amending Rules (commencing 1 July 2011) and Market Procedure to pre-register a DSP and associated CLs, NDLs and Interruptible Loads with that programme. The IMO notes that no registration fees will apply for the purposes of pre-registering DSPs for Market Customers with already registered CLs. Further details will be provided in the Market Procedure for Registration. The IMO also notes that there will be costs associated with transitioning to the new IT systems for registration at a later date than 1 October 2011.	Material
Governance Costs	The proposed changes to the Market Rules have only minor costs to the WEM in terms of the IMO's administration of the rule and procedure change processes and commencement of Market Rules. These costs are no higher than those usually associated with a standard Rule Change Proposal. The IMO notes that the process mapping exercise undertaken during the development of the proposed	None

Cost	Description of costs (relative to current situation)	Impact
	Amending Rules is a sunk cost and as such as not been considered in this assessment. There are no perceived costs in terms of IMO staffing associated with the proposed amendments (outside of those transitional costs noted above) as it is anticipated that any operational changes will be ultimately automated. The IMO perceives that these governance costs will have a minor impact.	

Table 2 – Benefits associated with RC_2010_29

Benefit	Description of benefits (relative to current situation)	Impact
Reliability Benefits	The requirement for DSPs to make capacity refunds during periods where they have availability obligations but are under-subscribed will improve the current incentive structures for ensuring that a DSP can meet its RCOQ at all applicable times during the Capacity Year. The IMO considers that the incentives to: • procure the right amount of NDLs and Interruptible Loads, as proposed to be implemented through the capacity refund mechanism; and • to deliver the required amount of curtailment when it is dispatched, as currently provided by the Capacity Cost Refund (clause 4.26.3A), will ensure greater certainty that DSPs can deliver the level of capacity reduction for which they have been certified. This will ultimately improve the reliability of DSM as a source of capacity in the WEM. The IMO notes the concerns of System Management regarding the ongoing dispatch of DSM. The IMO however reiterates the agreement between itself and System Management that the proposed changes are likely to improve System Management's ability to dispatch DSPs effectively (by issuing Dispatch Instructions to the DSP rather than each CL). This will allow System Management to be able to rely on the provision of load reduction services as an alternative to generation. This will promote DSM as a competitive product in the WEM.	Material

Benefit	Description of benefits (relative to current situation)	Impact
Efficiency Benefits	The proposed changes will result in efficiency benefits for the IMO and DSPs (through registration and certification) and System Management (through dispatch). The proposed changes to no longer require the IMO to separately register each CL will reduce the amount of information required to be provided by the DSP and considered by the IMO in assessing registrations. This will improve operational efficiency for both parties and reduce the application costs incurred by DSPs when applying to register each CL (at a cost of approximately $280 each). For example a 50MW DSP applying for the registration of 100 CLs would incur registration fees of $28,000. The IMO would also incur a significant number of personnel hours processing each application. There will also be allocative efficiency improvements with regards to System Management's resources if it is able to issue Dispatch Instructions to a DSP rather than each individual CL.	Minor
Improved risk allocation	The removal of a CL as a Registered Facility and replacement with the concept of a DSP being the Registered Facility in the Market Rules will require the DSM Aggregator to make a decision as to the appropriate NDLs and Interruptible Loads to include within its DSP. Currently the IMO is required to make this assessment when determining CRC for each CL. Under the proposed amendments the IMO will simply certify the DSP, with the DSM Aggregator then able to associate (and cease to associate) appropriate NDLs and Interruptible Loads with the DSP. The IMO considers that this amended certification process will ensure that the correct party determines whether an NDL or Interruptible Load should be associated with a DSP. This is because the DSM Aggregator would have greater visibility of the contractual obligations of the NDL or Interruptible Load and its likely ability to be able to curtail to the correct level when requested. The risks that a DSP is comprised of a number of NDLs or Interruptible Loads which are unable to meet their obligations will consequently be transferred from the IMO to the DSP (and reinforced by the proposed enhanced capacity refund mechanism).	Minor
Improved measurement of performance	The IMO notes its decision to not amend the current static baseline RD methodology to be based on 12 IRCR intervals and remove the ability to apply to the IMO for substitutions. The options for a dynamic baseline RD methodology will be further explored by the IMO in due course. By considering the consumption of a DSP at the aggregate level (rather than for each comprising NDL), the treatment of DSPs will be more equivalent to that of Market Generators (who are measured at one connection point).	Minor
Improved Integrity of Market Rules	The proposed changes will clarify a number of the requirements for registration, certification and the performance of DSPs in the WEM. They will also ensure that current ambiguities, such as whether a Load's connection point can be associated with both the energy provider and DSM Aggregator, are removed from the Market Rules. The IMO considers that the proposed amendments under RC_2010_29 will result in improvement to the integrity of the Market Rules relating to CLs and help to decrease regulatory risk through clear provisions for DSM in the	Significant

Benefit	Description of benefits (relative to current situation)	Impact
	WEM. The IMO notes that this improved integrity and removal of any potential ambiguity were the original basis of the proposal.	

The issues which RC_2010_29 is considering are outside of the scope of the wider RCM review being currently undertaken. The IMO considers that the outcomes of the wider review would not impact on the outcome of this assessment; as such this has not been taken into account by the IMO.

In completing its assessment the IMO has not taken into account any potential outcomes from the IMO's future consideration of the options for a dynamic RD methodology. Any potential future changes to the RD methodology to be based on a dynamic baseline will need to be individually assessed at a later time.

On the whole the analysis of the costs and benefits suggests that the proposed rule change is likely to have an overall net benefit relative to the current situation. As such the IMO considered, as noted in the Draft Rule Change Report, that there is a sufficient overall benefit to the market to justify progressing with RC_2010_29.

8. THE IMO'S FINAL DECISION

Based on the matters set out in this report, the IMO's final decision, in accordance with clause 2.7.8 (e), is to accept the Rule Change Proposal as modified by the amendments outlined in sections 3.4 and 6.4 and specified in Appendices 5 and 8 of this report.

8.1 Reasons for the Decision

The IMO has made its decision on the following basis:

- the Amending Rules:
  - will allow the Market Rules to better address Wholesale Market Objectives (a), (b), (c) and (e);
  - are consistent with Wholesale Market Objective (d);
  - have the general support of the MAC; and
  - have the support of the majority of submissions received during both submission periods; and
- the updated cost-benefit analysis undertaken by the IMO (presented in section 7.5) has illustrated that the benefits associated with the Rule Change Proposal exceed any costs that may arise.

Additional detail outlining the analysis behind the IMO's decision is outlined in section 7 of this Final Rule Change Report.

9. AMENDING RULES

9.1 Commencement

The initial amendments to the Market Rules resulting from this Rule Change Proposal will commence at **8.00am** on **1 July 2011**.

The commencement order for the amended clauses is as follows:

Clause	Subject	Commencement Date
2.29.5N	Outlines process to apply during the interim period for preparing existing CLs, Interruptible Loads and DSPs for the new Market Rules.	1 July 2011
2.29.5O	Outlines what happens on 1 October 2011	1 July 2011
2.31.23A	Inclusion of heads of power for interim Market Procedure	1 July 2011
2.31.23A	Removal of heads of power for interim Market Procedure	1 December 2011
Appendix 1	Requirements for provision of Single Line Diagrams for CLS	1 July 2011
All remaining proposed new and amended clauses.	N/A	1 October 2011

9.2 Amending Rules

The following clauses are amended (~~deleted text~~, added text):

2.27.1. By 1 June of each year Network Operators must calculate and provide to the IMO Loss Factors for each connection point in their Networks at which any of the following is connected ~~a~~:

(a) a Scheduled Generator;

(b) a Non-Scheduled Generator;

(c) a Non-Dispatchable Load;

(d) an Interruptible Load; or

(e) ~~Curtailable Load; or~~ [Blank]

(f) a Dispatchable Load.

2.27.2. In calculating Loss Factors, Network Operators must apply the following principles:

…

(c) Loss Factors must be calculated using:

i. generation and load meter data from the preceding 12 months; or

iA. for a new facility or a Non-Dispatchable Load, any other relevant data provided to the Network Operator by the Market Participant and as agreed with the Network Operator and the IMO, and

…

(e) a specific Loss Factor must be calculated for each:

i. Scheduled Generator;

ii. Non-Scheduled Generator;

iii. ~~Curtailable Load;~~ [Blank]

iv. Interruptible Load;

v. Dispatchable Load; and

vi. Non-Dispatchable Load above 1000kVA peak consumption;

…

2.27.4. A Market Participant may apply to the IMO for ~~seek~~ a re-assessment ~~by the IMO~~ of any Loss Factor applying to a Scheduled Generator, Non-Scheduled Generator, ~~Curtailable Load,~~ Interruptible Load, Dispatchable Load or Non-Dispatchable Load registered ~~by~~ to that Market Participant. ~~in accordance with the~~ The following process will apply to every application:

…

2.29.1. The following are Facilities for the purposes of these Market Rules:

(a) a distribution system;

(b) a transmission system;

(c) a generation system; ~~and~~

(d) a connection point at which electricity is delivered from a distribution system or transmission system to a Rule Participant ("**Load**")~~.~~; and

(e) a Demand Side Programme.

2.29.1A. The Facility Classes are:

(a) a Network;

(b) a Scheduled Generator;

(c) a Non-Scheduled Generator;

(d) an Interruptible Load;

(e) a Dispatchable Load; and

(f) a Demand Side Programme.

2.29.5. Subject to clauses 2.29.9 and 2.29.8A, a Market Customer that owns, operates or controls a Load:

…

(b) ~~may register that Load as a Curtailable Load if that Load can be interrupted on request~~[Blank]~~;~~

…

2.29.5A. A Market Customer that:

(a) has entered into; or

(b) intends to enter into

a contract with a person who owns, controls or operates a Non-Dispatchable Load or Interruptible Load, for the Load to provide curtailment on request by the Market Customer, may register a Demand Side Programme.

2.29.5B. A Market Customer with a Demand Side Programme may apply to the IMO to associate a Non-Dispatchable Load or Interruptible Load with the Demand Side Programme. The Market Customer must provide the following information to the IMO in support of the application:

(a) evidence satisfactory to the IMO that the Market Customer has entered into a contract with the person who owns, operates or controls the Load to provide curtailment on request by the Market Customer;

(b) the connection point of the Load;

(c) the expected minimum consumption of the Load in units of MW;

(d) the contract start date;

(e) the contract end date; and

(f) where the Load has a generation system that can connect to the network behind its associated meter, a single line diagram for the Load, including the locations of generators, transformers, switches, operational and settlement meters.

2.29.5C. The IMO must within one Business Day notify an applicant of the receipt of the application submitted under clause 2.29.5B. The IMO may, at its discretion, require that an applicant provide information that is missing from the application or is inadequately specified. The date the requested information is submitted to the IMO will become the date of receipt of the application.

2.29.5D. The IMO must determine, in accordance with clause 2.29.5E, whether to accept or reject an application submitted under clause 2.29.5B, and must notify the applicant of its decision within 10 Business Days of receipt of the application.

2.29.5E. The IMO must accept an application submitted under clause 2.29.5B unless:

(a) the IMO considers that the evidence provided by the Market Customer under clauses 2.29.5B and 2.29.5C is not satisfactory;

(b) the relevant Load is not equipped with interval metering;

(c) the relevant Load is an Interruptible Load assigned Capacity Credits for any part of the proposed Association Period;

(d) the relevant Load is registered as an Intermittent Load for any part of the proposed Association Period; or

(e) the relevant Load is already associated with a Demand Side Programme for any part of the proposed Association Period.

2.29.5F. If the IMO accepts an application under clause 2.29.5D then the IMO must:

(a) include in its notification to the applicant:

i. the date and time from which the relevant Load will be associated with the Demand Side Programme, as defined under clause 2.29.5G(a); and

ii. the date and time from which the relevant Load will cease to be associated with the Demand Side Programme, as defined under clause 2.29.5G(b); and

(b) provide System Management with any single line diagrams received in accordance with clause 2.29.5B(f), if applicable, within one Business Day.

2.29.5G If the IMO accepts an application submitted under clause 2.29.5B then the IMO must associate the relevant Load ("Associated Load") with the Demand Side Programme for the period ("Association Period") between:

(a) the later of:

i. the start of the Trading Day commencing on the contract start date provided under clause 2.29.5B(d); and

ii. the start of the Trading Day following the day that the IMO notifies the applicant of its decision under clause 2.29.5D; and

(b) the end of the Trading Day starting on the contract end date provided under clause 2.29.5B(e).

2.29.5H. If the IMO rejects an application submitted under clause 2.29.5B, then the IMO must include in its notification to the applicant under clause 2.29.5D the reasons for the rejection of the application. A Market Customer whose application is rejected may reapply to associate a Non-Dispatchable Load or Interruptible Load with a Demand Side Programme under clause 2.29.5B.

2.29.5I. A Market Customer with an Associated Load may apply to the IMO to:

(a) cancel the association of the relevant Load with the Demand Side Programme; or

(b) reduce the Association Period of the Associated Load.

2.29.5J. The IMO must within one Business Day notify an applicant of the receipt of an application submitted under clause 2.29.5I.

2.29.5K. The IMO must determine whether to accept or reject an application submitted under clause 2.29.5I and notify the applicant of its decision within two Business Days of the receipt of the application. The IMO must accept the application unless the proposed change would affect the association of the relevant Load with the Demand Side Programme during any period before the Trading Day commencing on the third Business Day after the receipt of the application.

2.29.5L. If the IMO accepts an application submitted under clause 2.29.5I then it must either:

(a) cancel the association of the relevant Load with the Demand Side Programme; or

(b) reduce the Association Period of the Associated Load,

as requested in the application.

2.29.5M. If the IMO rejects an application submitted under clause 2.29.5I, then the IMO must include in its notification to the applicant under clause 2.29.5K the reasons for the rejection of the application.

2.29.5N. Prior to 1 October 2011:

(a) the IMO must determine for each relevant Market Customer a transition plan to allocate all Capacity Credits assigned to its Demand Side Programmes or Curtailable Loads for future Capacity Years to one or more new Demand Side Programme Facilities, that will take effect from 1 October 2011; and

(b) Market Customers with Demand Side Programmes or Curtailable Loads assigned Capacity Credits for a future Capacity Year may:

(i) apply to pre-register Demand Side Programmes in accordance with their transition plans; and

(ii) apply to associate any Curtailable Loads, Non-Dispatchable Loads or Interruptible Loads with their pre-registered Demand Side Programmes.

2.29.5O. At 8:00 AM on 1 October 2011:

(a) all Capacity Credits assigned to Demand Side Programmes and Curtailable Loads for the current and any future Capacity Years will transfer to the relevant Demand Side Programme Facilities in accordance with the transition plans developed under clause 2.29.5N(a), along with any associated obligations, rights and liabilities;

(b) all pre-registered Demand Side Programmes will be deemed to be registered Demand Side Programmes;

(c) any application to pre-register a Demand Side Programme under consideration by the IMO will be deemed to be an application to register a Demand Side Programme; and

(d) each Load that was previously registered as a Curtailable Load will be deemed to be a Non-Dispatchable Load or Interruptible Load, as appropriate, and Curtailable Loads will cease to be a Facility Class.

2.29.8A. A Rule Participant must ensure an Interruptible Load~~, Curtailable Load~~ or Dispatchable Load registered by that Rule Participant is equipped with an interval meter.

~~2.29.8B. When a Rule Participant registers a Curtailable Load the Rule Participant must undertake a Verification Test in accordance with clause 4.25A within 20 Business Days of registration.~~

2.29.9A. ~~A Rule Participant may~~The IMO must not register a Demand Side Programme ~~Curtailable Load after 1 April 2009~~ where the minimum notice period required for dispatch exceeds four hours as specified in Standing Data.

~~2.29.9B Where a Rule Participant has registered a Curtailable Load with a minimum notice period required for dispatch that is less than four hours the minimum notice period may be increased to no more than four hours.~~

~~2.29.9C Where a Rule Participant has registered a Curtailable Load with a minimum notice period required for dispatch that is equal to or greater than four hours the minimum notice period may not be increased.~~

2.30.3. ~~Subject to clause 2.30.5, Curtailable Loads at different locations, but operated by a single Market Participant, may be aggregated with respect to their annual hours of availability so as cumulatively provide Reserve Capacity with an annual number of hours of availability greater than that of any of the individual facilities.~~ [Blank]

2.30.5. The IMO must only allow the aggregation of facilities if, in its opinion:

(a) the aggregation will not adversely impact on System Management's ability to maintain Power System Security and Power System Reliability;

(b) adequate control and monitoring equipment exists for the aggregated Facility;

(c) none of the Facilities within the aggregated facility are subject to an Ancillary Service Contract or Network Control Service Contract that requires that Facility not be part of an aggregated facility;

(d) ~~with the exception of facilities aggregated under clause 2.30.3,~~ the aggregated facilities are at the same location or have the same Loss Factor; and

(e) System Management and the IMO will continue to be provided with the same Standing Data for each individual facility as before the facilities were aggregated.

2.30B.2. For a Load to be eligible to be an Intermittent Load the IMO must be satisfied that the following conditions ~~must be satisfied~~ are met:

…

(c) the Market Customer for that Load must have an agreement in place with a Network Operator to allow energy to be supplied to the Load from a Network; ~~and~~

(d) the Load ~~must be~~ is an Interruptible Load~~, Curtailable Load,~~ or a Non-Dispatchable Load~~.~~; and

(e) the Load is not expected (based on applications accepted by the IMO under clause 2.29.5D and any amendments accepted by the IMO under clause 2.29.5K) to be associated with any Demand Side

Programme for any period following the registration of the Load as an Intermittent Load.

2.30B.5. A Market Customer, or applicant to become a Market Customer, may apply for a Load to be treated as an Intermittent Load as part of Market Customer registration (for a Non-Dispatchable Load) or Facility registration (for an Interruptible Load ~~or Curtailable Load~~).

The following amendment to clause 2.31.23A will commence at 8:00am on 1 July 2011.

2.31.23A. The IMO must document the process for the IMO, System Management and Market Customers to follow prior to 1 October 2011 for:

(a) developing a transition plan for each relevant Market Customer under clause 2.29.5N(a);

(b) the pre-registration of Demand Side Programmes; and

(c) the association of Curtailable Loads, Non-Dispatchable Loads and Interruptible Loads with pre-registered Demand Side Programmes,

in the Registration Procedure and the IMO, System Management and Market Customers must comply with that documented Market Procedure.

The following amendment to clause 2.31.23A will commence at 8:00am on 1 December 2011.

~~2.31.23A. The IMO must document the process for the IMO, System Management and Market Customers to follow prior to 1 October 2011 for:~~

~~(a) developing a transition plan for each relevant Market Customer under clause 2.29.5N(a);~~

~~(b) the pre-registration of Demand Side Programmes; and~~

~~(c) the association of Curtailable Loads, Non-Dispatchable Loads and Interruptible Loads with pre-registered Demand Side Programmes,~~

~~in the Registration Procedure and the IMO, System Management and Market Customers must comply with that documented Market Procedure.~~

2.33.1. The Rule Participant registration form must ~~prescribed by IMO must~~ require ~~that~~ an applicant for registration as a Rule Participant to provide the following information, and the applicant must provide the information required:

…

(h) if the application relates to the sale of electricity to Contestable Customers by an applicant for the Market Customer class:

i. evidence that the applicant holds an Arrangement for Access for the purpose of taking power from the electricity grid; and

ii. the information described in Appendix 1(f);

…

2.33.4. The Facility de-registration form prescribed by the IMO must require that the applicant provide the following:

…

(d) a proposed date on which that Registered Facility is to cease to be registered in the name of that Rule Participant where that date must be;

…

ii. the date the application is accepted in the event that the Facility has been rendered permanently inoperable; or

iii. not earlier than one month after the date of application if the Facility is a Demand Side Programme ~~Curtailable Load, which is associated with a Demand Side Programme and has been registered in accordance with clause 4.8.3~~; and

…

2.35.1. Market Participants with Scheduled Generators, Non-Scheduled Generators, Dispatchable Loads~~,~~ and Demand Side Programmes ~~Curtailable Loads~~ that are not under the direct control of System Management must maintain communication systems that enable communication with System Management for dispatch of those Registered Facilities.

3.14.1. Market Participant p's share of the Load Following Service payment cost in each Trading Month m is Load_Following_Share(p,m) which equals :

(a) the Market Participant's contributing quantity; divided by

(b) the total contributing quantity of all Market Participants,

where a Market Participant's contributing quantity for Trading Month m is the sum of:

i. the absolute value of the sum of the Metered Schedules for the Non-Dispatchable Loads~~,~~ and Interruptible Loads~~, Curtailable Loads~~ registered by the Market Participant for all Trading Intervals during Trading Month m; and

…

3.17.5. Unless otherwise directed by System Management, Rule Participants must, before 10 AM every Thursday, submit information to System Management ~~before 10 AM every Thursday~~, consisting of:

…

(c) for a Market Customer, information about the availability over the next Short-Term PASA Horizon of all its Registered Facilities ~~which~~ that are Loads or Demand Side Programmes and demand forecasts for any other load facilities designated as significant by System Management.

~~4.8.3. A Market Customer may apply for the certification of a Demand Side Programme including Loads at different locations as a Curtailable Load subject to the following conditions and provisions:~~

~~(a) No Intermittent Load may be included in the Demand Side Programme.~~

~~(b) The Loads comprising the Demand Side Programme must be registered as Curtailable Loads if they are to count towards satisfying the relevant Reserve Capacity Obligations of the Demand Side Program and must not have been separately awarded Capacity Credits.~~

~~(c) As the Loads comprising the Demand Side Program are registered, the IMO must assign Certified Reserve Capacity and Reserve Capacity Obligations to those Facilities and must correspondingly reduce the Certified Reserve Capacity and Reserve Capacity Obligations associated with the Demand Side Programme during the time those Facilities are registered.~~

~~(d) After accounting for the modifications in (c), if at any time a Market Customer has Reserve Capacity Obligations associated with its Demand Side Programme then, for settlement purposes, the Demand Side Programme must be treated by the IMO as a Facility that has failed to satisfy its Reserve Capacity Obligations.~~

~~(e) Loads comprising the Demand Side Programme must have the same or higher availability as the Demand Side Programme.~~

4.10.1.[5] ~~The~~ Each Market Participant must ensure that information ~~to be~~ submitted to the IMO with an application for certification of Reserve Capacity ~~must~~ pertains to the Reserve Capacity Cycle to which the certification relates, ~~must be~~ is supported by documented evidence and ~~must~~ includes, where applicable, the following information:

…

(c) if the Facility, or part of the facility, is yet to enter service:

…

iii. the Key Project Dates occurring after the date the request is submitted ~~to the IMO~~, including, ~~as~~ if applicable, but not limited to:

1. when all approvals will be finalised or, in the case of Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes all required contracts will be in place;

…

5. when generating equipment or Dispatchable Load equipment will be installed or, in the case of Interruptible

[5] The IMO notes that it has reflected the final changes approved in the Rule Change Proposal: Certification of Reserve Capacity (RC_2010_14). For further details refer to the following webpage: http://www.imowa.com.au/RC_2010_14

Loads and ~~Curtailable Loads~~ Demand Side Programmes, all required control equipment will be in place;

…

(f) for Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads~~, details for each of up to three blocks of capacity of~~:

i. ~~either~~

~~1.~~ the Reserve Capacity ~~expected to be~~ the Market Participant expects to make available from each of up to 3 blocks of capacity; ~~or~~

~~2. the Stipulated Default Load;~~

ii. the maximum number of hours per year the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity, where this must be ~~not less than~~ at least 24 hours;

iii. the maximum number of hours per day that the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity if called, where this must be ~~not~~:

1. not less than four hours; and

2. not more than the maximum of the periods specified in sub-clause (vi);

iv. the maximum number of times the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load can be called to provide Reserve Capacity during a 12 month period, where this must be at least six times;

v. the minimum notice period required for dispatch of the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load, where this must not be more than 4 hours; and

vi. the periods when the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load can be dispatched, which must include the period between noon and 8:00~~pm~~ PM on all Business Days~~.~~;

…

4.11.1.[6] 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 for which an application for Certified Reserve Capacity has been submitted in accordance with section 4.10:

[6] The IMO notes that it has reflected the final changes approved in the Rule Change Proposal: Certification of Reserve Capacity (RC_2010_14). For further details refer to the following webpage: http://www.imowa.com.au/RC_2010_14

(a) subject to clause 4.11.2, the Certified Reserve Capacity for a Scheduled Generator for a Reserve Capacity Cycle ~~is not to~~ must not exceed the IMO's reasonable expectation ~~as to~~ of the amount of capacity likely to be available, after netting off capacity required to serve Intermittent Loads, embedded loads and Parasitic Loads, for Peak Trading Intervals on Business Days in the period from the:

…

(c) the IMO must not assign Certified Reserve Capacity to a Facility for a Reserve Capacity Cycle if:

i. for Reserve Capacity Cycles up to and including 2009 that Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 30 November of Year 3 of that Reserve Capacity Cycle;

ii. for Reserve Capacity Cycles from 2010 onwards that Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 1 October of Year 3 of that Reserve Capacity Cycle; or

iii. that Facility will cease operation permanently, and hence cease to meet Reserve Capacity Obligations, from a time earlier than 1 August of Year 4 of that Reserve Capacity Cycle;

iv. that Facility already has Capacity Credits assigned to it under Clause 4.28C for the Reserve Capacity Cycle~~.~~; or

v. that Facility is an Interruptible Load and, based on applications accepted under clauses 2.29.5D and 2.29.5K (as applicable), the Facility will be associated with a Demand Side Programme for any period when Reserve Capacity Obligations would apply for the Facility for the Reserve Capacity Cycle;

…

(h) the IMO may decide not to assign Certified Reserve Capacity to a Facility if:

i. the Facility has operated for at least 36 months and has had a Forced Outage rate of greater than 15% or a combined Planned Outage rate, Forced Outage rate and Equipment Test rate of greater than 30% over the preceding 36 months; or

ii. the Facility has operated for less than 36 months, or is yet to commence operation, and the IMO has cause to believe that over a period of 36 months the Facility is likely to have a Forced Outage rate of greater than 15% or a combined Planned Outage rate, Forced Outage rate and Equipment Test rate of greater than 30%,

where the Planned Outage rate, the Forced Outage rate and Equipment Test rate for a Facility for a period will be calculated in

accordance with the Power System Operation Procedure. ~~(~~The IMO may consult with System Management in deciding whether or not to refuse to grant Certified Reserve Capacity under this paragraph~~)~~; ~~and~~

(i) the Certified Reserve Capacity assigned to a Facility is to be expressed to a precision of 0.001 MW~~.~~; and

(j) the Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle must not exceed the IMO's reasonable expectation of the amount of capacity likely to be available from that Facility during the periods specified in clause 4.10.1 (f)(vi), after netting off capacity required to serve minimum loads, from the Trading Day starting on 1 October in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle.

4.11.4. When assigning Certified Reserve Capacity to ~~a block of capacity provided by~~ an Interruptible Load, ~~Curtailable Load,~~Demand Side Programme or Dispatchable Load, the IMO must indicate what Availability Class is applicable to that Reserve Capacity where this Availability Class must reflect the maximum number of hours per year that the capacity will be available and must not be Availability Class 1.

~~4.11.4A. If the capacity of a Curtailable Load is specified in accordance with clause 4.10.1(f)(i)(1), the Certified Reserve Capacity assigned by the IMO to that Curtailable Load, including during the registration of that Curtailable Load in accordance with clause 4.8.3(c), must not exceed the Relevant Demand for the Curtailable Load set by the IMO in accordance with clause 4.26.2C~~

4.12.1. The Reserve Capacity Obligations of a Market Participant holding Capacity Credits, are as follows:

(a) a Market Participant (other than the Electricity Generation Corporation) must ensure that for each Trading Interval:

i. the aggregate MW equivalent of the quantity of Capacity Credits held by the Market Participant applicable in that Trading Interval for Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes registered ~~by~~ to the Market Participant; plus

…

iiA. if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any ~~Curtailable Load or~~ Interruptible Load, but excluding demand associated with any Dispatchable Load, during that Trading Interval as indicated in the applicable Resource Plan; plus

…

is not less than the total Reserve Capacity Obligation Quantity for that Trading Interval for Facilities registered ~~by~~ to the Market Participants,

less double the total MWh quantity to be provided as Ancillary Services as specified by the IMO for that Market Participant in accordance with clause 6.3A.2(e)(i).

…

4.12.4. Subject to clause 4.12.5, where the IMO establishes the ~~must apply the following principles in establishing the~~ initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:

(a) the Reserve Capacity Obligation Quantity ~~is not to~~ must not exceed the Certified Reserve Capacity held by the Market Participant for the Facility;

…

(c) for Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity ~~for each block~~:

i. ~~must be required~~ will equal zero once the capacity has been dispatched ~~to be available~~ for ~~a~~ the number of hours per year ~~that does not exceed the maximum number of hours per year as~~ that are specified ~~in accordance with~~ under clause 4.10.1(f)(ii);

ii. ~~must be required~~ will equal zero for the remainder of a Trading Day in which the capacity has been dispatched ~~to be available~~ for ~~a~~ the number of hours per day ~~that does not exceed the maximum number of hours per day as~~ that are specified ~~in accordance with~~ under clause 4.10.1(f)(iii);

iii. ~~must be specified as dropping to~~ will equal zero once the capacity ~~from the block~~ has been ~~called~~ dispatched the maximum number of times per year ~~as~~ specified under ~~in accordance with~~ clause 4.10.1(f)(iv) excluding where the Facility has been requested to perform a Reserve Capacity test in accordance with clause 4.25; ~~and~~

iv. must account for staffing and other restrictions on the ability of the Facility to ~~provide~~ curtail energy upon request~~.~~; and

v. will equal zero for intervals which fall outside of the periods specified in clause 4.10.1(f)(vi).

4.12.8. Where a ~~Curtailable Load~~ Demand Side Programme is dispatched to a level equal to its Reserve Capacity Obligation Quantity on two consecutive days the Reserve Capacity Obligation Quantity for the ~~following day~~ third consecutive day ~~shall~~ will be zero.

4.14.1. Subject to clause 4.14.3, each Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle must, by the date and time specified in clause 4.1.14, provide the following information to the IMO for

each Facility ~~or, in the case of Interruptible Loads, Curtailable Loads and Dispatchable Loads with at least two blocks holding Certified Reserve Capacity in different Availability Classes, for each block in respect of which it holds Certified Reserve Capacity~~ (expressed in MW to a precision of 0.001 MW):

…

4.18.1. A Market Participant must ensure that its Reserve Capacity Offers ~~must~~ include the following information:

…

(c) ~~a single Price-Quantity Pair for each Facility except~~ for Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads, ~~where~~ a single Price-Quantity Pair ~~is to be included~~ for each block of Certified Reserve Capacity associated with the Facility; and

(d) for every other Facility, a single Price-Quantity Pair for each Facility.

4.18.2. Each Reserve Capacity Price-Quantity Pair must comprise:

(a) the identity of the Facility to which it relates;

(b) an offer price in units of dollars per ~~megawatt~~ MW per year expressed to a precision of $0.01/MW between zero and the Maximum Reserve Capacity Price;

(c) a quantity in units of ~~megawatts~~ MW equal to the amount determined in accordance with clause 4.14.10 in respect of that Facility; and

(d) if the Facility is an Interruptible Load, ~~Curtailable Load~~ Demand Side Programme or Dispatchable Load, the Availability Class of that Price-Quantity Pair, as specified by the IMO in assigning Certified Reserve Capacity to that Facility in accordance with clause 4.11.

4.25.1. The IMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing Capacity Credits can:

(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 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~~.~~; and

(c) in the case of a ~~Curtailable Load~~ Demand Side Programme ~~can~~, during the term the Reserve Capacity Obligations apply, and during the period specified in clause 4.10.1(f)(vi), ~~operate at~~ decrease its consumption to operate at a level equivalent to 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 by the IMO:

(a) ~~by the IMO~~ in the case of a generation system:

i. observing the Facility operate at the required level at least once as part of normal market operations in Metered Schedules specific to the Facility; or

ii. requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to operate at the required level for not less than 60 minutes and the Facility successfully passing that test; or

(b) in the case of a Demand Side Programme:

i. observing the Facility operate at the required level at least once in response to an activation of the Facility by the relevant Market Customer as measured in metered consumption; or

ii. requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to reduce demand to the required level for not less than one Trading Interval and the Facility successfully passing that test; or

(c) in the case of an Interruptible Load or Dispatchable Load, requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to reduce demand to the required level for not less than one Trading Interval and the Facility successfully passing that test.

~~(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 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 for not less than one Trading Interval and the Facility successfully passing that test.~~

4.25.3B. If a ~~Curtailable Load~~ Demand Side Programme fails a Reserve Capacity test under clause 4.25.2(b)(ii) and is ~~activated~~ issued a Dispatch Instruction by System Management to decrease its consumption by a quantity equivalent to its maximum Reserve Capacity Obligation Quantity prior to a second Reserve

Capacity test being undertaken in accordance with clause 4.25.4, then the activation shall be deemed to be the second Reserve Capacity test.

4.25.4. Subject to clause 4.25.3B, ~~the IMO must, in the event that~~ if a Facility fails a Reserve Capacity test requested by the IMO under clause 4.25.2~~(b)~~, the IMO must require System Management to re-test that Facility in accordance with clause 4.25.2~~(b)~~, not earlier than 14 days and not later than 28 days after the first test. If the Facility fails this second test, then the IMO must, from the ~~next Trading Day~~second Trading Day following the Scheduling Day on which the IMO determines that the second test was failed:

(a) if the test related to a generation system, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in either test performed (after adjusting these results to the equivalent values at a temperature of 41^{o}C and allowing for the capability provided by operation on different types of fuels); or

(b) if the test related to a Dispatchable Load, ~~Curtailable Load~~ Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to the maximum level of reduction achieved in either of the two tests~~;~~.

4.25.4E. Where the Capacity Credits associated with a ~~Curtailable Load~~ Demand Side Programme are reduced in accordance with clause 4.25.4C the Market Participant must pay a refund of an amount equal to all Reserve Capacity Payments associated with the reduced Capacity Credits for the relevant Reserve Capacity Year to the IMO calculated in accordance with the provisions of clause 4.26.

4.25.4F. A Market Participant may not offer a ~~Curtailable Load~~ Demand Side Programme for Supplementary Reserve Capacity if the ~~Curtailable Load~~ Demand Side Programme has had its Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.

4.25.9. In conducting a test, System Management must:

(a) subject to paragraphs (b), (c) and (d), endeavour to conduct the test without warning;

(b) allow sufficient time for the Market Participant to schedule fuel that it is not required under these Market Rules to be stored on-site;

(c) allow sufficient time for switching a Facility from one fuel to an alternative fuel if operation using the alternative fuel is being tested;

(d) ~~must,~~ in the case of an Interruptible Load or a ~~Curtailable Load~~ Demand Side Programme, give at least as much notice as is specified under clause 4.10.1(f)(v) to allow ~~allow sufficient time~~ for arrangements to be made for the Facility to be triggered;

(e) report to the IMO whether the test was successfully performed;

(f) maintain adequate records of the test to allow independent verification of the test results; and

(g) conduct the test in the time interval specified by the IMO in accordance with clause 4.25.7(c) unless System Management has notified the IMO of an alternative time interval in accordance with clause 4.25.8, in which case, System Management must conduct the test in the time interval specified in accordance with clause 4.25.8(b).

4.25.10. Where a Facility, excluding a Demand Side Programme, is tested in accordance with this clause 4.25, the Dispatch Schedule for that Facility during the period of the test is to reflect the energy scheduled in the test.

4.25A. Verification Test for a ~~Curtailable Load~~ Demand Side Programme

4.25A.1. In each Reserve Capacity Year each ~~A Rule Participant~~ Market Customer must undertake a Verification Test during the period specified in clause 4.10.1(f)(vi) ~~of~~ for each ~~Curtailable Load~~ Demand Side Programme registered ~~by~~ to the ~~Rule Participant~~ Market Customer. Each test must be conducted in accordance with the Reserve Capacity Procedure and be carried out:

(a) within 20 Business Days of registration, as notified by the IMO under clause 2.31.6, of the ~~Curtailable Load~~ Demand Side Programme, if applicable; or

(b) between 1 October and 30 November ~~of each Reserve Capacity Year~~.

4.25A.2. To undertake a Verification Test ~~the Rule~~ a Market Customer ~~Participant will~~ must activate the ~~Curtailable Load~~ Demand Side Programme and ~~advise~~ provide evidence satisfactory to the IMO of the Trading Intervals during which the Verification Test was conducted.

4.25A.3. A Demand Side Programme will be deemed to have failed the ~~The~~ Verification Test ~~is failed if~~ unless a reduction in demand equal to at least 10% of the Capacity Credits, when measured against the Demand Side Programme's Relevant Demand determined under clause 4.26.2CA, is ~~not~~ identified from the ~~Curtailable Load~~ Demand Side Programme Load associated with that Demand Side Programme ~~meter data~~.

4.25A.4. Where a Demand Side Programme fails a Verification Test ~~is failed~~ the IMO must reduce the Capacity Credits assigned to the ~~Curtailable Load~~ Demand Side Programme to zero from the second Trading Day following the Scheduling Day on which the IMO determines that the Verification Test was failed under clause 4.25A.3.

4.25A.5. Where a Demand Side Programme fails a ~~the~~ Verification Test ~~is failed~~ the relevant ~~Rule~~ Market Participant may request that a second Verification Test be undertaken. If the ~~Curtailable Load~~ Demand Side Programme fails ~~this~~ the second Verification Test then the Capacity Credits assigned to the Demand

Side Programme are to remain at zero until the end of the relevant Reserve Capacity Year.

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 Generation 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 (excluding any payments relating to a Demand Side Programme) assuming the IMO acquires all of the Capacity Credits held by the Market Participant (excluding any Capacity Credits held for Demand Side Programmes) and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable).			
Where: For an Intermittent Facility that has been commissioned: Y equals 0 For all other facilities, including Intermittent Facilities that have not been commissioned: Y 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~~ Reserve Capacity Deficit refund for each Facility ("**~~Facility Forced Outage Refund~~ Facility Reserve Capacity Deficit Refund**") for each Trading Month m 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~~ Reserve Capacity Deficit in Trading Interval t,

where the ~~Forced Outage Shortfall~~ Reserve Capacity Deficit 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, 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 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~~ or

vii. if the Facility is a Demand Side Programme:

max(0, RCOQ – max(0, (RD – MinLoad)))

where:

RCOQ is the Reserve Capacity Obligation Quantity determined for the Facility under clause 4.12.4;

RD is the Relevant Demand for the Facility determined in accordance with clause 4.26.2CA; and

MinLoad is the sum of the minimum load MW quantities provided under clause 2.29.5B(c) for the Facility's Associated Loads; 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~~ Facility Reserve Capacity Deficit Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year.

4.26.1B. The IMO must calculate the ~~Forced Outage~~ Generation Reserve Capacity Deficit R~~r~~efund for each Market Participant ~~("**Participant Forced Outage Refund**")~~ for each Trading Month as the sum of the Facility ~~Forced Outage~~ Reserve Capacity Deficit Refunds for the Trading Month for each Facility registered to the relevant Market Participant, excluding any registered Demand Side Programmes.

~~4.26.1C. If a Market Participant holding Capacity Credits associated with a Curtailable Load 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 provisions of this clause 4.26.~~

4.26.2. The IMO must determine the net STEM shortfall ("**Net STEM Shortfall**") in Reserve Capacity supplied by each Market Participant p holding Capacity Credits associated with a generation system in each Trading Interval t of Trading Day d and Trading Month m as:

...

(b) the sum of the product of:

i. the factor described in clause 4.26.2B as it applies to Market Participant p's Registered Facilities; and

ii. the Reserve Capacity Obligation Quantity for each Facility

for all Market Participant p's Registered Facilities, excluding ~~Curtailable Loads~~ Demand Side Programmes;

…

(d) subject to paragraph (c), for the case where Market Participant p is not the Electricity Generation Corporation, the sum of:

…

iiA if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any ~~Curtailable Load or~~ Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus

…

4.26.2C. ~~The IMO must:~~

~~(a) Identify the eight consecutive Trading Intervals with the highest aggregate system demand in each month during the preceding Hot Season;~~

~~(b) Subject to clause 4.26.2C(c), set the Relevant Demand (in MW) for the Curtailable Load equal to the median of the metered consumption during the 32 Trading Intervals identified in clause 4.26.2C(a), where the Relevant Demand is a positive number.~~

~~(c) Where the metered consumption during the 32 Trading Intervals identified in clause 4.26.2C(b) is not available the IMO must set the Relevant Demand based on:~~

~~i. Available Meter Data, or~~

~~ii. Load information provided by the Rule Participant, or~~

~~iii. Other relevant information.~~

~~(d) Where evidence is provided by the Market Customer that the Curtailable Load was operating at below capacity due to its consumption being reduced at the request of System Management or because of maintenance during one or more of the 32 Trading Intervals identified in clause 4.26.2C(a), the IMO must set the Relevant Demand based on the IMO's estimate of the Curtailable Load consumption during those intervals.~~

For each Capacity Year, the IMO must:

(a) identify the eight consecutive Trading Intervals with the highest aggregate system demand in each month during the Hot Season of the previous Capacity Year; and

(b) for each Non-Dispatchable Load or Interruptible Load associated with a Demand Side Programme (Associated Load) during the Capacity Year and each of the 32 Trading Intervals identified under clause 4.26.2C(a), determine a MW quantity equal to:

i. the metered consumption of the Associated Load for the Trading Interval, multiplied by two to convert to units of MW; or

ii. where the metered consumption of the Associated Load for the Trading Interval is not available or is considered by the IMO to be inappropriate, a MW quantity determined by the IMO based on:

1. available Meter Data Submissions; or

2. Load information provided by the Market Customer; or

3. other relevant information; or

iii. where a Market Customer provides evidence satisfactory to the IMO that the Associated Load was operating at below capacity due to its consumption being reduced at the request of System Management or because of maintenance, the IMO's estimate of

what the consumption of the Associated Load would have been if it had not been reduced, multiplied by two to convert to units of MW.

4.26.2CA. The Relevant Demand of a Demand Side Programme for a Trading Day d in a Capacity Year is the median of the historical consumption quantities determined by the IMO for each of the 32 Trading Intervals identified under clause 4.26.2C(a) for the Capacity Year. The historical consumption quantity for each Trading Interval is the sum, over all the Associated Loads associated with the Demand Side Programme during Trading Day d, of the MW quantity determined by the IMO for each Associated Load and the Trading Interval under clause 4.26.2C(b).

4.26.2D. The IMO must determine the capacity shortfall ~~("Capacity Shortfall")~~ in Reserve Capacity ("Capacity Shortfall") supplied by each Market Participant p holding Capacity Credits associated with a ~~Curtailable Load~~ Demand Side Programme in each Trading Interval t of Trading Day d and Trading Month m relative to its Reserve Capacity Obligation Quantity as:

(a) ~~for Capacity Credits assigned in accordance with clause 4.10.1(f)(i)(1), and~~ where System Management has issued a Dispatch Instruction to the ~~Curtailable Load~~ Demand Side Programme for the Trading Interval as advised to the IMO by System Management under clause 7.13.1:

max(0, min(RCOQ, DIMW) – max(0, RD – DSPLMW))

where

RCOQ is the Reserve Capacity Obligation Quantity of the Demand Side Programme for Trading Interval t (in MW), determined in accordance with clause 4.12.4;

DIMW is the quantity by which the Demand Side Programme was instructed by System Management to reduce its consumption in Trading Interval t as specified by System Management in accordance with clause 7.13.1(eC), multiplied by two to convert to units of MW;

RD is the Relevant Demand of the Demand Side Programme for Trading Day d, determined by the IMO in accordance with clause 4.26.2CA; and

DSPLMW is the Demand Side Programme Load of the Demand Side Programme in Trading Interval t, multiplied by two to convert to units of MW; and

~~i. zero; if negative two multiplied by the Metered Schedule is less than the Relevant Demand set in clause 4.26.2C minus the Capacity Credits assigned to the Curtailable Load;~~

~~ii. the greater of:~~

~~1. zero, or~~

2. the required decrease, in MW, minus the load reduction, where the load reduction is equal to the Relevant Demand set in clause 4.26.2C minus negative two multiplied by the Metered Schedule for the Trading Interval,

if the Capacity Credits assigned to the Curtailable Load are greater than the Dispatch Instruction for the Trading Interval; or

iii. negative two multiplied by the Metered Schedule plus the Capacity Credits assigned to the Curtailable Load minus the Relevant Demand set in clause 4.26.2C;

(b) zero, where System Management has not issued a Dispatch Instruction to the Demand Side Programme for Trading Interval t as advised to the IMO by System Management under clause 7.13.1.for Capacity Credits assigned in accordance with clause 4.10.1(f)(i)(2), and where System Management has issued a Dispatch Instruction to the Curtailable Load for the Trading Interval as advised to the IMO by System Management under clause 7.13.1:

i. zero, if negative two multiplied by the Metered Schedule is less than the Stipulated Default Load;

ii. the greater of:

1. zero, or

2. negative two multiplied by the Metered Schedule minus the load reduction, where the load reduction is equal to the Stipulated Default Load plus the Capacity Credits assigned to the Curtailable Load minus the Dispatch Instruction for the Trading Interval,

if the Capacity Credits assigned to the Curtailable Load are greater than the Dispatch Instruction for the Trading Interval; or

iii. negative two multiplied by the Metered Schedule minus the Stipulated Default Load, if the Capacity Credits assigned to the Curtailable Load are less than the Dispatch Instruction for the Trading Interval; and

(c) for Capacity Credits assigned in accordance with either clause 4.10.1(f)(i)(1) or 4.10.1(f)(i)(2), and where System Management has not issued a Dispatch Instruction to the Curtailable Load for the Trading Interval as advised to the IMO by System Management under clause 7.13.1, zero.

4.26.2E. For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("**Capacity Cost Refund**") to be applied for Trading Month m in respect of a Net STEM Shortfall as determined under clause 4.26.2 and a Capacity Shortfall as determined under clause 4.26.2D during that Trading Month accordance with clause 4.26.2F.

4.26.2F. ~~For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("**Capacity Cost Refund**") to be applied for Trading Month m.~~ The Capacity Cost Refund for Market Participant p and Trading Month m is the sum of:

(a) either:

i. where Market Participant p holds Capacity Credits associated with a generation system, the Generation Capacity Cost Refund for Market Participant p for Trading Month m, determined in accordance with clause 4.26.3; or

ii. zero, otherwise; and

(b) the sum over all Demand Side Programmes for which Market Participant p holds Capacity Credits of the Demand Side Programme Capacity Cost Refund for Trading Month m, determined in accordance with clause 4.26.3A.

4.26.3. The Generation Capacity Cost Refund for Trading Month m for a Market Participant p holding Capacity Credits associated with a generation system is the lesser of:

(a) the Maximum Participant Generation Refund determined for Market Participant p and Trading Month m in accordance with the Refund Table, less all Generation Capacity Cost Refunds applicable to ~~the~~ Market Participant p in previous Trading Months falling in the same Capacity Year as Trading Month m; and

(b) the ~~Participant Forced Outage~~ Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Month m, plus the sum over all Trading Intervals t in Trading Month m of the Net STEM Refund,

where the Net STEM Refund is the product of:

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

ii. the Net STEM Shortfall for Market Participant p in Trading Interval t.

4.26.3A. The Demand Side Programme Capacity Cost Refund for Trading Month m for a Demand Side Programme ~~associated with a Curtailable Load~~ is equal to the lesser of:

(a) twelve times the Monthly Reserve Capacity Price for Trading Month m multiplied by the number of Capacity Credits associated with the Facility, less all Demand Side Programme Capacity Cost Refunds applicable to the ~~Market Participant~~ Facility in previous Trading Months falling in the same Capacity Year as Trading Month m; and

(b) the sum of:

i. the sum over all Trading Intervals t in Trading Month m of:

12 * Monthly Reserve Capacity Price * S / (2 * H)

Where:

S is the Capacity Shortfall in MW determined in accordance with clause 4.26.2D in any Trading Interval; and

H is the maximum number of hours that the Facility was certified to be available in accordance with clause 4.10.1(f)(ii)~~.~~; and

ii. the Facility Reserve Capacity Deficit Refund for Trading Month m for the Facility, determined in accordance with clause 4.26.1A.

4.26.4. The IMO must apply any revenue generated from the application of clause ~~4.26.3~~ 4.26.2E to Market Customers in accordance with clause 4.28.4.

6.3A.2. By 9:00 AM on the Scheduling Day the IMO must have calculated and released to each Market Participant the following parameters to be applied by that Market Participant in forming its STEM Submissions for each Trading Interval in the Trading Day:

…

(b) the Maximum Consumption Capability where this equals the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be consumed during a Trading Interval by that Market Participant's Non-Dispatchable Loads, Interruptible Loads~~, Curtailable Loads~~ and Dispatchable Loads based on the Standing Data maximum consumption quantities for those Facilities and Non-Dispatchable Loads, less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6;

…

6.5A.1. Market Participants other than the Electricity Generation Corporation that are Market Generators, or that are Market Customers with Dispatchable Loads or ~~Curtailable Loads~~ Demand Side Programmes, may submit Balancing Data Submission data for a Trading Day to the IMO between:

…

6.11.1. A Market Participant submitting Resource Plan Submission data or Standing Resource Plan Submission data must include in the submission:

…

(d) the total Loss Factor adjusted demand to be consumed by that Market Participant for each Trading Interval including demand associated with any ~~Curtailable Load or~~ Interruptible Load, but excluding demand associated with any Dispatchable Load; and

…

6.11.2. For Resource Plan Submission data or Standing Resource Plan Submission data to be valid:

…

(c) it must not include Interruptible Loads ~~or Curtailable Loads~~; and

…

6.11A.1. A Market Participant submitting Balancing Data Submission data must include in the submission:

…

(d) for each Demand Side Programme ~~Curtailable Load~~ registered ~~by~~ to the Market Participant:

…

6.12.1.

(a) By 1:30 PM on the Scheduling Day, (or within 40 minutes of a closing time extended in accordance with clause 6.5.1(b) or clause 6.5A.1(b)), the IMO must determine the Dispatch Merit Orders identified in paragraphs (b) to (g). A Dispatch Merit Order lists the order in which the Scheduled Generators, ~~and~~ Dispatchable Loads and Demand Side Programmes of Market Participants other than the Electricity Generation Corporation will, in the absence of transmission limitations or limitations necessary to maintain Power System Security, be issued Dispatch Instructions by System Management to increase or decrease output.

(b) A Dispatch Merit Order for an increase in generation or decrease in consumption relative to the quantities included in the applicable Resource Plan (or the current operating level of a Facility not included in a Resource Plan) during Peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:

i. this Dispatch Merit Order must list all Scheduled Generators, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads registered by Market Participants other than the Electricity Generation Corporation;

…

(e) A Dispatch Merit Order for an increase in generation or decrease in consumption relative to quantities included in the applicable Resource Plan (or the current operating level of a Facility not included in a Resource Plan) during Off-peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:

i. this Dispatch Merit Order must list all Scheduled Generators, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads registered by Market Participants other than the Electricity Generation Corporation;

...

(h) Where the prices in Balancing Data or payments described in Standing Data, as applicable, for two or more Registered Facilities ~~Market Participants~~ are equal, then for the purpose of determining the ranking in any Dispatch Merit Order other than those for decommitment, the IMO must rank a Registered Facility with a greater sent out capacity registered in Standing Data before a Registered Facility with a lesser sent out capacity. For a Dispatch Merit Order for decommitment, the IMO must rank a Registered Facility with a greater name plate capacity registered in Standing Data before a Registered Facility with a lesser name plate capacity.

6.15.2. ~~The Dispatch Schedule for a Trading Interval~~ The Dispatch Schedule for a Trading Interval equals the corresponding Metered Schedule for any of the following Facilities ~~equals the corresponding Metered Schedule~~:

(a) a Non-Scheduled Generator;

(aA) a Scheduled Generator to which clauses 3.21.2, 3.21A.14 or 4.25.10 apply;

(b) a Non-Dispatchable Load;

(c) ~~a Curtailable Load;~~ [Blank]

(d) an Interruptible Load;

(e) a Scheduled Generator or Dispatchable Load registered by the Electricity Generation Corporation; and

(f) a Scheduled Generator or Dispatchable Load registered by a Market Participant (other than the Electricity Generation Corporation) where a Dispatch Instruction of the type described in clause 7.7.3(d)(ii) was issued to the Market Participant in respect of the Facility.

6.16.1. Subject to clause 9.3.3, ~~T~~the IMO must determine the Metered Schedule for a Trading Interval for a Registered Facility or Non-Dispatchable Load ~~is determined by the IMO~~ in accordance with clause 9.3.4.

6.16.2. The IMO must determine the Demand Side Programme Load for a Demand Side Programme for a Trading Interval as the total net MWh quantity of energy consumed by the Associated Loads of that Demand Side Programme during the Trading Interval, determined from Meter Data Submissions and expressed as a positive non-loss adjusted value.

6.17.6. The Dispatch Instruction Payment, DIP(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals either ~~the sum of~~:

(a) zero, if Market Participant p:

i. is the Electricity Generation Corporation; or

ii. was issued no Dispatch Instructions ~~or was issued instructions described by either (c) or (d)~~ for ~~the~~ Trading Interval t;

or the sum of:

(b) the sum over all Scheduled Generators and Dispatchable Loads registered by the Market Participant of the following amounts for Trading Interval t:

i. if the Dispatch Schedule for the Registered Facility is set in accordance with clause 6.15.1(a) for Trading Interval t, the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dA) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dB) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node), the amount for the Registered Facility is zero;

iA. if clauses 3.21A.14 or 4.25.10 apply to the Registered Facility during the Trading Interval, the amount for the Registered Facility is zero;

ii. if neither paragraph (i) nor (iA) applies, the amount for the Registered Facility is the product of:

1. the qualifying quantity for Trading Interval t as calculated in accordance with clause 6.17.8, less the sum of the quantity indicated in the applicable Resource Plan (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity so that the result is measured at the Reference Node) for the Registered Facility for Trading Interval t and the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dA) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is

to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and

2. the price defined as:

i. the contracted price, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract for System Restart, Dispatch Support or Load Rejection~~.~~;

ii. zero, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract other than for System Restart, Dispatch Support or Load Rejection~~,~~; or

iii. the applicable price as defined by clause 6.17.7 less MCAP for Trading Interval t~~.~~; and

(c) the sum over all Non-Scheduled Generators registered by the Market Participant of the amount that is the product of:

i. the quantity, defined as a negative value, by which the Non-Scheduled Generator was instructed by System Management to reduce its output (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and

ii. the Standing Data price defined in Appendix 1(e)(v) that was current at the time of the Trading Interval for the Non-Scheduled Generator for a decrease in generation, (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval) less MCAP for the Trading Interval; and

(d) the sum over all ~~Curtailable Loads~~ Demand Side Programmes registered to ~~by~~ the Market Participant of the amount that is the product of:

i. the quantity (in MWh) by which the ~~Curtailable Load~~ Demand Side Programme reduced its consumption~~; where~~ in response to a Dispatch Instruction, excluding any instructions given under a Network Control Service Contract, where this quantity is equal to the least of:

1. ~~for a Curtailable Load that has nominated that its measurement is to be based on its Capacity Credits, the quantum of reduction in any Trading Interval is to be equal to half of the lesser of~~ half of the Facility's Capacity Credits~~Reserve Capacity (in MW),~~;

2. the Dispatch Instruction amount provided by System Management in accordance with clause 7.13.1(eC); or ~~and~~

3. the greater of zero and the difference between half of the Relevant Demand set in clause 4.26.2CA and the Demand Side Programme Load ~~twice the absolute value of the metered quantity (in MWh)~~ measured in the Trading Interval; and

~~2. for a Curtailable Load that has nominated that its measurement is to be based on the Stipulated Default Load, the quantum of reduction in each Trading Interval is to equal half of the lesser of the Relevant Demand (in MW) minus Stipulated Default Load (in MW), and the Relevant Demand (in MW) minus twice the absolute value of the metered quantity (in MWh) measured in the Trading Interval; and~~

ii. the price defined in ~~clause 6.11A.1(d)(ii)~~ the Market Participant's Balancing Data Submission provided in accordance with clause 6.5A, that was current at the time of the Trading Interval, for the ~~Curtailable Load~~ Demand Side Programme (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval); and

…

7.1.1. System Management must maintain the following data set, and must use this data set when determining which Dispatch Instructions it will give:

…

(i) Scheduled Generator, Non-Scheduled Generator, Dispatchable Load, ~~Curtailable Load~~ and Interruptible Load Forced Outages and Consequential Outages by Trading Interval received from Market Participants in accordance with clause 3.21;

…

7.2.2. The Load Forecasts for a Trading Day described in clause 7.2.1 must:

(a) represent Non-Dispatchable Load~~, Curtailable Load~~ and Interruptible Load net of forecast Non-Scheduled Generation;

…

7.6.10. Where a Market Participant has Capacity Credits granted in respect of a ~~Curtailable Load~~ Demand Side Programme:

(a) the IMO must provide System Management with the details of the Reserve Capacity Obligations to enable System Management to dispatch the ~~Curtailable Load~~ Demand Side Programme~~.~~; and

(b) System Management may issue directions to the ~~Curtailable Load~~ Demand Side Programme in accordance with the Reserve Capacity Obligations.

7.7.3. Each Dispatch Instruction must contain the following information:

(a) the Registered Facility to which the Dispatch Instruction relates;

(b) the time the Dispatch Instruction was issued;

(c) the time by which response to the Dispatch Instruction is required to commence (which must not be earlier than the time it was issued, except as contemplated by clause 7.7.7(b));

(d) the required level of sent out generation or consumption which may be ~~either~~ any one of the following:

i. a target MW output; ~~or~~

ii. a minimum MW level; ~~and~~ or

iii. a required decrease in consumption (in MW) for a Demand Side Programme; and

(e) the ramp-rate to maintain until the required level of sent out generation or consumption is reached, if a ramp rate has been identified in Standing Data.

7.7.4. System Management must determine which Facilities will be the subject of Dispatch Instructions by applying the Dispatch Merit Order relevant to the action required, except where:

…

(c) the Dispatch Merit Order would otherwise require that System Management dispatch a Demand Side Programme ~~curtail a Curtailable Load~~ when, due to limitations on the availability of the Demand Side Programme ~~Curtailable Load~~, such ~~curtailment~~ dispatch would prevent that Demand Side Programme ~~Curtailable Load~~ from being available to System Management at a later time when it would have greater benefit with respect to maintaining Power System Security and Power System Reliability.

7.7.4A. When selecting Demand Side Programmes ~~Curtailable Loads~~ from the Dispatch Merit Order System Management must select them in accordance with the Power System Operation~~s~~ Procedure, where the selection process specified in the Power System Operation~~s~~ Procedure must only discriminate between Demand Side Programmes ~~Curtailable Loads~~ based on size of the capacity, response time and availability of different Demand Side Programmes ~~Curtailable Loads~~.

7.7.10. When System Management has issued a ~~d~~Dispatch ~~i~~Instruction to a Demand Side Programme ~~Curtailable Load to reduce demand~~ to decrease its consumption System Management ~~it~~ may issue a further instruction

terminating the requirement for the Demand Side Programme ~~Curtailable Load~~ to ~~reduce demand~~ decrease its consumption providing that:

(a) ~~Such~~ the further instruction is issued ~~no less than~~ at least four hours before it is to come into effect, and

(b) ~~The~~ the minimum period for which the Demand Side Programme ~~Curtailable Load has been~~ is instructed to ~~reduce demand~~ decrease its consumption is not less than two hours.

7.10.4. System Management must monitor the behaviour of Market Participants with Registered Facilities to assess whether they are complying with clause 7.10.1 in accordance with its Monitoring and Reporting Protocol~~.~~, except where it relates to a Demand Side Programme.

7.13.1. System Management must provide the IMO with the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

…

(eC) the required decrease, in MWh, in the consumption of each ~~Curtailable Load~~ Demand Side Programme, by Trading Interval, as a result of System Management Dispatch Instructions~~, where t~~. This is to be used in settlement as the quantity described in clause 6.17.6(d)(i)(2).

(g) details of the instructions provided to:

i. ~~Curtailable Loads~~ Demand Side Programmes that have Reserve Capacity Obligations; and

ii. providers of Supplementary Capacity;

…

9.3.3. The IMO must determine the Metered Schedule for each of the following ~~Facility~~ Facilities ~~and Non-Dispatchable Load~~ for each Trading Interval in accordance with clause 9.3.4~~.~~:

(a) Non-Dispatchable Loads;

(b) Interruptible Loads;

(c) Dispatchable Loads;

(d) Scheduled Generators; and

(e) Non-Scheduled Generators.

9.3.4. Subject to clause 2.30B.10, the Metered Schedule for a Trading Interval for each of the following ~~a~~ ~~Facility~~ Facilities ~~or Non-Dispatchable Load,~~:

(a) Non-Dispatchable Loads, excluding those Non-Dispatchable Loads referred to in clause 9.3.4A;

(b) Interruptible Loads;

(c) Dispatchable Loads;

(d) Scheduled Generators; and

(e) Non-Scheduled Generators,

~~,~~ is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility ~~or Non-Dispatchable Load (as applicable)~~ during that Trading Interval, Loss Factor adjusted to the Reference Node, and determined from Meter Data Submissions received by the IMO in accordance with clause 8.4 or SCADA data received from System Management in accordance with clause 7.13.1(cA) where interval meter data is not available.

9.3.7. The IMO must determine the Consumption_Share(p,m) for Market Participant p in each Trading Month m, ~~which~~ to equal~~s~~

(a) the Market Participant's contributing quantity; divided by

(b) the total contributing quantity of all Market Participants,

where the contributing quantity for a Market Participant for Trading Month m is the sum of the Metered Schedules for the Non-Dispatchable Loads, Interruptible Loads~~, Curtailable Loads,~~ and Dispatchable Loads registered to the Market Participant for all Trading Intervals during Trading Month m.

9.13.1. The applicable Market Participant Fee settlement amount for Market Participant p for Trading Month m is:

MPFSA(p,m) = (-1) x (Market Fee rate + System Operation Fee rate + Regulator Fee rate) x (Monthly Participant Load(p,m) + Monthly Participant Generation(p,m))

Where

Market Fee rate is the charge per MWh for IMO's services determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

System Operation Fee rate is the charge per MWh for System Management's services determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

Regulator Fee rate is the charge per MWh for funding the Economic Regulation Authority's activities with respect to the Wholesale Electricity Market determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

Monthly Participant Load(p,m) = (-1) $\times$ Sum($d \in D, t \in T$, Metered Load(p,d,t));

where

Metered Load(p,d,t) for a Market Participant p for a Trading Interval t is the sum of the mathematical absolute values of the Metered Schedules for the Non-Dispatchable Loads, Dispatchable Loads~~,~~ and Interruptible Loads ~~and Curtailable Loads~~, registered to the Market Participant for Trading Interval t; and

Monthly Participant Generation(p,m)
= Sum(d∈ D,t∈ T, Metered Generation(p,d,t));

where

Metered Generation(p,d,t) for Market Participant p for Trading Interval t is the sum of the mathematical absolute values of the Metered Schedules for Scheduled Generators and Non-Scheduled Generators, registered to the Market Participant for Trading Interval t; and

D is the set of all Trading Days in Trading Month m, where "d" is used to refer to a member of that set;

T is the set of all Trading Intervals in Trading Day d, where "t" is used to refer to a member of that set.

10.5.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Public and the IMO must make each item of information available from the Market Web-Site after that item of information becomes available to the IMO:

…

(f) the following Reserve Capacity information (if applicable):

…

iv. for each Market Participant holding Capacity Credits, the Capacity Credits provided by each Facility for each Reserve Capacity Cycle~~. In the case of a Market Participant with a Demand Side Programme, the IMO must publish the total Capacity Credits for the programme and not for each Curtailable Load comprising the programme~~;

…

(j) for each Trading Interval in each completed Trading Day in the previous 12 calendar months the following dispatch summary information:

i. the values of MCAP, UDAP and DDAP;

ii. the Load Forecasts prepared by System Management in accordance with clause 7.2.1;

iii. the sum of the Metered Schedule load for all Non-Dispatchable Load, Dispatchable Load~~,~~ and Interruptible Load ~~and Curtailable Load~~;

iv. estimates of the energy not served due to involuntary load curtailment; and

v. any shortfalls in Ancillary Services;

…

Chapter 11: Glossary

Associated Load: Has the meaning given in clause 2.29.5G.

Association Period: Has the meaning given in clause 2.29.5G.

Capacity Cost Refund: Has the meaning given in clause ~~4.26.3~~ 4.26.2E.

~~**Curtailable Load**: A Load through which electricity is consumed where such consumption can be curtailed at short notice by the party managing the Load or in response to a request from System Management to the party managing the Load, and registered as such in accordance with clause 2.29.5(b).~~

Demand Side Programme: Means a ~~programme~~ Facility registered in accordance with clause 2.29.5A. ~~under which a Market Customer contracts Loads to be available for curtailment upon request of the Market Customer or System Management.~~

Demand Side Programme Capacity Cost Refund: Has the meaning given in clause 4.26.3A.

Demand Side Programme Load: Has the meaning given in clause 6.16.2.

Facility Classes: Any one of the classes of Facility specified in clause 2.29.1A. ~~Network, Scheduled Generator, Non-Scheduled Generator, Interruptible Load, Curtailable Load and Dispatchable Load.~~

Facility Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1A.

~~**Forced Outage Shortfall:** Has the meaning given in clause 4.26.1A.~~

Generation Capacity Cost Refund: Has the meaning given in clause 4.26.3.

Generation Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1B.

Non-Dispatchable Load: A Load which is not a Dispatchable Load~~, a Curtailable Load~~ or an Interruptible Load~~, and is therefore self scheduled~~.

~~**Participant Forced Outage Refund:** Has the meaning given in clause 4.26.1B.~~

Relevant Demand: The consumption of a ~~Curtailable Load~~ Demand Side Programme as determined in clause 4.26.2CA. Relevant Demand is used to ~~set the maximum Certified Reserve Capacity that can be assigned to a Curtailable Load. It is also used to~~ determine Reserve Capacity shortfalls.

Reserve Capacity Deficit: Has the meaning given in clause 4.26.1A.

~~**Stipulated Default Load**: The maximum energy consumption to be maintained by an Interruptible Load, Curtailable Load or Dispatchable Load if activated, as specified in its Reserve Capacity Obligations.~~

The following amendment to Appendix 1 will commence at 8:00am on 1 July 2011.

Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by the IMO for use by the IMO in market processes and by System Management in dispatch processes.

Standing Data required to provided as a pre-condition for Facility Registration, and which is to be updated by Rule Participants as necessary, is described by clauses (a) to (j).

Standing Data not required to be provided as a pre-condition for Facility Registration but that which is required to be maintained by the IMO includes the data described in clauses (k) onwards.

(a) for a Network:

…

(h) for a Curtailable Load:

i. the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval;

ii. evidence that the communication and control systems required by clause 2.36 are in place and operational;

iii. the maximum amount of load that can be curtailed;

iv. the maximum duration of any single curtailment;

v. [Blank]

vi. for a facility that is registered to a Market Participant other than the Electricity Generation Corporation, Standing Balancing Data comprising;

1. a Consumption Decrease Price for Peak Trading Intervals; and

2. a Consumption Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of $/MWh to a precision of $0.01/MWh;

vii. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output;

viii. the Metering Data Agent for the facility;

ix. where the Curtailable Load has a generation system that can connect to the network behind its associated meter, a single line diagram for the Curtailable Load, including the locations of generators, transformers, switches, operational and settlement meters; ~~the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;~~

x. the network nodes at which the facility can connect;

xi. the short circuit capability of facility equipment;

xii. whether the Curtailable Load is an Intermittent Load;

xiii. if the Curtailable Load is an Intermittent Load, the maximum allowed level of Intermittent Load, where this cannot exceed the quantity in (i);

xiv. if the Curtailable Load is an Intermittent Load, the maximum level of net consumption behind the meter associated with the Curtailable Load which is not separately metered and which is not Intermittent Load; and

xv. if the Curtailable Load is an Intermittent Load, the separately metered generating systems and loads behind that meter associated with the Curtailable Load which are not to be included in the definition of that Intermittent Load.

…

The following amendment to Appendix 1 will commence at 8:00am on 1 October 2011.

Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by the IMO for use by the IMO in market processes and by System Management in dispatch processes.

Standing Data required to provided as a pre-condition for Facility Registration, and which is to be updated by Rule Participants as necessary, is described by clauses (a) to (j).

Standing Data not required to be provided as a pre-condition for Facility Registration but that which is required to be maintained by the IMO includes the data described in clauses (k) onwards.

(a) for a Network:

…

(h) for a ~~Curtailable Load~~ Demand Side Programme:

i. ~~the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval;~~ [Blank]

ii. evidence that the communication and control systems required by clause 2.3~~6~~5 are in place and operational;

iii. the maximum amount of load that can be curtailed;

iv. the maximum duration of any single curtailment;

v. [Blank]

vi. for a ~~facility~~ Demand Side Programme that is registered to a Market Participant other than the Electricity Generation Corporation, Standing Balancing Data comprising;

1. a Consumption Decrease Price for Peak Trading Intervals; and

2. a Consumption Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of $/MWh to a precision of $0.01/MWh;

vii. the minimum response time before the ~~facility~~ Demand Side Programme can begin to respond to an instruction from System Management to change its output;

viii. ~~the Metering Data Agent for the facility;~~ the maximum number of hours per year the Demand Side Programme can be curtailed;

ix. ~~where the Curtailable Load has a generation system that can connect to the network behind its associated meter, a single line diagram for the Curtailable Load, including the locations of generators, transformers, switches, operational and settlement meters;~~the Trading Intervals where the Demand Side Programme can be curtailed;

x. ~~the network nodes at which the facility can connect;~~ any restrictions on the availability of the Demand Side Programme;

xi. ~~the short circuit capability of facility equipment;~~ the normal ramp up and ramp down rates as a function of output level, if applicable;

xii. ~~whether the Curtailable Load is an Intermittent Load;~~ emergency ramp up and ramp down rates, if applicable; and

xiii. ~~if the Curtailable Load is an Intermittent Load, the maximum allowed level of Intermittent Load, where this cannot exceed the quantity in (i);~~ the maximum number of times that the Demand Side Programme can be curtailed during the term of its Capacity Credits;

~~xiv. if the Curtailable Load is an Intermittent Load, the maximum level of net consumption behind the meter associated with the Curtailable Load which is not separately metered and which is not Intermittent Load; and~~

~~xv. if the Curtailable Load is an Intermittent Load, the separately metered generating systems and loads behind that meter associated with the Curtailable Load which are not to be included in the definition of that Intermittent Load.~~

…

(k) For each Registered Facility:

i. Reserve Capacity information including:

…

5. for Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes, the maximum number of times that interruption can be called during the term of the Capacity Credits;

…

Appendix 3: Reserve Capacity Auction & Trade Methodology

This appendix describes a single algorithm which performs two functions. One version of the algorithm is used to prevent the IMO accepting bilateral trades that have insufficient availability to usefully address the Reserve Capacity Requirement. Another version of the algorithm is used in the conduct of the Reserve Capacity Auction as required by clause 4.19.1.

The parameter "a" denotes the active Availability Class where "a" can have a value of {1, 2, 3, 4}. For the purpose of identifying which capacity can be applied to satisfying capacity requirements the minimum availability of each Availability Class is set to the maximum availability of the next Availability Class. However the algorithms in this appendix allow capacity from an Availability Class with high availability to be used in place of capacity from an Availability Class with lower availability. The following table indicates the required availability of capacity offered for each Availability Class:

Availability Class (i.e. value of "a")	Minimum Hours of Availability Per Year	Maximum Hours of Availability Per Year
1	96	All
2	72	96
3	48	72
4	24	48

All Certified Reserve Capacity associated with Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes or Dispatchable Loads is explicitly assigned an Availability Class, whereas all other Certified Reserve Capacity is automatically in Availability Class 1.

APPENDIX 1: FULL DETAILS OF THE PROPOSAL

Background

The IMO noted in its Rule Change Proposal that Market Participants that are electricity retailers serve numerous domestic, commercial and industrial users (Loads). Most of these will be NDLs[7], for which there are currently no registration provisions in the Market Rules. Some users are willing to curtail their energy usage at times of peak demand or at times of system stress under contract. DSM providers aggregate such users to form CLs in order to receive payment for providing Reserve Capacity. Clause 2.30.3 of the Market Rules facilitates this practice.

DSM has made a positive contribution to the Reserve Capacity Mechanism within the Wholesale Electricity Market, currently contributing approximately 5 percent of the total Reserve Capacity for the 2012/13 Capacity Year.

Users can also form part of a DSP which may interact with the energy market through one Market Participant (their electricity retailer) and with the capacity mechanism through a different Market Participant (their DSM provider). The IMO noted that one key issue with this is that the Market Rules do not currently allow for a Load to be registered to two Market Participants.

Issues and Proposed Solutions

The IMO contended that some elements of the Market Rules surrounding CLs are inconsistent with the treatment of other capacity types, inconsistent with the way the IMO has applied the Market Rules in the past, inconsistent with common practice in other jurisdictions, or are simply impractical. The IMO noted that it intends to ensure that DSM options in the market are treated in a similar manner to other capacity types.

Currently the IMO is required to assess the appropriateness of a CL which makes up a DSP. The IMO considered it appropriate that the risks associated with non-compliance of CL's for the provision of demand reduction services are borne by the DSP provider. This is rather than the IMO being responsible for determining "acceptable" CLs.

After a comprehensive review of the Market Rules the IMO identified a number of issues relevant to CLs. A paper outlining the issues was presented at the 12 May 2010 meeting.

The issues paper was also supplemented with further analysis regarding the measurement of CL performance at both the 16 June 2010 and 11 August 2010 MAC meetings[8]. At both these meetings the MAC agreed with a number of recommendations put forward by the IMO. The IMO noted that in preparing RC_2010_29, the views expressed by the MAC have been taken into account.

Issue 1: Registration of Curtailable Loads

Overview: Currently, if a DSP provider wishes to use a Load(s) to fulfil the obligations of its DSP, the IMO is required to register the comprising Load(s) as a CL belonging to the DSP provider (clause 4.8.3(b)). The IMO noted that this has a number of flow-on effects in the calculation of the energy associated with that Load because the Load's connection point now essentially "belongs" to two different Market Participants:

[7] A Load which is not a Dispatchable Load, Curtailable Load or an Interruptible Load, and is therefore self-scheduled.
[8] To review the previous MAC papers and minutes see: www.imowa.com.au/MAC

- Firstly as an un-registered NDL to the energy provider (as supported by the Meter Registry); and
- Secondly as a CL to the DSP provider.

Since Energy Market Commencement the IMO has allowed the registration of CLs to DSP providers who are not also the energy provider.

The IMO noted that the association of the connection point with both the energy market and capacity mechanism creates an issue with not clearly delineating that a Load associated with a DSP through a Market Participant who is not the energy retailer should only be paid for capacity. That is, there should be no Metered Scheduled determined for a DSP as this would result in an energy market payment also occurring. Currently the Market Rules require a Metered Schedule to be determined for a CL which incorporates a CL into the energy side of the market.

Agreed Outcomes: The MAC endorsed the IMO's recommendation to amend the Market Rules so that a Market Participant other than the Market Customer is able to contract for the Reserve Capacity associated with CLs (12 May 2010 meeting).

The IMO's proposed solution: To implement the recommendation the IMO proposed to remove the concept of a CL as a Registered Facility from the Market Rules and replace this with the concept of the DSP being the Registered Facility. The DSP will then have NDLs associated with it for the purposes of capacity obligations, dispatch and settlements.

Issue 2: Facility Definition

Overview: Currently the Market Rules treat a DSP as a single (aggregated) Facility for some purposes, and the CLs comprising the DSP as individual Facilities for other purposes. The IMO noted that the Market Rules imply that a DSM provider applies for certification of Reserve Capacity for the DSP as a whole but the Loads comprising a DSP must be registered individually (clause 4.8.3(b)). This creates an issue when a DSP is expected to be made up of, potentially, hundreds of smaller CLs. That is, when attempting to satisfy the obligations of the DSP, a Market Participant will be required to apply for registration of all the comprising CLs at the same time.

The registration process requires a large amount of information from DSP providers about each CL regarding both energy and capacity. The IMO contended that this is operationally inefficient for both the IMO, in assessing the applications, and for the DSP provider in providing the relevant information for the registration process. The IMO noted that for the purposes of the RCM the most important aspect of this is evidence that the Facility has the capacity to be dispatched to the level of Capacity Credits held by the Facility.

Additionally, the IMO noted that each application costs the Market Participant $280[9] and can take the IMO up to 10 days to process. Therefore if a Market Participant with a 50MW DSP applies for registration of the 100 CLs that make up the DSP, the Market Participant would be required to pay registration fees of $28,000.

Furthermore, the IMO noted that Dispatch Instructions may only be issued to Registered Facilities (clause 7.7.2(b)). If a DSP is not registered as a single Facility, the Dispatch Instructions could only be issued to its component Loads and System Management would have to decide which Loads are required to deliver any reduction in consumption. The IMO noted that for operational efficiency, System Management would prefer to issue

[9] Effective 1 July 2010.

a Dispatch Instruction to the DSP provider, who would then decide how to deliver the requested curtailment.

Finally, clause 4.8.3(c) of the Market Rules implies that the DSP provider will seek Certified Reserve Capacity for the DSP as a whole, but that the Reserve Capacity Obligations are transferred from the programme to its component Loads as they are registered. The IMO contended that this implies that it is not possible to have more capacity associated with CLs in a programme than the quantity of Certified Reserve Capacity assigned to the DSP. However it is normal that DSP providers oversubscribe the level of capacity within a programme to manage the risk and provide some redundancy.

Agreed Outcome: The MAC endorsed the IMO's recommendation to amend the Market Rules to allow for the registration of a DSP as a Registered Facility (12 May 2010 meeting). This will allow for the dispatch of a DSP instead of dispatching each CL within the DSP. This will become increasingly important as the expected number of CLs comprising DSPs will be between 200 and 500 by 2012/13.

The MAC also endorsed the IMO's recommendation that the Market Rules be amended to specify (and operationalise) the ability for DSPs to be over-subscribed. While this practise is not currently prohibited by the Market Rules, it is neither contemplated as a possibility.

Proposed Solution: In its proposal the IMO noted that this issue is solved via the solution outlined in issue 1 above i.e. if a DSP is a Registered Facility, System Management will be able to dispatch the Facility itself, and will not be required to dispatch each of the CLs comprising the DSP.

The IMO also proposed an amendment to the Relevant Demand calculation to allow for the possibility that a programme will be oversubscribed. This is outlined in further detail in issue 4 below. The IMO noted that the proposed amendments will amend the calculation to no longer limit the amount of curtailability a DSP will be able to offer. The IMO contended that this will be consistent with the treatment of Scheduled Generators. This is in the same way there is no limit on the amount of generation a Scheduled Generator can provide even if it requests its capacity to be certified at a level below the nameplate capacity of the Facility.

Issue 3: Market Fees

The IMO noted in its proposal that this issue is presented for completeness only, and no amendments to the current Market Rules are proposed under RC_2010_29

Overview: The Market Rules require Market Fees to be paid on a proportionate level to the net amount of energy supplied or consumed by the Market Participant. This is as determined through the Market Participant's Metered Schedules. Under the current arrangement a DSP who contracts solely for capacity is not required to pay any Market Fees. The IMO noted that it identified this as an area requiring further consideration due to the inconsistencies with the current requirements for other Market Participants. Several options were identified by the IMO:

1. DSM providers could pay no Market Fees, requiring no change to the Market Rules.
2. DSM providers could pay Market Fees based on the quantity of energy dispatched for curtailment, which is consistent with the Market Fee calculation for other Market Participants.

3. DSM providers could pay an annual Market Fee based on the number of Capacity Credits. This introduces additional complexity to the current Market Fee structure.
4. The entire Market Fee structure could be replaced with an arrangement based on both capacity and energy. This could introduce additional complexity to the current Market Fee structure.

Agreed Outcome: The MAC agreed that DSPs should not be required to pay Market Fees (12 May 2010 meeting).

Issue 4: Measurement of CL Performance

Overview: The IMO noted that the Rule Change Proposal: Demand Side Management - Operational Issues (RC_2008_20) introduced a new concept for measuring the curtailability of CLs. This is known as the RD level. The RD level determines the median value that a Curtailable Load consumes during 32 Trading Intervals of highest demand during the preceding Hot Season, reflecting a normal operating level during the intervals when the DSP is most likely to be dispatched.

The Market Rules also give a CL/DSP the ability to perform maintenance over these peak intervals without this reducing the corresponding RD level for the Facility. The IMO considered that the exclusion of maintenance from the calculation gives a dual incentive to Market Participants to perform maintenance during intervals they assume will be IRCR intervals[10]. For example a Market Participant can currently attempt to reduce its load over intervals which it considers will be Peak Trading Intervals. Note that the IRCR and RD intervals are likely to be similar intervals and as such a Market Participant's IRCR are likely to be reduced. To minimise the cost of these reductions if a Market Participant performs maintenance on a Facility over these intervals, that Market Participant can also apply to the IMO to exclude these intervals resulting in a higher RD level than they would otherwise have had calculated. As a result the Market Participant not only has a reduced IRCR cost but also received a higher RD level and so receives a higher Capacity Credit payment in the following year.

As noted above the RD level is intended to reflect the normal operating level during intervals when the DSP is most likely to be dispatched, however in the case outlined above the RD level will not be representative of this peak load operating level. The IMO therefore recommended to the MAC that the ability to exclude Trading Intervals where maintenance was being performed be removed from the Market Rules. The IMO considered that there is already a payment incentive in place to reduce consumption over peak periods in the IRCR calculation.

The IMO noted in its proposal that if a Facility was undertaking maintenance or experiencing an unplanned outage during any of the 32 Trading Intervals of highest demand used in the RD calculation, and these do not match up with any of the 12 IRCR Trading Intervals, then the Market Participant would not receive the benefit of a reduction in its IRCR and would have a lower RD level calculated (resulting in a reduced level of Capacity Credits being assigned). As a result the IMO commissioned Data Analysis Australia (DAA) to consider the use of the IRCR Trading Intervals as the basis for the RD calculation. DAA's analysis found that the use of the IRCR intervals would produce a more reliable result which better reflects the normal operating level during intervals when the DSP is most likely to be dispatched. Further details of DAA's analysis and the MAC's subsequent discussion are available on the IMO webpage: http://www.imowa.com.au/MAC_28

[10] The 12 peak Trading Intervals during the Hot Season preceding the initial calculation.

The IMO noted that a separate issue identified in the measurement of the performance of CLs is that the Market Rules do not currently contemplate the ability for a Facility to be oversubscribed. As such the measurement of these oversubscribed Facilities is also not accounted for. The following options to account for oversubscribed facilities were identified by the IMO, either to:

1. Measure the reduction of each individual Load compared to its individual RD level; or
2. Measure the aggregated DSP as a single Facility with a RD Level based on the sum of the comprising Loads.

Currently a reduction of a DSP is measured for those Loads which the DSP directed to curtail. This is similar to the first option presented above and results in only curtailment of output being associated with the DSPs performance and not any increases in load which may have occurred by Loads within the DSP (outside of any directions having been issued). The IMO considered that it is appropriate that the DSP is responsible for the level of operation of the DSP as a whole, which would include any natural movement in Loads above and/or below the DSPs RD level which were not as a result of directions having been issued.

Following the outcomes of DAA's analysis which found no significant difference between the two options, the IMO did not consider it is necessary to calculate the RD level for each individual Load as this would create unnecessary operational overhead and not improve the RD levels ability to reflect the normal operational level of the DSP during required intervals.

Agreed Outcome: The MAC agreed that:

- The RD level calculation methodology should be changed to be calculated on the IRCR intervals;
- The exclusion due to maintenance, clause 4.26.2C(d) should be removed from the Market Rules; and
- The RD level should be calculated based on the aggregated output of the DSP, and not by aggregating the RD of each CL associated with a DSP (11 August 2010 meeting).

Proposed Solution: The IMO noted in its proposal that the solutions to issues 1 and 2 (which will ensure that only the DSP is visible to the market and not the comprising loads) combined with the RD level being calculated based on the aggregated output of the DSP, and not by aggregating the RD of each CL associated with a DSP will ensure that the correct measurement of the DSP as a whole. The IMO contended that this will ensure that a DSP is treated similarly to other Facilities (by measuring consumption at an aggregate level) with regard to how it satisfies its Reserve Capacity Obligations and simplifies the measurement of the DSP's consumption.

Issue 5: Capacity Cost Refunds

Overview: The IMO noted that RC_2008_20 implemented a methodology for calculating Capacity Cost Refunds for CLs. This methodology requires a DSM provider to pay refunds only if it fails to deliver curtailment when dispatched.

The IMO purported that an unintended consequence of this is that a DSM provider is not required to pay refunds, even if they fail to procure any CLs into the programme, until such time as they fail to meet a Dispatch Instruction or fail a Reserve Capacity test. The

IMO considered that this is a manifest error as a DSM provider will continue to receive payment for the capacity even if it is unavailable to the market.

Agreed Outcome: The MAC agreed that a DSP should have the same obligations as a Market Generator, therefore a DSP consisting of one or more CLs, will be liable to pay refunds if at any time the programme is not filled completely (12 May 2010 meeting).

Proposed Solution: The IMO proposed to amend the Market Rules so that a DSP consisting of one or more CLs, is liable to pay refunds if at any time the program is not filled completely, at the amount by which the DSP falls short of its capacity requirements. This includes times where this is the result of a component Facility being on a Forced Outage.

Issue 6: Reserve Capacity Security

The IMO noted in its proposal that this issue is presented for completeness only, and no amendments to the Reserve Capacity Security Market Rules have been included in RC_2010_29.

Overview: The IMO noted that currently the arrangements for a DSP (and Intermittent Generators) regarding the return of Reserve Capacity Security are unclear and inconsistent. For example a DSP that contracted 90 percent of the certified curtailment capacity will not have its Reserve Capacity Security returned at all, whereas a Scheduled Generator would have the security released at the end of the Reserve Capacity Year. The IMO does not consider that this is equitable.

Clarity around the return of security will be achieved by allowing DSM aggregators to aggregate their Loads as a single DSP. The IMO contended that this will ensure consistency with the Market Rules governing the return of security for Market Generators. The IMO has recently proposed a number of amendments to the current provisions in the Market Rules around the administration and provision of Reserve Capacity Security. For further details please refer to RC_2010_12: http://www.imowa.com.au/RC_2010_12

Agreed outcome: The MAC agreed that a DSP should be entitled to have its security returned immediately if they operate at 100 percent of their RCOQ in at least one Trading Interval, or at the end of the Capacity Year if they operate at 90 percent of their RCOQ during the Capacity Year. Otherwise the Reserve Capacity Security would be forfeited in the same way as would be applied to a generation Facility. This would ensure consistency of treatment (12 May 2010 meeting).

Proposed Solution: The IMO noted that it has proposed under RC_2010_12 to amend the Market Rules so that a DSP is considered as a single Facility for the purpose of evaluating a request for the return of Reserve Capacity Security.

Issue 7: Stipulated Default Loads

Overview: The IMO noted that Stipulated Default Loads are a type of CL which must drop consumption to a defined level, as opposed to a typical CL which must drop consumption from a defined level.

The IMO contended that there is no clear way of determining the demand level of a Stipulated Default Loads from which to assign Certified Reserve Capacity (i.e. what can the load drop "from"). Currently the IMO uses the RD level when assigning CRC to a Stipulated Default Load, however at the time of assigning CRC the RD level is based on data that will be two years out of date when the associated obligation comes into effect.

The IMO considered that, due to this calculation issue and the fact that there is only minimal difference between a Stipulated Default Load and a CL once the RD is used to calculate the CRC, it is preferable to use the RD calculation provisions for CLs, rather than the provisions for Stipulated Default Loads, in all cases. Therefore the DSP's level of Capacity Credits would be based on the most recent summer's data instead of data from two years previously.

The IMO considered that this will ensure a more rigorous and accurate estimate of a Loads reduction in consumption is obtained which will ensure Capacity Credits accurately reflects the true curtailability of a DSP.

Note that there are only two Stipulated Default Loads in the market representing approximately 32 MW of capacity.

Proposed Solution: The IMO proposed that the Market Rules be amended to combine the concept of a CL and Stipulated Default Load into the DSP concept.

Issue 8: Potential Double Payment

Overview: The IMO noted that currently if a CL is requested to curtail its consumption by System Management then in accordance with clause 6.17.6 (d) the DSM Provider will be paid for the reduction in its consumption. During the August 2010 MAC meeting, a member raised concerns regarding the potential double payment for curtailment as a result of both a Dispatch Instruction Payment to the DSM Provider and an MCAP payment to relevant retailer for the Load reduction.

The IMO noted that if a CL is instructed to reduce its consumption by System Management then, all else being equal, one or more Facilities providing Balancing Services will be required to reduce output accordingly. In theory the reduction would also leave the Market Customers associated with the Load with an excess of energy over their Net Contract Positions, which would be sold to the market at MCAP. As a retailer would have already purchased the energy from a Market Generator the sale of the excess energy at MCAP should be considered a refund.

The IMO considered it is reasonable for a CL (to be amended to DSP) to receive a Dispatch Instruction Payment in incidences where it has curtailed its consumption following a request from System Management. While the Market Customer would also receive a payment during this period (for its excess energy), from a market perspective there is a requirement for either a generator to increase its output or a DSP to curtail its load to ensure system security. The IMO considered that in these circumstances the benefit which the market would derive from the services of the DSP would warrant the payment to both the DSP and potential MCAP payment to the relevant retailer. The IMO noted that for the marginal unit (Load) dispatched by System Management, the opportunity cost of a load curtailing (i.e. the output that could be produced by a manufacturing Facility (Load) during that period) would be equivalent to the operating costs for a generator (i.e. fuel costs). Note that if a generator were issued a Dispatch Instruction to increase its output then it would also receive a payment for being dispatched.

The IMO however considered that during periods when either a Reserve Capacity test or Verification Test is being undertaken the market should not pay the DSP. During these periods there is no market requirement for either an increase in generation or curtailment of load to ensure that the system security is maintained, as such no form of payment for the curtailment is justified. The IMO noted that not paying a DSP for these periods would ensure that during these Trading Intervals no cross subsidy would be incurred. This is consistent with the outcomes recently agreed by the MAC regarding Network Control Services (October 2010 MAC meeting).

Proposed Solution: The IMO proposed that DSPs not be paid for any energy reduced during either a Reserve Capacity test or Verification Test.

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 will remove the requirement for the Network Operator to calculate a Loss Factor for each connection point at which a CL is connected. This is consistent with the general removal of CLs from the Market Rules. The Loss Factor will be created for the NDLs that make up the program.

2.27.1. By 1 June of each year Network Operators must calculate and provide to the IMO Loss Factors for each connection point in their Networks at which any of the following is connected ~~a~~:

(a) Scheduled Generator;

(b) Non-Scheduled Generator;

(c) Non-Dispatchable Load;

(d) Interruptible Load; or

(e) ~~Curtailable Load; or~~ [Blank]

(f) Dispatchable Load

The proposed amendment will clarify that a NDL is a Facility (not a Registered Facility). This is required because a NDL is not a Registered Facility. The proposed amendment will improve the integrity of the Market Rules.

2.27.1A. A Market Participant may request, during the process of obtaining a relevant Arrangement for Access, that the relevant Network Operator determine and provide to the IMO, Loss Factors to apply to a Registered F~~f~~acility or a Non-Dispatchable Load where there are no Loss Factors applying to the connection point at which the Registered F~~f~~acility or the Non-Dispatchable Load will be connected.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove a CLs association with the energy side of the WEM.

2.27.2 In calculating Loss Factors, Network Operators must apply the following principles:

…

(c) Loss Factors must be calculated using:

i generation and load meter data from the preceding 12 months; or

iA for a new Registered F~~f~~acility or a Non-Dispatchable Load, any other relevant data provided to the Network Operator by the Market Participant and as agreed with the Network Operator and the IMO, and

…

(e) a specific Loss Factor ~~must be calculated~~ for each:

i. Scheduled Generator;

ii. Non-Scheduled Generator;

iii. ~~Curtailable Load;~~ [Blank];

iv. Interruptible Load;

v. Dispatchable Load; and

vi. Non-Dispatchable Load above 1000kVA peak consumption;

…

The proposed amendment will reflect the removal of the requirement for the Network Operator to calculate a Loss Factor for a CL. This will remove CL from the Market Rules. The proposed amendments will also clarify that the process to apply when a re-assessment is requested applies to the IMO, Market Participant and Network Operator.

2.27.4. A Market Participant may apply to the IMO for ~~seek~~ a re-assessment ~~by the IMO~~ of any Loss Factor applying to a Scheduled Generator, Non-Scheduled Generator, ~~Curtailable Load,~~ Interruptible Load, Dispatchable Load or Non-Dispatchable Load registered ~~by~~ to that Market Participant. ~~in accordance with the~~ The following process will apply to every application:

…

The proposed amendments will clarify that a DSP is a type of Facility for the purposes of the Market Rules.

2.29.1. The following are Facilities for the purposes of these Market Rules:

(a) a distribution system;

(b) a transmission system;

(c) a generation system; ~~and~~

(d) a connection point at which electricity is delivered from a distribution system or transmission system to a Rule Participant ("**Load**")~~.~~; and

(e) a Demand Side Programme.

The proposed new clause will clarify the classes of Facility in section 2.29 of the Market Rules (Facility Registration Classes). The definition of Facility Classes will be amended in Chapter 11 to reference clause 2.29.1A. The IMO considers that this proposed amendment will improve the integrity to the Market Rules and ensure that new Market Participants can clearly understand the registration process.

2.29.1A. The Facility Classes are:

(a) a Network;

(b) a Scheduled Generator;

(c) a Non-Scheduled Generator;

(d) a Interruptible Load;

(e) a Dispatchable Load; and

(f) a Demand Side Programme.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove a CLs association with the energy side of the WEM.

2.29.5 Subject to clauses 2.29.9 and 2.29.8A, a Market Customer that owns, operates or controls a Load:

…

(b) ~~may register that Load as a Curtailable Load if that Load can be interrupted on request~~ [Blank];

…

The proposed new clause will allow a Market Customer with a contract with a NDL (or a Market Customer that plans to enter into a contract with one) to register a DSP. Note that a DSP provider will also be able to register as a Market Customer in accordance with clause 2.28.13.

2.29.5A. Subject to clause 2.29.8A, a Market Customer that enters into, or intends to enter into, a contract with an end user who owns, controls or operates a Non-Dispatchable Load for the load to be available for curtailment on request, may register a Demand Side Programme.

The proposed new clause will allow a DSP to be filled with NDLs.

The IMO will incorporate details of the requirements for a Market Customer to provide the IMO with details of the contract, excluding any confidential information, in the Registration Market Procedure. These amendments will be developed in conjunction with the IMO Procedure Change and Development Working Group.

2.29.5B A Market Customer may associate a Non-Dispatchable Load with a Demand Side Programme (**"Associated Non-Dispatchable Load"**) if it provides evidence of a contract to provide curtailment upon request with the end user who owns, operates or controls the Non-Dispatchable Load, in accordance with the Registration Market Procedure. The evidence must include:

(a) the connection point of the Non-Dispatchable Load;

(b) the minimum load of the Non-Dispatchable Load;

(c) contract start date; and

(d) contract end date.

The proposed new clause will ensure that a NDL cannot be associated with two DSPs simultaneously.

2.29.5C A Market Customer may not associate a Non-Dispatchable Load with a Demand Side Programme where the Load is already an Associated Non-Dispatchable Load from the contract start date to the contract end date as specified in clauses 2.29.5B(c) and 2.29.5B(d).

The proposed new clause will ensure that a NDL cannot be associated with two DSPs at the same time by requiring the IMO to disassociate a NDL from the relevant Demand Side Programme the Trading Day after the contracted end date. This is consistent with the requirements of new clause 2.29.5C.

The IMO will include details of the process for disassociation of NDLs in the Registration Market Procedure. These amendments will be developed in conjunction with the IMO Procedure Change and Development Working group.

2.29.5D The IMO must disassociate, in accordance with the Registration Market Procedure, a Non-Dispatchable Load from the relevant Demand Side Programme by the Trading Day after the date specified in clause 2.29.5B(d).

The proposed new clause will ensure that a DSP, which reduces its ability to curtail demand, will be reflected in the programme's associated RD. This will ensure that the RD for the programme accurately reflects its ability to curtail demand when required.

2.29.5E If a Non-Dispatchable Load is either:

(a) associated with a Demand Side Programme in accordance with clause 2.29.5B; or

(b) disassociated with a Demand Side Programme in accordance with clause 2.29.5D,

during the contracted time that a Demand Side Programme has Reserve Capacity Obligations, as specified in clause 2.29.5B, the IMO must within 10 Business Days reset the Relevant Demand for that Demand Side Programme, in accordance with clause 4.26.2C.,

The proposed new clause will allow an existing DSP to disaggregate its comprising Loads and associate these each with an individual DSP.

The IMO notes that this clause will commence prior to any of the subsequent Amending Rules to replace the concept of a CL with a DSP commencing. Further details of the process for disagreggating the comprising Loads of existing DSPs will be specified in the Registration Market Procedure.

2.29.5F At any time before 1 October 2011 a Market Participant that has a registered Demand Side Programme with Capacity Credits associated with it for a future Reserve Capacity Year may, in accordance with Registration Procedure, disaggregate the Loads associated with the Demand Side Programme and associate them with other Demand Side Programmes that are registered to that Market Participant for those Reserve Capacity Years.

The proposed new clause 2.29.5G will specify that existing Loads registered as CLs which have been assigned Capacity Credits by the IMO will be treated as a NDL associated with a DSP from 1 October 2011 onwards. The proposed new clause 2.29.5H will require the relevant Market Participant to register a new DSP that the NDL will be associated with. The Reserve Capacity Obligations, rights and liabilities previously belonging to the CL will be transferred by the IMO to the new DSP. Market Participants will be able to disassociate the NDL with this new programme however they will not be able to reallocate the Capacity Credits to another DSP.

The IMO notes that clauses 2.29.5G and 2.29.5H will commence prior to any of the subsequent Amending Rules to replace the concept of a CL with a DSP commencing. The IMO notes that the intent of the proposed new clauses is not to amend the current structures in place around transferring Capacity Credits between programmes. That is they will not allow a Market Participant to transfer Capacity Credit obligations between programmes indefinitely.

2.29.5G From 1 October 2011 where a Load that was registered as a Curtailable Load has Capacity Credits associated with it for a future Reserve Capacity Year, the Load will be deemed to be a Non-Dispatchable Load associated with the Demand Side Programme registered by the Market Participant under clause 2.29.5H for those Reserve Capacity Years.

2.29.5H From 1 October 2011 where a Load that was registered as a Curtailable Load is deemed to be a Non-Dispatchable Load in accordance with clause 2.29.5G, the Market Participant that had registered that Curtailable Load must register a Demand Side Programme in accordance with the process specified in the Registration Procedure and the IMO must allocate the Reserve Capacity obligations, rights and liabilities previously belonging to that Curtailable Load to the Demand Side Programme.

The proposed amendments will clarify that that Interruptible Loads, Dispatchable Loads or a NDL associated with a DSP must have an interval meter.

2.29.8A. ~~A Rule Participant must ensure an Interruptible Load, Curtailable Load or Dispatchable Load registered by that Rule Participant is equipped with an interval meter.~~ To be registered or associated with a Demand Side Programme the following Loads must be equipped with interval meters:

(a) Interruptible Loads;

(b) Dispatchable Loads; and

(c) Non-Dispatchable Loads.

The proposed amendment will remove duplication of the requirements currently specified under clause 4.25A. This will improve the integrity of the Market Rules. The removal of this clause will also remove a current issue requiring a Market Participant to have completed a verification test within 20 Business Days of having registered the CL. The IMO notes that it is unlikely that a CL would necessarily be available within 20 Business Days of registration.

2.29.8B. ~~When a Rule Participant registers a Curtailable Load the Rule Participant must undertake a Verification Test in accordance with clause 4.25A within 20 Business Days of registration.~~ [Blank]

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove a CLs association with the energy side of the WEM. The proposed amendment will also clarify that the obligation for actually registering a DSP belongs to the IMO.

2.29.9A ~~A Rule Participant~~ The IMO must not register a Demand Side Programme ~~Curtailable Load after 1 April 2009~~ where the minimum notice period required for dispatch exceeds four hours.

The proposed amendments to 2.29.9B and 2.29.9C are consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM. The IMO notes that the requirements for the minimum notice periods for DSPs are specified in the section 4.10 of the Market Rules.

2.29.9B ~~Where a Rule Participant has registered a Curtailable Load with a minimum notice period required for dispatch that is less than four hours the minimum notice period may be increased to no more than four hours.~~ [Blank]

2.29.9C ~~Where a Rule Participant has registered a Curtailable Load with a minimum notice period required for dispatch that is equal to or greater than four hours the minimum notice period may not be increased.~~[Blank]

The proposed amendment will remove the current ability for a Market Participant to aggregate CLs at different locations. This will no longer be required as the requirement for the DSP will to be available for the correct amount of availability hours. For the avoidance of doubt the NDLs associated with a DSP can be at different locations, as long as they are available for the correct amount of availability hours. The Loads comprising a DSP will no longer be visible to the market.

2.30.3. ~~Subject to clause 2.30.5, Curtailable Loads at different locations, but operated by a single Market Participant, may be aggregated with respect to their annual hours of availability so as cumulatively provide Reserve Capacity with an annual number of hours of availability greater than that of any of the individual facilities.~~ [Blank]

The proposed amendment will remove the connection of energy associated with a CL from being able to be associated with an Intermittent Load. Under the proposed amendments the energy from the NDL will now be associated with the Intermittent Load.

The proposed amendments will also clarify that the IMO must be satisfied that the conditions have been met.

2.30B.2 For a Load to be eligible to be an Intermittent Load the IMO must be satisfied that the following conditions ~~must be satisfied~~ are met:

…

(d) the Load ~~must be~~ is an Interruptible Load~~, Curtailable Load,~~ or a Non-Dispatchable Load.

The proposed amendment will remove the connection of energy associated with a CL from being able to be associated with an Intermittent Load.

2.30B.5. A Market Customer, or applicant to become a Market Customer, may apply for a Load to be treated as an Intermittent Load as part of Market Customer registration (for a Non-Dispatchable Load) or Facility registration (for an Interruptible Load ~~or Curtailable Load~~).

The proposed amendment will clarify that a Market Customer which does not also sell electricity will not be required to provide the information specified in sub-clause 2.33.1(h)(i) and (ii).

2.33.1. The Rule Participant registration form ~~prescribed by IMO must~~ requires ~~that~~ an applicant for registration as a Rule Participant to provide the following information, and the applicant must provide the information required:

…

(h) if the application relates to the sale of electricity to Contestable Customers by an applicant for the Market Customer class:

i. evidence that the applicant holds an Arrangement for Access for the purpose of taking power from the electricity grid; and

ii. the information described in Appendix 1(f);

…

The proposed amendment will remove the current requirement for an applicant to provide a proposed date for a CL to cease operation that is no earlier than one month after the date of application. This sub-clause was originally put in place to take into account the churn of CLs from one DSP to another. This will be taken into account in the proposed new clauses 2.29.5B – E.

The Loads comprising a DSP will be no longer visible to the market under the proposed amendments.

2.33.4. The Facility de-registration form prescribed by IMO must require that the applicant provide the following:

…

(d) a proposed date on which that Registered Facility is to cease to be registered in the name of that Rule Participant where that date must be;

…

ii. the date the application is accepted in the event that the Facility has been rendered permanently inoperable; ~~or~~ and

iii. ~~not earlier than one month after the date of application if the Facility is a Curtailable Load, which is associated with a Demand Side Programme and has been registered in accordance with clause 4.8.3; and~~

…

The proposed amendment reflects the general changes to the Market Rules regarding a DSP being a Registered Facility.

2.35.1. Market Participants with Scheduled Generators, Non-Scheduled Generators, Dispatchable Loads~~,~~ and Demand Side Programmes ~~Curtailable Loads~~ that are not under the direct control of System Management must maintain communication systems that enable communication with System Management for dispatch of those Registered Facilities.

The proposed amendment reflects that as there will be no energy associated with the CL there will be no need for a Market Participant to be incorporated into the Load Following Service payment cost calculation.

3.14.1. Market Participant p's share of the Load Following Service payment cost in each Trading Month m is Load_Following_Share(p,m) which equals :

(a) the Market Participant's contributing quantity; divided by

(b) the total contributing quantity of all Market Participants,

where a Market Participant's contributing quantity for Trading Month m is the sum of:

i. the absolute value of the sum of the Metered Schedules for the Non-Dispatchable Loads~~,~~ and Interruptible Loads~~, Curtailable Loads~~ registered by the Market Participant for all Trading Intervals during Trading Month m; and

…

The proposed amendments will ensure that System Management is provided the necessary information for DSP. This is consistent with current practice. The IMO also proposes a minor amendment to improve the integrity of this clause.

3.17.5. Unless otherwise directed by System Management, Rule Participants must, before 10 AM every Thursday, submit information to System Management ~~before 10 AM every Thursda~~y, consisting of:

…

(c) for a Market Customer, information about the availability over the next Short-Term PASA Horizon of all its Registered Facilities which are

Loads or Demand Side Programmes and demand forecasts for any other load facilities designated as significant by System Management.

The proposed amendment will remove clause 4.8.3 which currently allows a Market Customer to apply for certification of a DSP. Under the proposed amendments a DSP will be a type of Facility and so may apply for CRC through the same mechanisms as any other Facility (via either clause 4.11.1(a) or clause 4.11.2(b)).

~~4.8.3. A Market Customer may apply for the certification of a Demand Side Programme including Loads at different locations as a Curtailable Load subject to the following conditions and provisions:~~

~~(a) No Intermittent Load may be included in the Demand Side Programme.~~

~~(b) The Loads comprising the Demand Side Programme must be registered as Curtailable Loads if they are to count towards satisfying the relevant Reserve Capacity Obligations of the Demand Side Program and must not have been separately awarded Capacity Credits.~~

~~(c) As the Loads comprising the Demand Side Program are registered, the IMO must assign Certified Reserve Capacity and Reserve Capacity Obligations to those Facilities and must correspondingly reduce the Certified Reserve Capacity and Reserve Capacity Obligations associated with the Demand Side Programme during the time those Facilities are registered.~~

~~(d) After accounting for the modifications in (c), if at any time a Market Customer has Reserve Capacity Obligations associated with its Demand Side Programme then, for settlement purposes, the Demand Side Programme must be treated by the IMO as a Facility that has failed to satisfy its Reserve Capacity Obligations.~~

~~(e) Loads comprising the Demand Side Programme must have the same or higher availability as the Demand Side Programme.~~[Blank]

The proposed amendment will remove SDLs as there will no longer be any difference between a DSP (previously referred to as CL) and a SDL. The proposed amendments will also replace any references to CLs with DSPs.

The IMO also proposed changes to ensure that availability of a DSP allows for multiple calls (at least six). This will ensure that a programme could not specify availability for one 24 hour call. In this case the programme would meet its certification requirements but no longer be available during the Capacity Year.

The IMO also proposes minor amendments to clarify that the obligation in this clause relates to the Market Participant.

4.10.1. The Market Participant must ensure that information to be submitted to the IMO with an application for certification of Reserve Capacity ~~must~~ pertains to

the Reserve Capacity Cycle to which the certification relates and ~~must~~ includes:

…

(c) if the Facility, or part of the facility, is yet to enter service:

iii. key project dates occurring after the date the request is submitted ~~to the IMO~~, including, as applicable, but not limited to:

1. when all approvals will be finalised or, in the case of Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes all required contracts will be in place;

…

5. when generating equipment or Dispatchable Load equipment will be installed or, in the case of Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes, all required control equipment will be in place;

….

(f) for Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads, details for each of up to three blocks of capacity of:

i. ~~either~~

~~1.~~ the Reserve Capacity ~~expected to be~~ the Market Participant expects to make available; ~~or~~

~~2. the Stipulated Default Load;~~

ii. the maximum number of hours per year the block is available to provide Reserve Capacity, where this must be ~~not less than~~ at least 24 hours;

iii. the maximum number of hours per day that the block is available to provide Reserve Capacity if called, where this must be ~~not~~:

1. not less than four hours; and

2. not more than the total of the periods specified in sub-clause (vi);

iv. the maximum number of times the block can be called to provide Reserve Capacity during a 12 month period, where this must be at least six times;

v. the minimum notice period required for dispatch of the block, where this must not be more than 4 hours; and

vi. the periods when the block can be dispatched, which must include the period between noon and 8:00pm on all Business Days.

The proposed amendments will reflect that DSPs will not have the same requirements as generators when applying for certification. In particular, currently the IMO can not take into account availability of the programme as specified in clause 4.10.1(f)(vi.).

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:

(a) subject to paragraphs (d), ~~and~~ (e), and (j) and clause 4.11.2, the Certified Reserve Capacity for a Facility for a Reserve Capacity Cycle ~~is not to~~ must not exceed the IMO's reasonable expectation ~~as to~~ of the amount of capacity likely to be available from that Facility, after netting off capacity required to serve Intermittent Loads, embedded loads and Parasitic Loads, at daily peak demand times in the period from the:

…

(h) the IMO may decide not to assign Certified Reserve Capacity to a Facility if:

i. the Facility has operated for at least 36 months and has had a Forced Outage rate of greater than 15% or a combined Planned Outage rate and Forced Outage rate of greater than 30% over the preceding 36 months; or

ii. the Facility has operated for less than 36 months, or is yet to commence operation, and the IMO has cause to believe that over a period of 36 months the Facility is likely to have a Forced Outage rate of greater than 15% or a combined Planned Outage rate and Forced Outage rate of greater than 30%,

where the Planned Outage rate and the Forced Outage rate for a Facility for a period will be calculated in accordance with the Power System Operation Procedure. ~~(~~The IMO may consult with System Management in deciding whether or not to refuse to grant Certified Reserve Capacity under this paragraph~~)~~; ~~and~~

(i) the Certified Reserve Capacity assigned to a Facility is to be expressed to a precision of 0.001 MW~~.~~; and

(j) the Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle must not exceed the IMO's reasonable expectation of the amount of capacity likely to be available from that Facility for each block during each of the periods specified in clause 4.10.1 (f)(vi), after netting off capacity required to serve minimum loads, from the Trading Day starting on 1 October in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove a CLs association with the energy side of the WEM.

4.11.4. When assigning Certified Reserve Capacity to a block of capacity provided by any Interruptible Load, ~~Curtailable Load,~~ Demand Side Programme or Dispatchable Load, the IMO must indicate what Availability Class is applicable to that Reserve Capacity. The ~~where this~~ Availability Class must reflect the maximum number of hours per year that the capacity will be available and must not be Availability Class 1.

The IMO notes that the removal of this clause is required as it will no longer be necessary (and in most cases not possible) to calculate the RD at the time of certification as the identity of the NDLs comprising the programme will not be known. This calculation will be undertaken in accordance with clause 2.29.5E.

4.11.4A. ~~If the capacity of a Curtailable Load is specified in accordance with clause 4.10.1(f)(i)(1), the Certified Reserve Capacity assigned by the IMO to that Curtailable Load, including during the registration of that Curtailable Load in accordance with clause 4.8.3(c), must not exceed the Relevant Demand for the Curtailable Load set by the IMO in accordance with clause 4.26.2C~~ [Blank]

The proposed amendment will remove the energy associated with a CL from the determination of a Market Participant's Reserve Capacity Obligations as the energy will be incorporated into the energy consumption associated with the NDL (this is covered under the "energy to be consumed by the Market Participant…" aspect of sub-clause 4.12.1(a) iiA).

The IMO also proposes a number of minor amendments to improve the integrity of this clause.

4.12.1. The Reserve Capacity Obligations of a Market Participant holding Capacity Credits are as follows:

(a) a Market Participant (other than the Electricity Generation Corporation) must ensure that for each Trading Interval:

i. the aggregate MW equivalent of the quantity of Capacity Credits held by the Market Participant applicable in that Trading Interval for Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes registered ~~by~~ to the Market Participant; plus

…

iiA. if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any ~~Curtailable Load or~~ Interruptible Load, but excluding demand associated with any Dispatchable Load, during that Trading Interval as indicated in the applicable Resource Plan; plus

…

is not less than the total Reserve Capacity Obligation Quantity for that Trading Interval for Facilities registered ~~by~~ to the Market Participants, less double the total MWh quantity to be provided as Ancillary Services as specified by the IMO for that Market Participant in accordance with clause 6.3A.2(e)(i).

…

The proposed amendments will ensure that a Facility's RCOQ will be adjusted if a DSP is dispatched by System Management.

The proposed amendments will ensure that periods when a Facility is undertaking a Reserve Capacity test will be treated additionally to a Facility's availability obligations. DSPs will in general be available for up to 24 hours, where the 24 hours of availability is provided in six blocks of four hours. If a Facility is tested by the IMO in accordance with clause 4.25, it will only be tested for one hour. Under clause 4.12.4 currently, this test would use up one of the four hour blocks of availability for the Facility. However the changes to clause (i) and (ii) will mean that even with this change they will not be required to be available for more than 24 hours.

The IMO notes that there will be system changes required to implement this proposed amendment to the determination of a Facility's RCOQ. The IMO also notes that under the proposed amendments a DSP will not be paid for the energy curtailed during the test.

4.12.4. Subject to clause 4.12.5, where the IMO establishes the ~~must apply the following principles in establishing the~~ initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:

(a) the Reserve Capacity Obligation Quantity ~~is not to~~ must not exceed the Certified Reserve Capacity held by the Market Participant for the Facility;

…

(c) for Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity for each block:

i. ~~must be required~~ will equal zero once the capacity from the block has been dispatched ~~to be available~~ for ~~a~~ the number of hours per year ~~that does not exceed the maximum number of hours per year~~ ~~as~~ that are specified ~~in accordance with~~ under clause 4.10.1(f)(ii);

ii. ~~must be required~~ will equal zero for the remainder of a Trading Day in which the capacity from the block has been dispatched ~~to be available~~ for ~~a~~ the number of hours per day ~~that does not exceed the maximum number of hours per day~~ ~~as~~ that are specified ~~in accordance with~~ under clause 4.10.1(f)(iii);

iii. ~~must be specified as dropping to~~ will equal zero once the capacity from the block has been ~~called~~ dispatched the

maximum number of times per year that are specified under ~~in accordance with~~ clause 4.10.1(f)(iv) excluding where the Facility has been requested to perform a Reserve Capacity test in accordance with clause 4.25; and

iv. must account for staffing and other restrictions on the ability of the Facility to ~~provide~~ curtail energy upon request.

v. will equal zero for intervals which fall outside of the period specified in clause 4.10.1(f)(vi).

The proposed amendments to clauses 4.12.8, 4.14.1, 4.18.1 and 4.18.2 are consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

The IMO also proposes a number of minor amendments to improve the integrity of these clauses.

4.12.8. Where a ~~Curtailable Load~~ Demand Side Programme is dispatched to a level equal to its Reserve Capacity Obligation Quantity on two consecutive days the Reserve Capacity Obligation Quantity for the ~~following day~~ third consecutive day ~~shall~~ will be zero.

4.14.1. Subject to clause 4.14.3, each Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle must, by the date and time specified in clause 4.1.14, provide the following information to the IMO for each Facility or, in the case of Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads with at least two blocks holding Certified Reserve Capacity in different Availability Classes, for each block in respect of which it holds Certified Reserve Capacity (expressed in MW to a precision of 0.001 MW):

…

4.18.1. A Market Participant must ensure that its Reserve Capacity Offers ~~must~~ include the following information:

…

(c) ~~a single Price-Quantity Pair for each Facility except~~ for Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads, ~~where~~ a single Price-Quantity Pair ~~is to be included~~ for each block of Certified Reserve Capacity associated with the Facility; and

(d) for every other Facility, a single Price-Quantity Pair for each Facility.

4.18.2. Each Reserve Capacity Price-Quantity Pair must comprise:

(a) the identity of the Facility to which it relates;

(b) an offer price in units of dollars per ~~megawatt~~ MW per year expressed to a precision of $0.01/MW between zero and the Maximum Reserve Capacity Price;

(c) a quantity in units of ~~megawatts~~ MW equal to the amount determined in accordance with clause 4.14.10 in respect of that Facility; and

(d) if the Facility is an Interruptible Load, ~~Curtailable Load~~ Demand Side Programme or Dispatchable Load, the Availability Class of that Price-Quantity Pair, as specified by the IMO in assigning Certified Reserve Capacity to that Facility in accordance with clause 4.11.

The proposed amendment will clarify the Trading Intervals during which the DSP can be tested. This will be consistent with the periods identified for certification, as specified under clause 4.10.1(f) (vi).

4.25.1. The IMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing Capacity Credits can:

(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 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~~ Demand Side Programme ~~can~~, during the term the Reserve Capacity Obligations apply, and during the period specified in clause 4.10.1(f)(vi), operate at its maximum Reserve Capacity Obligation Quantity at least once during the period between 1 October to 31 March.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

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 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 for not less than 60 minutes and the Facility successfully passing that test; and

ii. in the case of Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programme 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 for not less than one Trading Interval and the Facility successfully passing that test.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

The IMO also proposes to amend the requirement for the IMO to reduce the Capacity Credits for a Facility from "the next Trading Day" to "the next Scheduling Day". This is a manifest error in the Market Rules as due to the day ahead nature of the WEM it is not possible for the IMO to change a Facility's Capacity Credits for the next day (Trading Day). The IMO notes that this is currently a problem for all Facilities, including CLs.

The proposed amendments will also clarify that the IMO would reduce the Facility's Capacity Credits to the maximum level of reduction achieved in either of the two tests rather than the combined level of reduction achieved during the two tests.

4.25.4. Subject to clause 4.25.3B, ~~the IMO must, in the event that~~ if a Facility fails a Reserve Capacity test requested by the IMO under clause 4.25.2(b), the IMO must require System Management to re-test that Facility in accordance with clause 4.25.2(b), not earlier than 14 days and not later than 28 days after the first test. If the Facility fails this second test, then the IMO must, from the ~~next Trading Day~~ second Trading Day following the current Scheduling Day:

(a) if the test related to a generation system, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in either test performed (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuels); or

(b) if the test related to a Dispatchable Load, ~~Curtailable Load~~ Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to the maximum level of reduction achieved in either of the two tests;

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

4.25.4E. Where the Capacity Credits associated with a ~~Curtailable Load~~ Demand Side Programme are reduced in accordance with clause 4.25.4C the Market Participant must refund all Reserve Capacity Payments associated with the

reduced Capacity Credits for the relevant Reserve Capacity Year to the IMO calculated in accordance with the provisions of clause 4.26.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

4.25.4F. A Market Participant may not offer a ~~Curtailable Load~~ Demand Side Programme for Supplementary Reserve Capacity if the ~~Curtailable Load~~ Demand Side Programme has had its Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

The proposed amendment will also clarify the notice period System Management must give for before a DSP can be tested. This will be consistent with the notice period identified for certification, as specified under clause 4.10.1(f) (v).

The IMO also proposes a minor amendment to improve the integrity of this clause.

4.25.9. In conducting a test, System Management must:

(a) subject to paragraphs (b), (c) and (d), endeavour to conduct the test without warning;

(b) allow sufficient time for the Market Participant to schedule fuel that it is not required under these Market Rules to be stored on-site

(c) allow sufficient time for switching a Facility from one fuel to an alternative fuel if operation using the alternative fuel is being tested;

(d) ~~must~~ in the case of an Interruptible Load or a ~~Curtailable Load~~ Demand Side Programme, give at least as much notice as is specified under clause 4.10.1(f)(v) ~~allow sufficient time~~ for arrangements to be made for the Facility to be triggered;

(e) report to the IMO whether the test was successfully performed;

(f) maintain adequate records of the test to allow independent verification of the test results; and

(g) conduct the test in the time interval specified by the IMO in accordance with clause 4.25.7(c) unless System Management has notified the IMO of an alternative time interval in accordance with clause 4.25.8, in which case, System Management must conduct the test in the time interval specified in accordance with clause 4.25.8(b).

The proposed amendment is consistent with the IMO's proposal that a DSP is not paid for any energy reduced during either a Reserve Capacity test or a Verification Test.

4.25.10. Where a Facility, excluding a Demand Side Programme, is tested in accordance with this clause 4.25, the Dispatch Schedule for that Facility during the period of the test is to reflect the energy scheduled in the test.

4.25A. Verification Test for a ~~Curtailable Load~~ Demand Side Programme

The proposed amendments will ensure that a verification test of a DSP will occur during a period where the NDLassociated with the DSP would be likely to be operating. For example is a Facility has notified the IMO that if will be available between noon and 8pm, as part of its certification, the same Facility will not be able to use a period at midnight when all the comprising loads might be turned off as evidence that the DSP is able to curtail to the required amount.

The proposed amendment will also correct a current manifest error which would allow a programme to be tested both within 20 Business Days of registration, if applicable, or each year. The IMO considers that the requirement should be for a programme to be tested once after registration and then each year prior to 1 December in subsequent years.

The IMO also proposes to amend the reference to Market Customers rather than Rule Participants when referring to the requirements for Verification Tests to be undertaken. The IMO considers that this was an oversight in RC_2008_20.

The IMO notes that details of the requirements for the IMO, System Management and Market Participants when undertaking Verification Tests is currently specified in the Reserve Capacity Procedure: Reserve Capacity Testing. Minor amendments to the requirements specified in the Reserve Capacity Procedure will be required for consistency with any Amending Rules resulting from RC_2010_29. The IMO will also incorporate details of the timeframes for notifying the IMO of the completion of a Verification Test. These will be developed in conjunction with the IMO Procedure Change and Development Working Group.

4.25A.1. In each Reserve Capacity Year a ~~A Rule Participant~~ Market Customer must undertake a Verification Test, in accordance with the Reserve Capacity Procedure, during the period specified in clause 4.10.1(f)(vi) ~~of~~ for each ~~Curtailable Load~~ Demand Side Programme registered ~~by~~ to the ~~Rule Participant~~ Market Customer:

(a) within 20 Business Days of registration, as notified by the IMO under clause 2.31.6, of the ~~Curtailable Load~~ Demand Side Programme, if applicable; or

(b) between 1 October and 30 November ~~of each Reserve Capacity Year~~.

The proposed amendment will ensure that when reviewing the results of a Verification Test the IMO will be certain that the test was as the result of an activation and not an instance of happenstance. For example the loads in the programme just happened to all be 10 percent lower because of normal variation.

The IMO also proposes to amend the reference to Market Participants rather than Rule Participants when referring to the requirements for Verifications Tests to be undertaken.

4.25A.2. To undertake a Verification Test the ~~Rule~~ Market Customer ~~Participant will~~ must activate the ~~Curtailable Load~~ Demand Side Programme and ~~advise~~ provide evidence satisfactory to the IMO of the Trading Intervals during which the Verification Test was conducted.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM. The proposed amendment will also clarify that the test is against the reduction of the programme against its RD level and will be determined by the IMO from its DSP Load during the applicable time period.

4.25A.3. The Verification Test is failed if a reduction in demand equal to at least 10% of the Capacity Credits, when measured against the Demand Side Programme's Relevant Demand determined under clause 4.26.2C, is not identified from the ~~Curtailable Load~~ Demand Side Programme Load associated with that Demand Side Programme ~~meter data~~.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

The IMO also proposes to clarify that the reduction in Capacity Credits to zero will apply from the second Trading Day following the failure of a Verification Test. The IMO considers that this will improve the integrity of the Amending Rules.

4.25A.4. Where a Verification Test is failed the IMO must reduce the Capacity Credits assigned to the ~~Curtailable Load~~ Demand Side Programme to zero from the second Trading Day following the Scheduling Day on which the failure of the Verification Test under clause 4.25A.3 occurred.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

The IMO also proposes to amend the reference to Market Participants rather than Rule Participants when referring to the requirements for Verifications Tests to be undertaken.

4.25A.5. Where the Verification Test is failed the ~~Rule~~ Market Participant may request a second Verification Test be undertaken. If the ~~Curtailable Load~~ Demand Side Programme fails this second Verification Test then the Capacity Credits assigned are to remain at zero until the end of the relevant Reserve Capacity Year.

The proposed amendments will ensure that an undersubscribed DSP will be required to make Capacity Cost Refunds if at any time the DSP would not be able to deliver the level of capacity reduction for which it has been certified. This is because the Facility will have failed to supply the capacity required to be supplied and therefore should make a Facility Forced Outage Refund. This is consistent with the treatment of Facility's undertaking Commissioning Tests and Intermittent Facility's which have not been deemed by the IMO to be commissioned under clause 4.26.1.

Note that the requirement is for the value to be positive. This will ensure that a DSP which is over subscribed will not receive a negative refund (essentially a payment from the market for being over subscribed).

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

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

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

ii the Forced Outage Shortfall in Trading Interval t,

where the Forced Outage Shortfall for a Facility is equal to 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, 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 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~~ or

vii. if the Facility is a Demand Side Programme, the amount that the Relevant Demand minus the sum of the values specified in clause 2.29.5B(b) of the Associated Non-Dispatchable Loads

is less than the Capacity Credits assigned to that Facility, where this amount must be a positive value or be set to zero by the IMO.

…

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

4.26.1C. If a Market Participant holding Capacity Credits associated with a ~~Curtailable Load~~ Demand Side Programme 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 provisions of this clause 4.26.

The proposed amendment to sub-clause (b) is consistent with the IMO's general removal of CLs from the Market Rules and replacement with a DSP. As there will be no energy associated with a DSP (only capacity) the reference to CL has not been replaced with a reference to DSP in sub-clause (d). This will ensure that any energy associated with a load is not potentially double counted in the Net STEM Shortfall calculation.

4.26.2. The IMO must determine the net STEM shortfall ("**Net STEM Shortfall**") in Reserve Capacity supplied by each Market Participant p holding Capacity Credits associated with a generation system in each Trading Interval t of Trading Day d and Trading Month m as:

….

(b) the sum of the product of:

i. the factor described in clause 4.26.2B as it applies to Market Participant p's Registered Facilities; and

ii. the Reserve Capacity Obligation Quantity for each Facility

for all Market Participant p's Registered Facilities, excluding ~~Curtailable Loads~~ Demand Side Programmes;

…

(d) subject to paragraph (c), for the case where Market Participant p is not the Electricity Generation Corporation, the sum of:

…

iiA if a STEM submission does not exist for that Trading Interval, the MW quantity calculated by doubling the total MWh quantity of energy to be consumed by that Market Participant including demand associated with any ~~Curtailable Load or~~ Interruptible Load, but excluding demand associated with any Dispatchable Load during

that Trading Interval as indicated by the applicable Resource Plan; plus

…

The proposed amendment to clause 4.26.2C and new clauses 4.26.2CA, 4.26.2CB, and 4.26.2CC will allow for a DSP's RD to be set at the level of the loads it has associated with it at any point in time. A Market Customer will be responsible for ensuring that a NDL is associated with a programme at an optimal time. In particular the proposed amendments will remove the reference to the eight consecutive highest system demand Trading Intervals and instead use the IRCR intervals in the calculation. Additionally, the proposed amendments will ensure that the RD will be based on the DSP as a whole (issue 3(c)).

Note that a DSP Load will be a negative value as the Metered Schedules for these loads are negative. This is reflective of the load drawing energy from the system.

4.26.2C. The IMO must:

(a) prior to the start of a Reserve Capacity Year for which a Demand Side Programme will have Reserve Capacity Obligations;

(b) at the request of a Market Customer who has a registered Demand Side Programme with Reserve Capacity Obligations for the current Reserve Capacity Year; or

(c) in accordance with clause 2.29.5E,

set the Relevant Demand in accordance with clause 4.26.2CA ,4.26.2CB, or 4.26.2CC, whichever is relevant.

~~(a) Identify the eight consecutive Trading Intervals with the highest aggregate system demand in each month during the preceding Hot Season;~~

~~(b) Subject to clause 4.26.2C(c), set the Relevant Demand (in MW) for the Curtailable Load equal to the median of the metered consumption during the 32 Trading Intervals identified in clause 4.26.2C(a), where the Relevant Demand is a positive number.~~

~~(c) Where the metered consumption during the 32 Trading Intervals identified in clause 4.26.2C(b) is not available the IMO must set the Relevant Demand based on:~~

~~i. Available Meter Data, or~~

~~ii. Load information provided by the Rule Participant, or~~

~~iii. Other relevant information.~~

~~(d) Where evidence is provided by the Market Customer that the Curtailable Load was operating at below capacity due to its consumption being reduced at the request of System Management or~~

~~because of maintenance during one or more of the 32 Trading Intervals identified in clause 4.26.2C(a), the IMO must set the Relevant Demand based on the IMO's estimate of the Curtailable Load consumption during those intervals.~~

4.26.2CA Subject to clause 4.26.2C, the IMO must set the Relevant Demand for a Demand Side Programme equal to the median of the Demand Side Programme Load, determined in accordance with clause 6.16.2, multiplied by two during the 12 peak Trading Intervals described in Appendix 5 Step 1 where the Relevant Demand is a positive number.

4.26.2CB Where the metered consumption for an Associated Non- Dispatchable Load during the 12 Trading Intervals identified in clause 4.26.2CA is not available or is considered by the IMO to be inappropriate, the IMO must set the Metered Schedule for that load to be used in the Relevant Demand calculation in 4.26.2CA based on the latest median of the 4 peak Trading intervals described in Appendix 5 Step 5 at the time the Non-Dispatchable Load is associated with the Demand Side Programme under clause 2.29.5B.

4.26.2CC Where the Market Customer provides evidence satisfactory to the IMO the Demand Side Programme was operating at below capacity due to its consumption being reduced at the request of System Management during one or more of the Trading Intervals identified in clause 4.26.2CA or 4.26.2CB, which ever is applicable, the IMO must set the Relevant Demand based on the IMO's estimate of the Demand Side Programme's consumption during those intervals.

The proposed amendments will remove the reference to SDLs from the IMO's calculation of the Capacity Shortfall. This is consistent with the IMO's merging of the concept of CLs and SDLs. The proposed amendments will also remove the current reference to a CL and replace this with a DSP.

The IMO also proposes a minor amendment to improve the integrity of this clause.

4.26.2D. The IMO must determine the capacity shortfall ~~("Capacity Shortfall")~~ in Reserve Capacity ("Capacity Shortfall") supplied by each Market Participant p holding Capacity Credits associated with a ~~Curtailable Load~~ Demand Side Programme in each Trading Interval t of Trading Day d and Trading Month m relative to its Reserve Capacity Obligation Quantity as:

(a) ~~for Capacity Credits assigned in accordance with clause 4.10.1(f)(i)(1), and~~ where System Management has issued a Dispatch Instruction to the ~~Curtailable Load~~ Demand Side Programme for the Trading Interval as advised to the IMO by System Management under clause 7.13.1:

i. zero; if negative two multiplied by the ~~Metered Schedule~~ Demand Side Programme Load is less than the Relevant Demand set in clause 4.26.2C minus the Capacity Credits assigned to the ~~Curtailable Load~~ Demand Side Programme;

ii. the greater of:

1. zero, or

2. the required decrease, in MW, minus the load reduction, where the load reduction is equal to the Relevant Demand set in clause 4.26.2C minus negative two multiplied by the ~~Metered Schedule~~ Demand Side Programme Load for the Trading Interval,

if the Capacity Credits assigned to the ~~Curtailable Load~~ Demand Side Programme are greater than the Dispatch Instruction for the Trading Interval; or

iii. negative two multiplied by the ~~Metered Schedule~~ Demand Side Programme Load plus the Capacity Credits assigned to the ~~Curtailable Load~~ Demand Side Programme minus the Relevant Demand set in clause 4.26.2C; and

(b) ~~for Capacity Credits assigned in accordance with clause 4.10.1(f)(i)(2), and where System Management has issued a Dispatch Instruction to the Curtailable Load for the Trading Interval as advised to the IMO by System Management under clause 7.13.1:~~

~~i. zero, if negative two multiplied by the Metered Schedule is less than the Stipulated Default Load;~~

~~ii. the greater of:~~

~~1. zero, or~~

~~2. negative two multiplied by the Metered Schedule minus the load reduction, where the load reduction is equal to the Stipulated Default Load plus the Capacity Credits assigned to the Curtailable Load minus the Dispatch Instruction for the Trading Interval,~~

~~if the Capacity Credits assigned to the Curtailable Load are greater than the Dispatch Instruction for the Trading Interval; or~~

~~iii. negative two multiplied by the Metered Schedule minus the Stipulated Default Load, if the Capacity Credits assigned to the Curtailable Load are less than the Dispatch Instruction for the Trading Interval; and~~ [Blank]; and

(c) ~~for Capacity Credits assigned in accordance with either clause 4.10.1(f)(i)(1) or 4.10.1(f)(i)(2), and~~ zero where System Management has not issued a Dispatch Instruction to the ~~Curtailable Load~~ Demand Side Programme for the Trading Interval as advised to the IMO by System Management under clause 7.13.1~~, zero~~.

The proposed amendment will ensure that the calculation of the Capacity Cost Refund for a DSP will capture the refund payments described in clause 4.26.1A.

4.26.3A. The Capacity Cost Refund associated with a ~~Curtailable Load~~ Demand Side Programme is equal to the lesser of:

(a) twelve times the Monthly Reserve Capacity Price multiplied by the number of Capacity Credits associated with the Facility, less all Capacity Cost Refunds applicable to the Market Participant in previous Trading Months falling in the same Capacity Year as Trading Month m; and

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

i. 12 * Monthly Reserve Capacity Price * S / (2 * H)

Where:

S is the Capacity Shortfall in MW determined in accordance with clause 4.26.2D in any Trading Interval; and

H is the maximum number of hours that the Facility was certified to be available in accordance with clause 4.10.1(f)(ii)~~.~~

plus;

ii. the Facility Forced Outage Refund determined in accordance with clause 4.26.1A.

The proposed amendment will ensure that the IMO will apply any revenue generated from the application of Capacity Cost Refunds from either a generating system (clause 4.26.3) or DSP (clause 4.26.3A).

4.26.4. The IMO must apply any revenue generated from the application of clauses 4.26.3 and 4.26.3A to Market Customers in accordance with clause 4.28.4.

The proposed amendment will remove the need to the IMO to calculate a consumption limit for a CL – the consumption limit will be calculated for the NDL. This amendment is consistent with the IMO's general removal of CLs from the Market Rules.

6.3A.2 By 9:00 AM on the Scheduling Day the IMO must have calculated and released to each Market Participant the following parameters to be respected by that Market Participant in forming its STEM Submissions for each Trading Interval in the Trading Day:

…

(b) the Maximum Consumption Capability where this equals the maximum Factor adjusted quantity of energy, in units of MWh, that could be consumed during a Trading Interval by that Market Participant's Non-Dispatchable Loads, Interruptible Loads~~, Curtailable Loads~~ and Dispatchable Loads based on the Standing Data maximum consumption quantities for those Facilities and Non-Dispatchable Loads, less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6;

…

The proposed amendment will ensure that in the case where a DSP is requested to reduce its load by System Management it will be paid at the price it has specified in its Balancing Data Submission (as provided in clause 6.11A.1(d)(ii)) for the Trading Interval. In the case where the Market Participant has not provided a price for the Trading Interval the price to be applied will correspond with that specified in the Facility's Standing Data (as provided in accordance with Appendix 1 (h))

6.5A.1. Market Participants other than the Electricity Generation Corporation that are Market Generators, or that are Market Customers with Dispatchable Loads or ~~Curtailable Loads~~ Demand Side Programmes, may submit Balancing Data Submission data for a Trading Day to the IMO between:

…

The proposed amendment will remove the reference to a CL. The demand to be consumed by the Market Participant will now be associated with the NDL.

6.11.1 A Market Participant submitting Resource Plan Submission data or Standing Resource Plan Submission data must include in the submission:

…

(d) the total Loss Factor adjusted demand to be consumed by that Market Participant for each Trading Interval including demand associated with any ~~Curtailable Load or~~ Interruptible Load, but excluding demand associated with any Dispatchable Load; and

…

The proposed amendment will remove the current exclusion of CLs from Resource Plan Submission data. This is consistent with the removal of DSPs from the energy side of the market.

6.11.2. For Resource Plan Submission data or Standing Resource Plan Submission data to be valid:

…

(c) it must not include Interruptible Loads ~~or Curtailable Loads~~; and

…

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

6.11A.1. A Market Participant submitting Balancing Data Submission data must include in the submission:

…

(d) for each Demand Side Programme ~~Curtailable Load~~ registered ~~by~~ to the Market Participant:

…

The proposed amendment will remove the reference to Scheduled Generators and Dispatchable Loads and replace this with a Registered Facility. The Dispatch Merit Order should list Scheduled and Non-Scheduled Generators, Dispatchable Loads, Interruptible Loads and DSPs. The reference to Registered Facility will cover all these classes of Market Participant. The IMO notes that the class of Registered Facility also includes the Network Operator, but as it is not possible to dispatch the Network Operator this should not be an issue.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules.

6.12.1.

(a) By 1:30 PM on the Scheduling Day, (or within 40 minutes of a closing time extended in accordance with clause 6.5.1(b) or clause 6.5A.1(b)), the IMO must determine the Dispatch Merit Orders identified in paragraphs (b) to (g). A Dispatch Merit Order lists the order in which the Scheduled Generators, ~~and~~ Dispatchable Loads and Demand Side Programmes of Market Participants other than the Electricity Generation Corporation will, in the absence of transmission limitations or limitations necessary to maintain Power System Security, be issued Dispatch Instructions by System Management to increase or decrease output.

(b) A Dispatch Merit Order for an increase in generation or decrease in consumption relative to the quantities included in the applicable Resource Plan (or the current operating level of a Facility not included in a Resource Plan) during Peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:

i. this Dispatch Merit Order must list all Scheduled Generators, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads registered by Market Participants other than the Electricity Generation Corporation;

…

(e) A Dispatch Merit Order for an increase in generation or decrease in consumption relative to quantities included in the applicable Resource Plan (or the current operating level of a Facility not included in a Resource Plan) during Off-peak Trading Intervals. The IMO must take into account the following principles when determining this Dispatch Merit Order:

i. this Dispatch Merit Order must list all Scheduled Generators, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads registered by Market Participants other than the Electricity Generation Corporation;

..

(h) Where the prices in Balancing Data or payments described in Standing Data, as applicable, for two or more Registered Facilities ~~Market Participants~~ are equal, then for the purpose of determining the ranking in any Dispatch Merit Order other than those for decommitment, the IMO must rank a Registered Facility with a greater sent out capacity registered in Standing Data before a Registered Facility with a lesser sent out capacity. For a Dispatch Merit Order for decommitment, the IMO must rank a Registered Facility with a greater name plate capacity registered in Standing Data before a Registered Facility with a lesser name plate capacity.

The proposed amendment will remove the requirement for the Dispatch Schedule to equate to the Metered Schedule for a CL as the Dispatch Schedule (and any deviations) will be now captured by the NDL.

Note that a DSP will not have a Dispatch Schedule or a Metered Schedule associated with it under the IMO's proposed amendments.

The IMO also proposes a minor change to the format of the clause to improve its integrity.

6.15.2. ~~The Dispatch Schedule for a Trading Interval f~~For any of the following Facilities ~~equals the corresponding Metered Schedule~~:

(a) a Non-Scheduled Generator;

(aA) a Scheduled Generator to which clauses 3.21A.14 or 4.25.10 apply;

(b) a Non-Dispatchable Load;

(c) ~~a Curtailable Load;~~ [Blank]

(d) an Interruptible Load;

(e) a Scheduled Generator or Dispatchable Load registered by the Electricity Generation Corporation; and

(f) a Scheduled Generator or Dispatchable Load registered by a Market Participant (other than the Electricity Generation Corporation) where a Dispatch Instruction of the type described in clause 7.7.3(d)(ii) was issued to the Market Participant in respect of the Facility,

the Dispatch Schedule for a Trading Interval equals the corresponding Metered Schedule.

The proposed amendment will reference clause 9.3.3 which notes that a DSP has no Metered Schedule. This is similar to a network, which is also a Registered Facility that does not have a Metered Schedule. The IMO considers that this will improve the integrity of the Market Rules and is consistent with the IMO's general removal of DSPs from the energy side of the market.

6.16.1. Subject to clause 9.3.3, ~~T~~the IMO must determine the Metered Schedule for a Trading Interval for a Registered Facility or Non-Dispatchable Load ~~is determined by IMO~~ in accordance with clause 9.3.4.

The proposed new clause will introduce the concept of a DSP Load which will be defined in the Glossary and used as the basis for calculating the Required Level for a DSP under the Rule Change Proposal: Reserve Capacity Security (RC_2010_12)

6.16.2 The IMO must determine the Demand Side Programme Load for a Demand Side Programme for a Trading Interval as the sum of the Metered Schedules of the associated Non-Dispatchable Loads, adjusted to a non-loss adjusted value.

The proposed amendment will limit the Dispatch Instruction Payment made to a Market Participant with a registered DSP to only occurring when System Management requests the programme to reduce its consumption. Currently the IMO is required to make a Dispatch Instruction Payment to CLs in all intervals where they are operating below their RD level. The IMO also proposes to remove the reference to "issued instructions described under either (c) or (d)" as in both cases the Non-Scheduled Generator or DSP are Registered Facilities and so will have been issued Dispatch Instructions by System Management. The proposed amendments will also remove the current reference to a SDL.

The IMO notes that the proposed amendment is to the Amending Rules which will commence as a result of RC_2008_20 on 1 October 2011. As a result the following proposed amendments would not also commence until 1 October 2011.

6.17.6 The Dispatch Instruction Payment, DIP(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals the sum of:

(a) zero, if Market Participant p:

i is the Electricity Generation Corporation; or

ii was issued no Dispatch Instructions ~~or was issued instructions described by either (c) or (d) for the Trading Interval~~;

…

(d) the sum over all ~~Curtailable Loads~~ Demand Side Programmes registered to ~~by~~ the Market Participant of the amount that is the product of:

i. the quantity by which the ~~Curtailable Load~~ Demand Side Programme reduced its consumption in response to a Dispatch Instruction where the quantum of reduction in any Trading Interval is equal to the lesser of:

1. ~~for a Curtailable Load that has nominated that its measurement is to be based on its Capacity Credits, the quantum of reduction in any Trading Interval is to be equal to half of the lesser of~~ half of the Facility's Capacity Credits ~~Reserve Capacity~~ (in MW)~~,~~;

2. half of the Dispatch Instruction amount (in MW) provided by System Management in accordance with clause 7.1.13(eC); or ~~and~~

3. the difference between the Relevant Demand set in clause 4.26.2C and negative two multiplied by the Demand Side Programme Load ~~twice the absolute value of the metered quantity~~ (in MW~~h~~) measured in the Trading Interval;

~~2. for a Curtailable Load that has nominated that its measurement is to be based on the Stipulated Default Load, the quantum of reduction in each Trading Interval is to equal half of the lesser of the Relevant Demand (in MW) minus Stipulated Default Load (in MW), and the Relevant Demand (in MW) minus twice the absolute value of the metered quantity (in MWh) measured in the Trading Interval; and~~

and

ii. the price defined in ~~clause 6.11A.1(d)(ii)~~ the Market Participant's Balancing Data Submission provided in accordance with clause 6.5A, that was current at the time of the Trading Interval, for the ~~Curtailable Load~~ Demand Side Programme (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval).

…

The proposed amendment will remove the requirement for System Management to maintain a dataset of Forced Outages and Consequential Outages for CLs. The IMO does not propose to require System Management to maintain this same data set for a DSP as it is not possible for a DSP to experience a Forced Outage.

7.1.1. System Management must maintain the following data set, and must use this data set when determining which Dispatch Instructions it will give:

…

(i) Scheduled Generator, Non-Scheduled Generator, Dispatchable Load, ~~Curtailable Load~~ and Interruptible Load Forced Outages and Consequential Outages by Trading Interval received from Market Participants in accordance with clause 3.21;

…

The proposed amendments to clauses 7.2.2 and 7.6.10 are consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

7.2.2. The Load Forecasts for a Trading Day described in clause 7.2.1 must:

(a) represent Non-Dispatchable Load~~, Curtailable Load~~ and Interruptible Load net of forecast Non-Scheduled Generation;

…

7.6.10. Where a Market Participant has Capacity Credits granted in respect of a ~~Curtailable Load~~ Demand Side Programme:

(a) the IMO must provide System Management with the details of the Reserve Capacity Obligations to enable System Management to dispatch the ~~Curtailable Load~~ Demand Side Programme.

(b) System Management may issue directions to the ~~Curtailable Load~~ Demand Side Programme in accordance with the Reserve Capacity Obligations.

The proposed amendment will allow System Management to issue a Dispatch Instruction to a DSP which specifies the required decrease quantity (measured against the RD level). As System Management will no longer issue instructions to each individual load the IMO considers it would be more appropriate for System Management to request a DSP to reduce its consumption by an amount rather than to reduce to a specific level.

The IMO notes that this is similar to the current requirement specified in clause 7.7.5D (which will be amended to being [Blank] on 1 October 2011 in accordance with RC_2008_20)

7.7.3. Each Dispatch Instruction must contain the following information:

(a) the Registered Facility to which the Dispatch Instruction relates;

(b) the time the Dispatch Instruction was issued;

(c) the time by which response to the Dispatch Instruction is required to commence (which must not be earlier than the time it was issued, except as contemplated by clause 7.7.7(b);

(d) the required level of sent out generation or consumption which may be ~~either~~ any one of the following:

i. a target MW output; ~~or~~

ii. a minimum MW level; ~~and~~ or

iii. a required decrease in MW; and

(e) the ramp-rate to maintain until the required level of sent out generation or consumption is reached.

The proposed amendments to clause 7.7.4, 7.7.4A, 7.7.10 and 7.13.1 are consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM.

7.7.4. System Management must determine which Facilities will be the subject of Dispatch Instructions by applying the Dispatch Merit Order relevant to the action required, except where:

…

(c) the Dispatch Merit Order would otherwise require that System Management dispatch a Demand Side Programme ~~curtail a Curtailable Load~~ when, due to limitations on the availability of the Demand Side Programme ~~Curtailable Load~~, such ~~curtailment~~ dispatch would prevent

that Demand Side Programme ~~Curtailable Load~~ from being available to System Management at a later time when it would have greater benefit with respect to maintaining Power System Security and Power System Reliability.

7.7.4A. When selecting Demand Side Programmes ~~Curtailable Loads~~ from the Dispatch Merit Order System Management must select them in accordance with the Power System Operation~~s~~ Procedure, where the selection process specified in the Power System Operation~~s~~ Procedure must only discriminate between Demand Side Programmes ~~Curtailable Loads~~ based on size of the capacity, response time, availability and cost of different Demand Side Programmes ~~Curtailable Loads~~.

7.7.10 When System Management has issued a ~~d~~Dispatch ~~i~~Instruction to a Demand Side Programme ~~Curtailable Load~~ to reduce demand it may issue a further instruction terminating the requirement for the Demand Side Programme ~~Curtailable Load~~ to reduce demand providing that:

(a) ~~Such~~ the further instruction is issued ~~no less than~~ at least four hours before it is to come into effect, and

(b) The minimum period for which the Demand Side Programme ~~Curtailable Load has been~~ is instructed to reduce demand is ~~not less than~~ two hours.

7.13.1. System Management must provide the IMO with the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

…

(eC) the required decrease, in MWh, ~~in the consumption~~ of each ~~Curtailable Load~~ Demand Side Programme, by Trading Interval, as a result of System Management Dispatch Instructions ,~~where t~~. This is to be used in settlement as the quantity described in clause 6.17.6(d)(i).

(g) details of the instructions provided to:

i. ~~Curtailable Loads~~ Demand Side Programmes that have Reserve Capacity Obligations; and

ii. providers of Supplementary Capacity;

…

The proposed amendment will specify the types of Facilities that the IMO will determine a Metered Schedule for. Under the proposed amendments a Metered Schedule will not be determined for a DSP. This will ensure that a DSP is only paid for its capacity and not any energy.

9.3.3. The IMO must determine the Metered Schedule for each of the following ~~Facility~~ Facilities ~~and Non-Dispatchable Load~~ for each Trading Interval~~.~~:

(a) Non-Dispatchable Loads;

(b) Interruptible Loads;

(c) Dispatchable Loads;

(d) Scheduled Generators; and

(e) Non-Scheduled Generators.

The proposed amendment will amend the clause to list the specific types of Facilities. This will correct for the current situation where this requirement would be applied to a Network Operator.

9.3.4. Subject to clause 2.30B.10, the Metered Schedule for a Trading Interval for each of the following ~~a Facility~~ Facilities ~~or Non-Dispatchable Load,~~:

(a) Non-Dispatchable Loads, excluding those Non-Dispatchable Loads referred to in clause 9.3.4A;

(b) Interruptible Loads;

(c) Dispatchable Loads;

(d) Scheduled Generators; and

(e) Non-Scheduled Generators,

~~,~~ is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility ~~or Non-Dispatchable Load (as applicable)~~ during that Trading Interval, Loss Factor adjusted to the Reference Node, and determined from Meter Data Submissions received by the IMO in accordance with clause 8.4 or SCADA data received from System Management in accordance with clause 7.13.1(cA) where interval meter data is not available.

The proposed amendment is consistent with the IMO's general removal of the term CL from the Market Rules. This will remove CLs association with the energy side of the WEM. There will also no longer be a Metered Schedule determined for a CL.

9.3.7. The IMO must determine the Consumption_Share(p,m) for Market Participant p in each Trading Month m, ~~which~~ to equal~~s~~

(a) the Market Participant's contributing quantity; divided by

(b) the total contributing quantity of all Market Participants,

where the contributing quantity for a Market Participant for Trading Month m is the sum of the Metered Schedules for the Non-Dispatchable Loads, Interruptible Loads~~, Curtailable Loads,~~ and Dispatchable Loads registered to the Market Participant for all Trading Intervals during Trading Month m.

The proposed amendment will remove the reference to CL as there will be no Metered Schedule calculated for these types of loads.

9.13.1. The applicable Market Participant Fee settlement amount for Market Participant p for Trading Month m is:

MPFSA(p,m) = (-1) x (Market Fee rate + System Operation Fee rate + Regulator Fee rate) x (Monthly Participant Load(p,m) + Monthly Participant Generation(p,m))

Where

Market Fee rate is the charge per MWh for IMO's services determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

System Operation Fee rate is the charge per MWh for System Management's services determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

Regulator Fee rate is the charge per MWh for funding the Economic Regulation Authority's activities with respect to the Wholesale Electricity Market determined in accordance with clause 2.24.2 for the year in which Trading Month m falls;

Monthly Participant Load(p,m) = (-1) × Sum(d∈ D,t∈ T,Metered Load(p,d,t));

where

Metered Load(p,d,t) for a Market Participant p for a Trading Interval t is the sum of the mathematical absolute values of the Metered Schedules for the Non-Dispatchable Loads, Dispatchable Loads~~,~~ and Interruptible Loads ~~and Curtailable Loads~~, registered to the Market Participant for Trading Interval t; and

Monthly Participant Generation(p,m) = Sum(d∈ D,t∈ T, Metered Generation(p,d,t));

where

Metered Generation(p,d,t) for Market Participant p for Trading Interval t is the sum of the mathematical absolute values of the Metered Schedules for Scheduled Generators and Non-Scheduled Generators, registered to the Market Participant for Trading Interval t; and

D is the set of all Trading Days in Trading Month m, where "d" is used to refer to a member of that set;

T is the set of all Trading Intervals in Trading Day d, where "t" is used to refer to a member of that set.

The proposed amendment will remove the status of Metered Schedule information for a CL as being public. Under the proposed amendments there will be no longer a Metered Schedule calculated for a CL.

The proposed amendment will also remove the clarification that the Capacity Credits not be published for each CL comprising of a DSP. This will no longer be necessary as there will be no visibility to the market of the Loads comprising a DSP.

10.5.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Public and the IMO must make each item of information available from the Market Web-Site after that item of information becomes available to the IMO:

…

(f) the following Reserve Capacity information (if applicable):

iv. for each Market Participant holding Capacity Credits, the Capacity Credits provided by each Facility for each Reserve Capacity Cycle. In the case of a Market Participant with a Demand Side Programme, the IMO must publish the total Capacity Credits for the programme ~~and not for each Curtailable Load comprising the programme~~;

…

(j) for each Trading Interval in each completed Trading Day in the previous 12 calendar months the following dispatch summary information:

i. the values of MCAP, UDAP and DDAP;

ii. the Load Forecasts prepared by System Management in accordance with clause 7.2.1;

iii. the sum of the Metered Schedule load for all Non-Dispatchable Load, Dispatchable Load~~,~~ and Interruptible Load ~~and Curtailable Load~~;

iv. estimates of the energy not served due to involuntary load curtailment; and

v. any shortfalls in Ancillary Services;

…

Chapter 11: Glossary

Associated Non-Dispatchable Load: Has the meaning given in clause 2.29.5B

~~**Curtailable Load**: A Load through which electricity is consumed where such consumption can be curtailed at short notice by the party managing the Load or in response to a request from System Management to the party managing the Load, and registered as such in accordance with clause 2.29.5(b).~~

Demand Side Programme: Means a programme registered in accordance with clause 2.29.5A. ~~under which a Market Customer contracts Loads to be available for curtailment upon request of the Market Customer or System Management.~~

Demand Side Programme Load: Has the meaning given in clause 6.16.2.

Facility Classes: Any one of the classes of Facility specified in clause 2.29.1A. ~~Network, Scheduled Generator, Non-Scheduled Generator, Interruptible Load, Curtailable Load and Dispatchable Load.~~

Facility Forced Outage Refund: Has the meaning given in clause 4.26.1A

Load: Has the meaning given in clause 2.29.1(d).

Non-Dispatchable Load: A Load which is not a Dispatchable Load~~, a Curtailable Load~~ or an Interruptible Load~~, and is therefore self scheduled~~.

Relevant Demand: The consumption of a ~~Curtailable Load~~ Demand Side Programme as determined in clause 4.26.2C. Relevant Demand is used to ~~set the maximum Certified Reserve Capacity that can be assigned to a Curtailable Load. It is also used to~~ determine Reserve Capacity shortfalls.

~~**Stipulated Default Load**: The maximum energy consumption to be maintained by an Interruptible Load, Curtailable Load or Dispatchable Load if activated, as specified in its Reserve Capacity Obligations.~~

The proposed amendment will remove the energy associated with the DSP from being provided as Standing Data. This is consistent with the IMO's general removal of energy from being connected with a DSP. The IMO notes that the proposed amendments also remove requirements for Standing Data that would no longer be relevant for a DSP (these requirements relate to the underlying Loads comprising the programme which will no longer be visible to the market).

Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by the IMO for use by the IMO in market processes and by System Management in dispatch processes.

Standing Data required to provided as a pre-condition for Facility Registration, and which is to be updated by Rule Participants as necessary, is described by clauses (a) to (j).

Standing Data not required to be provided as a pre-condition for Facility Registration but that which is required to be maintained by the IMO includes the data described in clauses (k) onwards.

(a) for a Network:

…

(h) for a ~~Curtailable Load~~ Demand Side Programme:

i. ~~the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval~~;

ii. evidence that the communication and control systems required by clause 2.3~~6~~5 are in place and operational;

iii. the maximum amount of load that can be curtailed;

iv. the maximum duration of any single curtailment;

v. [Blank]

vi. for a facility that is registered to a Market Participant other than the Electricity Generation Corporation, Standing Balancing Data comprising;

1. a Consumption Decrease Price for Peak Trading Intervals; and

2. a Consumption Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of $/MWh to a precision of $0.01/MWh; and

vii. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output~~;~~.

~~viii. the Metering Data Agent for the facility;~~

~~ix. the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;~~

~~x. the network nodes at which the facility can connect;~~

~~xi. the short circuit capability of facility equipment;~~

~~xii. whether the Curtailable Load is an Intermittent Load;~~

~~xiii. if the Curtailable Load is an Intermittent Load, the maximum allowed level of Intermittent Load, where this cannot exceed the quantity in (i);~~

~~xiv. if the Curtailable Load is an Intermittent Load, the maximum level of net consumption behind the meter associated with the~~

~~Curtailable Load which is not separately metered and which is not Intermittent Load; and~~

~~xv. if the Curtailable Load is an Intermittent Load, the separately metered generating systems and loads behind that meter associated with the Curtailable Load which are not to be included in the definition of that Intermittent Load.~~

…

(k) For each Registered Facility:

i. Reserve Capacity information including:

5. for Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes, the maximum number of times that interruption can be called during the term of the Capacity Credits;

…

The proposed amendment will ensure that DSPs are explicitly assigned an Availability Class and so not automatically included in Availability Class 1. This is consistent with the decision made under RC_2008_20: DSM – Operational Issues, that Availability Class 1 should comprise of only generation to ensure that sufficient generation is brought into the system to limit energy shortfalls as required by clause 4.5.9(b). The IMO notes that the proposed revised clause 4.11.4 will specify that a DSP must not be assigned to Availability Class 1.

Appendix 3: Reserve Capacity Auction & Trade Methodology

This appendix describes a single algorithm which performs two functions. One version of the algorithm is used to prevent the IMO accepting bilateral trades that have insufficient availability to usefully address the Reserve Capacity Requirement. Another version of the algorithm is used in the conduct of the Reserve Capacity Auction as required by clause 4.19.1.

The parameter "a" denotes the active Availability Class where "a" can have a value of {1, 2, 3, 4}. For the purpose of identifying which capacity can be applied to satisfying capacity requirements the minimum availability of each Availability Class is set to the maximum availability of the next Availability Class. However the algorithms in this appendix allow capacity from an Availability Class with high availability to be used in place of capacity from an Availability Class with lower availability. The following table indicates the required availability of capacity offered for each Availability Class:

Availability Class (i.e. value of "a")	Minimum Hours of Availability Per Year	Maximum Hours of Availability Per Year
1	96	All
2	72	96
3	48	72
4	24	48

All Certified Reserve Capacity associated with Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes or Dispatchable Loads is explicitly assigned an Availability Class, whereas all other Certified Reserve Capacity is automatically in Availability Class 1.

APPENDIX 3: SUMMARY OF SUBMISSIONS RECEIVED DURING THE FIRST SUBMISSION PERIOD

A summary of the main points for each of the issues raised by submitting parties during the first submission period is provided below. A copy of the full text of all submissions is available on the IMO website.

Submitter	Registration of Curtailable Loads (Issue 1)	Facility Definition (Issue 2)	Market Fees (Issue 3)	Measurement of CL Performance (Issue 4)	Capacity Cost Refunds (Issue 5)	Reserve Capacity Security (Issue 6)	SDLs (Issue 7)	Potential Double Payment (Issue 8)
Alinta	Does not support. Also questions whether provision has been included in the Amending Rules to allow a DSP to be deregistered.	Does not support	Does not support	Does not support, noting that the assumption that a DSP is operating at its RD level before a Dispatch Instruction needs further consideration	Does not support	Does not support	Does not support	Does not support
Energy Response	Agrees	Supports	Supports	Proposed changes are likely to severely impede the levels of capacity provided by DSPs.	Generally agrees, but considers that: • greater thought needs to be given to the definition of "Forced Outages" • a mechanism to exchange an obsolete NDL for a new NDL as quickly as possible should be included.	Agrees, however concerned that the mechanism to return security is less than ideal.	Supports	Supports
EnerNOC	Supports, but note that may restrict DSP activities to the capacity market alone.	Supports	Supports	Recommends that the RD measure be amended to a profile methodology. This will proceed with a separate Rule Change Proposal to reflect this recommendation.	Supports, but recommends that potential for capacity refunds should only relate to failure during the period where a DSP's availability is mandated (noon to 8pm on Business Days).	Supports RC_2010_12	Supports	Supports

Submitter	Registration of Curtailable Loads (Issue 1)	Facility Definition (Issue 2)	Market Fees (Issue 3)	Measurement of CL Performance (Issue 4)	Capacity Cost Refunds (Issue 5)	Reserve Capacity Security (Issue 6)	SDLs (Issue 7)	Potential Double Payment (Issue 8)
LGP	Supports	Supports	Supports	Supports	Supports	N/A	Supports	Supports
System Management	The proposal does not mention a new Rule Participant class as confirmed to be included by the IMO at the 12 May 2010 MAC meeting.	Appear to cover the agreed outcome. Notes a continued issue with the dispatch of a DSP caused by no minimum size of blocks being specified.	Does not wish to comment on this issue.	Appear to cover the agreed outcome.	Appear to cover the agreed outcome.	Does not wish to comment on this issue.	Appear to cover the agreed outcome.	Appear to cover the agreed outcome.
Synergy	Supports	Supports	Considers it opportune to now consider a mechanism by which DSM providers pay fees to the market.	Supports	Supports	Supports RC_2010_12	Supports	Dispatch Instruction Payments (DIPs) to CLs should be removed as appropriate compensation already received through Capacity Credit mechanism.

A summary of the assessment by the submitting parties during the first submission period against the Wholesale Market Objectives is presented below:

Submitter	Wholesale Market Objective Assessment
Alinta	Considers that until the RCM is reviewed the IMO cannot be satisfied that RC_2010_29 is consistent with the Wholesale Market Objectives, and in any event that it is unlikely to be inconsistent with Wholesale Market Objectives. To the extent that RC_2010_29 reinforces the status quo, Alinta believe the outcome is likely to be inconsistent with Wholesale Market Objectives (a), (b), (c) and (d).
Energy Response	Considers that the solution to: • Issue 1 will make a contribution towards meeting Wholesale Market Objectives (b),(c) and (e); • Issue 2 will more closely align the Market Rules to Wholesale Market Objective (a); • Issue 4 will work counter to Wholesale Market Objectives (c) and (d); • Issue 5, assuming Energy Response's updates are incorporated, will bring greater transparency to the market thereby enriching the Market Rules and bringing them closer to the Wholesale Market Objectives; and • Issue 6 will be inconsistent with Wholesale Market Objective (c).
EnerNOC	Considers that the changes proposed under RC_2010_29 for: • Issue 1 and 2 will better Wholesale Market Objectives (a), (b) and (d) and be consistent with (c) and (e); • Issue 4 will be inconsistent with Wholesale Market Objectives (a), (c), (d) and (e) and consistent with (b); and • Issue 5 will better Wholesale Market Objective (c) and be consistent with (a), (b), (d) and (e).
LGP	Supports the changes on the basis of being necessary to improving the integrity, administration and practicality of the participation of DSM in the WEM.
System Management	Consider that the proposed changes, incorporating System Management's suggestions, will address the concerns expressed.
Synergy	Consider that the solutions for: • Issue 1 will better address Wholesale Market Objective (a); • Issue 2 will better address Wholesale Market Objectives (a) and (b); • Issue 4 will better address Wholesale Market Objective (c); • Issue 5 will better address Wholesale Market Objective (a); • Issue 7 will better address Wholesale Market Objective (a); and • Issue 8 will not allow the Market Rules to better facilitate the achievement of the Wholesale Market Objectives.

An overview of participant submissions, during the first submission period, on the costs associated with implementing these changes and the timeframe to implement the rule change is presented below:

Submitter	Identified Costs	Implementation Timeframe
Alinta	None	None
Energy Response	*Not noted.*	*Not noted.*
EnerNOC	Changes to the static RD measurement calculation will require amendments to existing systems. Envisages costs to be small. Alignment of RD with IRCR intervals will impact on EnerNOC's portfolio management. Unclear what magnitude of the impact will be but expected to be significant.	Were the changes proposed by the IMO to proceed, it may take approximately 3 months to implement the changes to the measurement calculation, with the main requirements of systems and contract changes requiring this period for implementation. Longer term changes to the makeup and structuring of EnerNOC's DSM portfolio would also be likely, impacting on both the 2012/13 and 2013/14 years.
LGP	None	Immediately
System Management	Changes to System Management IT systems to accept a new class of facility registration would be required. Not yet estimated by System Management as no IMO Interface Specification is available to cost to. Anticipated that costs would be minimal.	Has not been estimated as there is no IMO Interface Specification to cost to. Expected that System Management will be able to amend its IT systems prior to the commencement date, once a specification is made available.
Synergy	None	Immediately

APPENDIX 4: 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:

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
Registration of DSPs (Issue 1)	System Management	Notes the advice provided by the IMO to the MAC that a new Rule Participant class would be created for DSP Providers. Suggests that it would be consistent with this advice if clause 2.28.1 is expanded to include a Rule Participant class called a DSP Provider, and new clauses are added which state: *"A person who contracts for Reserve Capacity associated with a Demand Side Programme must register as a Demand Side Programme Provider";* and *"A person who intends to contract for Reserve Capacity associated with a Demand Side Programme must register as a Demand Side Programme Provider"* System Management considers that this would make the proposed clause 2.29.5A redundant and notes that clause 2.29.5 would need to change to "A Demand Side Programme Provider…". System Management also notes that an update to the Glossary would also be required.	The IMO notes that amending the Market Rules to create a DSP Provider as a new class of Rule Participant would be a much more complex option to implement than the IMO's proposal to simply define a DSP as a type of Facility. If a DSP Provider were to be registered as a distinct type of Rule Participant, the IMO would still need to define a new facility type to allow for Standing Data to be provided and Dispatch Instructions to be issued etc. The IMO notes that DSPs are registered as a Rule Participant in the Market Customer class. The IMO considers that the proposed solution of simply registering a DSP as a type of Facility represents a reasonable balance between additional complexity being incorporated of the Market Rules and the operational practicality. As such no further updates have been proposed.
Replacement of obsolete NDLs (Issue 1)	Energy Response	Essential to consider what happens when a site is permanently or temporarily unable to provide DSM. As an aggregator, Energy Response would be keen to see a mechanism to exchange an obsolete NDL for a new NDL as quickly as possible. Energy Response notes that this would in many ways reflect the treatment of a generator with multiple units where one unit suffers a catastrophic breakdown and is required to be replaces with an entirely new unit. Preferably such updates can be done at any time, so	The IMO notes that under new clause 2.29.5G a Market Participant will be able to notify the IMO that it wishes for a NDL to cease to be associated with its DSP. Further details of the timeframes for this process along with the process for transferring existing CLs into DSPs will be outlined in the Registration Procedure. The IMO notes that a new Market Procedure for the registration of Demand Side Programmes will be developed in conjunction with the IMO Procedure Change and Development Working Group. This will be a transitional Market Procedure to apply until 1 October 2011 and will form part of the wider Registration Procedure, as prescribed by the Market Rules.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		that NDLs can exit a DSP at any time.	
De-registration of DSPs (Issue 1)	Alinta	Questions whether provision has been made in the Market Rules as amended by RC_2010_29 to allow a DSP to be deregistered.	The IMO confirms that under the proposed amended clause 2.33.4 a DSP will not be restricted from applying to be deregistered. As a DSP will be a Facility type a DSP provider will be able to apply to have a DSP, which will be ceasing operation, de-registered in accordance with clause 2.33.4(d)(i). The proposed amendments will simply remove the ability for CLs to churn from one DSP to another.
Issue 1	EnerNOC	At this stage of the WEM's development, EnerNOC queries whether the proposed change (i.e. the development of a DSP as a Facility Type) may, perhaps unintentionally, entirely restrict DSP activities to the capacity market alone.	The IMO considers that DSP activities should be restricted to the capacity market in the Market Rules. A DSP can not bid into the STEM, however it must respond to Dispatch Instructions, for which it will receive an energy market payment for (Pay as Bid). Additionally, the Loads comprising a DSP can interact with the energy market directly through the Market Customer that has contracted for the energy. The IMO notes that these interrelationships are no different to the status quo.
Dispatch of DSPs (Issue 2)	System Management	Has a continued issue with the dispatch of a DSP, despite the proposed Amending Rules. That is RC_2010_29 will allow for three blocks within a DSP. There is no minimum size for these blocks, so the dispatch of a block could be for a quantity of 0.001MW, being the minimum reserve capacity size. Additionally a DSP provider may register many DSP facilities, each of which may also be 0.001MW. To overcome these issues System Management suggests that following additions: *"4.10.1(f)vii. With only one block of having its Reserve Capacity to be less than 10 MW"* *"2.29.5x A Demand Side Programme Provider may not register a Demand Side Programme if it already has registered a Demand Side Programme whose reserve capacity is less than 10MW"*	The IMO notes that a further issue has been identified, relating to the inconsistent use of the concept of blocks of capacity from a DSP between the capacity and energy side of the market. To clarify, the IMO notes that under the proposed changes the concept of blocks will only apply for the purposes of bidding into the Reserve Capacity Auction, and not for any energy market purposes or when assessing the performance of the DSP against its capacity obligations. Dispatch Instructions would be issued to the DSP and not to any blocks comprising the DSP. The IMO notes that, as agreed during the September 2010 MAC meeting, it will be working with System Management to further consider the issue of the registration and dispatch of a large number of small DSPs. As such the IMO has not adopted System Management's proposed amendments.
Ramp Rates for DSPs	System Management	Clause 7.7.3(e) should be amended to cater for the fact that a DSP has no ramp rate stipulated in	The IMO considers that it is foreseeable that some Loads may have ramp rates and has therefore amended clause 7.7.3(e) to reference the provision

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
(Issue 2)		standing data, but this clause requires one be stated. System Management suggests amending this rule to be *"For a Scheduled Generator, Non-Scheduled Generator or Dispatchable Load the ramp rate required…"*	of a ramp rate, if provided in Standing Data. The IMO has also updated the Standing Data requirements to allow for a normal and emergency ramp rate to be provided for a DSP, if applicable. Refer to Appendix 3 of this report for more details.
Notification time for Dispatch Instructions (Issue 2)	System Management	Clause 7.7.10 restricts issue of Dispatch Instructions to be before 4 hours before response. System Management believes it should be the notification time as stated in Standing Data. That is if the notification time is one hour System Management should not be restricted to giving a four hour notification. System Management suggests deleting clause 7.7.10(a), as clause 7.7.2(c) already requires System Management to take into account the response time given in the Standing Data for all facilities.	The IMO notes that clause 7.7.10 only relates to System Management issuing a further Dispatch Instruction terminating the requirement for a DSP to reduce its consumption, provided that: • at least four hours lead time before the instruction would take effect is provided; and • once the Dispatch Instruction is terminated the DSP would have curtailed its consumption for at least two hours. The IMO considers that these current requirements are reasonable, given the impacts that issuing and revoking Dispatch Instructions in quick succession would have on the associated NDLs. These current arrangements are consistent with the recommendations of the DSM Working Group. For further details refer to: http://www.imowa.com.au/RC_2008_20.
Standing Data for DSPs (Issue 2)	System Management	In order for System Management to be able to effectively issue Dispatch Instructions to DSPs in accordance with clause 7.7.4A, System Management would need full details of the DSP as given in clause 4.10.1(f). System Management considers that Appendix 1: Standing Data should be amended to include the availability of the DSP. System Management also considers that the consumption decrease price for Peak and Off-Peak must be given to System Management to enable it to comply with clause 7.7.4A.	The IMO agrees that System Management will need details of the DSP as provided under clause 4.10.1(f) and that Standing Data should be amended to include these availability details for the DSP. The proposed Amending Rules have been updated to reflect these suggestions from System Management (refer to Appendix 3 for further details). However, the IMO has not updated the proposed Amending Rules to require price information for the DSP to be provided to System Management. This is because the Dispatch Merit Order (DMO) currently provided to System Management reflects the consumption decrease price for a DSP during Peak and Off-Peak periods. As a result, the IMO does not consider there is any need to provide System Management with the specific price details of a DSP. Additionally, information on the Reserve Capacity expected to be available (clause 4.10.1(f)(i)) will not be provided, as System Management will receive

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			details of the most recent Certified Reserve Capacity (CRC) of the DSP under sub-clause (k) in Appendix 1.
Market Fees (Issue 3)	Synergy	Believes it is opportune to now consider a mechanism by which DSM providers pay fees to the market. The current fee recovery structure, based on energy generated and consumed, will require review; since DSM generates no energy, DSM currently pays little in the way of fees.	The IMO notes that the proposed amendments are consistent with the MAC's agreement at the May 2010 MAC meeting that a DSP should not be required to pay Market Fees. The IMO notes that it has logged this issue for further consideration at a later date, following a discussion at the November 2010 MAC meeting.
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	Alinta	Notes that RC_2010_12 would amend the Market Rules to measure whether or not a CL or DSP has met its Required Level by comparing actual post dispatch consumption to its RD less CCs associated with the CL or DSP. Irrespective of whether RD is measured by IRCR or 32 Peak Trading Intervals, this method risks misrepresenting the amount of capacity actually provided by the CL or DSP where actual pre-dispatch consumption is lower than the RD of the CL or DSP.	The IMO notes that this issue is associated with the use of an RD value that has been determined using a static baseline. The IMO notes that the changes proposed under RC_2010_29 around the determination of a DSP's RD are twofold: • firstly, to remove the issue associated with double payment of DSPs; and • secondly, to ensure that the performance of DSPs can be better measured. As agreed by the MAC during the August 2010 meeting, the IMO has proposed that the RD level be a static baseline measure, calculated on the IRCR intervals. This decision to use IRCR intervals was made on the basis of analysis provided by Data Analysis Australia (DAA), which indicated that the most reliable indicator of the available capacity at peak times was the IRCR method (i.e. the median of the 12 Peak Trading Intervals for each Hot Season). The IMO notes that since it proposed a variant of the current static RD methodology, EnerNOC has presented a discussion paper to the MAC (February 2011 meeting) proposing the introduction of a dynamic baseline methodology. A copy of the discussion paper is available on the following webpage: http://www.imowa.com.au/MAC_35 Using a dynamic baseline model to measure a DSP's performance would result in increased certainty around the output of the DSP prior to being issued a Dispatch Instruction than under the current static model. However, the IMO notes that even with a dynamic baseline model and advanced DSM

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			equipment that indicates real time consumption of associated NDLs, complete certainty of the consumption of the DSP had a Dispatch Instruction not been issued would be unlikely. The IMO is interested in views during the second submission period on the issue of whether a static or dynamic baseline methodology should be adopted. The IMO presents two options for progressing this issue and wishes interested parties to submit on which of these constitutes the best pathway forward: • continue with the proposed amendments to maintain a static baseline methodology based on the 12 IRCR periods as part of RC_2010_29 (as originally proposed); or • remove the proposed amendments from RC_2010_29, with the MAC to consider the static and dynamic model options further. Should the proposed amendments to the RD methodology not progress the IMO notes that IT systems changes will still be required to amend the current RD calculation to be based on DSPs and not CLs.
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	Alinta	The method for measuring DSP performance also differs from the manner that capacity obligations apply to other Scheduled Generators because when dispatched, the additional capacity provided by those facilities will be known with certainty and those facilities are only paid for the additional capacity they actually make available to the system.	The IMO notes that the different measurement of performance between DSPs and Scheduled Generators reflects that when a: • Scheduled Generator is issued a Dispatch Instruction there is certainty as to the starting point from which to measure their performance; and • DSP is dispatched there is no certainty as to the exactly what the DSP would have been consuming during the time it is dispatched. This is similar to the case of an Intermittent Generator that is requested by System Management to reduce its output in that it is not possible to tell exactly what the Intermittent Generator would have produced had it not responded to the Dispatch Instruction. DSM is an important source of capacity for managing high energy demands and the associated strain on both the transmission and distribution networks during peak periods and other events. The IMO considers that reducing the consumption of energy during peak periods directly promotes Market Objective (e). Given these associated benefits with using DSM, the IMO considers that the distinction between the methods for measuring the

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			performance of DSM and generators with capacity obligations is warranted.
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	Alinta	The changes proposed under RC_2010_12 would allow CLs and DSPs already operating below their RD to be paid as if they had reduced consumption from their RD level. Alinta also notes that the converse case is true if operating above their RD level.	Refer to above. This situation is no different to that encountered under the current Market Rules. The IMO confirms that given that RD is a median value it is also possible that a DSP could be operating above its RD when dispatched.
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	Alinta	That the Market Rules effectively assume that a CL or DSP is operating at its RD level before a Dispatch Instruction is issued would appear to create a potential misalignment between the objective of System Management in issuing a Dispatch Instruction (to achieve a specific load reduction) and the (financial) incentive faced by the Market Participant that registered the CL or DSP (to minimise actual load reduction). As a result Alinta considers that proposed clause 4.11.3B would also lead to System Management being uncertain as to the effectiveness of issuing a Dispatch Instruction to CLs or DSPs to achieve a specific load reduction.	Refer to above.
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	EnerNOC	A static RD measurement is inherently an inappropriate methodology to employ for operational purposes for a resource participating in the WEM. Almost no electricity users have demands that remain flat over the day let alone the course of a season or a year.	The IMO agrees that it is unlikely that an electricity user's demand would remain flat over a day. However, the IMO notes that the wider issues associated with adopting a dynamic baseline model (which would account for these variations in demand) need to be further considered, and reiterates its request for submissions on the two identified pathways forward.
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	EnerNOC	The issues that the IMO seeks to resolve through modifying the RD intervals and the exclusion rules are each symptoms of the use of a flawed static baseline methodology to determine the RD measure. Moving away from a static RD would not only prevent the inherent conflicts between planning and operations, it would also improve the overall accuracy and integrity of the RD measure and associated performance calculations.	Refer to above.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	EnerNOC	Notes the following points: • The WEM would benefit by the use of improved measurement methodologies, which both are more accurate and mitigate against gaming activities by Market Participants. • There is a clear choice to both accomplish the objectives of the IMO's proposed changes to the RD methodology and to also improve its accuracy in general: a measurement methodology known as a "profile" baseline. • Notes that EnerNOC will shortly submit a Rule Change Proposal seeking to implement an RD calculation based on a more accurate profile baseline. • Acknowledges the rule change process within the WEM and recognises that its proposal to consider a dynamic measure may necessitate the parallel consideration of both rule change alternatives.	Refer to above.
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	EnerNOC	Underlying the concept of aligning IRCR and RD intervals is an assumption that because a customer managed their IRCR in the previous year that they can be assumed in the current year to have already curtailed demand when System Management would otherwise dispatch them. EnerNOC considers this assumption is erroneous, and potentially dangerous.	Refer to above. This issue relates to the use of a static baseline methodology which is reliant on information from the previous Hot Season to indicate the likely availability of a facility. The IMO also notes that the intent of the proposed changes is to allow an end use customer to make a decision over which potential payment stream they wish to target (IRCR or DSM).
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	EnerNOC	Questions the wisdom of a rule change which will in its very design exclude the WEM's most demand-flexible and peak-responsive loads from providing capacity to the market.	The IMO disagrees as the proposed changes will simply require an associated NDL to make a decision whether to reduce its IRCR obligations or increase the RD of the DSP with which it has contracted. Any cost impacts to a DSP as a result of one of its associated NDLs targeting a reduction in its IRCR, for which the DSP provider would receive no financial benefit (only the Market Customer to which the NDL contracts energy), should be taken into account by the DSM aggregator when establishing contracts.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			The IMO however notes the potential benefits (and costs) associated with implementing a dynamic baseline methodology and reiterates its request for comments from interested parties of the identified pathways for proceeding with this issue. The IMO notes that further consideration of solutions to the current double payment issues will be required for methodology using non-IRCR intervals.
Calculation of RD - dynamic vs. static baseline methodology (Issue 4)	EnerNOC	The RD measure, were it to remain static, be amended to include an additional 20 Trading Intervals for a total of 32, being the peak 8 Trading Intervals on each of the peak four days in the previous Hot Season, and to utilise an arithmetic mean for averaging instead of a median.	DAA concluded that the IRCR methodology (the median of the 12 Peak Trading Intervals for the Hot Season) produces the most reliable results when it comes to predicting what the Load will likely be operating at during a peak demand event during the next year. Using a larger sample size would reintroduce the current double payment issue. For example if 32 Trading Intervals were to be used and a DSP successfully targeted the 12 IRCR intervals (thereby reducing its consumption), the remaining 20 Trading Intervals within the dataset would allow for a higher RD to be set than would otherwise be the case. Additionally, due to the small sample size (12 intervals) it is more appropriate to use a median, as an average would be distorted by any outliers.
Calculation of RD and removal of exclusions due to maintenance (Issue 4)	Energy Response	In practice the current RD measurement methodology which allows for substitutions is acceptable, however the use of IRCR intervals will only be suitable if substitutions and adjustments are allowed. The use of a small subset of data (i.e. the 12 IRCR Intervals) poses another difficulty and is not a very robust approach when dealing with the inherent variability of large commercial and industrial loads; this can cause serious problems without a substitution option. Sites do have extended shutdowns and outages. That does not mean that they are unable to provide	Given the outcomes of DAA's analysis, as noted above, the IMO disagrees with Energy Response that the use of the 12 IRCR intervals is not a very robust approach. The IMO acknowledges that where a site is on extended shutdown or outage during these 12 IRCR intervals then the calculation of the relevant DSP's RD for the next year may not reflect the DSP's availability to the capacity market. This would reduce their level of Capacity Credits and associated income stream. However, in this instance the Market Customer to which the NDL belongs has already been compensated during the previous year, as its IRCR would have been reduced while it was either on outage or extended shutdown. Additionally, the IMO considers that there is an equal random possibility that during the past year an NDL:

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		benefit to the market in the following summer.	• had shut down during the 12 IRCR intervals , resulting in a lower RD for the current year, and yet is available during peak periods in the current year; and • was available during the 12 IRCR intervals, resulting in a higher RD for the current year, and yet is on an outage during the peak intervals in the current year.
Calculation of RD and removal of exclusions due to maintenance (Issue 4)	Energy Response	The variance is too large to make this a viable measurement method without the possibility of adjustments.	Refer to above.
Calculation of RD using IRCR periods (Issue 4)	Energy Response	The proposed changes will work counter to the Wholesale Market Objective of treating each technology equally. There would be a substantial cost impact on Energy Response in having to make up the difference in capacity.	The IMO disagrees that removing the current "double payments" associated with an NDL undertaking maintenance during peak periods to reduce its IRCR (as passed through by the Market Customer to which it contracts energy) and then having these periods excluded from its RD calculation would result in differences in the treatment of technology types. This is because a Market Generator does not receive an IRCR benefit where it provides (or doesn't provide) energy during peak intervals. Any cost impacts to a DSP as a result of one of its associated NDLs targeting a reduction in its IRCR, for which the IMO notes the DSP provider would receive no financial benefit (only the Market Customer to which the NDL contracts energy), should be taken into account by the DSM aggregator when establishing contracts.
Calculation of RD and removal of exclusions due to maintenance (Issue 4)	Energy Response	Under the proposed amendments, where substitutions are not allowed for the IRCR intervals, Energy Response would experience a loss of almost 8 percent of its total DSM available. This loss is not adjustable under the proposed changes and is compounded by the fact that loss factors are also not compensated, which generally account for about 6 to 10 percent, thereby making aggregated DSM	Refer to above. The IMO notes that consideration of compensation for loss factors is outside the scope of RC_2010_29.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		disadvantaged when compared to generation by between 14 and 18 percent.	
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	End-use customers choosing to secure their direct economic interest by reducing their IRCR will impact existing and future DSPs, with potential for capacity shortfalls, Supplementary Reserve Capacity (SRC) and/or the need to additional generation.	Refer to above. The IMO notes that a DSP will be able to substitute alternative NDLs into its programme and therefore mitigate against any risks it is unable to meet its capacity obligations and that an SRC event may arise.
Calculation of RD using IRCR periods (Issue 4)	Energy Response	Overall the proposed changes are likely to severely impede on the levels of Reserve Capacity to be supplied by DSM aggregators and will potentially lead to high costs for the entire WEM.	The IMO disagrees as the proposed amendments will ensure that the RD of a DSP better reflects its likely availability and consequent value of the reduced consumption offered by the DSP to the market than currently. The IMO also reiterates that the outcomes of DAA's assessment indicated that the use of the 12 IRCR intervals would produce a more stable and reliable measure of a DSP's likely availability. The Reserve Capacity Requirement (clause 4.29.1) caps the cost of capacity to the market as any additional capacity required is adjusted for in the Monthly Reserve Capacity Price using the Excess Capacity Adjustment..
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	Believes that the IMO's proposed approach to DSP performance measurement is likely to create significant risks for DSM capacity provision and lead to greater instability and higher costs to the market as a whole.	Refer to above.
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	By aligning the intervals used to determine a DSP's RD measure with those intervals used for IRCR purposes, the market would be bundling two separate mechanisms that require distinct measurements for their own specific purposes	A Market Customer's IRCR is equal to the share of the Reserve Capacity Requirement allocated to it based on its expected historic system peak demand plus an additional reserve margin. These are updated monthly to reflect adjustments to a Market Customer's share values. Alternatively, a DSP's RD will be reflective of a level of curtailability that could be expected during those peak IRCR intervals (the basis on which capacity is charge to Market Customers). In essence the IRCR amount paid by a Market Customer acts as compensation for the availability of capacity during peak intervals (from DSPs and other generation types). Given the interrelated nature of the two mechanisms the IMO considers it is appropriate that they are more closely aligned by using same 12 peak intervals in each

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			calculation.
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	The supposed "conflict" between IRCR and RD is a consequence of an approach that has an underlying assumption that it is appropriate to employ the same methodology for determining a CL's IRCR and its ability to provide capacity to the WEM when dispatched. By continuing with the approach the IMO is conflating resource adequacy and planning activities with measurement needs in an operational context.	Refer to above.
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	By linking the RD and IRCR methodologies, the IMO appears to falsely presume that a DSP would only be dispatched by System Management in response to a capacity shortfall, and not for the other likely purposes such as transmission constraints or unforeseen system contingencies.	Refer to above. The IMO disagrees that it has assumed that capacity would only be dispatched by System Management in response to a capacity shortfall. There are a number of reasons why a DSP might be dispatched (i.e. lack of sufficient generation capacity, transmission issues etc). These reasons however do not affect the merits of linking the two methodologies and will result in the removal of the current "double counting" issue.
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	As a result of RC_2010_29, IRCR management and demand side participation will become mutually exclusive.	The IMO confirms that this was the intent of bundling the two mechanisms and will result in the removal of the current "double counting" issues.
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	End-use customers choosing to provide DSM for capacity purposes to the detriment of reducing their peak loads will lead to capacity forecasts being higher than would otherwise be necessary, increasing electricity costs to all customers in the SWIS.	The proposed amendments will allow an end-use customer to either reduce its IRCR or increase the RD of any DSP it is associated with. The IMO agrees that if an end use customer aims to increase its RD this will potentially lead to increased capacity forecasts. The IMO however disagrees that this cost will necessarily be borne by all customers but rather would be allocated to the specific NDL adjusting its behaviour.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			To illustrate this impact consider a 1 MW increase in an NDLs consumption[11]. This would lead to a: • increase in the capacity forecasts • CC benefit to the NDL (1 MW of CCs) • IRCR cost to the NDL, based on the TDL_Ratio (approx. 1.4 x the cost of a Capacity Credit) Under this example if a NDLs IRCR is not reduced it will effectively pay for the increase in the Reserve Capacity Requirements (forecast).
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	While perhaps unintentional, adopting RC_2010_29 would signal that the market is seeking to either remove an incentive to reduce peak demands or limit the quantity of DSM providing capacity in the WEM. Either signal is likely to lead to market inefficiencies and work against Wholesale Market Objectives (a), (d) and (e).	Refer to above. The IMO notes the dual incentive of reducing peak demand and increasing the supply of DSM capacity in the WEM is currently inefficient as it creates a double payment stream. The intent of the proposed changes is to allow an end use customer to make a decision over which payment stream they wish to target.
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	The proposed RD measurement approach penalises customers for IRCR management even when those activities are non-coincident with the likely dispatch requirements of a DSP by System Management.	The IMO disagrees, noting that while IRCR management would reduce the DSP's RD level in the following year, the NDL would have already been compensated through their IRCR reduction.
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	In its attempts to limit "double payment" concerns, the IMO has advocated for an RD methodology that unfairly penalises customers that manage their IRCR exposure as it will end up removing all WEM derived payments for any load reductions dispatched by System Management, whether or not they are actually coincident with IRCR intervals. While this risk is also present in the current RD methodology, it is guaranteed under RC_2010_29.	Refer to above.

[11] Note that this example assumes that the NDL is operating directly in the SWIS and so is not subject to any contracting arrangements with either a Market Customer (to pass through IRCR costs) or DSP (thereby accruing full CC benefits associated with an increase in its RD).

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
Calculation of RD using IRCR periods (Issue 4)	EnerNOC	The alignment of both RD and IRCR measures would produce an outcome where the loads most capable of assisting the WEM as CLs would have no incentive to provide this capacity.	Refer to above. The intent of the proposed changes is to allow an end use customer to make a decision over which potential payment stream they wish to target (IRCR or RD).
Commencement of proposed RD methodology (Issue 4)	EnerNOC	If the IMO were to proceed with its proposed RD methodology, any changes should be scheduled for implementation and used no earlier than the 2012/13 Capacity Year.	As noted above the IMO will be seeking the views of interested parties on the pathway forward regarding the consideration of a static vs. a dynamic baseline methodology. Further consideration of the implementation of any potential Amending Rules will be dependent on the views of interested parties during the second submission period.
Definition of Facility Forced Outage Refund (Issue 5)	Energy Response	Great thought needs to be given to the definition of "Forced Outages". Forced Outages for generators is a relatively easy concept to understand, however when applying the same concept to NDLs it can be quite confusing.	This issue does not relate to the wider definition of Forced Outages but rather to the reference to Forced Outages used in the calculation of a Facility's capacity deficit (Facility Forced Outage Refund) under clause 4.26.1A. The IMO agrees that this does not correctly reflect the intent of this calculation and has subsequently amended this to refer to a "Facility Reserve Capacity Deficit Refund". Refer to Appendix 3 for further details of the additional changes made by the IMO.
Requirements for capacity refunds (Issue 5)	EnerNOC	Recommends that the potential for capacity refunds for DSPs should only relate to failure during that period where the DSP's availability is mandated (between noon and 8pm on Business Days) and that the rule changes proposed relating to capacity shortfall calculations be reflective of this.	The IMO agrees that capacity refunds should only be required where a DSP has not met its Reserve Capacity obligations during contracted hours. This will ensure consistency with the requirements for a Scheduled Generator to make refunds where it fails to meet its RCOQ. The IMO has amended clause 4.12.4 to reflect this amendment. Refer to Appendix 3. The IMO notes that where a DSP which has not subscribed sufficient NDLs to be able to meets its capacity obligations has its RCOQ amended during the Capacity Year (i.e. following the results of a Verification Test), it will be possible that the DSP will not refund 100 percent of its Capacity Credits under the proposed amendments. The IMO however notes that the refunds for a DSP which fails to provide the required level of reduction when a Dispatch Instruction is issued under clause 4.26.3A are much larger than those required for a Scheduled Generator (under clause 4.26.3). Under clause 4.26.3A the level of refund to apply in any Trading Interval is determined based on the amount of Capacity Shortfall, measured in terms of MWh, as a proportion of the total MWh reduction that the DSP should have delivered if called to the maximum level for the maximum allowable time.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			The total amount of refunds payable in a year is capped at the level of Reserve Capacity payment.
Return of RCS (Issue 6)	Energy Response	Concerned that the mechanism to return the security deposit is less than ideal. The security deposit should be released at the time when the DSM aggregator declares the facility available for service and the IMO determines that the programme has been completely filled. There is little point having the Facility available on 1 August (or 1 June in the future) and the Facility not being tested for several months after that date, at which time the security deposit can be released.	The proposed introduction of the concept of a Required Level under the Rule Change Proposal: Required Level and Reserve Capacity Security (RC_2010_12) will facilitate the ability for a Facility which enters the market early to receive its Reserve Capacity Security back once it has meet 100 percent of its Required Level. There will be no restriction on a DSP conducting its own trial to prove that it can meet 100 percent of its Required Level. The IMO notes that the IMO does not conduct "tests" for the purposes of the return of Reserve Capacity Security but relies of the actual output of a Facility (or provision of an expert report) to indicate that it is capable of meeting its Required Level. For further details please refer to: http://www.imowa.com.au/RC_2010_12
Return of RCS (Issue 6)	Energy Response	Delays and uncertainty related to the release of security deposits would create considerable cost and credibility issues with Energy Response's financiers, which would reflect poorly on the WEM and discriminate against DSM aggregation.	Refer to above.
DIPs (Issue 8)	Synergy	A generator under a Dispatch Instruction produces electricity that can be allocated in the market and paid for by a counter-party under a normal market transaction. For a CL, no such transaction occurs, yet a dispatch payment is made regardless. This would suggest that a CL is getting something a generator providing the same capacity is not getting; a dispatch payment to CLs could therefore be construed as being discriminatory against generators.	In instances where a Dispatch Instruction has been issued to either a Scheduled Generator or a DSP this will be in response to any of the following unanticipated events: • increased consumption of electricity; • decreased supply of electricity; • transmission constraints; or • system contingencies. Where a generator or a DSP is dispatched by System Management it will be paid its Pay As Bid Price for the Dispatch Quantity. The shortfall (between the amount paid by the Market Participant causing the need for the additional energy and the amount paid to the generator / DSP) paid by all Market Customers would however usually be greater if DSM is dispatched. This is because where a generator produced energy the Market Participant that caused the need for the additional energy will be required to pay at least MCAP. Alternatively however as a DSP produces no energy, there would be no contribution to the overall shortfall quantity paid by all Market Customers from an individual Market Participant to cover the costs of calling the DSP.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
			During the February 2011 MAC meeting a worked example of the associated costs of dispatching a peaker and a DSP was presented. It was agreed that further consideration is required of whether a DSP should be paid to reduce its consumption following the receipt of a Dispatch Instruction. This issue is to be considered as part of the wider RCM review.
DIPs (Issue 8)	Synergy	Considers that a CL already receives appropriate compensation payment through the Capacity Credit mechanism – it has elected to accept a reduced level of reliability by offering itself to be turned down/off at System Management's request – and therefore should not receive a DIP at all.	Refer to above. The IMO notes that there are potentially costs to NDLs associated with having to shutdown when a Dispatch Instruction has been issued to a DSP. Whether any of these additional costs can not be compensated for by the DSP's capacity payments will be considered as part of the wider RCM review. The IMO also notes that in considering whether DIPs should be removed for DSPs the impacts of a zero price for DSPs on the Dispatch Merit Order should be taken into account.
DIPs (Issue 8)	Synergy	DIPs to CLs are an unnecessary cost burden on the market without any resulting benefits. CLs have already committed to reducing demand when instructed, for which compensation is provided through the RCM; there is no rationale to justify continuing another compensation payment to CLs. Synergy therefore believes that to remove this partiality from the market, DIPs to CLs should be removed from the Market Rules.	Refer to above
DIPs (Issue 8)	EnerNOC	When System Management dispatches a CL/DSP, it is because DSM capacity is needed at that specific point in time, not because of system conditions from the preceding Hot Season. If a CL/DSP can provide the needed load reduction when dispatched, they should not only be encouraged to do so, they should also be paid for the resource they provide to the WEM – regardless of any IRCR activities.	Refer to above.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
DIPs (Issue 8)	EnerNOC	Acknowledges the potential double payment concern raised by a MAC member, and suggests only that were this concern to be pursued further at a later time, the solution looks to target the MCAP benefit received by the Market Customer supplying energy to the Load. It is the retailer in these instances that is receiving an "unplanned benefit" (unless they are operating the DSP dispatched by System Management) rather than the DSP which is providing a direct service to the WEM through its dispatch.	The IMO notes EnerNOC's comments and will consider them during the wider RCM review. The IMO notes that in this circumstance the MCAP payment to the retailer is reimbursing them for electricity they have paid for (through bilateral contracts or the STEM) but did not consume. This is not however a special case caused by a Dispatch Instruction. The IMO notes that it would be inappropriate to make the retailer (who may be completely removed from the DSP arrangements) pay for electricity it did not use.
Progression of RC_2010_29	Alinta	Does not consider it necessary or desirable to proceed with RC_2010_29 at this time, given that the IMO will shortly engage a consultant to review the RCM and provide it with recommendations on any practical changes to the RCM to deliver economically efficient outcomes, including ensuring appropriate investment signals and incentives for the right mix of Facilities. The scope of works specifically requires that the consultant consider whether the RCM is delivering the optimal mix of generation and DSM capacity. Alinta considers it very likely that substantial changes to the RCM will be recommended following this review. For this reason, Alinta considers that it appears premature to amend the Market Rules as proposed by RC_2010_29 ahead of the recommendations of the review being considered by the MAC.	The IMO notes that RC_2010_29 is intended to fix a number of issues identified with the current Market Rules, and does not intend to consider the optimal mix of generation in the WEM. Consideration of whether the RCM is delivering the optimal mix of generation and DSM capacity, including a review of the Availability Classes, has been included in the wider review of the RCM currently being undertaken by the IMO. The IMO's wider review of the RCM will not be completed until mid 2011, with any subsequent Rule Change Proposals unlikely to enter the process until early 2012. The IMO considers in this case the existence of other work streams/reviews should not be a reason in itself to unnecessarily delay work already compiled. Given the operational issues identified in the current Market Rules the IMO considers that progressing with the proposed amendments is warranted at this time and should not be delayed subject to the potential outcomes of the RCM wider review.
Progression of RC_2010_29	Alinta	Does not consider it necessary or desirable to proceed with RC_2010_29 at this time given that to the extent the IMO has developed a workable approach that is permissible within the current Market Rules, there appears to be no practical need	As noted above, there are a number of operational issues in the current Market Rules relating to CLs that need to be addressed. The IMO considers that it is important for the integrity of the market that these operational issues be corrected as soon as possible, so that all Market Participants can have as much confidence in the operation of the Market Rules as possible.

Clause/Issue	Submitter	Comment/Change Requested	IMO's response
		for amending the Market Rules as proposed by RC_2010_29. Alinta notes that the IMO advised the MAC of a number of perceived issues associated with CLs and DSM in May 2010. In the intervening period, the IMO has successfully completed a Reserve Capacity Cycle assigning a significant number of new CCs to DSPs.	To ensure that there are sufficient benefits associated with progressing with RC_2010_29 at this time (given the IT costs associated with the proposed changes) the IMO has undertaken a qualitative cost benefit analysis of the proposed amendments against the status quo. The outcomes of the IMO's cost benefit analysis (as presented in section 5.5 and Appendix 4) indicate that there are sufficient benefits to outweigh the costs associated with progressing with RC_2010_29 at this time.

APPENDIX 5: ADDITIONAL AMENDMENTS MADE BY THE IMO FOLLOWING THE FIRST SUBMISSION PERIOD

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

The proposed amendments to clauses 2.27.1, 2.27.2 and 2.29.1A are typographical changes to improve the integrity of the Amending Rules.

2.27.1. By 1 June of each year Network Operators must calculate and provide to the IMO Loss Factors for each connection point in their Networks at which any of the following is connected ~~a~~:

(a) a Scheduled Generator;

(b) a Non-Scheduled Generator;

(c) a Non-Dispatchable Load;

(d) an Interruptible Load; or

(e) [Blank]

(f) a Dispatchable Load.

2.27.2 In calculating Loss Factors, Network Operators must apply the following principles:

…

(c) Loss Factors must be calculated using:

i. generation and load meter data from the preceding 12 months; or

iA. for a new Registered Facility or a Non-Dispatchable Load, any other relevant data provided to the Network Operator by the Market Participant and as agreed with the Network Operator and the IMO, and

…

(e) a specific Loss Factor must be calculated for each:

i. Scheduled Generator;

ii. Non-Scheduled Generator;

iii. [Blank];

iv. Interruptible Load;

v. Dispatchable Load; and

vi. Non-Dispatchable Load above 1000kVA peak consumption;

…

2.29.1A. The Facility Classes are:

(a) a Network;

(b) a Scheduled Generator;

(c) a Non-Scheduled Generator;

(d) an Interruptible Load;

(e) a Dispatchable Load; and

(f) a Demand Side Programme.

The proposed amendments to new clause 2.29.5A will improve the integrity of this clause by restructuring the conditions under which a Market Customer with a contract with a NDL (or that plans to enter into one) may register a DSP.

2.29.5A. Subject to clause 2.29.8A, a Market Customer that:

(a) has entered into; or

(b) intends to enter into

~~that enters into, or intends to enter into,~~ a contract with a~~n end user~~ person who owns, controls or operates a Non-Dispatchable Load for the load to ~~be available for~~ provide curtailment on request by the Market Customer~~,~~ may apply to the IMO to register a Demand Side Programme.

The proposed amendments to new clause 2.29.5B will clarify that a Market Customer with an existing DSP registered to them may apply to the IMO to associate a NDL with that DSP. The proposed amendments will also clarify the information that must be provided in support of that application.

2.29.5B. A Market Customer with a registered Demand Side Programme may apply to the IMO to associate a Non-Dispatchable Load with ~~a~~ the Demand Side Programme. ~~(**"Associated Non-Dispatchable Load"**). if it provides evidence of a contract to provide curtailment upon request with the end user who owns, operates or controls the Non-Dispatchable Load, in accordance with the Registration Market Procedure. The evidence must include:~~ The Market Customer must provide the following information in support of the application:

(a) evidence that the Market Customer has entered into a contract with the person who owns, operates or controls the Non-Dispatchable Load to provide curtailment on request by the Market Customer;

(~~a~~ b) the connection point of the Non-Dispatchable Load;

(~~b~~ c) the minimum load of the Non-Dispatchable Load;

(~~c~~ d) contract start date; and

(~~d~~ e) contract end date.

The proposed amendments to new clause 2.29.5C will remove the current clauses specifying that a NDL can not be associated with more than one DSP at any one time. This clarification will be incorporated into new clause 2.29.5F, albeit adjusted to place

the obligation for ensuring this does not happen onto the IMO. The proposed amendments will require the IMO to notify the Market Customer that they have received their application within 1 Business Day and allow for any additional information required to make its decision on whether to approve the association of the NDL with the DSP to be requested.

2.29.5C. ~~A Market Customer may not associate a Non-Dispatchable Load with a Demand Side Programme where the Load is already an Associated Non-Dispatchable Load from the contract start date to the contract end date as specified in clauses 2.29.5B(c) and 2.29.5B(d).~~ The IMO must notify an applicant of the receipt of the application under clause 2.29.5B within one Business Day. The IMO may, at its discretion, require that an applicant provide information that is missing from the application or is inadequately specified. The date the requested information is submitted to the IMO becomes the date of receipt of the application.

The proposed amendments to new clause 2.29.5D will outline the requirement for the IMO to either approve or reject the application to associate the NDL with the DSP, dependent on the evidence provided under clause 2.29.5B or provided following a further request by the IMO under clause 2.29.5C.

2.29.5D. ~~The IMO must disassociate, in accordance with the Registration Market Procedure, a Non-Dispatchable Load from the relevant Demand Side Programme by the Trading Day after the date specified in clause 2.29.5B(d).~~

If the IMO considers that the evidence provided by the Market Customer under clauses 2.29.5B and 2.29.5C:

(a) is satisfactory, the IMO must approve the application to associate the Non-Dispatchable Load with the Demand Side Programme (**"Associated Non-Dispatchable Load"**); or

(b) is not satisfactory, the IMO must reject the application to associate the Non-Dispatchable Load with the Demand Side Programme.

The proposed amendments to new clause 2.29.5E will clarify that the IMO will make a decision to approve or reject an application to associate a NDL with a DSP within 10 Business Days. The proposed amendments will also require the IMO to provide reasons for rejecting an application and specify that a Market Customer may reapply to associate either the same NDL (where they can address the issues identified by the IMO) or an alternative NDL with the DSP.

2.29.5E. ~~If a Non-Dispatchable Load is either:~~

~~(a) associated with a Demand Side Programme in accordance with clause 2.29.5B; or~~

~~(b) disassociated with a Demand Side Programme in accordance with clause 2.29.5D,~~

~~during the contracted time that a Demand Side Programme has Reserve Capacity Obligations, as specified in clause 2.29.5B, the IMO must within 10 Business Days reset the Relevant Demand for that Demand Side Programme, in accordance with clause 4.26.2C.~~

The IMO must notify an applicant of its decision under clause 2.29.5D within 10 Business Days of the receipt of the application. If the IMO:

(a) has accepted an application the notification must include the date and time from which the Non-Dispatchable Load will be associated with the Demand Side Programme; or

(b) has rejected an application the notification must include the reasons for the rejection. A Market Customer whose application is rejected may reapply to associate a Non-Dispatchable Load with a Demand Side Programme under clause 2.29.5B.

The proposed amendments to new clause 2.29.5F will clarify that the IMO will be responsible to ensuring that a NDL is not associated with two DSPs during the same contract period. This requirement was previously incorporated into clause 2.29.5C, albeit with the requirement on the Market Customer not to associate the NDL with two DSPs. It is more appropriate that this obligation is placed on the IMO given that it is best placed to be able to identify whether a NMI is associated with two DSPs at any one time.

2.29.5F. ~~At any time before 1 October 2011 a Market Participant that has a registered Demand Side Programme with Capacity Credits associated with it for a future Reserve Capacity Year may, in accordance with Registration Procedure, disaggregate the Loads associated with the Demand Side Programme and associate them with other Demand Side Programmes that are registered to that Market Participant for those Reserve Capacity Years.~~ A Non-Dispatchable Load may be associated with only one Demand Side Programme at a time. If a Market Customer makes an application under clause 2.29.5B in connection with a Non-Dispatchable Load that is already associated with a Demand Side Programme for a period between the dates specified in clauses 2.29.5B(d) and 2.29.5B(e), the IMO will not approve the further application to associate the Non-Dispatchable Load with a Demand Side Programme during the same period.

The proposed amendments to new clause 2.29.5G will clarify that a NDL will cease to be associated with a DSP from the start of the Trading Day specified as the end date for the contract. This requirement was previously incorporated into clause 2.29.5D. The IMO has also incorporated a clarification that a NDL will cease to be associated with a DSP from the start of the Trading Day notified to the IMO by the Market Participant if an earlier date than the contract end date is required. The proposed amendment will also clarify that where a Market Customer wishes to no longer associate a NDL with a DSP prior to the contracted end date, it must provide a date from which the NDL will cease to be associated with the DSP which must be at least 10 Business Days after the notice has been provided to the IMO.

2.29.5G. ~~From 1 October 2011 where a Load that was registered as a Curtailable Load has Capacity Credits associated with it for a future Reserve Capacity Year, the Load will be deemed to be a Non-Dispatchable Load associated with the Demand Side Programme registered by the Market Participant under clause 2.29.5H for those Reserve Capacity Years.~~ A Non-Dispatchable Load will cease to be associated with a Demand Side Programme from the date specified in clause 2.29.5B(e). A Market Customer may notify the IMO that a Non-Dispatchable Load will cease to be associated with a Demand Side Programme from an earlier date, being at least 10 Business Days after the notice is given. The Non-Dispatchable Load will cease to be associated with the Demand Side Programme from the start of the Trading Day from the earlier of the date specified in the notice or the date specified in clause 2.29.5B(e).

The proposed amendments to new clause 2.29.5H will incorporate the clarification that the IMO will reset a DSPs RD within 10 Business Days of the start date of a contract or where an NDL ceases to be associated with a DSP that was previously included in clause 2.29.5E.

The proposed amendment will also require the IMO to reset the RD for a DSP prior to the beginning of a Capacity Year where the DSP has capacity obligations.

2.29.5H. ~~From 1 October 2011 where a Load that was registered as a Curtailable Load is deemed to be a Non-Dispatchable Load in accordance with clause 2.29.5G, the Market Participant that had registered that Curtailable Load must register a Demand Side Programme in accordance with the process specified in the Registration Procedure and the IMO must allocate the Reserve Capacity obligations, rights and liabilities previously belonging to that Curtailable Load to the Demand Side Programme.~~ The IMO must reset the Relevant Demand for a Demand Side Programme in accordance with clause 4.26.2C:

(a) within 10 Business Days of the contract start date specified in clause 2.29.5B(d), where a Non-Dispatchable Load is associated with a Demand Side Programme in accordance with clause 2.29.5D(a);

(b) within 10 Business Days of the start of the Trading Day beginning on the date specified in clause 2.29.5G, where a Non-Dispatchable Load ceases to be associated with a Demand Side Programme; or

(c) prior to the beginning of a Reserve Capacity Year for which the Demand Side Programme has been assigned Capacity Credits by the IMO.

The proposed amendments to new clause 2.29.5I will incorporate the previous transitional clause that was specified in clause 2.29.5F. The proposed amendments will clarify that prior to 1 October 2011 a Market Participant that already has a DSP may disaggregate the Loads comprising that programme and reallocate them to other DSPs belonging to that Market Participant. The Market Participant must subsequently advise the IMO of the Loads associated with each DSP. Further details of the process

associated with the transitional amendments will be included in the Registration Procedure to be developed in conjunction with the IMO Procedure Change and Development Working Group.

2.29.5I. At any time before 1 October 2011 a Market Participant that has a Demand Side Programme with Capacity Credits associated with it for a future Reserve Capacity Year may disaggregate the Loads associated with the Demand Side Programme and advise the IMO that they are associated with other Demand Side Programmes that are registered to that Market Participant for that Reserve Capacity Year.

The proposed amendments to new clause 2.29.5J will incorporate the previous transitional clause that was specified in clause 2.29.5G. No changes to the contents of this transitional clause have been proposed by the IMO.

2.29.5J. From 1 October 2011 where a Load that was registered as a Curtailable Load has Capacity Credits associated with it for a future Reserve Capacity Year, the Load will be deemed to be a Non-Dispatchable Load associated with the Demand Side Programme registered by the Market Participant under clause 2.29.5K for those Reserve Capacity Years.

The proposed amendments to new clause 2.29.5K will incorporate the previous transitional clause that was specified in clause 2.29.5H. No change to the contents of this transitional clause have been proposed by the IMO.

2.29.5K. By 1 October 2011 where a Load that was registered as a Curtailable Load will be deemed to be a Non-Dispatchable Load under clause 2.29.5J, the Market Participant that had registered that Curtailable Load must register a Demand Side Programme in accordance with the process specified in the Registration Procedure and the Reserve Capacity obligations, rights and liabilities previously belonging to that Curtailable Load will transfer to the Demand Side Programme.

The proposed amendments to clause 2.29.8A will clarify that it is the relevant Rule Participants responsibility to ensure that an Interruptible Load, Dispatchable Load or Non-Dispatchable Load is equipped with an interval meter.

2.29.8A. To be registered, or associated with a Demand Side Programme under clause 2.29.5E (a), a Rule Participant must ensure that the following Loads ~~must be~~ are equipped with interval meters:

(a) Interruptible Loads;

(b) Dispatchable Loads; and

(c) Non-Dispatchable Loads.

The proposed amendment to clause 2.29.8B will completely remove this clause as it is not necessary to continue to maintain this clause as a place holder in the Market Rules. This will improve the integrity of the Market Rules.

~~2.29.8B. [Blank]~~

The proposed amendments to clause 2.29.9A will clarify that the minimum notice period required for dispatch of a DSP is specified in Standing Data.

2.29.9A. The IMO must not register a Demand Side Programme where the minimum notice period required for dispatch exceeds four hours as specified in Standing Data.

The proposed amendment to clause 2.29.9B will completely remove this clause as it is not necessary to continue to maintain this clause as a place holder in the Market Rules. This will improve the integrity of the Market Rules.

~~2.29.9B [Blank]~~

The proposed amendment to clause 2.29.9C will completely remove this clause as it is not necessary to continue to maintain this clause as a place holder in the Market Rules as it is as the end of a section. This will improve the integrity of the Market Rules.

~~2.29.9C [Blank]~~

The proposed new clause will require the IMO to document the process for Market Participants to transfer their existing Curtailable Loads into DSPs in accordance with new clauses 2.29.5I – 2.29.5K.

The IMO notes that this new Market Procedure will be developed in conjunction with the IMO Procedure Change and Development Working Group during the second consultation period for RC_2010_29. Any Amending Rules resulting from RC_2010_29 would commence at the same time as the new Market Procedure to ensure that Market Participants are provided sufficient time prior to 1 October 2011 to complete any registration or transfer activities required.

2.31.23A. The IMO must document the process for the IMO and Market Participants to follow prior to 1 October 2011 for registering a Demand Side Programme and associating a Load registered as a Curtailable Load to that Demand Side Programme in the Registration Procedure, and:

(a) the IMO must follow that documented Market Procedure when processing applications; and

(b) Market Participants must follow that documented Market Procedure when applying to:

i. register a Demand Side Programme;

ii. associate and cease to associate a Load registered as a Curtailable Load with that Demand Side Programme; or

iii. disaggregate a Curtailable Load currently associated with a Demand Side Programme.

The proposed minor amendments to clause 2.33.1 will improve the integrity of the Market Rules.

2.33.1. The Rule Participant registration form must ~~requires~~ an applicant for registration as a Rule Participant to provide the following information, and the applicant must provide the information required:

…

(h) if the application relates to the sale of electricity to Contestable Customers by an applicant for the Market Customer class:

i. evidence that the applicant holds an Arrangement for Access for the purpose of taking power from the electricity grid; and

ii. the information described in Appendix 1(f);

…

The proposed minor amendment to clause 2.33.4 will improve the integrity of the Market Rules.

2.33.4. The Facility de-registration form prescribed by the IMO must require that the applicant provide the following:

…

(e) a proposed date on which that Registered Facility is to cease to be registered in the name of that Rule Participant where that date must be;

…

ii. the date the application is accepted in the event that the Facility has been rendered permanently inoperable; and

~~iii.~~

…

The proposed minor amendment to clause 3.17.5 will improve the integrity of the Market Rules.

3.17.5. Unless otherwise directed by System Management, Rule Participants must, before 10 AM every Thursday, submit information to System Management, consisting of:

…

(c) for a Market Customer, information about the availability over the next Short-Term PASA Horizon of all its Registered Facilities ~~which~~ that are Loads or Demand Side Programmes and demand forecasts for any other load facilities designated as significant by System Management.

The IMO does not propose to amend sub-clause 4.1.26(a) to remove the term CL as these specifications from when Reserve Capacity Obligations apply are not longer relevant. That is they have be superseded by the specifications in sub-clause 4.1.26(c).

The IMO has included this clarification in the Draft Rule Change Report for completeness only.

4.1.26. Reserve Capacity Obligations apply:

(a) in the case of the first Reserve Capacity Cycle:

i. from the Initial Time, for Facilities that were commissioned before Energy Market Commencement;

ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), for Scheduled Generators and Non-Scheduled Generators commissioned between Energy Market Commencement and 30 November 2007, inclusive; and

iii. from the Trading Day commencing on 1 October 2007 for Interruptible Loads, Curtailable Loads or Dispatchable Loads commissioned after Energy Market Commencement; and

(b) for subsequent Reserve Capacity Cycles up to and including 2009:

i. from the Trading Day commencing on 1 October of Year 3, for Facilities that were commissioned as at the scheduled time of the Reserve Capacity Auction for the Reserve Capacity Cycle as specified in clause 4.1.18(a) or for Facilities which have provided Capacity Credits in one or both of the two previous Reserve Capacity Cycles;

ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A or clause 4.27.11D, for Facilities commissioned between 1 August of Year 3 and 30 November of Year 3; and

iii. from the Trading Day commencing on 30 November of Year 3, for new generating systems undertaking Commissioning Tests after 30 November of Year 3; and

(c) for subsequent Reserve Capacity Cycles from 2010 onwards:

i. from the Trading Day commencing on 1 October of Year 3, for Facilities that were commissioned as at the scheduled time of the Reserve Capacity Auction for the Reserve Capacity Cycle as specified in clause 4.1.18(a) or for Facilities which have provided Capacity Credits in one or both of the two previous Reserve Capacity Cycles;

ii. from the Trading Day commencing on the scheduled date of commissioning, as specified in accordance with clause 4.10.1(c)(iii)(7), or as revised in accordance with clause 4.27.11A or clause 4.27.11D, for Facilities commissioned between 1 June of Year 3 and 1 October of Year 3; and

iii. from the Trading Day commencing on 1 October of Year 3, for new generating systems undertaking Commissioning Tests after 1 October of Year 3.

The proposed amendment to clause 4.8.3 will completely remove this clause as it is not necessary to continue to maintain this clause as a place holder in the Market Rules as it is as the end of a section. This will improve the integrity of the Market Rules.

~~4.8.3. [Blank]~~

The proposed amendment to clause 4.10.1 will clarify that the required information will only be provided by each Market Participant and not multiple parties. Further changes to this clause are proposed under the Rule Change Proposal: Certification of Reserve Capacity (RC_2010_14). These have not been reflected in the drafting as presented below as they relate to alternative sub-clauses and do not impact on the intent to the changes proposed under RC_2010_29.

The IMO has also amended the references to blocks to ensure that availability information is supplied for the DSP. This is consistent with the concept of blocks only applying for the purposes of bidding into the Reserve Capacity Auction.

4.10.1. ~~The~~ Each Market Participant must ensure that information to be submitted to the IMO with an application for certification of Reserve Capacity pertains to the Reserve Capacity Cycle to which the certification relates and includes:

…

(c) if the Facility, or part of the facility, is yet to enter service:

iii. key project dates occurring after the date the request is submitted, including, as applicable, but not limited to:

1. when all approvals will be finalised or, in the case of Interruptible Loads and Demand Side Programmes all required contracts will be in place;

…

5. when generating equipment or Dispatchable Load equipment will be installed or, in the case of Interruptible Loads and Demand Side Programmes, all required control equipment will be in place;

….

(f) for Interruptible Loads, Demand Side Programmes and Dispatchable Loads~~, details for each of up to three blocks of capacity of~~:

i. the Reserve Capacity the Market Participant expects to make available from each of up to 3 blocks of capacity;

ii. the maximum number of hours per year the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity, where this must be ~~not less than~~ at least 24 hours;

iii. the maximum number of hours per day that the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity if called, where this must be:

1. not less than four hours; and
2. not more than the total of the periods specified in sub-clause (vi);

iv. the maximum number of times the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load can be called to provide Reserve Capacity during a 12 month period, where this must be at least six times;

v. the minimum notice period required for dispatch of the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load, where this must not be more than 4 hours; and

vi. the periods when the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load can be dispatched, which must include the period between noon and 8:00pm on all Business Days~~.~~;

…

The proposed removal of clause 4.11.4 is consistent with the concept that blocks of capacity will only apply for the purposes of an auction. Any CRC assigned will be to the DSP.

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:

…

(j) the Certified Reserve Capacity for a Demand Side Programme for a Reserve Capacity Cycle must not exceed the IMO's reasonable expectation of the amount of capacity likely to be available from that Facility ~~for each block~~ during ~~each of~~ the periods specified in clause 4.10.1 (f)(vi), after netting off capacity required to serve minimum loads, from the Trading Day starting on 1 October in Year 3 of the Reserve Capacity Cycle to the end of July in Year 4 of the Reserve Capacity Cycle.

The proposed removal of clause 4.11.4 is consistent with the concept that blocks of capacity will only apply for the purposes of an auction. Any CRC assigned will be to the DSP.

4.11.4 ~~When assigning Certified Reserve Capacity to a block of capacity provided by any Interruptible Load, Demand Side Programme or Dispatchable Load, the IMO must indicate what Availability Class is applicable to that Reserve Capacity. The~~

~~Availability Class must reflect the maximum number of hours per year that the capacity will be available and must not be Availability Class 1.~~[Blank]

The proposed amendment to clause 4.11.4A will completely remove this clause as it is not necessary to continue to maintain this clause as a place holder in the Market Rules as it is as the end of a section. This will improve the integrity of the Market Rules.

~~4.11.4A. [Blank]~~

The proposed amendment to clause 4.12.4 will remove the reference to blocks of capacity for DSPs, Interruptible Loads and Dispatchable Load. This is consistent with the concept of blocks only applying for the purposes of bidding into the Auction and not when assessing performance of DSPs against their capacity obligations (RCOQs).

4.12.4. Subject to clause 4.12.5, where the IMO establishes the initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:

(a) the Reserve Capacity Obligation Quantity must not exceed the Certified Reserve Capacity held by the Market Participant for the Facility;

…

(c) for Interruptible Loads, Demand Side Programmes and Dispatchable Loads, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity ~~for each block~~:

i. will equal zero once the capacity ~~from the block~~ has been dispatched for the number of hours per year that are specified under clause 4.10.1(f)(ii);

ii. will equal zero for the remainder of a Trading Day in which the capacity ~~from the block~~ has been dispatched for ~~a~~ the number of hours per day that are specified under clause 4.10.1(f)(iii);

iii. will equal zero once the capacity ~~from the block~~ has been dispatched the maximum number of times per year that are specified under clause 4.10.1(f)(iv) excluding where the Facility has been requested to perform a Reserve Capacity test in accordance with clause 4.25; ~~and~~

iv. must account for staffing and other restrictions on the ability of the Facility to curtail energy upon request~~.~~; and

v. will equal zero for intervals which fall outside of the period specified in clause 4.10.1(f)(vi).

The proposed amendments to clause 4.14.1 will remove the reference to blocks of capacity existing after CRC.

4.14.1. Subject to clause 4.14.3, each Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle must, by the date and time specified in clause 4.1.14, provide the following information to the IMO for each Facility ~~or, in the case of Interruptible Loads,~~ Demand Side Programmes

~~and Dispatchable Loads with at least two blocks holding Certified Reserve Capacity in different Availability Classes, for each block in respect of which it holds Certified Reserve Capacity~~ (expressed in MW to a precision of 0.001 MW):

The proposed typographical amendment to clause 4.25.1 will improve the integrity of the proposed Amending Rules.

4.25.1. The IMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing Capacity Credits can:

(a) in the case of a generation system, during the term the Reserve Capacity Obligations apply, operate at its maximum Reserve Capacity Obligation Quantity 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) 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~~.~~; and

(c) in the case of a Demand Side Programme, during the term the Reserve Capacity Obligations apply, and during the period specified in clause 4.10.1(f)(vi), operate at its maximum Reserve Capacity Obligation Quantity at least once during the period between 1 October to 31 March.

The proposed typographical amendment to clause 4.25.2 will improve the integrity of the proposed Amending Rules.

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 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 for not less than 60 minutes and the Facility successfully passing that test; and

ii. in the case of Interruptible Loads, Demand Side Programmes 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 for not less than one Trading Interval and the Facility successfully passing that test.

The proposed amendment will remove the reference to a CL currently included in clause 4.25.3B and replace this with DSP.

4.25.3B. If a ~~Curtailable Load~~ Demand Side Programme fails a Reserve Capacity test under clause 4.25.2(b) and is activated prior to a second Reserve Capacity test being undertaken in accordance with clause 4.25.4 then the activation shall be deemed to be the second Reserve Capacity test.

The proposed amendment to clause 4.25.4E will improve the integrity of the proposed Amending Rules by clarifying that a capacity refund to be paid by a Market Participant must be of an amount equal to all Reserve Capacity Payments associated with a reduction in CCs for the Capacity Year as calculated under the provisions specified in clause 4.26.

4.25.4E. Where the Capacity Credits associated with a Demand Side Programme are reduced in accordance with clause 4.25.4C the Market Participant must pay a refund of an amount equal to all Reserve Capacity Payments associated with the reduced Capacity Credits for the relevant Reserve Capacity Year to the IMO calculated in accordance with the provisions of clause 4.26.

The proposed minor amendments to clause 4.25.9 will improve the integrity of the Market Rules.

4.25.9. In conducting a test, System Management must:

(a) subject to paragraphs (b), (c) and (d), endeavour to conduct the test without warning;

(b) allow sufficient time for the Market Participant to schedule fuel that it is not required under these Market Rules to be stored on-site;

(c) allow sufficient time for switching a Facility from one fuel to an alternative fuel if operation using the alternative fuel is being tested;

(d) in the case of an Interruptible Load or a Demand Side Programme, give at least as much notice as is specified under clause 4.10.1(f)(v) to allow for arrangements to be made for the Facility to be triggered;

(e) report to the IMO whether the test was successfully performed;

(f) maintain adequate records of the test to allow independent verification of the test results; and

(g) conduct the test in the time interval specified by the IMO in accordance with clause 4.25.7(c) unless System Management has notified the IMO of an alternative time interval in accordance with clause 4.25.8, in

which case, System Management must conduct the test in the time interval specified in accordance with clause 4.25.8(b).

The proposed amendment to clause 4.25A.1 will make the requirement for Verification Tests to be conducted in accordance with the Market Procedure more explicit and clarify that the requirement is for each Market Customer to undertake the Verification Test.

4.25A.1. In each Reserve Capacity Year ~~a~~ each Market Customer must undertake a Verification Test~~, in accordance with the Reserve Capacity Procedure,~~ during the period specified in clause 4.10.1(f)(vi) for each Demand Side Programme registered to the Market Customer. Each test must be conducted in accordance with the Reserve Capacity Procedure and be carried out:

(a) within 20 Business Days of registration, as notified by the IMO under clause 2.31.6, of the Demand Side Programme, if applicable; or

(b) between 1 October and 30 November.

The proposed minor amendment to clause 4.25A.2 will improve the integrity of the Market Rules.

4.25A.2. To undertake a Verification Test ~~the~~ a Market Customer must activate the Demand Side Programme and provide evidence satisfactory to the IMO of the Trading Intervals during which the Verification Test was conducted.

The proposed amendments to clauses 4.25A.3 and 4.25.A.4 will more clearly define the circumstances under which a Verification Test will be deemed to have been failed and the subsequent requirement for the IMO to reduce the DSPs Capacity Credits.

4.25A.3. A Demand Side Programme will be deemed to have failed the ~~The~~ Verification Test ~~is failed if~~ unless a reduction in demand equal to at least 10% of the Capacity Credits, when measured against the Demand Side Programme's Relevant Demand determined under clause 4.26.2C, is ~~not~~ identified from the Demand Side Programme Load associated with that Demand Side Programme.

4.25A.4. Where a Demand Side Programme fails a Verification Test ~~is failed~~ the IMO must reduce the Capacity Credits assigned to the Demand Side Programme to zero from the second Trading Day following the Scheduling Day on which the failure of the Verification Test under clause 4.25A.3 occurred.

The proposed amendments to clause 4.25A.5 will clarify the ability for a DSP which fails its first Verification Test to be able to request a second be undertaken.

4.25A.5. Where ~~the~~ a Demand Side Programmes fails a Verification Test ~~is failed~~ the relevant Market Participant may request that a second Verification Test be undertaken. If the Demand Side Programme fails ~~this~~ the second Verification Test then the Capacity Credits assigned to the Demand Side Programme are to remain at zero until the end of the relevant Reserve Capacity Year.

The proposed amendments to clause 4.26.1A will improve clarify that if a negative value is determined under sub-clause (viii) then the IMO will set the value equal to zero. The proposed amendments will also rename the clause to better reflect that this calculates the refund for each Facility resulting from an overall capacity deficit and not just as the result of a Facility experiencing a Forced Outage.

The proposed amendment will also correct the reference to the minimum load specified in clause 2.29.5(c). This update is required given the IMO's proposed further clarification of the registration rules associated with DSPs.

4.26.1A. The IMO must calculate the ~~Forced Outage~~ Reserve Capacity Deficit refund for each Facility ("**~~Facility Forced Outage Refund~~ Facility Reserve Capacity Deficit 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~~ Reserve Capacity Deficit in Trading Interval t,

where the ~~Forced Outage Shortfall~~ Reserve Capacity Deficit 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, 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 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; or

vii. if the Facility is a Demand Side Programme, the amount that the Relevant Demand minus the sum of the values specified in clause 2.29.5B(~~b~~ c) of the Associated Non-Dispatchable Loads is less than the Reserve Capacity Obligation Quantity determined for ~~Capacity Credits assigned to~~ that Facility under clause 4.12.4, where if this amount is a negative ~~must be a positive~~ value the IMO will ~~or be~~ set the value to zero ~~by the IMO.~~; 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~~ Facility Reserve Capacity Deficit Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year.

The proposed amendment to clause 4.26.1B is consistent with the IMO's clarification that clause 4.26.1A relates to any form of capacity deficit from a Facility and not just where a Forced Outage occurred.

4.26.1B. The IMO must calculate the ~~Forced Outage~~ Reserve Capacity Deficit R~~r~~efund for each Market Participant ("**Participant ~~Forced Outage Refund~~ Reserve Capacity Deficit Refund**") as the sum of the Facility ~~Forced Outage~~ Reserve Capacity Deficit Refunds for each Facility registered to the relevant Market Participant.

The proposed amendments to clause 4.26.2C will restructure the clause to improve its integrity. The proposed amendments will also update the reference to clause 2.29.5H. The proposed amendments will also clarify that a RD value would apply at a point in time rather than multiply RD values potentially applying in a Capacity Year where the RD has been updated multiple times.

4.26.2C. The IMO must set the Relevant Demand to apply at a point in time in accordance with clause 4.26.2CA ,4.26.2CB, or 4.26.2CC (whichever applies):

(a) prior to the start of a Reserve Capacity Year for which a Demand Side Programme will have Reserve Capacity Obligations;

(b) at the request of a Market Customer who has a registered Demand Side Programme with Reserve Capacity Obligations for the current Reserve Capacity Year; or

(c) in accordance with clause 2.29.5~~E~~H~~,~~.

~~set the Relevant Demand in accordance with clause 4.26.2CA ,4.26.2CB, or 4.26.2CC, whichever is relevant.~~

The proposed amendment to clause 4.26.2CA will clarify that the RD will be expressed as a positive number.

4.26.2CA. Subject to clause 4.26.2C, the IMO must set the Relevant Demand for a Demand Side Programme equal to the median of the Demand Side Programme Load, determined in accordance with clause 6.16.2, multiplied by two during the 12 peak Trading Intervals described in Appendix 5 Step 1 where the Relevant Demand is expressed as a positive number.

The proposed amendment to clause 4.26.2CB will update the reference to the clause under which the IMO approves the association of a NDL with a DSP. This update is required given the IMO's proposed further clarification of the registration rules associated with DSPs.

4.26.2CB. Where the metered consumption for an Associated Non- Dispatchable Load during the 12 Trading Intervals identified in clause 4.26.2CA is not available or is considered by the IMO to be inappropriate, the IMO must set the Metered Schedule for that load to be used in the Relevant Demand calculation in 4.26.2CA based on the latest median of the 4 peak Trading intervals described in Appendix 5 Step 5 at the time the Non-Dispatchable Load is associated with the Demand Side Programme under clause 2.29.5~~B~~D.

The proposed amendments to clause 4.26.2CC will clarify that the evidence provided by a Market Customer must relate to a DSP that is registered to that same Market Customer. The proposed amendments will also clarify that the IMO's estimate is of what the DSPs consumption would have otherwise been during the period had it not been requested by System Management.

4.26.2CC. ~~Where the~~ If a Market Customer provides evidence satisfactory to the IMO ~~the~~ that a Demand Side Programme registered to that Market Customer was operating at below capacity due to its consumption being reduced at the request of System Management during one or more of the Trading Intervals identified in clause 4.26.2CA or 4.26.2CB, whichever applies ~~is applicable~~, the IMO must set the Relevant Demand based on the IMO's estimate of what the Demand Side Programme's consumption would have been during those intervals.

The proposed minor amendment to clause 4.26.2D will improve the integrity of this clause.

4.26.2D. The IMO must determine the capacity shortfall in Reserve Capacity ("Capacity Shortfall") supplied by each Market Participant p holding Capacity Credits associated with a Demand Side Programme in each Trading Interval t of Trading Day d and Trading Month m relative to its Reserve Capacity Obligation Quantity as:

(a) where System Management has issued a Dispatch Instruction to the Demand Side Programme for the Trading Interval as advised to the IMO by System Management under clause 7.13.1:

i. zero; if negative two multiplied by the Demand Side Programme Load is less than the Relevant Demand set in clause 4.26.2C minus the Capacity Credits assigned to the Demand Side Programme;

ii. the greater of:

1. zero, or

2. the required decrease, in MW, minus the load reduction, where the load reduction is equal to the Relevant Demand set in clause 4.26.2C minus negative two multiplied by the Demand Side Programme Load for the Trading Interval,

if the Capacity Credits assigned to the Demand Side Programme are greater than the Dispatch Instruction for the Trading Interval; or

iii. negative two multiplied by the Demand Side Programme Load plus the Capacity Credits assigned to the Demand Side Programme minus the Relevant Demand set in clause 4.26.2C; and

(b) [Blank]; ~~and~~

(c) zero where System Management has not issued a Dispatch Instruction to the Demand Side Programme for the Trading Interval as advised to the IMO by System Management under clause 7.13.1.

The proposed amendment to clause 4.26.3 is consistent with the IMO's clarification that clause 4.26.1A relates to any form of capacity deficit from a Facility and not just where a Forced Outage occurred.

4.26.3. The Capacity Cost Refund associated with a generation system is the lesser of:

(a) the Maximum Participant Refund determined in accordance with the Refund Table, less all Capacity Cost Refunds applicable to the Market Participant in previous Trading Months falling in the same Capacity

Year as Trading Month m; and

(b) the Participant ~~Forced Outage~~ Reserve Capacity Deficit Refund plus the sum over all Trading Intervals t in Trading Month m of the Net STEM Refund,

where the Net STEM Refund is the product of:

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

ii. the Net STEM Shortfall in Trading Interval t.

The proposed amendments to clause 4.26.3A are required for consistency with the change to the name of the refund calculation under clause 4.26.1A

4.26.3A. The Capacity Cost Refund associated with a Demand Side Programme is equal to the lesser of:

(a) twelve times the Monthly Reserve Capacity Price multiplied by the number of Capacity Credits associated with the Facility, less all Capacity Cost Refunds applicable to the Market Participant in previous Trading Months falling in the same Capacity Year as Trading Month m; and

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

i. 12 * Monthly Reserve Capacity Price * S / (2 * H)

Where:

S is the Capacity Shortfall in MW determined in accordance with clause 4.26.2D in any Trading Interval; and

H is the maximum number of hours that the Facility was certified to be available in accordance with clause 4.10.1(f)(ii)~~.~~

plus;

ii. the Facility ~~Forced Outage~~ Reserve Capacity Deficit Refund determined in accordance with clause 4.26.1A.

The proposed amendments to clause 6.15.2 will revert to the original structure of this clause in the Market Rules. The IMO considers that this is clearer than the alternative structure proposed.

6.15.2. The Dispatch Schedule for a Trading Interval equals the corresponding Metered Schedule, ~~F~~for any of the following Facilities:

(a) a Non-Scheduled Generator;

(aA) a Scheduled Generator to which clauses 3.21A.14 or 4.25.10 apply;

(b) a Non-Dispatchable Load;

(c) [Blank]

(d) an Interruptible Load;

(e) a Scheduled Generator or Dispatchable Load registered by the Electricity Generation Corporation; and

(f) a Scheduled Generator or Dispatchable Load registered by a Market Participant (other than the Electricity Generation Corporation) where a Dispatch Instruction of the type described in clause 7.7.3(d)(ii) was issued to the Market Participant in respect of the Facility.~~,~~

~~the Dispatch Schedule for a Trading Interval equals the corresponding Metered Schedule~~.

The proposed amendment to clause 7.7.3 will specify that where ramp rate information is available for a Facility this will be stated in the Dispatch Instruction. The proposed amendments will also clarify that sub-clause (d) iii. relates to a required decrease in consumption. This is required to ensure that the directional movement of output following curtailment of a DSP is correctly stated – that is a decrease in generation would result in quite a different market outcome.

7.7.3. Each Dispatch Instruction must contain the following information:

(a) the Registered Facility to which the Dispatch Instruction relates;

(b) the time the Dispatch Instruction was issued;

(c) the time by which response to the Dispatch Instruction is required to commence (which must not be earlier than the time it was issued, except as contemplated by clause 7.7.7(b));

(d) the required level of sent out generation or consumption which may be any one of the following:

i. a target MW output;

ii. a minimum MW level; or

iii. a required decrease in consumption (in MW); and

(e) the ramp-rate to maintain until the required level of sent out generation or consumption is reached, if a ramp rate has been identified in Standing Data.

The proposed amendments to clause 7.7.10 will clarify that a Dispatch Instruction to a DSP may only be revoked where the further instruction is provided at least four hours prior to taking effect and that the original instruction was to curtail demand for a period greater two hours. The IMO has also incorporated some further changes to improve the consistency of the language used in section 7.7 regarding a DSP "decreasing its consumption".

7.7.10. When System Management has issued a Dispatch Instruction to a Demand Side Programme to ~~reduce demand~~ decrease its consumption System Management ~~it~~ may issue a further instruction terminating the requirement for

the Demand Side Programme to ~~reduce~~ ~~demand~~ decrease ~~-~~its consumption providing that:

(a) the further instruction is issued at least four hours before it is to come into effect, and

(b) ~~The~~ the minimum period for which the Demand Side Programme is instructed to ~~reduce demand~~ decrease its consumption is not less than two hours.

The proposed amendments to Appendix 1 will allow for details of normal and emergency ramp rates for DSPs to be specified if applicable. The proposed changes will also allow for information provided by the Market Participant during certification on the maximum number of hours a year the DSP is available, the times of its availability and any restrictions on its availability. The IMO notes that information on the most recent CRC for the Facility is currently provided under sub-clause (k)

Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by the IMO for use by the IMO in market processes and by System Management in dispatch processes.

Standing Data required to provided as a pre-condition for Facility Registration, and which is to be updated by Rule Participants as necessary, is described by clauses (a) to (j).

Standing Data not required to be provided as a pre-condition for Facility Registration but that which is required to be maintained by the IMO includes the data described in clauses (k) onwards.

(a) for a Network:

…

(h) for a Demand Side Programme:

i. [Blank];

ii. evidence that the communication and control systems required by clause 2.35 are in place and operational;

iii. the maximum amount of load that can be curtailed;

iv. the maximum duration of any single curtailment;

v. [Blank];

vi. for a facility that is registered to a Market Participant other than the Electricity Generation Corporation, Standing Balancing Data comprising;

1. a Consumption Decrease Price for Peak Trading Intervals; and

2. a Consumption Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of $/MWh to a precision of $0.01/MWh; ~~and~~

vii. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output~~.~~;

viii. the maximum number of hours per year the Demand Side Programme can be curtailed;

ix. the Trading Intervals where the Demand Side Programme can be curtailed;

x. any restrictions on the availability of the Demand Side Programme;

xi. the normal ramp up and ramp down rates as a function of output level, if applicable; and

xii. emergency ramp up and ramp down rates, if applicable.

…

(k) For each Registered Facility:

i. Reserve Capacity information including:

…

5. for Interruptible Loads and Demand Side Programmes, the maximum number of times that interruption can be called during the term of the Capacity Credits;

…

The proposed amendment to the definition of an Associated NDL has been updated to reflect the restructuring and greater clarification of the registration rules proposed by the IMO. In particular, clause 2.29.5D is now proposed to specify the circumstances under which a NDL becomes an Associated NDL.

Associated Non-Dispatchable Load: Has the meaning given in clause 2.29.5~~B~~D

The proposed amendment to the definition of a Capacity Cost Refund will correct a current minor and typographical error with this definition only relating to generating systems and not to DSPs.

Capacity Cost Refund: Has the meanings given in clauses 4.26.3 and 4.26.3A.

The proposed amendments to the definition of Facility Forced Outage Refund, Forced Outage Shortfall and Participant Forced Outage Refund will reflect the IMO's clarifications that the refund calculated in clause 4.26.1A relates to any deficit in capacity made available by a facility and not just as a result of a Forced Outage.

Facility ~~Forced Outage~~ Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1A.

~~Forced Outage~~ Reserve Capacity Deficit Shortfall: Has the meaning given in clause 4.26.1A.

Participant ~~Forced Outage~~ Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1B.

APPENDIX 6: DISCUSSION AT THE MARKET ADVISORY COMMITTEE

The MAC discussed the proposal at the 12 May, 16 June, 11 August, 8 September and 10 November 2010 MAC meetings, and was presented a worked example of the dispatch of a peaker vs. a DSP at the 11 February MAC meeting. An overview of the discussion 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 it identified a number of issues and recommendations for consideration by the MAC.

The following points were raised.

- **Recommendation 1:** The Market Rules be changed so that a Market Participant other than the Market Customer is able to contract for the Reserve Capacity associated with CLs.
    - It was noted that registration of CLs only works for individual loads and not for aggregators. Mr Peter Huxtable queried whether the proposed change would create a new participant class. The IMO confirmed that this was the case[12].
    - Mr Stephen MacLean noted a concern with this recommendation as it takes control over a load away from a retailer by allowing a third party to transact with loads, and that by doing so it opens up the possibility of other transactions occurring. Mr Michael Zammit noted that Energy Response had no intention of selling energy to retail customers and that it was considered good not to be a retailer.
    - Mr MacLean noted a concern that aggregators are unregulated and that an aggregator could deceive a customer by failing to inform it of the obligations it would incur in return for the payments being offered. The Chair suggested that the Trade Practices Act may prohibit this type of behaviour. Mr Corey Dykstra noted that he shared Mr MacLean's concern that DSM aggregators are currently unregulated.
    - Mr Michael Zammit agreed with Mr MacLean's concerns about unregulated practices, noting that to provide rigour Energy Response holds an AFLS licence and is developing a code of conduct/ethics policy.
    - Mr Cremin noted that in general there were very strong licensing requirements for Market Customers and Market Generators, and that similar standards should be in place for DSM providers. Mr Zammit did not see any reason why aggregators should not be subject to some licensing and compliance requirements.
- **Recommendation 2:** The Market Rules be changed to create a new class of facility, known as a DSM Programme.
    - Mr MacLean suggested that a different capacity price should apply to DSM Programmes. The IMO commented that this had been considered in the past but there are some difficulties with this approach.
    - The MAC endorsed recommendation 2.

[12] The IMO notes that on further consideration it was determined that to reduce the complexity of the potential Market Rules it would be more appropriate to simply create a DSP as a type of Facility.

- **Recommendation 3:** The Market Rules be changed so that over-subscription of DSM Programmes is allowed.
    - The IMO noted that under the Market Rules it is not possible to have over-subscribed DSM Programmes. This presents a problem to DSM providers, who would prefer to over-subscribe programmes to ensure that curtailment requirements can be met. Mr MacLean noted that individual Loads can change retailer or else prove to be unreliable. Both problems mean that a DSM provider has to over-subscribe.
    - Mr MacLean stated that a mechanism was needed to ensure that what is offered by a DSM provider can be delivered. The Chair noted that the Market Rules will provide for a rigorous test regime from 1 October 2010.
    - The MAC endorsed recommendation 3.
- **Recommendation 4:** The Market Rules be changed so that DSM Providers pay Market Fees based on the quantity of energy dispatched for curtailment each year.
    - It was agreed that the Market Rules remain as they are regarding Market Fees for DSM Providers. Therefore the MAC did not endorse recommendation 4.
- **Recommendation 5:** The IMO undertake analysis to compare the three options (for the measurement of RD presented in the concept paper), with a view to basing the RD calculation on the consumption of the whole DSM Programme during the peak demand times over the Hot Season.
    - The IMO advised there are some issues regarding the RD calculation. It was agreed that the discussion on this would be postponed until a more detailed session on DSM issues was held.
- **Recommendation 6:** The Market Rules be changed so that a DSP consisting of one or more CLs, is liable to pay refunds if at any time the program is not filled completely. This includes times where this is the result of a component facility being on Forced Outage.
    - Mr Ken Brown queried whether the IMO intended to give DSM providers the opportunity to regain their accreditation. The IMO confirmed that this was the IMO's intention. Mr MacLean asked whether there would also be the option for a DSM provider to reduce its Capacity Credits if the requirement cannot be met. The IMO responded that this option already exists in the market.
    - It was agreed that a DSP should have the same obligations as a Market Generator, therefore a DSP consisting of one or more CLs, will be liable to pay refunds if at any time the program is not filled completely.
- **Recommendation 7:** A DSM Programme be considered as a single Facility for the purpose of evaluating a request for return of Reserve Capacity Security.
- **Recommendation 8:** The Market Rules be amended to ensure that equivalent treatment of all facilities with regard to the return of Reserve Capacity Security is achieved.
    - Mr MacLean noted that when a DSP achieved certification it did not necessarily imply that the DSP would continue to be able to meet its capacity obligations on an ongoing basis. Mr Zammit noted that testing is the aggregate of the Facility to 100%.
    - The MAC endorsed recommendations 7 and 8.

- **Recommendation 9:** The Market Rules be changed to remove Stipulated Default Loads.
    - The IMO advised that discussion of this issue will be addressed in conjunction with the discussion planned for Recommendation 5.

June 2010 Meeting

During the meeting the IMO noted that it had engaged DAA to assist with undertaking analysis of the options for measurement of RD. The IMO noted that DAA has undertaken an initial investigation. The IMO noted that DAA has been requested to undertake further analysis to determine which methodology best represents the curtailability of a DSM provider at peak demand times during the Hot Season.

The MAC noted that DAA will be undertaking further analysis of the identified methodologies for determining the RD level for CLs.

August 2010 Meeting

During the meeting the IMO presented additional analysis of the measurement options which had been completed. It was noted that the purpose of the analysis was to devise a methodology that was both stable (in that the same Facilities would receive similar RDs year on year) and reliable (in that the RD accurately represented the actual capacity that a Facility would be able to provide at the time of peak demand).

The following points were noted:

- The IMO noted that DAA's analysis had found that as more intervals were used in the calculations the RDs became more stable but less reflective of the available capacity at peak times. The most reliable indicator was found to be the IRCR method (i.e. the median of 12 Peak Trading Intervals for each Hot Season), while the current method was found to produce the second least reliable results.
- The IMO noted that DAA had also been asked to compare the current RD calculation technique (summing the RDs for individual Loads) with the proposed technique whereby a single RD would be calculated using the aggregated Load of a DSM Programme. DAA found no significant difference between the two techniques.
- The IMO noted that the IMO's recommendation was to use the IRCR method of calculation, applied to the aggregated load of a DSM Programme.
- Mr Dykstra questioned whether CLs would be dispatched at the Programme level or at the individual Load level. The IMO and Mr Ken Brown replied that it had been agreed previously that it would be better for System Management to dispatch at the DSP level.
- Mr Rhodes queried whether Recommendation 3 in the analysis paper presented implied that details of all the underlying facilities in a DSP would need to be uploaded into the WEMS. The IMO replied that it might need to see evidence of individual contracts, and would definitely need the NMIs of the contributing loads for RD assessment. The IMO noted that the original Reserve Capacity registration was for the DSP as a whole, while the RD assessment would consider all the NMIs in the DSP.
- Mr Rhodes queried how it would be possible to assess RD if the individual loads were not known. The IMO repeated that the original capacity certification

was not performed at the NMI level, and that an RD assessment did not need to be made at the time of the original certification. In response to a question from Mr MacLean, the IMO confirmed that a DSP would still be able to contract customers and register those facilities to provide DSM after the certification window closes through to the commencement of the relevant Capacity Year.

- Mr Huxtable queried how CL would be managed for the upcoming Capacity Year. The IMO noted that there was currently a great deal of uncertainty around CL, and that it would be working with DSM Providers on this matter.
- The IMO raised the issue of new loads without at least one year of historical interval data. The IMO noted that such loads would need to be considered, but suggested that they might be excluded from participation in a DSP.
- The MAC agreed with Recommendation 2 of the analysis paper, i.e. that the exclusion due to maintenance in clause 4.26.2C(d) of the Market Rules should be removed.
- Mr Sutherland noted that the dispatch of a CL resulted in both a Dispatch Instruction Payment to the DSP and an MCAP payment to the relevant retailer for the load reduction. Mr Sutherland considered that this could be another case of double dipping. The IMO advised that the IMO would look into this issue.

September 2010 Meeting

During the meeting the IMO noted that it was seeking the MAC's endorsement for the proposed solutions summarised in the CLs Project Update paper.

The following points were noted:

- The IMO noted that Issue 1 (registration of Curtailable Loads) and Issue 2 (Facility definition) were closely linked. The IMO submitted that System Management would prefer to dispatch a DSP as a single Facility, rather than needing to dispatch the individual loads comprising the DSP.
- The Chair considered that it would not be appropriate to dispatch each CL individually and asked MAC members whether they agreed with this view. Mr Dykstra considered that eventually this was a decision for the DSP, and that some DSPs may choose not to change their current practice of treating CLs individually. The IMO agreed that this practice would be allowed, but noted that System Management might object if in future it had a large number of CLs to be dispatched individually.
- Mr Dykstra suggested that if a DSP wanted to register for Reserve Capacity but not be dispatched, it might choose to register many small, individual loads to make the dispatch of these loads less attractive. The IMO noted that it had discussed using blocks of DSM dispatch with System Management. This option is not currently part of the IMO's proposal, but the IMO may consider it in future if necessary. The Chair suggested that an action item be created for the IMO to re-examine the issue in six months' time.
- The IMO noted that a CL can be registered to a DSP that is not the energy retailer for that load. The IMO submitted that while there is no problem with the actual registration of the load, the rest of the Market Rules do not deal with this situation. The IMO noted the IMO's proposed solution is to remove the concept of a CL as a Registered Facility from the Market Rules and replace it with the concept of the DSP being the Registered Facility. The DSP will then have its component loads associated with it for the purposes of capacity obligations and

dispatch. Mr Pablo Campillos suggested that in effect there was a need for a Capacity NMI and an energy NMI.

- Mr Sutherland queried what would happen if some of the loads comprising a DSP reduced load during a dispatch event while other loads in the same DSP actually increased load. Mr Ken Brown responded that the overall reduction of all the loads in the DSP would be considered, and that DSM Providers will need to manage their portfolios accordingly. Mr Sutherland queried why, if DSM Providers were able to aggregate across their loads, generators were not also able to aggregate across their Facilities.
- Mr Sutherland reminded the MAC of the potential double dipping issue he raised in the August 2010 MAC meeting, regarding Dispatch Instruction and energy payments for CLs. Mr MacLean noted that he had also raised the issue with the IMO. There was some discussion about whether pay as bid Dispatch Instruction payments for DSPs are warranted, given that no additional energy is being generated.
- The Chair suggested that the IMO prepare a worked example comparing the costs of a peaker generator against the DSM option. In response to a query from Mr Campillos, the IMO clarified that the example would give a high level comparison of the overall costs to the market of each option.

November 2010 Meeting

During the meeting the IMO presented the Pre Rule Change Discussion Paper that had been developed to reflect the principles agreed by the MAC during previous meetings. The IMO sought feedback from MAC members about any issues they had with the implementation of the agreed principles in PRC_2010_29.

The following points were noted:

- Mr Dykstra noted that Alinta had previously sent comments to the IMO about the calculation of RD using load data for the previous year. Mr Dykstra gave the example of a load with a RD of 100 MW offering 50 MW of capacity. If the peak demand of the load had reduced from 100 MW to 50 MW since the previous summer then the load would be able to meet its capacity requirements without having to reduce its consumption.
- Mr Dykstra sought Mr Kelloway's thoughts on how System Management can be sure that DSPs will deliver their promised capacity. Mr Kelloway responded that System Management's experience of DSPs had been limited, but acknowledged a concern that a requested reduction might not be delivered. Mr Huxtable considered that DSPs had also provided some good results to the market.
- Mr Zammit submitted that there was no generally agreed method of measuring DSM response. Mr Huxtable noted that on some occasions Loads can be operating well above their RD and so would need to need to reduce their consumption more to meet the requirements. Mr Campillos noted that it was up to the DSM aggregator to ensure that requirements were met, but suggested that Mr Dykstra's example was unlikely.
- Mr Kelloway considered that he was still not convinced of DSM's ability to deliver reductions at all times of day or on all days of the year. Given the variability of loads, it was likely that the level of response would vary at different times of the year. Mr Kelloway suggested that if a large percentage of Reserve Capacity was provided by DSM then this could result in issues for System Management over the winter months.

- The Chair asked MAC members whether the paper accurately represented the discussions on CL and DSPs at MAC over the past year. MAC members agreed that this was the case, except for Mr Dykstra.
- Mr MacLean considered that since DSPs created costs for the IMO and System Management they should not be exempt from Market Fees. The Chair noted that at the May 2010 MAC meeting members had agreed not to change the Market Fee arrangements for DSM providers. The Chair proposed that the IMO log the question of Market Fees for DSM providers as an issue to be addressed at a later date. The MAC supported this.
- The IMO sought the views of MAC members on whether DSPs should receive pay as bid DIPs. The IMO proposed to not make any changes to the current arrangements, to prevent any delay to the progress of the Rule Change Proposal. Mr MacLean considered that DSPs should not receive these payments. The MAC agreed that while members had concerns about DIPs for DSPs and would like to consider the issue as part of a broader review, no further action was required in relation to this Rule Change Proposal.
- The IMO noted that currently when a generator is dispatched upwards for a test it is paid MCAP for the energy produced, but when a CL is dispatched for test it receives no equivalent payment. The Chair did not consider this to be a significant issue, but noted that if this was to change then the matter could considered at a later date. The MAC agreed that DSPs should not be paid when they are dispatched for a test.
- Mr Campillos raised his concerns about the proposed use of the same 12 Peak Trading Intervals for both the calculation of IRCR values and the determination of the RD used to measure DSP performance. Mr Campillos queried whether MAC members had fully considered the potential impact of this approach. Mr Campillos suggested that some of the most suitable loads for DSM may become unavailable as a result of the change, since by seeking to reduce their consumption in the 12 Peak Trading Intervals (to reduce their IRCR) they would lower their RD levels, making participation is a DSP unattractive.
- There was some discussion around the extent to which loads were seeking to reduce their IRCRs by adjusting their consumption during expected Peak Trading Intervals, and whether such activities were good or bad for the market. Mr Dykstra considered that the problem was product of the split between the retailer and the DSM provider. Mr Zammit and Mr Campillos disagreed with this opinion.
- Mr MacLean considered that a customer that could reduce its IRCR would effectively be subsidised by other customers. Mr Campillos considered that the issue was that there needed to be an incentive for loads to reduce at times other than during the 12 Peak Trading Intervals. Mr MacLean suggested that there may be a better way to allocate IRCR apart from the current 12 Peak Trading Interval methodology.
- The MAC supported the progression of PRC_2010_29 into the rule change process.

February 2011 Meeting

During the meeting the IMO presented a worked example comparing the costs to the market of dispatching a peaker and a DSP. The following points were raised:

- Mr Sutherland requested clarification that the costs (in excess of MCAP) of dispatching a generator following an increase in a Market Customer's

consumption would be shared across all Market Customers during the Trading Month. The IMO confirmed.

- Mr Dykstra clarified that where Market Customer 1 increases its consumption and a DSP is dispatched, the additional energy sold by Market Customer 2 (following the reduction in consumption of Load X) would be sold in the Balancing Market. The IMO confirmed.
- Mr Dykstra noted that under both the scenario of a Market Customer increasing consumption and a Market Generator reducing generation, the cost to the market associated with the dispatch of a DSP is greater than if a peaker was dispatched. The IMO confirmed that this would be the case assuming the same Pay as Bid prices.
- The IMO noted that the dispatch of Load X could either benefit or disadvantage Market Customer 2 (the retailer for Load X), depending on its the contractual arrangements.
- The Chair noted that the question at hand is whether it should cost the market more for the dispatch of a DSP. Mr Cremin noted that whether this is the case depends on the DSP's Pay as Bid Price. The Chair responded that assuming all else remains equal the cost to the market of dispatching DSPs is greater. Mr Zammit commented that this seems counterintuitive.
- Mr Cremin noted that a peaker receives a Pay as Bid Price to allow for cost recovery when it is dispatched. Mr Cremin queried whether there was any necessary cost recovery for a DSP. Mr Stephen MacLean stated that a DSP's costs should be covered by its capacity payments.
- Mr Dykstra noted that there is no guarantee that the Pay as Bid price for a generator and a DSP would be the same. The Chair noted that if the Pay as Bid price limit for DSP was to be amended they would be more likely to be dispatched as they would move up the Dispatch Merit Order.
- Mr Zammit noted that it would be incorrect to assume the marginal cost for all DSPs to reduce consumption would all be the same. Mr Dykstra noted that a peaker has a high capital cost and a lower SRMC, while a DSP has a lower capital cost and a higher SRMC. Mr MacLean noted that this was a reasonable assumption.
- Mr Sutherland noted that a Market Generator who is issued a Dispatch Instruction is also required to pay Market Fees and Spinning Reserve costs. This is not the case for a DSP.
- Mr Campillos noted that in the IMO's worked example where a DSP is dispatched it is Market Customer 2 that benefits from the Load's reduced consumption. Mr MacLean noted that Market Customer 2 however has no control over its Load also belonging to a DSP.
- The Chair suggested that the IMO look further into the requirement to pay a DSP to reduce consumption when issued a Dispatch Instruction, in particular whether the capacity payments made to DSPs are sufficient to compensate them for reduced consumption. Mr MacLean agreed that this should be further considered stating that this may otherwise be construed as being discriminatory towards DSPs.

APPENDIX 7: COST BENEFIT ANALYSIS (DRAFT RULE CHANGE REPORT)

While the system costs of approximately $200,000 are relatively minor compared to the costs of DSM to the market currently (estimated at around $85 million for the 2012/13 Capacity Year) and that the proposed changes are required to ensure the Market Rules are unambiguous with regard to the treatment of DSM, the IMO considered it prudent to determine whether the associated benefits would exceed these costs (and any other related identified costs). Therefore the IMO undertook a qualitative cost benefit analysis of the solutions proposed under RC_2010_29 (as a whole) against the status quo. The results of the IMO's analysis were presented in the Draft Rule Change Report.

Approach to Cost-Benefit Assessment

The IMO acknowledged that it is responsible for making judgements on the impacts of proposed rule changes. Given the nature of the information available in this case the IMO has concluded that it would not be feasible to undertake a quantitative assessment of the costs relative to the benefits. This is due to the fact that there would be many subjective judgements involved and some of the benefits, in particular, would be difficult to quantify. As a result of these restrictions, the costs and benefits have been assessed largely on a qualitative basis, relative to the current situation.

The IMO considered the likely costs and benefits resulting from the proposed Amending Rules in order to determine whether any identified costs will be outweighed by the associated benefits to the market. The following table identifies the main issues for evaluation.

Costs	
Set-up Costs	The costs to change the IMO's, System Management's and Market Participant's operating systems
Transition Costs	The costs to transition from the current arrangements
Governance Costs	The costs to the WEM of amending the Market Rules, Market Procedures and overseeing the implementation of any necessary changes

Benefits	
Reliability Benefits	The benefits to the whole of market associated with greater reliability of DSM when it is dispatched
Efficiency Benefits	The benefits to System Management, the IMO and DSPs associated with more efficient allocation of resources
Improved Risk Allocation	The benefits to the whole of market associated with correctly allocating the risks of a DSP not being able to meet it obligations
Improved Measurement of Performance	The benefits to the whole of market associated with improved measurement of the performance of DSPs
Improved integrity of the Market Rules	The benefits to the whole of market associated with improving the integrity of the Market Rules relating to CLs.

The IMO notes that the costs assessed are generally tangible costs that can be quantified in monetary terms with some confidence. The benefits however are generally less tangible and difficult to assign a monetary value. Therefore the IMO applied its impact assessment framework to facilitate the development of an overall assessment of the costs and benefits relative to the current situation. The impact assessment framework uses the following ranges:

Impact	*Impact Description*
None	No material difference relative to the current situation
Minor	A small difference relative to the current situation
Material	A reasonably material difference relative to the current situation
Major	A reasonably large difference relative to the current situation
Significant	A very large difference relative to the current situation

The outcomes from the IMO's assessment of the costs and benefits of the proposed solutions to the identified issues (as a whole) are presented in the following two tables.

Table 1: Costs associated with RC_2010_29

Cost	*Description of costs (relative to current situation)*	*Impact*
Set-up Costs	The proposed changes to the Market Rules would involve updates to the IMO's IT system which are estimated to cost approximately $200,000. These costs when compared to the overall costs to the market associated with DSM provision (estimated to be approximately $85 million for the 2012/13 Capacity Year) are reasonably large. The IMO also notes that they constitute a one-off cost that will result in significant improvements to the treatment of DSM options under the Market Rules, There will also be updates required to the IT systems operated by System Management to enact the proposed amendments to how DSPs are registered (Issues 1 & 2). System Management has estimated that these will be minimal. The IMO notes that there are also costs to Market Participant's IT systems identified (see submission from EnerNOC for further details). However, this does not represent all Market Participants' costs, only those who chose to submit to the IMO.	Major
Transition Costs	There will be minor costs in terms of IMO staffing during the transitional period for any Amending Rules commencing. The majority of these costs will be associated with the entry of DSPs/CLs into the market prior to the date that the Amending Rules commence (provisionally 1 October). The IMO will have to undertake its current registration processes to register each individual CL that enters the market before 1 October. The new entrants will then need to use the transitional rules which will be commenced earlier to transfer their CLs to a registered DSP prior to 1 October. The IMO notes that no registration fees will apply for the purposes of registering DSPs for already registered CLs. Further details	Minor

Cost	Description of costs (relative to current situation)	Impact
	will be provided in the Market Procedure for Registration. Costs have also been identified for EnerNOC with regard to the alignment of the RD measure with IRCR intervals as this change would potentially impact on the ability to recruit sufficient capacity. EnerNOC estimates that this impact is likely to be significant. The IMO notes that these identified impacts on portfolio management would be likely experienced by other DSPs. The IMO however notes that it has requested the views of Market Participants on the pathway forward regarding a dynamic vs static RD model. Should the IMO determine to progress with the static RD model it will further consideration the implementation dates related to this aspect of RC_2010_29.	
Governance Costs	The proposed changes to the Market Rules would only have minor costs to the WEM in terms of the IMO's administration of the rule and procedure change processes and commencement of Market Rules. These costs are no higher than those usually associated with a standard Rule Change Proposal. The IMO notes that the process mapping exercise undertaken during the development of the proposed Amending Rules is a sunk cost and as such as not been considered in this assessment. There are no perceived costs in terms of IMO staffing associated with the proposed amendments (outside of those transitional costs noted above) as it is anticipated that any operational changes will be automated. The IMO perceives that these governance costs will have a minor impact.	None

Table 2 – Benefits associated with RC_2010_29

Benefit	*Description of benefits (relative to current situation)*	*Impact*
Reliability Benefits	The requirement for DSPs to make capacity refunds during periods where they have availability obligations but are under-subscribed will improve the current incentive structures for ensuring that a DSP can meet its RCOQ at all applicable times during the Capacity Year. The IMO considers that the incentives to: • procure the right amount of NDLs, as proposed to be implemented through the capacity refund mechanism; and • to deliver the required amount of curtailment when it is dispatched, as currently provided by the Capacity Cost Refund (clause 4.26.3A), will ensure greater certainty that DSPs can deliver the level of capacity reduction for which they have been certified. This will ultimately improve the reliability of DSM as a source of capacity in the WEM. Improving the ability for System Management to dispatch DSPs effectively (by issuing dispatch instructions to the DSP rather than each CL) will also allow System Management to be able to rely on the provision of load reduction services as an alternative to generation. This will promote DSM as a competitive product in the WEM.	Material
Efficiency Benefits	The proposed changes will result in efficiency benefits for the IMO and DSPs (through registration and certification) and System Management (through dispatch). The proposed changes to no longer require the IMO to separately register each CL will reduce the amount of information required to be provided by the DSP and considered by the IMO in assessing registrations. This will improve operational efficiency for both parties and and reduce the application costs incurred by DSPs when applying to register each CL (at a cost of approximately $280 each). For example a 50MW DSP applying for the registration of 100 CLs would incur registration fees of $28,000. The IMO would also incur a significant number of personnel hours processing each application. There will also be allocative efficiency improvements with regards to System Management's resources if it is able to issue Dispatch Instructions to a DSP rather than each individual CL.	Minor

Benefit	Description of benefits (relative to current situation)	Impact
Improved risk allocation	The removal of a CL as a Registered Facility and replacement with the concept of a DSP being the Registered Facility in the Market Rules will require the DSM Aggregator to make a decision as to the appropriate NDLs to include within its DSP. Currently the IMO is required to make this assessment when determining CRC for each CL. Under the proposed amendments the IMO will simply certify the DSP, with the DSM Aggregator then able to associate (and cease to associate) appropriate NDLs with the DSP. The IMO considers that this amended certification process will ensure that the correct party determines whether an NDL should be associated with a DSP. This is because the DSM Aggregator would have greater visibility of the contractual obligations of the NDL and its likely ability to be able to curtail to the correct level when requested. The risks that a DSP is comprised of a number of NDLs which are unable to meet their obligations will consequently be transferred from the IMO to the DSP (and reinforced by the proposed enhanced capacity refund mechanism).	Minor
Improved measurement of performance	The changes to the RD calculation, to base it on IRCR intervals and to remove the current exclusions due to maintenance and unplanned outages, will ensure a more appropriate measure of a DSP's curtailability is determined. The performance of the DSP when it is requested to curtail will then be assessed against this RD value. The IMO also notes that under RC_2010_12 the ability for a DSP to receive its Reserve Capacity Security back will be determined based on the DSP's ability to meet its Required Level (as determined using the DSP's RD and Capacity Credits). The proposed changes will also remove a current inefficiency in the Market Rules where a double payment stream can result from NDLs targeting both reductions in IRCRs (through their Market Customers – dependent on contractual arrangements to pass through IRCR costs to the NDL) and increased RD levels (through their DSP) for the next year. By considering the consumption of a DSP at the aggregate level (rather than for each comprising NDL), the treatment of DSPs will be more equivalent to that of Market Generators (who are measured at one connection point).	Material
Improved Integrity of Market Rules	The proposed changes will clarify a number of the requirements for registration, certification and the performance of DSPs in the WEM. They will also ensure that current ambiguities, such as whether a Load's connection point can be associated with both the energy provider and DSM Aggregator, are removed from the Market Rules. The IMO considers that the proposed amendments under RC_2010_29 will result in improvement to the integrity of the Market Rules relating to CLs and help to decrease regulatory risk through clear provisions for DSM in the WEM. The IMO notes that this improved integrity and removal of any potential ambiguity were the original basis of the proposal.	Significant

The issues which RC_2010_29 is considering are outside of the scope of the wider RCM review being currently undertaken. The IMO considers that the outcomes of the wider

review would not impact on the outcome of this assessment; as such this has not been taken into account by the IMO.

On the whole the analysis of the costs and benefits suggested that the proposed rule change is likely to have an overall net benefit relative to the current situation. As such the IMO considered, as noted in the Draft Rule Change Report, that there is a sufficient overall benefit to the market to justify progressing with RC_2010_29.

APPENDIX 8: ADDITIONAL AMENDMENTS MADE BY THE IMO FOLLOWING THE SECOND SUBMISSION PERIOD

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

The IMO has amended clause 2.27.1A and 2.27.2 to correct the reference to Registered Facility to simply refer to facility as it is conceivable that a Market Participant will need to have a Loss Factor for a facility determined prior to registration.

2.27.1A. A Market Participant may request, during the process of obtaining a relevant Arrangement for Access, that the relevant Network Operator determine and provide to the IMO, Loss Factors to apply to a ~~Registered F~~facility or a Non-Dispatchable Load where there are no Loss Factors applying to the connection point at which the ~~Registered F~~facility or the Non-Dispatchable Load will be connected.

2.27.2. In calculating Loss Factors, Network Operators must apply the following principles:

…

(c) Loss Factors must be calculated using:

i. generation and load meter data from the preceding 12 months; or

iA. for a new ~~Registered F~~facility or a Non-Dispatchable Load, any other relevant data provided to the Network Operator by the Market Participant and as agreed with the Network Operator and the IMO, and

…

(e) a specific Loss Factor must be calculated for each:

i. Scheduled Generator;

ii. Non-Scheduled Generator;

iii. [Blank]~~;~~

iv. Interruptible Load;

v. Dispatchable Load; and

vi. Non-Dispatchable Load above 1000kVA peak consumption;

…

The proposed amendments to clause 2.29.5 are to improve the integrity of the Market Rules.

2.29.5. Subject to clauses 2.29.9 and 2.29.8A, a Market Customer that owns, operates or controls a Load:

…

(b) [Blank]~~;~~

…

The proposed amendment to clause 2.29.5A will clarify that an Interruptible Load may be associated with a DSP.

2.29.5A. ~~Subject to clause 2.29.8A, a~~A Market Customer that:

(a) has entered into; or

(b) intends to enter into

a contract with a person who owns, controls or operates a Non-Dispatchable Load or Interruptible Load, for the ~~l~~Load to provide curtailment on request by the Market Customer, may ~~apply to the IMO to~~ register a Demand Side Programme.

The proposed amendment to clause 2.29.5B will clarify that an Interruptible Load may also be incorporated into a DSP. The IMO has also clarified that a single line diagram will be required where a load to be associated with a DSP has a generation system behind its meter that can connect to the network. The IMO has included this information following informal discussions with System Management which has advised that the availability of this information is necessary to ensure there is transparency over whether a generation facility will be displacing load when an instruction to curtail to a site is issued. Otherwise there may be potential system security issues associated with curtailing a load that System Management would otherwise be unaware of, i.e. unexpected increased generation on a particular line.

2.29.5B. A Market Customer with a ~~registered~~ Demand Side Programme may apply to the IMO to associate a Non-Dispatchable Load or Interruptible Load with the Demand Side Programme. The Market Customer must provide the following information to the IMO in support of the application:

(a) evidence satisfactory to the IMO that the Market Customer has entered into a contract with the person who owns, operates or controls the ~~Non-Dispatchable~~ Load to provide curtailment on request by the Market Customer;

(b) the connection point of the ~~Non-Dispatchable~~ Load;

(c) the ~~minimum load of the Non-Dispatchable~~ expected minimum consumption of the Load in units of MW;

(d) the contract start date; ~~and~~

(e) the contract end date~~.~~; and

(f) where the Load has a generation system that can connect to the network behind its associated meter, a single line diagram for the Load, including the locations of generators, transformers, switches, operational and settlement meters.

The proposed amendment to clause 2.29.5C improves the integrity of the proposed Amending Rules.

2.29.5C. The IMO must within one Business Day notify an applicant of the receipt of the application submitted under clause 2.29.5B ~~within one Business Day~~. The IMO may, at its discretion, require that an applicant provide information that is missing from the application or is inadequately specified. The date the requested information is submitted to the IMO will become~~s~~ the date of receipt of the application.

The proposed amendment to clause 2.29.5D will outline that the IMO must make a decision whether to accept or reject an application to associate a Load with a DSP in accordance with clause 2.29.5E and notify the applicant of its decision.

2.29.5D. ~~If the IMO considers that the evidence provided by the Market Customer under clauses 2.29.5B and 2.29.5C:~~

~~(a) is satisfactory, the IMO must approve the application to associate the Non-Dispatchable Load with the Demand Side Programme (**"Associated Non-Dispatchable Load"**); or~~

~~(b) is not satisfactory, the IMO must reject the application to associate the Non-Dispatchable Load with the Demand Side Programme.~~

The IMO must determine, in accordance with clause 2.29.5E, whether to accept or reject an application submitted under clause 2.29.5B, and must notify the applicant of its decision within 10 Business Days of receipt of the application.

The proposed amendment to clause 2.29.5E will outline the circumstances under which the IMO must accept an application to associate a Load with a DSP. The IMO notes that this change consolidates the requirements outlined elsewhere in the Market Rules into one clause. The only additional circumstance which is not previously covered elsewhere in the Market Rules is where the Load is an Interruptible Load assigned Capacity Credits for any part of the proposed Association Period. This will ensure that an Interruptible Load can not be included in a DSP where it has been assigned Capacity Credits in its own right during the proposed Association Period.

The IMO notes that the requirements specified under sub-clause (e) were previously outlined in clause 2.29.5F.

2.29.5E. ~~The IMO must notify an applicant of its decision under clause 2.29.5D within 10 Business Days of the receipt of the application. If the IMO:~~

~~(a) has accepted an application the notification must include the date and time from which the Non-Dispatchable Load will be associated with the Demand Side Programme; or~~

~~(b) has rejected an application the notification must include the reasons for the rejection. A Market Customer whose application is rejected may~~

~~reapply to associate a Non-Dispatchable Load with a Demand Side Programme under clause 2.29.5B.~~

The IMO must accept an application submitted under clause 2.29.5B unless:

(a) the IMO considers that the evidence provided by the Market Customer under clauses 2.29.5B and 2.29.5C is not satisfactory;

(b) the relevant Load is not equipped with interval metering;

(c) the relevant Load is an Interruptible Load assigned Capacity Credits for any part of the proposed Association Period;

(d) the relevant Load is registered as an Intermittent Load for any part of the proposed Association Period; or

(e) the relevant Load is already associated with a Demand Side Programme for any part of the proposed Association Period.

The proposed amendments to clause 2.29.5F will require the IMO, where it approves an application, to notify the applicant of the dates for which the Load will be associated with the DSP and provide System Management with any single line diagrams it receives at the same time as approving the association of a NDL or Interruptible Load.

2.29.5F. ~~A Non-Dispatchable Load may be associated with only one Demand Side Programme at a time. If a Market Customer makes an application under clause 2.29.5B in connection with a Non-Dispatchable Load that is already associated with a Demand Side Programme for a period between the dates specified in clauses 2.29.5B(d) and 2.29.5B(e), the IMO will not approve the further application to associate the Non-Dispatchable Load with a Demand Side Programme during the same period.~~ If the IMO accepts an application under clause 2.29.5D then the IMO must:

(a) include in its notification to the applicant:

i. the date and time from which the relevant Load will be associated with the Demand Side Programme, as defined under clause 2.29.5G(a); and

ii. the date and time from which the relevant Load will cease to be associated with the Demand Side Programme, as defined under clause 2.29.5G(b); and

(b) provide System Management with any single line diagrams received in accordance with clause 2.29.5B(f), if applicable, within one Business Day.

The proposed amendments to clause 2.29.5G will specify the exact period over which a Load will be associated with a Demand Side Programme, where the IMO accepts and application.

2.29.5G. ~~A Non-Dispatchable Load will cease to be associated with a Demand Side Programme from the date specified in clause 2.29.5B(e). A Market Customer~~

~~may notify the IMO that a Non-Dispatchable Load will cease to be associated with a Demand Side Programme from an earlier date, being at least 10 Business Days after the notice is given. The Non-Dispatchable Load will cease to be associated with the Demand Side Programme from the start of the Trading Day from the earlier of the date specified in the notice or the date specified in clause 2.29.5B(e).~~If the IMO accepts an application submitted under clause 2.29.5B then the IMO must associate the relevant Load ("Associated Load") with the Demand Side Programme for the period ("Association Period") between:

(a) the later of:

i. the start of the Trading Day commencing on the contract start date provided under clause 2.29.5B(d); and

ii. the start of the Trading Day following the day that the IMO notifies the applicant of its decision under clause 2.29.5D; and

(b) the end of the Trading Day starting on the contract end date provided under clause 2.29.5B(e).

The proposed amendments will remove the specification of when the IMO will calculate the RD for a DSP. The IMO notes that the RD for a DSP will be calculated daily to take into account revisions to Meter Data, substitutions and any churn in Associated Loads.

The IMO notes that clause 2.29.5H has been amended to outline the process for where the IMO rejects an application to associate a Load with a DSP. These requirements were previously outlined in clause 2.29.5E(b)

2.29.5H. ~~The IMO must reset the Relevant Demand for a Demand Side Programme in accordance with clause 4.26.2C:~~

~~(a) within 10 Business Days of the contract start date specified in clause 2.29.5B(d), where a Non-Dispatchable Load is associated with a Demand Side Programme in accordance with clause 2.29.5D(a);~~

~~(b) within 10 Business Days of the start of the Trading Day beginning on the date specified in clause 2.29.5G, where a Non-Dispatchable Load ceases to be associated with a Demand Side Programme; or~~

~~(c) prior to the beginning of a Reserve Capacity Year for which the Demand Side Programme has been assigned Capacity Credits by the IMO.~~

If the IMO rejects an application submitted under clause 2.29.5B, then the IMO must include in its notification to the applicant under clause 2.29.5D the reasons for the rejection of the application. A Market Customer whose application is rejected may reapply to associate a Non-Dispatchable Load or Interruptible Load with a Demand Side Programme under clause 2.29.5B.

The proposed amendments to clauses 2.29.5I, 2.29.5J and 2.29.5K and new clauses 2.29.5L and 2.29.5M will outline the processes for applying to the IMO to cancel or reduce the association of a Load with a DSP. The IMO considers that the proposed clauses will better outline the processes to be followed in these situations.

2.29.5I. ~~At any time before 1 October 2011 a Market Participant that has a Demand Side Programme with Capacity Credits associated with it for a future Reserve Capacity Year may disaggregate the Loads associated with the Demand Side Programme and advise the IMO that they are associated with other Demand Side Programmes that are registered to that Market Participant for that Reserve Capacity Year.~~ A Market Customer with an Associated Load may apply to the IMO to:

(a) cancel the association of the relevant Load with the Demand Side Programme; or

(b) reduce the Association Period of the Associated Load.

2.29.5J. ~~From 1 October 2011 where a Load that was registered as a Curtailable Load has Capacity Credits associated with it for a future Reserve Capacity Year, the Load will be deemed to be a Non-Dispatchable Load associated with the Demand Side Programme registered by the Market Participant under clause 2.29.5K for those Reserve Capacity Years.~~ The IMO must within one Business Day notify an applicant of the receipt of an application submitted under clause 2.29.5I.

2.29.5K. ~~By 1 October 2011 where a Load that was registered as a Curtailable Load will be deemed to be a Non-Dispatchable Load under clause 2.29.5J, the Market Participant that had registered that Curtailable Load must register a Demand Side Programme in accordance with the process specified in the Registration Procedure and the Reserve Capacity obligations, rights and liabilities previously belonging to that Curtailable Load will transfer to the Demand Side Programme.~~ The IMO must determine whether to accept or reject an application submitted under clause 2.29.5I and notify the applicant of its decision within two Business Days of the receipt of the application. The IMO must accept the application unless the proposed change would affect the association of the relevant Load with the Demand Side Programme during any period before the Trading Day commencing on the third Business Day after the receipt of the application.

2.29.5L. If the IMO accepts an application submitted under clause 2.29.5I then it must either:

(a) cancel the association of the relevant Load with the Demand Side Programme; or

(b) reduce the Association Period of the Associated Load,

as requested in the application.

2.29.5M. If the IMO rejects an application submitted under clause 2.29.5I, then the IMO must include in its notification to the applicant under clause 2.29.5K the reasons for the rejection of the application.

New clause 2.29.5N will make more explicit the process to apply during the interim period for preparing existing CLs, Interruptible Loads and DSPs for the new Market Rules. As noted previously the processes to apply during the interim period will be supported by an interim Market Procedure.

2.29.5N. Prior to 1 October 2011:

(a) the IMO must determine for each relevant Market Customer a transition plan to allocate all Capacity Credits assigned to its Demand Side Programmes or Curtailable Loads for future Capacity Years to one or more new Demand Side Programme Facilities, that will take effect from 1 October 2011; and

(b) Market Customers with Demand Side Programmes or Curtailable Loads assigned Capacity Credits for a future Capacity Year may:

(i) apply to pre-register Demand Side Programmes in accordance with their transition plans; and

(ii) apply to associate any Curtailable Loads, Non-Dispatchable Loads or Interruptible Loads with their pre-registered Demand Side Programmes.

New clause 2.29.5O will make more explicit what will happen on 1 October 2011 when the majority of the Amending Rules commence.

2.29.5O. At 8:00 AM on 1 October 2011:

(a) all Capacity Credits assigned to Demand Side Programmes and Curtailable Loads for the current and any future Capacity Years will transfer to the relevant Demand Side Programme Facilities in accordance with the transition plans developed under clause 2.29.5N(a), along with any associated obligations, rights and liabilities;

(b) all pre-registered Demand Side Programmes will be deemed to be registered Demand Side Programmes;

(c) any application to pre-register a Demand Side Programme under consideration by the IMO will be deemed to be an application to register a Demand Side Programme; and

(d) each Load that was previously registered as a Curtailable Load will be deemed to be a Non-Dispatchable Load or Interruptible Load, as appropriate, and Curtailable Loads will cease to be a Facility Class.

The proposed amendments to clause 2.29.8A will clarify the requirements for Loads to be equipped with interval meters. Note that the requirement for a Load associated with a DSP will be outlined in clause 2.29.5E(b).

2.29.8A. ~~To be registered, or associated with a Demand Side Programme under clause 2.29.5E(a), a Rule Participant must ensure that the following Loads are equipped with interval meters:~~

~~(a) Interruptible Loads;~~

~~(b) Dispatchable Loads; and~~

~~(c) Non-Dispatchable Loads.~~

A Rule Participant must ensure an Interruptible Load or Dispatchable Load registered by that Rule Participant is equipped with an interval meter.

The following to amendment to clause 2.30.5 is consistent with the IMO's proposed amendment to make clause 2.30.3 blank.

2.30.5. The IMO must only allow the aggregation of facilities if, in its opinion:

(a) the aggregation will not adversely impact on System Management's ability to maintain Power System Security and Power System Reliability;

(b) adequate control and monitoring equipment exists for the aggregated Facility;

(c) none of the Facilities within the aggregated facility are subject to an Ancillary Service Contract or Network Control Service Contract that requires that Facility not be part of an aggregated facility;

(d) ~~with the exception of facilities aggregated under clause 2.30.3, the~~ aggregated facilities are at the same location or have the same Loss Factor; and

(e) System Management and the IMO will continue to be provided with the same Standing Data for each individual facility as before the facilities were aggregated.

The proposed amendment to clause 2.30B.2 will clarify that a Load that is associated with a DSP can not also be an Intermittent Load. The IMO notes that the interim Market Procedure will clarify the requirements for the IMO to confirm a Load is not an Intermittent Load when determining whether to associate a Load with a DSP. This requirement will also be specified in the general Registration Procedure.

2.30B.2. For a Load to be eligible to be an Intermittent Load the IMO must be satisfied that the following conditions are met:

…

(c) the Market Customer for that Load must have an agreement in place with a Network Operator to allow energy to be supplied to the Load from a Network; ~~and~~

(d) the Load is an Interruptible Load or a Non-Dispatchable Load~~.~~; and

(e) the Load is not expected (based on applications accepted by the IMO under clause 2.29.5D and any amendments accepted by the IMO under clause 2.29.5K) to be associated with any Demand Side Programme for any period following the registration of the Load as an Intermittent Load.

The proposed amendments to clause 2.31.23A will commence on 1 July 2011. The IMO has amended to the heads of power for the interim Market Procedure to reflect the revised process to apply during this period.

2.31.23A. The IMO must document the process for the IMO, System Management and Market Customers ~~Participants~~ to follow prior to 1 October 2011 for:

(a) developing a transition plan for each relevant Market Customer under clause 2.29.5N(a);

(b) the pre-registration of Demand Side Programmes; and

(c) the association of Curtailable Loads, Non-Dispatchable Loads and Interruptible Loads with pre-registered Demand Side Programmes,

in the Registration Procedure and the IMO, System Management and Market Customers must comply with that documented Market Procedure.

~~registering a Demand Side Programme and associating a Load registered as a Curtailable Load to that Demand Side Programme in the Registration Procedure, and:~~

~~(a) the IMO must follow that documented Market Procedure when processing applications; and~~

~~(b) Market Participants must follow that documented Market Procedure when applying to:~~

~~i. register a Demand Side Programme;~~

~~ii. associate and cease to associate a Load registered as a Curtailable Load with that Demand Side Programme; or~~

~~iii. disaggregate a Curtailable Load currently associated with a Demand Side Programme~~.

The proposed amendments to clause 2.31.23A will commence on 1 December 2011 and remove the heads of power for the interim Market Procedure. At the same time the interim Market Procedure will also be revoked.

~~2.31.23A. The IMO must document the process for the IMO, System Management and Market Customers to follow prior to 1 October 2011 for:~~

~~(a) developing a transition plan for each relevant Market Customer under clause 2.29.5N(a);~~

~~(b) the pre-registration of Demand Side Programmes; and~~

~~(c) the association of Curtailable Loads, Non-Dispatchable Loads and Interruptible Loads with pre-registered Demand Side Programmes,~~

~~in the Registration Procedure and the IMO, System Management and Market Customers must comply with that documented Market Procedure.~~

The proposed amendment to clause 2.33.4 will amend the requirement of de-registration of a DSP to be equivalent to the current 1 month requirement for CLs.

2.33.4. The Facility de-registration form prescribed by the IMO must require that the applicant provide the following:

…

(d) a proposed date on which that Registered Facility is to cease to be registered in the name of that Rule Participant where that date must be;

…

ii. the date the application is accepted in the event that the Facility has been rendered permanently inoperable; ~~and~~ or

iii. not earlier than one month after the date of application if the Facility is a Demand Side Programme; and

…

The proposed amendment to clause 4.10.1 will improve the integrity of the proposed Amending Rules. The IMO notes that it has shown all amendments as proposed by RC_2010_29 to clause 4.10.1 as marked up from the Amending Rules resulting from RC_2010_14.

4.10.1. Each Market Participant must ensure that ~~The~~ information ~~to be~~ submitted to the IMO with an application for certification of Reserve Capacity ~~must~~ pertains to the Reserve Capacity Cycle to which the certification relates, ~~must be~~ is supported by documented evidence and ~~must~~ includes, where applicable, the following information:

…

(c) if the Facility, or part of the facility, is yet to enter service:

…

iii. the Key Project Dates occurring after the date the request is submitted ~~to the IMO~~, including, ~~as~~ if applicable, but not limited to:

1. when all approvals will be finalised or, in the case of Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes all required contracts will be in place;

…

5. when generating equipment or Dispatchable Load equipment will be installed or, in the case of Interruptible Loads and ~~Curtailable Loads~~ Demand Side Programmes, all required control equipment will be in place;

…

(f) for Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads~~, details for each of up to three blocks of capacity of~~:

i. ~~either~~

~~1.~~ the Reserve Capacity ~~expected to be~~ the Market Participant expects to make available from each of up to 3 blocks of capacity; ~~or~~

~~2. the Stipulated Default Load;~~

ii. the maximum number of hours per year the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity, where this must be ~~not less than~~ at least 24 hours;

iii. the maximum number of hours per day that the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load is available to provide Reserve Capacity if called, where this must be ~~not~~:

1. not less than four hours; and

2. not more than the maximum of the periods specified in sub-clause (vi);

iv. the maximum number of times the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load can be called to provide Reserve Capacity during a 12 month period, where this must be at least six times;

v. the minimum notice period required for dispatch of the Interruptible Load, Demand Side Programme or Dispatchable Load, where this must not be more than 4 hours; and

vi. the periods when the ~~block~~ Interruptible Load, Demand Side Programme or Dispatchable Load can be dispatched, which must include the period between noon and 8:00~~pm~~ PM on all Business Days~~.~~;

…

The proposed amendment to clause 4.11.1(c) will clarify that an Interruptible Load may not be assigned Capacity Credits in its own right and also be associated with a DSP at the same time.

The IMO notes that the final Amending Rules resulting from RC_2010_14 have been incorporated into the drafting presented below.

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 for which an application for Certified Reserve Capacity has been submitted in accordance with section 4.10:

(a) subject to clause 4.11.2, the Certified Reserve Capacity for a Scheduled Generator for a Reserve Capacity Cycle ~~is not to~~ must not exceed the IMO's reasonable expectation ~~as to~~ of the amount of capacity likely to be available, after netting off capacity required to serve Intermittent Loads, embedded loads and Parasitic Loads, for Peak Trading Intervals on Business Days in the period from the:

…

(c) the IMO must not assign Certified Reserve Capacity to a Facility for a Reserve Capacity Cycle if:

i. for Reserve Capacity Cycles up to and including 2009 that Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 30 November of Year 3 of that Reserve Capacity Cycle;

ii. for Reserve Capacity Cycles from 2010 onwards that Facility is not operational or is not scheduled to commence operation for the first time so as to meet its Reserve Capacity Obligations by 1 October of Year 3 of that Reserve Capacity Cycle; or

iii. that Facility will cease operation permanently, and hence cease to meet Reserve Capacity Obligations, from a time earlier than 1 August of Year 4 of that Reserve Capacity Cycle;

iv. that Facility already has Capacity Credits assigned to it under Clause 4.28C for the Reserve Capacity Cycle ~~.~~; or

v. that Facility is an Interruptible Load and, based on applications accepted under clauses 2.29.5D and 2.29.5K (as applicable), the Facility will be associated with a Demand Side Programme for any period when Reserve Capacity Obligations would apply for the Facility for the Reserve Capacity Cycle;

…

4.11.4. ~~[Blank]~~ When assigning Certified Reserve Capacity to an Interruptible Load, Demand Side Programme or Dispatchable Load, the IMO must indicate what Availability Class is applicable to that Reserve Capacity where this Availability Class must reflect the maximum number of hours per year that the capacity will be available and must not be Availability Class 1.

The proposed amendment to clause 4.12.4 will improve the integrity of the proposed Amending Rules

4.12.4. Subject to clause 4.12.5, where the IMO establishes the initial Reserve Capacity Obligation Quantity to apply for a Facility for a Trading Interval:

(a) the Reserve Capacity Obligation Quantity must not exceed the Certified Reserve Capacity held by the Market Participant for the Facility;

…

(c) for Interruptible Loads, Demand Side Programmes and Dispatchable Loads, except where otherwise precluded by this clause 4.12.4, the Reserve Capacity Obligation Quantity:

i. will equal zero once the capacity has been dispatched for the number of hours per year that are specified under clause 4.10.1(f)(ii);

ii. will equal zero for the remainder of a Trading Day in which the capacity has been dispatched for the number of hours per day that are specified under clause 4.10.1(f)(iii);

iii. will equal zero once the capacity has been dispatched the maximum number of times per year ~~that are~~ specified under clause 4.10.1(f)(iv) excluding where the Facility has been requested to perform a Reserve Capacity test in accordance with clause 4.25;

iv. must account for staffing and other restrictions on the ability of the Facility to curtail energy upon request; and

v. will equal zero for intervals which fall outside of the period<u>s</u> specified in clause 4.10.1(f)(vi).

The proposed amendment to clause 4.25.1 will clarify the requirement for a DSP to reduce its consumption to a level equivalent to its maximum RCOQ.

The IMO notes that there are additional amendments to clause 4.25.1 proposed under RC_2010_12. These changes have not been reflected in the Amending Rules presented below as they are still awaiting a decision by the IMO Board.

4.25.1. The IMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing Capacity Credits can:

(a) in the case of a generation system, during the term the Reserve Capacity Obligations apply, operate at its maximum Reserve Capacity Obligation Quantity 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) 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; and

(c) in the case of a Demand Side Programme, during the term the Reserve Capacity Obligations apply, and during the period specified in clause 4.10.1(f)(vi), ~~operate at~~ decrease its consumption to operate at a level equivalent to 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 will clarify that verification of a Reserve Capacity Test for a DSP will be measured by non-loss adjusted output. The IMO will define in the Reserve Capacity Testing Market Procedure the requirements for an activation of a DSP by a Market Customer, including the provision of information to the IMO on the activation, in order to meet the requirements of sub-clause 4.25.2(b).

The IMO has also proposed minor amendments to restructure this clause and improve its general integrity and clarify the requirements for a DSP to verify it can meet its RCOQ.

4.25.2. The verification referred to in clause 4.25.1 can be achieved by the IMO:

(a) ~~by the IMO~~ in the case of a generation system:

i. observing the Facility operate at the required level at least once as part of normal market operations in Metered Schedules specific to the Facility; or

ii. requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to operate at the required level for not less than 60 minutes and the Facility successfully passing that test; or

(b) in the case of a Demand Side Programme:

i. observing the Facility operate at the required level at least once in response to an activation of the Facility by the relevant Market Customer as determined from metered consumption; or

ii. requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to reduce demand to the required level for not less than one Trading Interval and the Facility successfully passing that test; or

(c) in the case of an Interruptible Load or Dispatchable Load, requiring System Management, in accordance with clause 4.25.7, to test the Facility's ability to reduce demand to the required level for not less than one Trading Interval and the Facility successfully passing that test.

~~(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 for not less than 60 minutes and the Facility successfully passing that test; and~~

~~ii. in the case of Interruptible Loads, Demand Side Programmes 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 for not less than one Trading Interval and the Facility successfully passing that test.~~

The proposed amendment to clause 4.25.3B will clarify that normal activations of a DSP will only be considered to be the second Reserve Capacity test where the DSP has been requested to decrease its consumption by a quantity equivalent to its maximum RCOQ. This will preclude a partial activation being treated as a Reserve Capacity test. The IMO also proposes to clarify that activation is referring to the issue of a Dispatch Instruction being issued by System Management.

The IMO notes that subject to any decision on RC_2010_12 this clause will be potentially further amended to implement the Required Level concept. These changes will be reflected in any potential Amending Rules resulting from RC_2010_12 and will further clarify the performance obligations for Facilities during Reserve Capacity Testing.

4.25.3B. If a Demand Side Programme fails a Reserve Capacity test under clause 4.25.2(b)(ii) and is ~~activated~~ issued a Dispatch Instruction by System Management to decrease its consumption by a quantity equivalent to its maximum Reserve Capacity Obligation Quantity prior to a second Reserve Capacity test being undertaken in accordance with clause 4.25.4, then the activation shall be deemed to be the second Reserve Capacity test.

The proposed amendments to clause 4.25.4 will improve the integrity of the Amending Rules.

4.25.4. Subject to clause 4.25.3B, if a Facility fails a Reserve Capacity test requested by the IMO under clause 4.25.2~~(b)~~, the IMO must require System Management to re-test that Facility in accordance with clause 4.25.2~~(b)~~, not earlier than 14 days and not later than 28 days after the first test. If the Facility fails this second test, then the IMO must, from the second Trading Day following the ~~current~~ Scheduling Day on which the IMO determines that the second test was failed:

(a) if the test related to a generation system, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to reflect the maximum capabilities achieved in either test performed (after adjusting these results to the equivalent values at a temperature of 41°C and allowing for the capability provided by operation on different types of fuels); or

(b) if the test related to a Dispatchable Load, Demand Side Programme or Interruptible Load, reduce the number of Capacity Credits held by the relevant Market Participant for that Facility to the maximum level of reduction achieved in either of the two tests~~;~~.

The proposed amendment to clause 4.25A.3 incorporates the amended clause reference to where the IMO determines the RD of a DSP. The IMO notes that this clause will be further amended contingent on the outcomes of the Rule Change Proposal: Reserve Capacity Security (RC_2010_12) to implement the concept of measuring the performance of the DSP against its Required Level. The IMO notes that the intent of the proposed amendments to this clause under both RC_2010_29 and RC_2010_12 was to require the DSP to reduce its output by 10 percent from the level it was currently operating at.

4.25A.3. A Demand Side Programme will be deemed to have failed the Verification Test unless a reduction in demand equal to at least 10% of the Capacity Credits, when measured against the Demand Side Programme's Relevant Demand determined under clause 4.26.2CA, is identified from the Demand Side Programme Load associated with that Demand Side Programme.

The proposed amendment to clause 4.25A.4 will improve the integrity of the Amending Rules.

4.25A.4. Where a Demand Side Programme fails a Verification Test the IMO must reduce the Capacity Credits assigned to the Demand Side Programme to zero from the second Trading Day following the Scheduling Day on which the ~~failure of the Verification Test under clause 4.25A.3 occurred~~ IMO determines that the Verification Test was failed under clause 4.25A.3.

The proposed amendment to clause 4.26.1 will clarify that Maximum Participant Generation Refund is exclusive of DSPs. This will to ensure that the capacity and STEM shortfalls for both generation assets (and dispatchable loads etc) and for DSPs are correctly capped at the relevant Market Participants RCOQ and then added together under clause 4.26.2F

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	1.5 x Y	1.5 x Y	4 x Y	6 x Y

shortfall per Trading Interval)				
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 Generation 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 (excluding any payments relating to a Demand Side Programme) assuming the IMO acquires all of the Capacity Credits held by the Market Participant (excluding any Capacity Credits held for Demand Side Programmes) and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable).			

Where:

For an Intermittent Facility that has been commissioned: Y equals 0

For all other facilities, including Intermittent Facilities that have not been commissioned: Y 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 is will improve the clarity of this clause.

The IMO notes that there are additional amendments to clause 4.26.1A proposed under the Rule Change Proposal: Partial commissioning for Intermittent Generation (RC_2010_22). These changes have not been reflected in the Amending Rules presented below as they are still awaiting a decision by the IMO Board.

4.26.1A. The IMO must calculate the Reserve Capacity Deficit refund for each Facility ("**Facility Reserve Capacity Deficit Refund**") for each Trading Month m 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 Reserve Capacity Deficit in Trading Interval t,

where the Reserve Capacity Deficit 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, 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 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; or

vii. if the Facility is a Demand Side Programme:

max(0, RCOQ – max(0, (RD – MinLoad)))

where:

RCOQ is the Reserve Capacity Obligation Quantity determined for the Facility under clause 4.12.4;

RD is the Relevant Demand for the Facility determined in accordance with clause 4.26.2CA; and

MinLoad is the sum of the minimum load MW quantities provided under clause 2.29.5B(c) for the Facility's Associated Loads; and

~~vii. if the Facility is a Demand Side Programme, the amount that the Relevant Demand minus the sum of the values specified in clause 2.29.5B(c) of the Associated Non-Dispatchable Loads is less than the Reserve Capacity Obligation Quantity determined for that Facility under clause 4.12.4, where if this amount is a negative value the IMO will set the value to zero;~~

~~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 Reserve Capacity Deficit Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year.

The proposed amendment to clause 4.26.1B is consistent with the requirement for the IMO to calculate a Generation Reserve Capacity Deficit Refund separately from the Reserve Capacity Deficit Refunds for each DSP.

4.26.1B. The IMO must calculate the Generation Reserve Capacity Deficit Refund for each Market Participant (~~"**Participant Reserve Capacity Deficit Refund**"~~) for each Trading Month as the sum of the Facility Reserve Capacity Deficit Refunds for the Trading Month for each Facility registered to the relevant Market Participant, excluding any registered Demand Side Programmes.

The proposed deletion of clause 4.26.1C will improve the integrity of the Amending Rules as the requirements outlined in this clause are duplicated elsewhere.

~~4.26.1C. If a Market Participant holding Capacity Credits associated with a Demand Side Programme 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 provisions of this clause 4.26.~~

The proposed amendment to clause 4.26.2C and 4.26.2CA will amend the Relevant Demand calculation to continue to be based on the current static RD methodology, including allowing for substitutions of Associated Loads considered by the IMO to undertaking maintenance. The IMO notes that it has however amended the calculation to be at the DSP level rather than individual load level.

The IMO has also included a number of typographical amendments, along with some minor structural amendments to the two clauses, to improve the integrity of the Amending Rules.

4.26.2C. ~~The IMO must set the Relevant Demand to apply at a point in time in accordance with clause 4.26.2CA, 4.26.2CB, or 4.26.CC (whichever applies):~~

~~(a) prior to the start of a Reserve Capacity Year for which a Demand Side Programme will have Reserve Capacity Obligations;~~

~~(b) at the request of a Market Customer who has a registered Demand Side Programme with Reserve Capacity Obligations for the current Reserve Capacity Year; or~~

~~(c) in accordance with clause 2.29.5H.~~

For each Capacity Year, the IMO must:

(a) identify the eight consecutive Trading Intervals with the highest aggregate system demand in each month during the Hot Season of the previous Capacity Year; and

(b) for each Non-Dispatchable Load or Interruptible Load associated with a Demand Side Programme (Associated Load) during the Capacity Year and each of the 32 Trading Intervals identified under clause 4.26.2C(a), determine a MW quantity equal to:

i. the metered consumption of the Associated Load for the Trading Interval, multiplied by two to convert to units of MW; or

ii. where the metered consumption of the Associated Load for the Trading Interval is not available or is considered by the IMO to be inappropriate, a MW quantity determined by the IMO based on:

1. available Meter Data Submissions; or

2. Load information provided by the Market Customer; or

3. other relevant information; or

iii. where a Market Customer provides evidence satisfactory to the IMO that the Associated Load was operating at below capacity due to its consumption being reduced at the request of System Management or because of maintenance, the IMO's estimate of what the consumption of the Associated Load would have been if it had not been reduced, multiplied by two to convert to units of MW.

4.26.2CA. ~~Subject to clause 4.26.2C, the IMO must set the Relevant Demand for a Demand Side Programme equal to the median of the Demand Side Programme Load, determined in accordance with clause 6.16.2, multiplied by two during the 12 peak Trading Intervals described in Appendix 5 Step 1 where the Relevant Demand is expressed as a positive number.~~

The Relevant Demand of a Demand Side Programme for a Trading Day d in a Capacity Year is the median of the historical consumption quantities determined by the IMO for each of the 32 Trading Intervals identified under clause 4.26.2C(a) for the Capacity Year. The historical consumption quantity

for each Trading Interval is the sum, over all the Associated Loads associated with the Demand Side Programme during Trading Day d, of the MW quantity determined by the IMO for each Associated Load and the Trading Interval under clause 4.26.2C(b).

The proposed amendment to clause 4.26.2CB and 4.26.2CC will remove these clauses. The Relevant Demand calculation will be covered by clauses 4.26.2C and 4.26.2CA.

~~4.26.2CB. Where the metered consumption for an Associated Non- Dispatchable Load during the 12 Trading Intervals identified in clause 4.26.2CA is not available or is considered by the IMO to be inappropriate, the IMO must set the Metered Schedule for that load to be used in the Relevant Demand calculation in 4.26.2CA based on the latest median of the 4 peak Trading intervals described in Appendix 5 Step 5 at the time the Non-Dispatchable Load is associated with the Demand Side Programme under clause 2.29.5D.~~

~~4.26.2CC. If a Market Customer provides evidence satisfactory to the IMO that a Demand Side Programme registered to that Market Customer was operating at below capacity due to its consumption being reduced at the request of System Management; or during one or more of the Trading Intervals identified in clause 4.26.2CA or 4.26.2CB, which ever applies, the IMO must set the Relevant Demand based on the IMO's estimate of what the Demand Side Programme's consumption would have been during those intervals.~~

The proposed amendment to clause 4.26.2D will incorporate an equation to better define how the capacity shortfall will be determined where a Dispatch Instruction is issued to a Demand Side Programme. The IMO considers that this will improve the integrity of the Amending Rules.

The IMO also proposed a minor change to the structure of clause 4.26.2D to improve the integrity of the Amending Rules.

4.26.2D. The IMO must determine the capacity shortfall in Reserve Capacity ("Capacity Shortfall") supplied by each Market Participant p holding Capacity Credits associated with a Demand Side Programme in each Trading Interval t of Trading Day d and Trading Month m relative to its Reserve Capacity Obligation Quantity as:

(a) where System Management has issued a Dispatch Instruction to the Demand Side Programme for the Trading Interval as advised to the IMO by System Management under clause 7.13.1:

$$\max(0, \min(RCOQ, DIMW) - \max(0, RD - DSPLMW))$$

where

RCOQ is the Reserve Capacity Obligation Quantity of the Demand Side Programme for Trading Interval t (in MW), determined in accordance with clause 4.12.4;

DIMW is the quantity by which the Demand Side Programme was instructed by System Management to reduce its consumption in Trading Interval t as specified by System Management in accordance with clause 7.13.1(eC), multiplied by two to convert to units of MW;

RD is the Relevant Demand of the Demand Side Programme for Trading Day d, determined by the IMO in accordance with clause 4.26.2CA; and

DSPLMW is the Demand Side Programme Load of the Demand Side Programme in Trading Interval t, multiplied by two to convert to units of MW; and

~~i. zero; if negative two multiplied by the Demand Side Programme Load is less than the Relevant Demand set in clause 4.26.2C minus the Capacity Credits assigned to the Demand Side Programme;~~

~~ii. the greater of:~~

~~1. zero, or~~

~~2. the required decrease, in MW, minus the load reduction, where the load reduction is equal to the Relevant Demand set in clause 4.26.2C minus negative two multiplied by the Demand Side Programme Load for the Trading Interval,~~

~~if the Capacity Credits assigned to the Demand Side Programme are greater than the Dispatch Instruction for the Trading Interval; or~~

~~iii. negative two multiplied by the Demand Side Programme Load plus the Capacity Credits assigned to the Demand Side Programme minus the Relevant Demand set in clause 4.26.2C; and~~

(b) ~~[Blank];~~ zero, where System Management has not issued a Dispatch Instruction to the Demand Side Programme for Trading Interval t as advised to the IMO by System Management under clause 7.13.1.

~~(c) zero where System Management has not issued a Dispatch Instruction to the Demand Side Programme for the Trading Interval as advised to the IMO by System Management under clause 7.13.1.~~

The proposed amendments to clause 4.26.2E and 4.26.2F will remove an unnecessary duplication of the obligations to determine the Capacity Cost Refund for each Market Participant. The IMO considers the proposed amendment will improve the integrity of the Amending Rules.

The IMO notes that the generation and DSP components of the Capacity Cost Refund for a Market Participant will be calculated and limited to the capacity obligations of each

separately. This will ensure that the DSP Capacity Shortfall and Reserve Capacity Deficit Refund amounts could not when added together exceed the Capacity Credit payments to that Demand Side Programme.

4.26.2E. For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("**Capacity Cost Refund**") to be applied for Trading Month m in ~~respect of a Net STEM Shortfall as determined under clause 4.26.2 and a Capacity Shortfall as determined under clause 4.26.2D during that Trading Month~~ accordance with clause 4.26.2F.

4.26.2F. ~~For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("**Capacity Cost Refund**") to be applied for Trading Month m.~~ The Capacity Cost Refund for Market Participant p and Trading Month m is the sum of:

(a) either:

i. where Market Participant p holds Capacity Credits associated with a generation system, the Generation Capacity Cost Refund for Market Participant p for Trading Month m, determined in accordance with clause 4.26.3; or

ii. zero, otherwise; and

(b) the sum over all Demand Side Programmes for which Market Participant p holds Capacity Credits of the Demand Side Programme Capacity Cost Refund for Trading Month m, determined in accordance with clause 4.26.3A.

The proposed amendments to clause 4.26.3 will reflect the amendments to clearly distinguish between a Generation Reserve Capacity Deficit Refund and a refund for DSM. The IMO has also included a number of minor and typographical amendments which it considers will improve the integrity of the Amending Rules.

4.26.3. The Generation Capacity Cost Refund for Trading Month m for a Market Participant p holding Capacity Credits associated with a generation system is the lesser of:

(a) the Maximum Participant Generation Refund determined for Market Participant p and Trading Month m in accordance with the Refund Table, less all Generation Capacity Cost Refunds applicable to ~~the~~ Market Participant p in previous Trading Months falling in the same Capacity Year as Trading Month m; and

(b) the ~~Participant~~ Generation Reserve Capacity Deficit Refund for Market Participant p and Trading Month m, plus the sum over all Trading Intervals t in Trading Month m of the Net STEM Refund,

where the Net STEM Refund is the product of:

i. the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table

applicable to Trading Interval t; and

ii. the Net STEM Shortfall for Market Participant p in Trading Interval t.

The proposed amendment to clause 4.26.3A will ensure that the Facility Reserve Capacity Deficit Refund (a monthly cost figure) is added to the monthly cost associated with a Facility having a capacity shortfall.

The IMO also proposes a number of minor and typographical amendments to improve the integrity of the Amending Rules.

4.26.3A. The Demand Side Programme Capacity Cost Refund ~~associated with~~ for Trading Month m for a Demand Side Programme is equal to the lesser of:

(a) twelve times the Monthly Reserve Capacity Price for Trading Month m multiplied by the number of Capacity Credits associated with the Facility, less all Demand Side Programme Capacity Cost Refunds applicable to the ~~Market Participant~~ Facility in previous Trading Months falling in the same Capacity Year as Trading Month m; and

(b) the sum of:

i. the sum over all Trading Intervals t in Trading Month m of:

12 * Monthly Reserve Capacity Price * S / (2 * H)

Where:

S is the Capacity Shortfall in MW determined in accordance with clause 4.26.2D in any Trading Interval; and

H is the maximum number of hours that the Facility was certified to be available in accordance with clause 4.10.1(f)(ii)~~.~~; and

ii. the Facility Reserve Capacity Deficit Refund for Trading Month m for the Facility, determined in accordance with clause 4.26.1A.

The proposed amendment to clause 4.26.4 will ensure consistency with the amendments to section 4.26 proposed in this section.

4.26.4. The IMO must apply any revenue generated from the application of clause ~~4.26.3 and 4.26.3A~~ 4.26.2E to Market Customers in accordance with clause 4.28.4.

The proposed amendment to clause 6.16.2 will reflect the amendment to clarify that an Interruptible Load may be associated with a DSP. The IMO has also amended the reference to the MWh consumption determined from Meter Data Submissions as this is a non-loss factor adjusted value and so does not require further adjustments.

The IMO notes that the Demand Side Programme Load will be expressed as a positive number.

6.16.2 The IMO must determine the Demand Side Programme Load for a Demand Side Programme for a Trading Interval as the ~~sum of the Metered Schedules of the associated Non-Dispatchable Loads, adjusted to a non-loss adjusted value~~ total net MWh quantity of energy consumed by the Associated Loads of that Demand Side Programme during the Trading Interval, determined from Meter Data Submissions and expressed as a positive non-loss adjusted value.

The proposed amendment to clause 6.17.6 will ensure that all the variables are presented as MWh non-loss adjusted values. The changes also correct the reference to clause 7.13.1(eC) and place a floor on the difference between the RD and DSP Load value. The IMO has also clarified that the DIP will be either the value determined in (a) or the sum of (b)-(e). The IMO considers that this calculation is currently ambiguous in the Market Rules.

The IMO notes that it has included the Amending Rules due to commence for both RC_2008_20 and RC_2010_11.

6.17.6. The Dispatch Instruction Payment, DIP(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals either ~~the sum of~~:

(a) zero, if Market Participant p:

i. is the Electricity Generation Corporation; or

ii. was issued no Dispatch Instructions for Trading Interval t;

or the sum of:

(b) the sum over all Scheduled Generators and Dispatchable Loads registered by the Market Participant of the following amounts for Trading Interval t:

i. if the Dispatch Schedule for the Registered Facility is set in accordance with clause 6.15.1(a) for Trading Interval t, the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dA) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dB) is zero (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node), the amount for the Registered Facility is zero;

iA. if clauses 3.21A.14 or 4.25.10 apply to the Registered Facility during the Trading Interval, the amount for the Registered Facility is zero;

ii. if neither paragraph (i) nor (iA) applies, the amount for the Registered Facility is the product of:

1. the qualifying quantity for Trading Interval t as calculated in accordance with clause 6.17.8, less the sum of the quantity indicated in the applicable Resource Plan (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity so that the result is measured at the Reference Node) for the Registered Facility for Trading Interval t and the Balancing Support Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dA) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) and the Network Control Service Contract energy dispatched from the Facility in Trading Interval t as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and

2. the price defined as:

i. the contracted price, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract for System Restart, Dispatch Support or Load Rejection~~.~~;

ii. zero, if the Dispatch Instruction is for the purposes of an Ancillary Services Contract other than for System Restart, Dispatch Support or Load Rejection~~.~~; or

iii. the applicable price as defined by clause 6.17.7 less MCAP for Trading Interval t~~.~~; and

(c) the sum over all Non-Scheduled Generators registered by the Market Participant of the amount that is the product of:

i. the quantity, defined as a negative value, by which the Non-Scheduled Generator was instructed by System Management to reduce its output (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node); and

ii. the Standing Data price defined in Appendix 1(e)(v) that was current at the time of the Trading Interval for the Non-

Scheduled Generator for a decrease in generation, (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval) less MCAP for the Trading Interval; and

(d) the sum over all Demand Side Programmes registered to the Market Participant of the amount that is the product of:

i. the quantity (in MWh) by which the Demand Side Programme reduced its consumption in response to a Dispatch Instruction, excluding any instructions given under a Network Control Service Contract, where this quantity is equal to the least of: ~~where the quantum of reduction in any Trading Interval is equal to the lesser of:~~

1. half of the Facility's Capacity Credits ~~(in MW)~~;

2. ~~half of~~ the Dispatch Instruction amount ~~(in MW)~~ provided by System Management in accordance with clause ~~7.1.13(eC)~~ 7.13.1(eC); or

3. the greater of zero and the difference between half of the Relevant Demand set in clause 4.26.2CA and ~~negative~~ ~~two multiplied by~~ the Demand Side Programme Load ~~(in MW)~~ measured in the Trading Interval; and

ii. the price defined in the Market Participant's Balancing Data Submission provided in accordance with clause 6.5A, that was current at the time of the Trading Interval, for the Demand Side Programme (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval)~~.~~; and

(e) if the participant is given an instruction under a Network Control Service Contract then the sum over all Network Control Service Contract Facilities registered by the Market Participant of the amount that is the product of:

i. the quantity by which the Facility was instructed by System Management to increase its output as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) or reduce its consumption as specified by System Management in accordance with clause 7.13.1(dB); and

ii. the price as defined as:

1. MCAP for Trading Interval t, if the Facility was instructed to increase its output; or

2. zero, if the Facility was instructed to reduce its consumption.

The proposed amendment to clause 7.6.10 will improve the integrity of the Amending Rules.

7.6.10. Where a Market Participant has Capacity Credits granted in respect of a Demand Side Programme:

(a) the IMO must provide System Management with the details of the Reserve Capacity Obligations to enable System Management to dispatch the Demand Side Programme~~.~~; and

(b) System Management may issue directions to the Demand Side Programme in accordance with the Reserve Capacity Obligations.

The proposed amendments to clause 7.7.3 will clarify that the Dispatch Instruction will be for a decrease in consumption. This is consistent with the measure being in MW. The IMO has also clarified that these Dispatch Instructions will apply specifically for a Demand Side Programme. For example Dispatchable Loads will be issued Dispatch Instructions in accordance with clauses 7.7.3 (d) (i) or (ii), as applicable.

7.7.3. Each Dispatch Instruction must contain the following information:

(a) the Registered Facility to which the Dispatch Instruction relates;

(b) the time the Dispatch Instruction was issued;

(c) the time by which response to the Dispatch Instruction is required to commence (which must not be earlier than the time it was issued, except as contemplated by clause 7.7.7(b));

(d) the required level of sent out generation or consumption which may be any one of the following:

i. a target MW output;

ii. a minimum MW level; or

iii. a required decrease in consumption (in MW) for a Demand Side Programme; and

(e) the ramp-rate to maintain until the required level of sent out generation or consumption is reached, if a ramp rate has been identified in Standing Data.

The proposed amendment to clause 7.10.4 will remove System Management's requirement to monitor the behaviour of DSPs with the clause 7.10.1. The IMO notes that System Management's Monitoring and Reporting Protocol will need to be amended to reflect this revised monitoring requirement.

7.10.4. System Management must monitor the behaviour of Market Participants with Registered Facilities to assess whether they are complying with clause 7.10.1 in accordance with its Monitoring and Reporting Protocol~~.~~, except where it relates to a Demand Side Programme.

The proposed amendment to clause 7.13.1 will clarify that the required decrease relates to the consumption of each Demand Side Programme.

7.13.1. System Management must provide the IMO with the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

…

(eC) the required decrease, in MWh, in the consumption of each Demand Side Programme, by Trading Interval, as a result of System Management Dispatch Instructions. This is to be used in settlement as the quantity described in clause 6.17.6(d)(i)(2)~~.~~;

…

(g) details of the instructions provided to:

i. Demand Side Programmes that have Reserve Capacity Obligations; and

ii. providers of Supplementary Capacity;

…

The proposed amendment to clause 10.5.1 reflects that status of a DSP as being a Registered Facility under the proposed Amending Rules.

10.5.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Public and the IMO must make each item of information available from the Market Web-Site after that item of information becomes available to the IMO:

…

(f) the following Reserve Capacity information (if applicable):

…

iv. for each Market Participant holding Capacity Credits, the Capacity Credits provided by each Facility for each Reserve Capacity Cycle~~. In the case of a Market Participant with a Demand Side Programme, the IMO must publish the total Capacity Credits for the programme~~;

…

(j) for each Trading Interval in each completed Trading Day in the previous 12 calendar months the following dispatch summary information:

i. the values of MCAP, UDAP and DDAP;

ii. the Load Forecasts prepared by System Management in accordance with clause 7.2.1;

iii. the sum of the Metered Schedule load for all Non-Dispatchable Load, Dispatchable Load and Interruptible Load;

iv. estimates of the energy not served due to involuntary load curtailment; and

v. any shortfalls in Ancillary Services;

…

Chapter 11: Glossary

Associated ~~Non-Dispatchable~~ Load: Has the meaning given in clause 2.29.5G~~D~~.

Association Period: Has the meaning given in clause 2.29.5G.

Capacity Cost Refund: Has the meaning~~s~~ given in clause~~s~~ ~~4.26.3 and 4.26.3A.~~ 4.26.2E.

Demand Side Programme: Means a ~~programme~~ Facility registered in accordance with clause 2.29.5A.

Demand Side Programme Capacity Cost Refund: Has the meaning given in clause 4.26.3A.

Facility Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1A.

Generation Capacity Cost Refund: Has the meaning given in clause 4.26.3.

Generation Reserve Capacity Deficit Refund: Has the meaning given in clause 4.26.1B.

Relevant Demand: The consumption of a Demand Side Programme as determined in clause 4.26.2CA. Relevant Demand is used to determine Reserve Capacity shortfalls.

Reserve Capacity Deficit ~~Shortfall~~: Has the meaning given in clause 4.26.1A.

~~**Participant Reserve Capacity Deficit Refund:** Has the meaning given in clause 4.26.1B.~~

The proposed amendments to Appendix 1 will commence at 1 July 2011 and amend the requirements for the provision of Single Line Diagrams for Curtailable Loads. The IMO has included this information following informal discussions with System Management around the provision of this information. In particular, System Management has confirmed that this information is only required if a generator will connect to the network at the Curtailable Load site. The IMO considers that there will be some efficiency gains to both Market Customers and System Management associated with removing the requirement to provide single line diagrams for each Curtailable Load earlier than 1 October 2011. Note that to avoid confusion these amendments are shown against the current version of Appendix 1 in the Market Rules rather than the version proposed by the IMO in the Draft Rule Change Report for this Rule Change Proposal.

Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by the IMO for use by the IMO in market processes and by System Management in dispatch processes.

Standing Data required to provided as a pre-condition for Facility Registration, and which is to be updated by Rule Participants as necessary, is described by clauses (a) to (j).

Standing Data not required to be provided as a pre-condition for Facility Registration but that which is required to be maintained by the IMO includes the data described in clauses (k) onwards.

(a) for a Network:

…

(h) for a Curtailable Load:

i. the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval;

ii. evidence that the communication and control systems required by clause 2.36 are in place and operational;

iii. the maximum amount of load that can be curtailed;

iv. the maximum duration of any single curtailment;

v. [Blank]

vi. for a facility that is registered to a Market Participant other than the Electricity Generation Corporation, Standing Balancing Data comprising;

1. a Consumption Decrease Price for Peak Trading Intervals; and

2. a Consumption Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of $/MWh to a precision of $0.01/MWh;

vii. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output;

viii. the Metering Data Agent for the facility;

ix. where the Curtailable Load has a generation system that can connect to the network behind its associated meter, a single line diagram for the Curtailable Load, including the locations of generators, transformers, switches, operational and settlement meters; ~~the single line diagram for the facility, including the locations of transformers, switches, operational and settlement meters;~~

x. the network nodes at which the facility can connect;

xi. the short circuit capability of facility equipment;

xii. whether the Curtailable Load is an Intermittent Load;

xiii. if the Curtailable Load is an Intermittent Load, the maximum allowed level of Intermittent Load, where this cannot exceed the quantity in (i);

xiv. if the Curtailable Load is an Intermittent Load, the maximum level of net consumption behind the meter associated with the Curtailable Load which is not separately metered and which is not Intermittent Load; and

xv. if the Curtailable Load is an Intermittent Load, the separately metered generating systems and loads behind that meter associated with the Curtailable Load which are not to be included in the definition of that Intermittent Load.

…

The proposed amendment to Appendix 1 will commence on 1 October 2011 and incorporate the requirement to provide as part of the Standing Data required as a pre-condition for Facility Registration the number of times a DSP can be curtailed.

The IMO also has included a number of minor and typographical amendments to improve the integrity of the Amending Rules. Note that to avoid confusion the proposed amendments are shown in full rather than as incremental changes against the version of Appendix 1 proposed by the IMO in the Draft Rule Change Report for this Rule Change Proposal.

Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by the IMO for use by the IMO in market processes and by System Management in dispatch processes.

Standing Data required to provided as a pre-condition for Facility Registration, and which is to be updated by Rule Participants as necessary, is described by clauses (a) to (j).

Standing Data not required to be provided as a pre-condition for Facility Registration but that which is required to be maintained by the IMO includes the data described in clauses (k) onwards.

(a) for a Network:

…

(h) for a ~~Curtailable Load~~ Demand Side Programme:

i. ~~the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval;~~ [Blank]

ii. evidence that the communication and control systems required by clause 2.3~~6~~5 are in place and operational;

iii. the maximum amount of load that can be curtailed;

iv. the maximum duration of any single curtailment;

v. [Blank]

vi. for a ~~facility~~ Demand Side Programme that is registered to a Market Participant other than the Electricity Generation Corporation, Standing Balancing Data comprising;

1. a Consumption Decrease Price for Peak Trading Intervals; and

2. a Consumption Decrease Price for Off-Peak Trading Intervals;

where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of $/MWh to a precision of $0.01/MWh;

vii. the minimum response time before the ~~facility~~ Demand Side Programme can begin to respond to an instruction from System Management to change its output;

viii. ~~the Metering Data Agent for the facility;~~ the maximum number of hours per year the Demand Side Programme can be curtailed;

ix. ~~where the Curtailable Load has a generation system that can connect to the network behind its associated meter, a single line diagram for the Curtailable Load, including the locations of generators, transformers, switches, operational and settlement meters;~~the Trading Intervals where the Demand Side Programme can be curtailed;

x. ~~the network nodes at which the facility can connect;~~ any restrictions on the availability of the Demand Side Programme;

xi. ~~the short circuit capability of facility equipment;~~ the normal ramp up and ramp down rates as a function of output level, if applicable;

xii. ~~whether the Curtailable Load is an Intermittent Load;~~ emergency ramp up and ramp down rates, if applicable; and

xiii. ~~if the Curtailable Load is an Intermittent Load, the maximum allowed level of Intermittent Load, where this cannot exceed the quantity in (i);~~ the maximum number of times that the Demand Side Programme can be curtailed during the term of its Capacity Credits;

~~xiv. if the Curtailable Load is an Intermittent Load, the maximum level of net consumption behind the meter associated with the Curtailable Load which is not separately metered and which is not Intermittent Load; and~~

~~xv. if the Curtailable Load is an Intermittent Load, the separately metered generating systems and loads behind that meter associated with the Curtailable Load which are not to be included in the definition of that Intermittent Load.~~

…

(k) For each Registered Facility:

i. Reserve Capacity information including:

…

5. for Interruptible Loads ~~and Curtailable Loads~~, the maximum number of times that interruption can be called during the term of the Capacity Credits;

…