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## Wholesale Electricity Market Rule Change Proposal

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**Change Proposal No:** RC\_2010\_29  
**Received date:** 2 December 2010

### Change requested by

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| <b>Date submitted:</b>          | 2 December 2010   |
| <b>Urgency:</b>                 | High  |
| <b>Change Proposal title:</b>   | Curtailed Loads and Demand Side Programmes  |
| <b>Market Rule(s) affected:</b> | 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 claddix 3 and 2( ne)1 a s , i96268d.1, the c.T2( ne)1 2.3( )-61508d2(a4)1.3(2(A)-9.11) 2.29.5G, 2.29.5H, 4.26.2CA, 4.26.2CB, and 4.26.2CC. |

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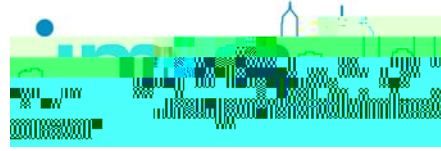
### Introduction

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.

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## **Details of the proposed Market Rule Change**

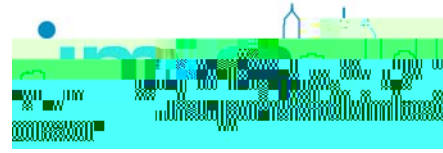
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### **1. Describe the concern with the existing Market Rules that is to be addressed by the proposed Market Rule change:**

#### **Background**

Market Participants that are electricity retailers serve numerous domestic, commercial and industrial users (Loads). Most of these will be Non-Dispatchable Loads<sup>1</sup> (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

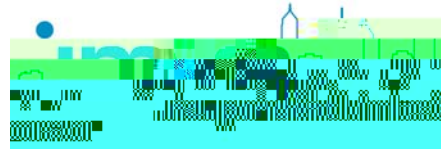


mechanism through a different Market Participant (their DSM provider). One key issue with this is that the Market Rules do not currently allow for a Load to be registered to two Market Participants.

### **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



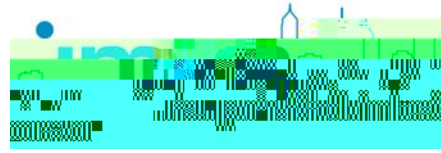
Schedule to be determined for a Curtailable Load which incorporates a Curtailable Load into the energy side of the market.

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 DSM provider applies for certification of Reserve Capacity for the



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.

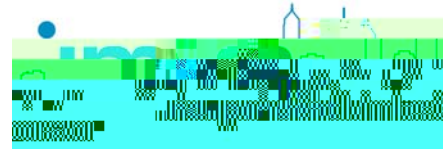
### **Issue 3: Market Fees**

*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).



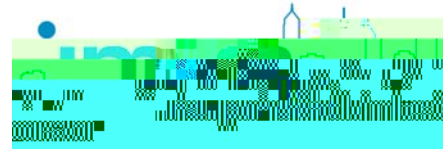
#### ***Issue 4: Measurement of CL Performance***

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 intervals<sup>4</sup>. 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



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;

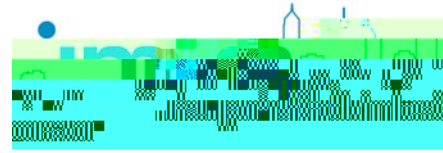
The exclusion due to maintenance, clause 4.26.2C(d) should be removed from the Market Rules; and

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 the RD level of a DSP based on the aggregated output of the DSP.



**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](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.

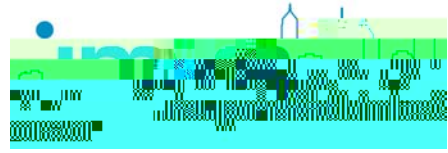
### **Issue 7: Stipulated Default Loads**

**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.

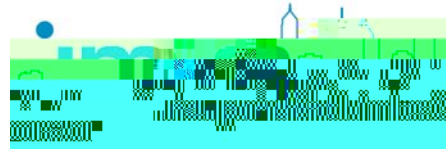
There is no clear way of determining the demand level of a Stipulated Default Loads from which to assign Certified Reserve Capacity (i.e. what can the load drop “from”). Currently the IMO uses the RD level when assigning CRC to a Stipulated Default Load, however at the time of assigning CRC the RD level 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





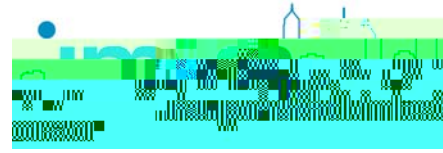
for Stipulated Default Loads, in all cases. Therefore the DSP's level of Capacity Credits



with the outcomes recently agreed by the MAC regarding Network Control Services (October 2010 MAC meeting).

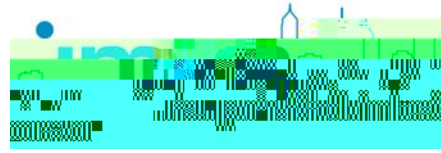
*Proposed Solution:* The IMO proposes that DSPs not be paid for any energy reduced during





- 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



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.

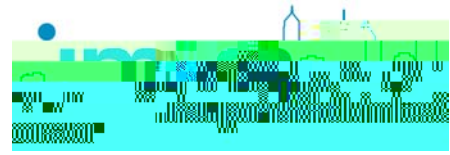
The proposed new clause will ensure that a Non-Dispatchable Load cannot be associated with two Demand Side Programmes simultaneously.

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).





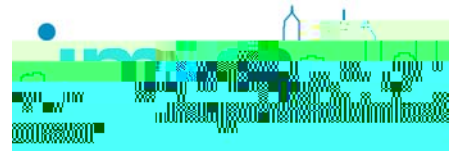
The IMO notes that clauses 2.29.5G and 2.29.5H will commence prior to any of the subsequent Amending Rules to replace the concept of a Curtailable Load with a Demand Side Programme commencing. The IMO notes that the intent of the proposed new clauses is not to amend the current structures in place around 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.

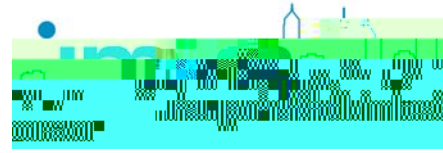
2.29.5H From 1 October 2011 where a Load that was registered as a Curtailable Load is deemed to be a Non-Dispatchable Load in accordance with clause 2.29.5G, the Market Participant that had registered that Curtailable Load must register a Demand Side Programme in accordance with the process specified 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 (Side r87.24 356.4242.8A.) also be registered







...

- (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~~ requires that an applicant for registration as a Rule Participant to provide the following information, and the applicant must provide the information required:

...

- (h) if the application relates to the sale of electricity to Contestable Customers by an applicant for the Market Customer class;
  - i. evidence that the applicant holds an Arrangement for Access for the purpose of taking power from the electricity grid; and
  - ii. the information described in Appendix 1(f);

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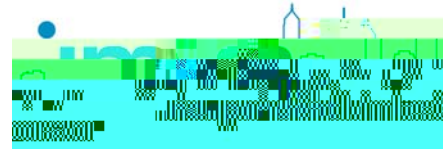
The proposed amendment will remove the current requirement for an applicant to provide a proposed date for a Curtable Load to cease operation that is no earlier than one month after the date of application. This sub-clause was originally put in place to take into account the churn of Curtable Loads from 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;



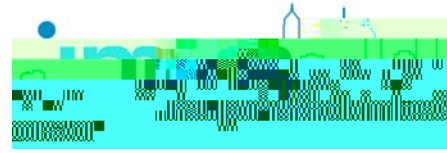
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- ii. the date the application is accepted in the event that the Facility has been rendered permanently inoperable; ~~or and~~
- iii. ~~not earlier than one month after the date of application if the Facility is a Curtailable Load, which is associated with a Demand Side Programme and has been registered in accordance with clause 4.8.3; and~~

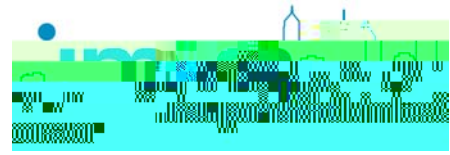
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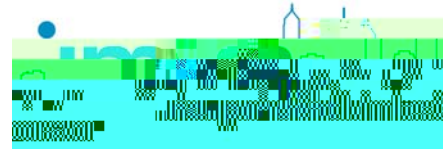
The proposed amendment reflects the general changes to the Market Rules regarding a Demand Side Programme being a Registered Facility.

- 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

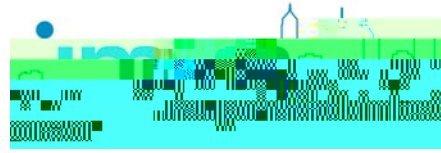


3.17.5. Unless otherwise directed by System Management, Rule Participants must, before





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



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.~~

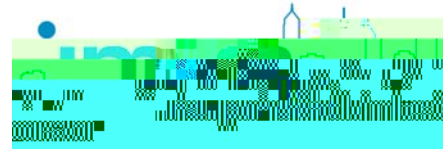
The proposed amendment is consistent with the IMO's general removal of the term Curtailable Load from the Market Rules. This will remove a Curtailable Loads association with the energy side of the WEM.

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]~~

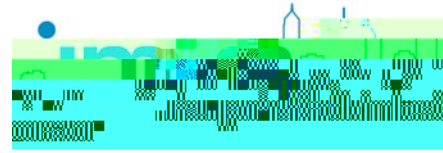
The proposed amendment will remove the energy associated with a Curtailable Load from the determination of a Market Participant's Reserve Capacity Obligations as the energy will be incorporated into the energy consumption associated with the Non-Dispatchable Load (this is covered under the "energy to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



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



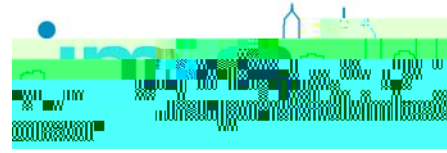
(a) the Reserve Capacity Obligation Quantity ~~is not to~~ must not exceed the Certified Reserve Capacity held by the Market Participant for the Facility;

...

(c) for Interruptible Loads, ~~Curtable 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:

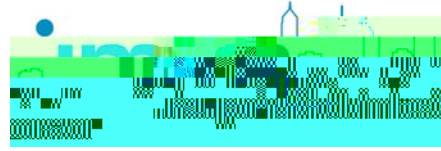
- i. ~~must be required~~ will equal zero once the capacity from the block has been dispatched ~~to be available for a~~ the number of hours per year ~~that does not exceed the maximum number of hours per year~~ as that are





Facility or, in the case of Interruptible Loads, ~~Curtailable Loads~~ Demand Side Programmes and Dispatchable Loads with at least two blocks holding Certified





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.

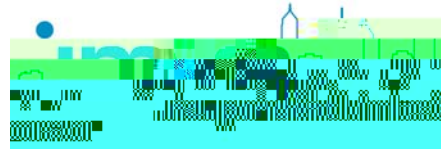
- 4.25.4. Subject to clause 4.25.3B, ~~the IMO must, in the event that~~ if a Facility fails a Reserve Capacity test requested by the IMO under clause 4.25.2(b), the IMO must require System Management to re-test that Facility in accordance with clause 4.25.2(b), not earlier than 14 days and not later 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:

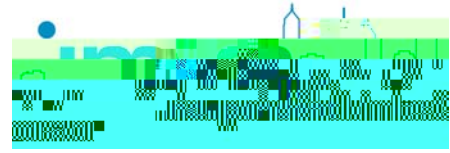
- (a) subject to paragraphs (b), (c) and (d), endeavour to conduct the test without warning;
- (b) allow sufficient time for the Market Participant to schedule fuel that it is not required under these Market Rules to be stored on-site
- (c) allow sufficient time for switching a Facility from one fuel 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.

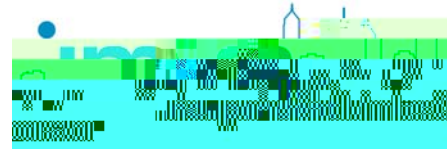
4.25.10. Where a Facility, excluding a Demand Side Programme, is tested in accordance with this clause 4.25, the Dispatch Schedule for that Facility during the period of the test is to reflect the energy scheduled in the test.

#### **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

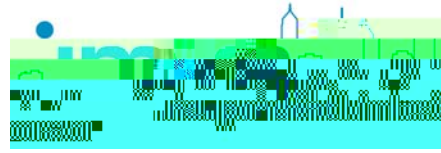


| IMO that if will be available between noon and 8pm, as part of its certification, the same |



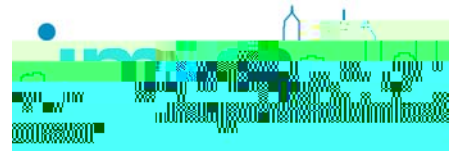
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The proposed amendment is consistent with the IMO's general removal of the term



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**”







quantity of energy to be consumed by that Market Participant including demand associated with any ~~Curtailable Load or~~ Interruptible Load, but excluding demand associated with any Dispatchable Load during that Trading Interval as indicated by the applicable Resource Plan; plus

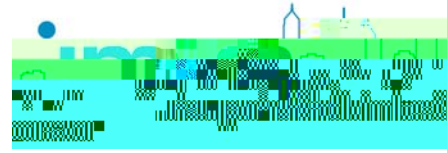
...

The proposed amendment to clause 4.26.2C and new clauses 4.26.2CA, 4.26.2CB, and 4.26.2CC will allow for a 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.

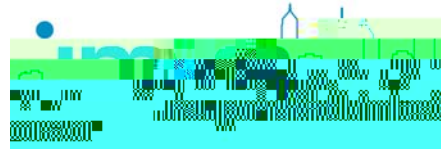
4.26.2C. The IMO must:

- (a) prior to the start of a Reserve Capacity Year for which a Demand Side

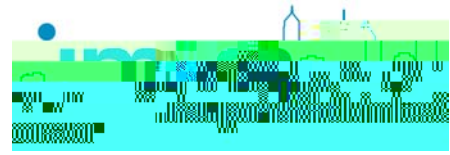


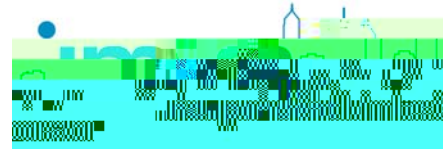
~~iii. Other relevant information.~~

~~(d) Where evidence is provided by the Market Customer that the Curtailable~~



- (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 ~~Curtable 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





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.

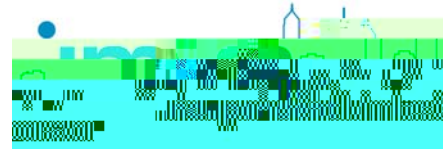
6.3A.2 By 9:00 AM on the Scheduling Day the IMO must have calculated and released to each Market Participant the following parameters to be respected by that Market Participant in forming its STEM Submissions for each Trading Interval in the Trading Day:

...

- (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;

...

...



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

...

The proposed amendment will remove the current exclusion of Curtailable Loads from Resource Plan Submission data. This is consistent with the removal of Demand Side ~~Programme~~ from the energy side of the market. IMO's general removal of the term

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

...

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

...

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

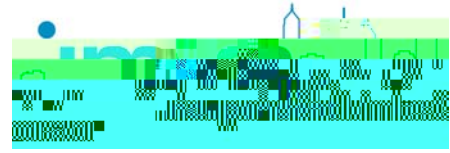
- 6.11A.1. A Market Participant submitting Balancing Data Submission data must include in the submission:

...

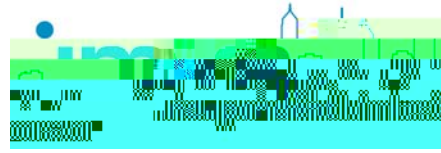
- (d) for each Demand Side Programme ~~Curtailable Load~~ registered by to the Market Participant:

...

The proposed amendment will remove the reference to Scheduled Generators and



and Dispatchable Loads and Demand Side Programmes of Market



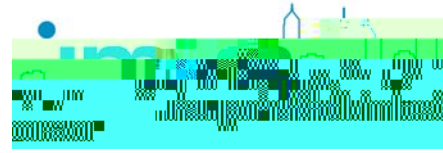
Note that a Demand Side Programme will not have a Dispatch Schedule or a Metered Schedule associated with it under the IMO's proposed amendments.

The IMO also proposes a minor change to the format of the clause to improve its integrity.

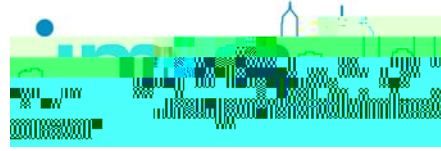
6.15.2. ~~The Dispatch Schedule for a Trading Interval for~~ For any of the following Facilities equals the corresponding Metered Schedule:

- (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.





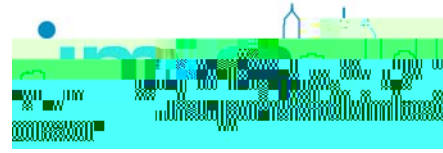
The proposed amendment will limit the Dispatch Instruction Payment made to a Market Participant with a registered Demand Side Programme to only occurring when System Management requests the programme to reduce its consumption. Currently the IMO is required to make a Dispatch Instruction Payment to a 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



~~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,



- (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.

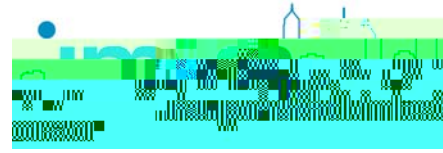
The IMO notes that this is similar to the current requirement specified in clause 7.7.5D (which will be amended to being [Blank] on 1 October 2011 in accordance with RC\_2008\_20)

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:



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:

...

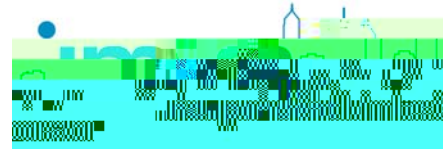
(eC) the required decrease, in MWh, ~~in the consumption of each Curtable Load-Demand Side Programme~~, by Trading Interval, as a result of System Management Dispatch Instructions, ~~where t.~~ This is to be used in settlement as the quantity described in clause 6.17.6(d)(i).

(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



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:

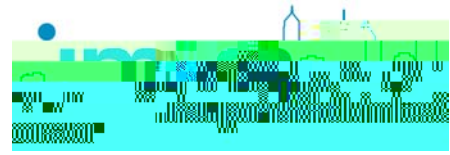
- (a) Non-Dispatchable Loads, excluding those Non-Dispatchable Loads referred to in clause 9.3.4A;
- (b) Interruptible Loads;
- (c) Dispatchable Loads;
- (d) Scheduled Generators; and
- (e) Non-Scheduled Generators.

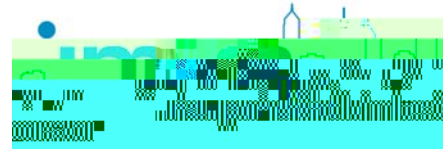
$\bar{r}$  is the net quantity of energy generated and sent out into the relevant Network or consumed by the Facility ~~or Non-Dispatchable Load (as applicable)~~ during that Trading Interval, Loss Factor adjusted to the Reference Node, and determined from Meter Data Submissions received by the IMO in 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,





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:

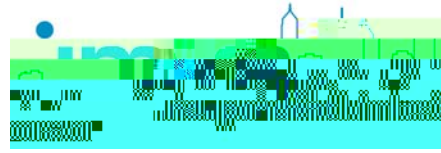
...

- (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.~~

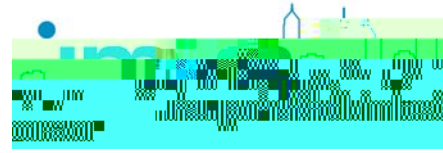
**Demand Side Programme Load:** Has the meaning given in clause 6.16.2.

~~**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 1.9.225 TD-n -a37t -1.9pti6.62 Tm.01.9pti Non





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.

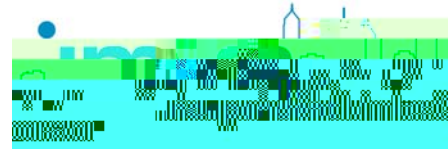
(a) for a Network:

...

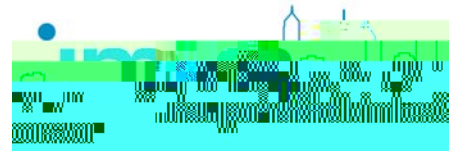
(h) for a ~~Curtailable Load~~ Demand Side Programme:

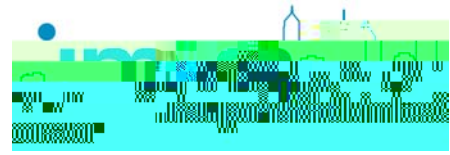
- i. ~~the Market Customer's nominated maximum consumption quantity, in units of MWh per Trading Interval;~~
- ii. evidence that the communication and control systems required by clause 2.365 are in place and operational;
- iii. the maximum amount of load that can be curtailed;
- iv. the maximum duration 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;

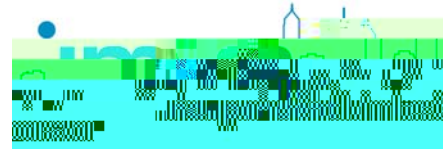
where these prices must be not less than the Minimum STEM Price, not more than the Alternative Maximum STEM Price, and must be expressed in units of \$/MWh to a precision of \$0.01/MWh; and



- vii. the minimum response time before the facility can begin to respond to an instruction from System Management to change its output; $t_{\text{c}}$
- viii.







| 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.                            |                   |

