

Wholesale Electricity Market Rule Change Proposal

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Change requested by

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Change Proposal title:	Curtaillable Loads and Demand Side Programmes
Market Rule(s) affected:	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.

Introduction

Market Rule 2.5.1 of the Wholesale Electricity Market Rules provides that any person (including the IMO) may make a Rule Change Proposal by completing a Rule Change Proposal Form that must be submitted to the Independent Market Operator.

This Change Proposal can be posted, faxed or emailed to:

Independent Market Operator
 Attn: General Manager Development
 PO Box 7096
 Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4339
 Email: market.development@imowa.com.au

The Independent Market Operator will assess the proposal and, within 5 Business Days of receiving this Rule Change Proposal form, will notify you whether the Rule Change Proposal will be further progressed.

In order for the proposal to be progressed, all fields below must be completed and the change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the wholesale electricity market objectives. The objectives of the market are:

- (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
- (b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
- (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
- (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
- (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

Details of the proposed Market Rule Change

1. Describe the concern with the existing Market Rules that is to be addressed by the proposed Market Rule change:

Background

Market Participants that are electricity retailers serve numerous domestic, commercial and industrial users (Loads). Most of these will be Non-Dispatchable Loads¹ (NDLs), 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. Demand Side Management (DSM) providers aggregate such users to form Curtailable Loads (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 Demand Side Programme (DSP) which may interact with the energy market through one Market Participant (their electricity retailer) and with the capacity

¹ A Load which is not a Dispatchable Load, Curtailable Load or an Interruptible Load, and is therefore self-scheduled.

mechanism through a different Market Participant (their DSM provider). 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

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 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 considers 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 Curtailable Loads. A paper outlining the issues was presented at the 12 May 2010 Market Advisory Committee (MAC) meeting.

The issues paper was also supplemented with further analysis regarding the measurement of Curtailable Load performance at both the 16 June 2010 and 11 August 2010 MAC meetings². At both these meetings the MAC agreed with a number of recommendations put forward by the IMO. In preparing this Rule Change Proposal, 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)). 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:

- 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 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

² To review the previous MAC papers and minutes see: www.imowa.com.au/MAC

Schedule to be determined for a Curtailable Load which incorporates a Curtailable Load 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 Curtailable Loads (12 May 2010 meeting).

The IMO's proposed solution: To implement the recommendation the IMO proposes 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 Market Rules imply that a DSP 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. 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. 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, each application costs the Market Participant \$280³ 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, 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. For operational efficiency, System Management would prefer to issue 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. 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.

³ Effective 1 July 2010.

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: 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 proposes 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. The proposed amendments will amend the calculation to no longer limit the amount of curtailability a DSP will be able to offer. 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

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 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 Rule Change Proposal: Demand Side Management - Operational Issues (RC_2008_20) introduced a new concept for measuring the curtailability of Curtailable Loads. This is known as the Relevant Demand (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 considers 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 intervals⁴. 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 that the ability to exclude Trading Intervals where maintenance was being performed be removed from the Market Rules. The IMO considers that there is already a payment incentive in place to reduce consumption over peak periods in the IRCR calculation.

The IMO notes 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

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

⁴ The 12 peak Trading Intervals during the Hot Season preceding the initial calculation.

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 notes 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. 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 Rule Change Proposal: DSM – Operational Issues (RC_2008_20) implemented a methodology for calculating Capacity Cost Refunds for Curtailable Loads. This methodology requires a DSM provider to pay refunds only if it fails to deliver curtailment when dispatched.

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 considers 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 proposes 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

This issue is presented for completeness only, and no amendments to the Reserve Capacity Security Market Rules have been included in this proposal.

Overview: 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. 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 the Rule Change Proposal: Required Level and Reserve Capacity Security (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 has proposed under the Rule Change Proposal: Required Level and Reserve Capacity Security (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: 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.

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 considers 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 considers 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 proposes 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: 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 notes 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 considers 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 considers 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 notes that for the marginal unit (Load) dispatched by System Management, the opportunity cost of a load curtailment (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 considers 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 notes 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 proposes that DSPs not be paid for any energy reduced during either a Reserve Capacity test or Verification Test.

2. Explain the reason for the degree of urgency:

The IMO proposes that this Rule Change Proposal be progressed through the Standard Rule Change Process.

3. Provide any proposed specific changes to particular Rules: (for clarity, please use the current wording of the Rules and place a ~~strikethrough~~ where words are deleted and underline words added)

The proposed amendments will remove the requirement for the Network Operator to calculate a Loss Factor for each connection point at which a Curtailable Load is connected. This is consistent with the general removal of Curtailable Loads from the Market Rules. The Loss Factor will be created for the Non-Dispatchable Loads 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 Non-Dispatchable Load is a Facility (not a Registered Facility). This is required because a Non-Dispatchable Load 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 Facility or a Non-Dispatchable Load where there are no Loss Factors applying to the connection

point at which the Registered Facility or the Non-Dispatchable Load will be connected.

The proposed amendment is consistent with the IMO's general removal of the term Curtailable Load from the Market Rules. This will remove a Curtailable Loads 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 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;

...

The proposed amendment will reflect the removal of the requirement for the Network Operator to calculate a Loss Factor for a Curtailable Load. This will remove Curtailable Loads 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 Demand Side Programme 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 Curtailable Load from the Market Rules. This will remove a Curtailable Loads 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 Non-Dispatchable Load (or a Market Customer that plans to enter into a contract with one) to register a Demand Side Programme. Note that a Demand Side Programme 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 Demand Side Programme to be filled with Non-Dispatchable Loads.

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 Non-Dispatchable Load cannot be associated with two Demand Side Programmes 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 Non-Dispatchable Load cannot be associated with two Demand Side Programmes at the same time by requiring the IMO to disassociate a Non-Dispatchable Load 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 Non-Dispatchable Loads 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 Demand Side Programme, which reduces its ability to curtail demand, will be reflected in the programme's associated Relevant Demand. This will ensure that the Relevant Demand 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 Demand Side Programme to disaggregate its comprising Loads and associate these each with an individual Demand Side Programme.

The IMO notes that this clause will commence prior to any of the subsequent Amending Rules to replace the concept of a Curtailable Load with a Demand Side Programme commencing. Further details of the process for disaggregating the comprising Loads of existing Demand Side Programmes 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 Curtailable Loads which have been assigned Capacity Credits by the IMO will be treated as a Non-Dispatchable Loads associated with Demand Side Programmes from 1 October 2011 onwards. The proposed new clause 2.29.5H will require the relevant Market Participant to register a new Demand Side Programme that the Non-Dispatchable Load will be associated with. The Reserve Capacity Obligations, rights and liabilities previously belonging to the Curtailable Load will be transferred by the IMO to the new Demand Side Programme. Market Participants will be able to disassociate the Non-Dispatchable Load with this new programme however they will not be able to reallocate the Capacity Credits to another Demand Side Programme.

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 Curtailable Load with a Demand Side Programme 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 Non-Dispatchable Load associated with a Demand Side Programme 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 Curtailable Load. The IMO notes that it is unlikely that a Curtailable Load 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 Curtailable Load from the Market Rules. This will remove a Curtailable Loads association with the energy side of the WEM. The proposed amendment will also clarify that the obligation for actually registering a Demand Side Programme 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads association with the energy side of the WEM. The IMO notes that the requirements for the minimum notice periods for Demand Side Programmes 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 Curtailable Loads at different locations. This will no longer be required as the requirement for the Demand Side Programme will to be available for the correct amount of availability hours. For the avoidance of doubt the Non-Dispatchable Loads associated with a Demand Side Programme can be at different locations, as long as they are available for the correct amount of availability hours. The Loads comprising a Demand Side Programme 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 Curtailable Load from being able to be associated with an Intermittent Load. Under the proposed amendments the energy from the Non-Dispatchable Load 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, ~~Curtable Load~~, or a Non-Dispatchable Load.

The proposed amendment will remove the connection of energy associated with a Curtable Load 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 Curtable 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 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);

...

The proposed amendment will remove the current requirement for an applicant to provide a proposed date for a Curtable Load 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 Curtable Loads from one Demand Side Programme to another. This will be taken into account in the proposed new clauses 2.29.5B – E.

The Loads comprising a Demand Side Programme 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 Demand Side Programme 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 Curtailable Load 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 Demand Side Programmes. 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 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 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 Demand Side Programme. Under the proposed amendments a Demand Side Programme will be a type of Facility and so may apply for Certified Reserve Capacity 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 Stipulated Default Loads as there will no longer be any difference between a Demand Side Programme (previously referred to as Curtailable

Load) and a Stipulated Default Load. The proposed amendments will also replace any references to Curtailable Loads with Demand Side Programmes.

The IMO also proposed changes to ensure that availability of a Demand Side Programme 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 Demand Side Programmes 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 Curtailable Load from the Market Rules. This will remove a Curtailable Loads 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 Relevant Demand at the time of certification as the identity of the Non-Dispatchable Loads 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 Curtailable Load from the determination of a Market Participant's Reserve Capacity Obligations as the energy will be incorporated into the energy consumption associated with the Non-Dispatchable Load (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 Demand Side Programme 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. Demand Side Programmes 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 Demand Side Programme 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads 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 Demand Side Programme 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads 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 Curtailable Loads.

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, ~~Curtable 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 Curtable Load from the Market Rules. This will remove Curtable Loads association with the energy side of the WEM.

- 4.25.4E. Where the Capacity Credits associated with a ~~Curtable 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 Curtable Load from the Market Rules. This will remove Curtable Loads association with the energy side of the WEM.

- 4.25.4F. A Market Participant may not offer a ~~Curtable Load~~ Demand Side Programme for Supplementary Reserve Capacity if the ~~Curtable 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads association with the energy side of the WEM.

The proposed amendment will also clarify the notice period System Management must give for before a Demand Side Programme 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 Demand Side Programme will occur during a period where the Non-Dispatchable Load associated with the Demand Side Programme would be likely to be operating. For example is a Facility has notified the

IMO that if it 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 Demand Side Programme 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads 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 Relevant Demand level and will be determined by the IMO from its Demand Side Programme 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads 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 Demand Side Programme will be required to make Capacity Cost Refunds if at any time the Demand Side Programme 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 Demand Side Programme 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads 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 Curtailable Loads from the Market Rules and replacement with a Demand Side Programme. As there will be no energy associated with a Demand Side Programme (only capacity) the reference to Curtailable Load has not been replaced with a reference to Demand Side Programme 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 ~~Curtable 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 Demand Side Programme's Relevant Demand 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 Non-Dispatchable Load 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 Relevant Demand will be based on the Demand Side Programme as a whole (issue 3(c)).

Note that a Demand Side Programme 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 Curtable 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 Stipulated Default Loads from the IMO's calculation of the Capacity Shortfall. This is consistent with the IMO's merging of the concept of Curtailable Loads and Stipulated Default Loads. The proposed amendments will also remove the current reference to a Curtailable Load and replace this with a Demand Side Programme.

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 ~~Curtailed 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 ~~Curtailed 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 ~~Curtailed 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 ~~Curtailed 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 ~~Curtailed 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 Curtailed Load minus the Dispatch Instruction for the Trading Interval;~~

if the Capacity Credits assigned to the ~~Curtailed 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 Demand Side Programme 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. $12 * \text{Monthly Reserve Capacity Price} * S / (2 * H)$
 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 Demand Side Programme (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 Curtailable Load – the consumption limit will be calculated for the Non-Dispatchable Load. This amendment is consistent with the IMO’s general removal of Curtailable Loads 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 Demand Side Programme 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 Curtailable Load. The demand to be consumed by the Market Participant will now be associated with the Non-Dispatchable Load.

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 ~~Curtailed Load~~ or Interruptible Load, but excluding demand associated with any Dispatchable Load; and

...

The proposed amendment will remove the current exclusion of Curtailed Loads from Resource Plan Submission data. This is consistent with the removal of Demand Side Programmes 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 ~~Curtailed Loads~~; and

...

The proposed amendment is consistent with the IMO's general removal of the term Curtailed Load from the Market Rules. This will remove Curtailed Loads 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 ~~Curtailed 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 Demand Side Programmes. 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 Curtailed Load 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 Curtailable Load as the Dispatch Schedule (and any deviations) will be now captured by the Non-Dispatchable Load.

Note that a Demand Side Programme 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 Demand Side Programme 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 Demand Side Programmes from the energy side of the market.

6.16.1. Subject to clause 9.3.3, 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 Demand Side Programme Load which will be defined in the Glossary and used as the basis for calculating the Required Level for a Demand Side Programme 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 Demand Side Programme 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 a Curtailable Loads in all intervals where they are operating below their Relevant Demand 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 Demand Side Programme 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 Stipulated Default Load.

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 MWh) 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),₂

...

The proposed amendment will remove the requirement for System Management to maintain a dataset of Forced Outages and Consequential Outages for Curtailable Loads. The IMO does not propose to require System Management to maintain this same data set for a Demand Side Programme as it is not possible for a Demand Side Programme 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads 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 Curtailed Load Demand Side Programme.
- (b) System Management may issue directions to the Curtailed 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 Demand Side Programme which specifies the required decrease quantity (measured against the Relevant Demand 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 Demand Side Programme 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 Curtailed Load from the Market Rules. This will remove Curtailed Loads 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 Curtailed Load when, due

to limitations on the availability of the Demand Side Programme Curtable Load, such ~~curtailment-dispatch~~ would prevent that Demand Side Programme Curtable 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 Curtable Loads from the Dispatch Merit Order System Management must select them in accordance with the Power System Operations Procedure, where the selection process specified in the Power System Operations Procedure must only discriminate between Demand Side Programmes Curtable Loads based on size of the capacity, response time, availability and cost of different Demand Side Programmes Curtable Loads.

7.7.10 When System Management has issued a ~~Dispatch~~ instruction to a Demand Side Programme Curtable Load to reduce demand it may issue a further instruction terminating the requirement for the Demand Side Programme Curtable 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 Curtable 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 Curtable 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. ~~Curtable 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 Demand Side Programme. This will ensure that a Demand Side Programme 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.

\bar{r} 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 Curtailable Load from the Market Rules. This will remove Curtailable Loads association with the energy side of the WEM. There will also no longer be a Metered Schedule determined for a Curtailable Load.

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

- (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, ~~Curtailed 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 Curtailed Load 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:

$$\text{MPFSA}(p,m) = (-1) \times (\text{Market Fee rate} + \text{System Operation Fee rate} + \text{Regulator Fee rate}) \times (\text{Monthly Participant Load}(p,m) + \text{Monthly Participant Generation}(p,m))$$

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;

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

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 Curtailed Loads~~, registered to the Market Participant for Trading Interval t; and

$$\text{Monthly Participant Generation}(p,m) = \text{Sum}(d \in D, t \in T, \text{Metered Generation}(p,d,t));$$

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 Curtailable Load as being public. Under the proposed amendments there will be no longer a Metered Schedule calculated for a Curtailable Load.

The proposed amendment will also remove the clarification that the Capacity Credits not be published for each Curtailable Load 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

~~Curtable 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, Curtable 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 Curtable Load or an Interruptible Load, and is therefore self-scheduled.

Relevant Demand: The consumption of a ~~Curtable 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 Curtable Load. It is also used to determine Reserve Capacity shortfalls.~~

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

The proposed amendment will remove the energy associated with the Demand Side Programme from being provided as Standing Data. This is consistent with the IMO's general removal of energy from being connected with a Demand Side Programme. The IMO notes that the proposed amendments also remove requirements for Standing Data that would no longer be relevant for a Demand Side Programme (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 be 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 2.365 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 Demand Side Programmes 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 Demand Side Programme 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, ~~Curtable 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.

...

4. Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

The IMO’s assessment of the impact of each of the proposed changes 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 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 IMO considers that the proposed amendments will promote Market Objective (a) by allocating the risks associated with determining appropriate Loads for inclusion in Demand Side Programmes from the IMO to the DSM providers (the correct party to manage these). This will promote greater economic efficiency.

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 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.	

The IMO considers that the proposed amendments will promote Market Objective (a) by allowing System Management to issue a Dispatch Instruction to the DSP provider, who would then decide how to deliver the requested curtailment. This would improve the allocative efficiency of System Management resources.

The proposed amendments will also promote Market Objective (b) by ensuring that DSM can be used more effectively as a competitive product. By removing a potential barrier to System Management being able to effectively dispatch a DSP provider’s portfolio of NDLS, the IMO considers that 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 IMO considers that the proposed amendments, which:

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

will also promote 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.

Issue 3: Market Fees

The IMO notes that it does not propose any amendments to the current Market Fee requirements for DSPs.

Issue 4: Measurement of Curtailable Load performance

The IMO considers the changes proposed to amend the calculation of the Relevant Demand to be based on the aggregated output of the DSP and be calculated on the IRCR intervals will have the following impact of the 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.	

The IMO considers that by considering the consumption of a DSP at the aggregated level (rather than for each individual Load) a DSP will be treated equivalently to Market Generators whose output is currently measured at one connection point (which incorporates behind the fence load).

Issue 5: Capacity Cost refunds

The IMO considers the changes which will require a Market Participant to make Capacity Credit refunds where its DSP has not be filled will have the following impact on the 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 IMO considers that the proposed amendment would promote Market Objective (a) by requiring a DSP which fails to meet its capacity obligations to pay refunds to the level at which it didn't meet its obligations. For the Reserve Capacity Mechanism to operate effectively, it is essential that there are the correct incentives for DSP to be fully available at all 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 the level of capacity reduction for which it has been certified, will better reflect the incentive structure the Refund Mechanism was intended to provide. The proposed amendment will promote the reliable supply of energy in the SWIS.

Issue 6: Reserve Capacity Security

The IMO notes that it does not propose any amendments within this rule change proposal 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 the using the current Relevant Demand calculation provisions for Curtailable Loads, rather than Stipulated Default Loads will have the following impact on the 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 IMO considers that the proposed amendments would promote Market Objective (a) by ensuring that a more rigorous and accurate estimate of a Loads reduction in consumption is obtained will ensure that the Capacity Credits assigned to a Facility will more accurately reflect the true availability of a Demand Side Programme. The proposed changes will ensure that the safe and reliable supply of electricity can be maintained by System Management.

Issue 8: Potential Double Payment

The IMO considers that the proposal to clarify that DSPs are not be paid for any energy reduced during either a Reserve Capacity test or Verification Test will be consistent with the Market Objectives.

5. Provide any identifiable costs and benefits of the change:

Costs:

- Updates to the IMO’s systems will be required.

Benefits:

- Reduce complexity within the Market Rules associated with CLs and DSPs;
- Clearly delineate between the energy market and capacity mechanism aspects of DSPs; and
- Allocate the risks associated with determining appropriate Loads for inclusion in Demand Side Programmes from the IMO to the DSM providers (the correct party to manage these).
- Remove the current energy market cross subsidy associated with DSP’s undertaking Reserve Capacity test or Verification Tests.