Independent Market Operator

Draft Rule Change Report

Title: Demand Side Management – Operational Issues

Ref: RC_2008_20

Standard Rule Change Process

Date: 26 September 2008

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DOCUMENT DETAILS

IMO Notice No.: RC_2008_20
Report Title: Draft Rule Change Report: Demand Side Management – Operational Issues
Release Status: Public
Confidentiality Status: Public domain
Published in accordance with Market Rule 2.7.6

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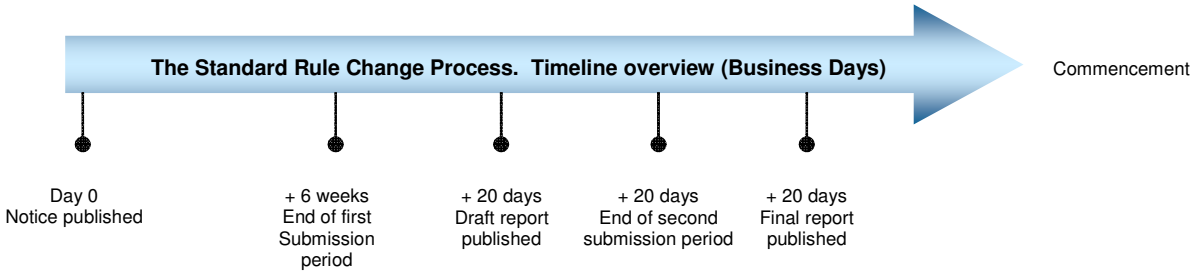
1. INTRODUCTION

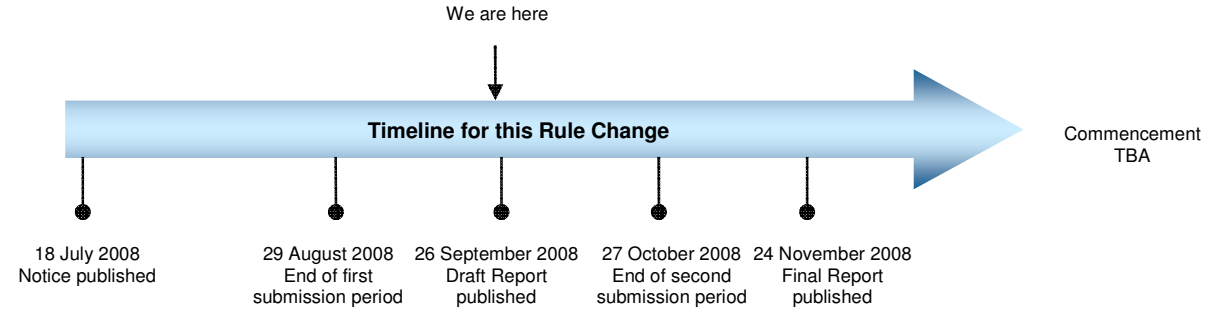
On 16 July 2008 the IMO submitted a Rule Change Proposal regarding changes to clauses 2.29.5, 2.29.8A, 2.29.8B, 2.29.9A, 2.29.9B, 2.29.9C, 4.8.3(e), 4.10.1(f), 4.11.1(i), 4.11.4, 4.11.4A, 4.12.8, 4.14.1, 4.25.1(a), 4.25.1(c), 4.25.2(b)(ii), 4.25.3B, 4.25.4, 4.25.4E, 4.25.4F, 4.25A, 4.25A.1, 4.25A.2, 4.25A.3, 4.25A.4, 4.25A.5, 4.26.1, 4.26.1C, 4.26.2, 4.26.2C, 4.26.2D, 4.26.2E, 4.26.3, 4.26.3A, 6.17.6(d), 7.7.5D, 7.7.10 and 7.13.1(eC) to the Wholesale Electricity Market Rules (Market Rules).

This Proposal is being processed using the Standard Rule Change Process, described in section 2.7 of the Market Rules.

The standard process adheres to the following timelines, outlined in section 2.7 of the Market Rules:



The key dates in processing this Rule Change Proposal are:



Based on the submissions received, the IMO's draft decision is to implement the Rule Change Proposal in the form outlined in section 6 of this Report.

This Draft Rule Change Report on the Rule Change Proposal has been prepared by the IMO in accordance with clause 2.7.6 of the Market Rules.

Interested parties are invited to provide further submissions in relation to this Draft Rule Change Report. In accordance with the Market Rules timelines, the deadline for submissions is 27 October 2008.

2. THE RULE CHANGE PROPOSAL

2.1. Submission Details

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Date submitted:	16/07/2008
Urgency:	Medium
Change Proposal title:	Demand Side Management – Operational Issues

2.2. Details of the Proposal

The IMO submitted that Demand Side Management (DSM) is the process of deliberately reducing or curtailing consumption of energy, usually in response to external factors. DSM provides around 2-3% of the capacity required to meet the Reserve Capacity Requirement within the Wholesale Electricity Market. Experience to date has identified a number of operational issues and in December 2007, the Market Advisory Committee established the DSM Working Group to determine a set of Terms and Conditions under which DSM can be certified. This Working Group used a Discussion Paper as the starting point for its deliberations.

In considering the Terms and Conditions that should apply to DSM the Working Group was guided by three principles:

- Maximising the operational efficiency of DSM.
- Recognition of the operational requirements of DSM providers (the end-use customers)
- Consistency with obligations placed on generation Facilities.

In accordance with the Terms of Reference, a set of Terms and Conditions was developed and these are discussed below.

Interval Meters

The Working Group recommended that all DSM Facilities must have Interval Meters.

Demonstration that Curtailable Load can respond to a Dispatch Instruction

The Market Rules require the IMO to verify that each Facility providing Capacity Credits can operate at a level equal to its Reserve Capacity Obligation Quantity. For a generator this may require a test in which the Facility is dispatched to its Reserve Capacity Obligation level. For a DSM provider any test is restricted to the communication system.

The opinion of the Working Group was divided as to whether this is appropriate. The opposing positions were:

- Testing of the communication system is not sufficient to demonstrate that an actual reduction in demand will be achieved. DSM is only activated rarely so end-use customers may make changes to equipment, or to staffing arrangements, which mean that a response is not certain. As DSM is likely to be called as a last resort to avert involuntary customer outages, there should be certainty that a dispatch instruction will elicit a response and the power system will not be put at risk.

- The key issue is to ensure that a Market Participant has an effective mechanism to communicate with end-use customers. Calling of DSM, when it is not actually required for system purposes, will cause inconvenience for the end-use customer and, potentially, unnecessary costs. This will act as a disincentive for end-use customers to offer DSM.

The majority of the Working Group favoured a physical test of all DSM and recommends that each DSM Provider undertake a Verification Test with each end-use customer.

Availability of Curtailable Loads associated with a Demand Side Programme

There is currently no restriction on the availability (i.e. hours available per year) of individual Curtailable Loads that form part of a Demand Side Programme.

Notification Time for Dispatch

The Working Group recommended that the required notice of activation nominated for a Curtailable Load must not be greater than four hours. A maximum period shorter than four hours is not considered appropriate because some Curtailable Loads require this level of notice to rearrange their operation so to provide the demand reduction.

Some Curtailable Loads have a notification period of less than four hours and the Working Group recommends that these be able to increase this up to four hours should they wish to do so.

System Management may wish to cancel a notification to Curtailable Loads. The Working Group recommends that this termination notice also carry a four hour notice period and that the minimum period for which a Curtailable Load can be instructed to reduce demand be two hours.

DSM not to be eligible to be in Availability Class 1

There are four availability classes to accommodate the different number of hours that DSM offers to be available. Currently, DSM which offers 96 hours or more could be assigned to Availability Class 1. This Class 1, however, should comprise only generation to ensure that sufficient generation is brought into the system to limit energy shortfalls as required by clause 4.5.9(b).

Reserve Capacity Determination

The Market Rules do not define how the capacity of a Curtailable Load is to be determined. Such a measure cannot be definitive because the amount of curtailability provided needs to be measured against the demand that would have existed if curtailment had not been implemented. A number of measurements could be considered, including comparison with:

- The demand prior to activation of curtailment.
- The load at the same time the previous day.
- The demand on a day of similar temperatures.

The Working Group recommended that a single “Relevant Demand” figure, which is typical of the level of demand that can be expected over a four hour period at the time of system peak demands, be used. It was proposed that:

- The IMO identify the eight consecutive Trading Intervals in each month during the Hot Season with the highest aggregate system demand.
- The Relevant Demand for the Curtailable Load is set equal to the median of the metered consumption during the eight highest demand consecutive Trading Intervals in each of the months within the preceding Hot Season, i.e. the median of the 32 measurements.

Where interval meter data for the whole Hot Season for a Curtailable Load is not available, the Relevant Demand of the Curtailable Load is to be set by the IMO based on:

- Available meter data.
- Load information provided by the Market Participant.

- Other relevant information.

Periods when DSM is to be available

The Working Group recommended that DSM should be available to be called on all Business Days between the hours of noon and 8 pm with the exception that if the Facility has been called on two consecutive days then the obligation is reduced to zero for the following (third) day.

Precision

It was proposed to increase the precision in clauses 4.11.1 and 4.14.1.

Reserve Capacity Testing

If a generation Facility has not demonstrated that it can operate at a level equal to its Capacity Credits the Market Rules provide for the IMO to undertake a test. If the Facility subsequently fails this test a second test is undertaken. Failure in both tests results in the number of assigned Capacity Credits being reduced.

The Working Group recommended that DSM be subjected to a similar testing regime:

- The IMO must conduct a Performance Test:
  - If the Curtailable Load has not been activated to the level of its Capacity Credits during the current Reserve Capacity Year.
  - If the Curtailable Load has been activated and failed to effect a reduction equal to its assigned Capacity Credits.
- If the Curtailable Load is activated as a Performance Test and effects a reduction equal to its Capacity Credits then it has passed the test.
- If the Curtailable Load is activated and fails to reduce demand in accordance with its Capacity Credits, the IMO may undertake a second Performance Test within 14 Business Days.
- Following the second Performance Test, the IMO is to set the number of Capacity Credits held by the Curtailable Load equal to the lower of:
  - The maximum level of reduction achieved in the two Performance Tests; or
  - The Certified Reserve Capacity level of the Curtailable Load.
- If the Curtailable Load is activated to meet system requirements within 14 Days of failing a Performance Test, this activation is deemed to be the second Performance Test.

The timing of testing of generators is covered in a procedure designed to meet system requirements with minimum interruptions or costs to Rule Participants. This procedure will

be amended to incorporate appropriate timing arrangements into the testing of Curtailable Loads.

Rescinding of Capacity Credits

It may be that a DSM Facility is demonstrably unable to meet its obligations. In this circumstance, retailers would like the option for the Facility to essentially be allowed to permanently reduce its Capacity Credits. This would allow a retailer that has a DSM Programme to substitute an alternative curtailable load. The Working Group recommended that at any time a Market Participant may request the IMO to reduce the number of Capacity Credits held by a Curtailable Load to be reduced to zero in which case:

- The Market Participant must refund all capacity payments already paid in the Reserve Capacity Year.
- The Capacity Credits assigned to the Curtailable Load in any future Reserve Capacity Cycles are reduced to zero.
- The Curtailable Load may not offer Supplementary Reserve Capacity in any Reserve Capacity Year in which its Capacity credits have been reduced to zero.

Reserve Capacity Refunds

If a generation Facility completely fails to meet its obligations it will return all of its Reserve Capacity Payments by way of refunds. The Working Group recommended that the same principle be applied to DSM. The level of refund to apply in any Trading Interval is therefore based on the amount of shortfall measured in terms of MWh as a proportion of the total MWh reduction that the Curtailable Load should deliver if called to the maximum level for the maximum allowable time.

As with generation Facilities, the total amount of refunds payable in a year is capped at the level of Reserve Capacity Payment.

Reporting of Activation

On the day following the relevant Trading Day, System Management must advise the IMO which Curtailable Loads were issued Dispatch Instructions and the quantum of each Dispatch Instruction if this was less than the full capacity of the Curtailable Loads. The IMO will determine the quantum of any reduction using meter data.

Currently payment for load curtailment is paid on the basis of the Dispatch Instruction. It was proposed that, in future, payment be made on the basis of the actual reduction that is provided.

Dispatch Groups

DSM is dispatched in a two-step process. On determining that DSM must be activated, System Management will call each Market Participant who is providing DSM and it, in turn, will generally call its end-use customers. This process includes the following:

1. System Management may advise Market Participant(s) that there is likelihood that DSM will be called.

2. If System Management advises a Market Participant that there is a likelihood that its DSM may be called, the Market Participant must advise System Management of how much capacity it believes can be provided from each of its Dispatch Groups

3. System Management will issue a Dispatch Instruction to the Market Participant to activate DSM in accordance with Market Rule 7.7

4. The Dispatch Instruction will cover Dispatch Groups and not individual loads.

5. The Market Participant will dispatch the individual curtailable loads within the Dispatch Group

6. The IMO will use meter data to determine the level of payment to be made to the Market Participant for each load and the level of any refunds.

System Management has expressed its desire that DSM be grouped into blocks of 10 – 20 MW so that:

- Each block is of significant size compared to the load reductions required to support the power system.
- System Management does not need to call a large number of blocks in times of system stress.

Retailers wish to be able to separate their end-use customers into separate blocks on the basis of factors such as:

- The notice period required for dispatch.
- The number of dispatch hours that the end-use customer has offered.
- The price for each dispatch activation.

Consideration was given to setting the nominal minimum size of each separate block to 10 MW, though blocks would be allowed to be smaller than this as retailers build up a portfolio of DSM customers. However, the Working Group agreed that the minimum block

size be set at 1 MW and that a higher figure only be set if the number of blocks nominated by Market Customers becomes unreasonably large.

The Working Group noted that although DSM is generally dispatched by a retailer, it is reasonable for this to be undertaken by any suitably qualified and equipped entity (a Dispatch Agent).

The Working Group recommended that:

- All DSM Facilities are to be grouped into Dispatch Groups that are to be dispatched as blocks.
- A Dispatch Group, and a DSM Program, must contain at least 1 MW of DSM Facilities.
- A Dispatch Group may comprise DSM Facilities registered to different Market Participants but which are dispatched under the control of a single Dispatch Agent.
- System Management will issue Dispatch Instructions for Dispatch Groups not individual loads (except where the Dispatch Group comprises an individual load).

It was proposed to change the Power System Operation Procedure to require that:

- A Rule Participant must assign each Curtailable Load registered to that Rule Participant to a Dispatch Group which is under the control of a Dispatch Agent (which may or may not be the Rule Participant).
- A Dispatch Group must contain Curtailable Loads with a combined total of at least 1 MW.
- The Dispatch Agent must advise System Management for each Dispatch Group under its control:

    (a) the name of the Dispatch Group;

    (b) Contact Person(s) and phone number(s) for issuing of Dispatch Instructions

    (c) the Availability Class;

    (d) the total nominal capacity of loads assigned to the Dispatch Group; and

    (e) the minimum notification period.

Outage Planning

System Management has removed DSM from the list of Facilities that must coordinate any maintenance outages with System Management. The Working Group agreed that the outage planning obligation should be removed for Curtailable Loads. It is noted that

Dispatch Agents are to provide System Management with an estimate of available capacity when advance notice of potential dispatch is provided.

It was proposed to change the Power System Operation Procedure accordingly.

Real Time Notification of DSM Availability

Rule Participants are to use their best endeavours to provide System Management with up-to-date estimates of the amount of Curtailable Load capacity that can be provided. This could be through a daily or weekly report or could be by standing data with notification of exceptions.

It was noted that the provision of this advice does not remove the obligation on the Market Participant to meet its Reserve Capacity Obligations in full.

It was proposed to change the Power System Operation Procedure accordingly.

Commencement Dates for Market Rule Changes

It was proposed to commence the amended clauses as follows:

Rule Number	Subject	Commencement Date
2.29.8A	Interval Meters required.	As soon as practicable after the Rule Change is approved
2.29.8B	Verification Test required within 20 days of certification.	1 October 2010
2.29.9A	Minimum activation notice of 4 hours.	For all registrations from 1 April 2009 so as to apply to summer 2009/10.
4.8.3	Loads must have same availability as DSM program	As soon as practicable after the Rule Change is approved
4.10.1	DSM to be available noon to 8 pm.	Next round of Certification (in 2009 for 2011/12)
4.11.1	Certification precision to be 0.001 MW	As soon as practicable after the Rule Change is approved
4.11.4	DSM cannot be Availability Class 1	As soon as practicable after the Rule Change is approved
4.11.4A	Capacity of DSM to be determined by its Relevant Demand	Next round of Certification (in 2009 for 2011/12)
4.12.8	Obligation drops to zero after two days of dispatch at maximum	Next round of Certification (in 2009 for 2011/12)
4.14.1	Capacity precision to be 0.001 MW	As soon as practicable after the Rule Change is approved
4.25.1	DSM verification only to apply to period between October and March	1 October 2010
4.25.2	DSM verification testing to require load reduction for one Trading Interval	1 October 2010
4.25.3B	Activation of DSM deemed to be a Reserve capacity Test	1 October 2010

4.25.4	Reserve Capacity testing	1 October 2010
4.25.4E	Capacity Payments to be refunded if capacity credits surrendered to IMO	As soon as practicable after the Rule Change is approved
4.25.4F	Capacity cannot offer supplementary reserve capacity in the year that capacity credits are surrendered	As soon as practicable after the Rule Change is approved
4.25A.1	Verification test	1 October 2010
4.25A.2	Verification test	1 October 2010
4.25A.3	Verification test	1 October 2010
4.25A.4	Verification test	1 October 2010
4.25A.5	Verification test	1 October 2010
4.26.1	Refunds	As soon as practicable after the Rule Change is approved
4.26.1C	Refunds	As soon as practicable after the Rule Change is approved
4.26.2	Refunds	As soon as practicable after the Rule Change is approved
4.26.2C	Determination of Relevant Demand	As soon as practicable after the Rule Change is approved
4.26.2D	Determination of capacity shortfall	As soon as practicable after the Rule Change is approved
4.26.2E	Calculation of refund	As soon as practicable after the Rule Change is approved
4.26.3	Calculation of refund	As soon as practicable after the Rule Change is approved
4.26.3A	Calculation of refund	As soon as practicable after the Rule Change is approved
6.17.6	Calculation of Dispatch Payment.	1 October 2011

2.3. The Proposal and the Market Objectives

The IMO's assessment regarding how the amendments will allow the Market Rules to better address the market objectives can be found in section 4.1.2 of this Report.

2.4. Amending Rules proposed by the IMO

The IMO proposed the following amendments to the Market Rules (added words are underlined and deletions are shown with ~~strikethrough~~):

2.29.5 Subject to clause 2.29.9 and 2.29.8A, a Market Customer that owns ….

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

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

2.29.9A A Rule Participant may not register a Curtailable Load after 1 April 2009 where the minimum notice period required for dispatch exceeds four hours.

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

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

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:

……..

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

4.10.1. The information to be submitted with an application for certification of Reserve Capacity must pertain to the Reserve Capacity Cycle to which the certification relates and must include:

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

……..

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

iv. the maximum number of times the block can be called to provide Reserve Capacity during a 12 month period;

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.

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:

……..

(i) the Certified Reserve Capacity assigned to a Facility is to be expressed to a precision of 0.0015 ~~5~~ MW.

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

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

4.12.8. Where a Curtailable Load 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 shall be zero.

4.14.1. Subject to clause 4.14.3, each Market Participant holding Certified Reserve Capacity for the current Reserve Capacity Cycle must, by the date and time specified in clause 4.1.14 provide the following information to the IMO for each Facility or, in the case of Interruptible Loads, Curtailable Loads and Dispatchable Loads with at least two blocks holding Certified Reserve Capacity in different Availability Classes, for each block in respect of which it holds Certified Reserve Capacity (expressed in MW to a precision of 0.0015 ~~5~~ MW):

……

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

(a) in the case of a generation system can, during the term the Reserve Capacity Obligations apply, operate at its maximum Reserve Capacity Obligation Quantity at least once during each of the following periods and ~~in the case of a generation system,~~ 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

……

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

4.25.2. The verification referred to in clause 4.25.1 can be achieved:

……

(b) by the IMO:

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

ii. in the case of Interruptible Loads, Curtailable Loads and Dispatchable Loads, requiring System Management, in accordance with clause 4.25.7, to test the ~~process and systems to activate a reduction in demand without requiring demand to actually reduce,~~ Facility's ability to reduce demand to the required level for not less than one Trading Interval and the Facility successfully passing that test.

4.25.3B. If a Curtailable Load fails a Reserve Capacity test under clause 4.25.2(b) and is activated prior to a second Reserve Capacity test being undertaken in accordance with clause 4.25.4 then the activation shall be deemed to be the second Reserve Capacity test.

4.25.4. Subject to clause 4.25.3B, the ~~The~~ IMO must, in the event that a Facility fails a Reserve Capacity test under clause 4.25.2(b), 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:

……..

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

4.25.4E. Where the Capacity Credits associated with a Curtailable Load are reduced in accordance with clause 4.25.4C the Market Participant must refund all Reserve Capacity Payments associated with those Capacity Credits for the relevant Reserve Capacity Year to the IMO.

4.25.4F. A Market Participant may not offer a curtailable load for Supplementary Reserve Capacity if the curtailable load has had its Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.

4.25A. Verification Test for a Curtailable Load

4.25A.1. A Rule Participant must undertake a Verification Test of each Curtailable Load registered by the Rule Participant:

(a) within 20 Business Days of registration of the Curtailable Load, or

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

4.25A.2. To undertake a Verification Test the Rule Participant will activate the Curtailable Load and advise the IMO of the Trading Intervals during which the Verification Test was conducted.

4.25A.3. The Verification Test is failed if a reduction in demand equal to at least 10% of the Capacity Credits is not identified from the Curtailable Load meter data.

4.25A.4. Where a Verification Test is failed the IMO must reduce the Capacity Credits assigned to the Curtailable Load to zero.

4.25A.5. Where the Verification Test is failed the Rule Participant may request a second Verification Test be undertaken. If the Curtailable Load fails this

second Verification Test then the Capacity Credits assigned are to remain at zero until the end of the relevant Reserve Capacity Year.

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

……..

4.26.1C. If a Market Participant holding Capacity Credits associated with a Curtailable Load fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to the IMO calculated in accordance with the provisions of this clause 4.26.

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

4.26.2C. The IMO must:

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

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

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

i. Available Meter Data, or

ii. Load information provided by the Rule Participant, or

iii. Other relevant information.

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

(a) for capacity certified in accordance with clause 4.10.1(f)(i)(1), the greater of

i. zero; and

ii. the required decrease, in MW, as a result of System Management's Dispatch Instruction minus the load reduction, where the load reduction is equal to the Relevant Demand set in clause 4.26.2C minus twice the absolute value Metered Schedule for the Trading Interval, and

(a) for capacity certified in accordance with clause 4.10.1(f)(i)(2), the greater of

i. zero; and

ii. twice the absolute value of the Metered Schedule minus the Stipulated Default Load.

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

4.26.3 For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("**Capacity Cost Refund**") associated with a generation system to be applied for Trading Month m. The Capacity Cost Refund is the lesser of:

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

(b) the Participant Forced Outage Refund plus the sum over all Trading Intervals t in Trading Month m of the Net STEM Refund,

where the Net STEM Refund is the product of:

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

ii. the Net STEM Shortfall in Trading Interval t.

4.26.3A. The Capacity Cost Refund associated with a Curtailable Load 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:

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

Where:

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

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

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:

……..

(d) the sum over all Curtailable Loads registered by the Market Participant of the amount that is the product of:

i. the quantity by which the Curtailable Load ~~was instructed by System Management to~~ reduced its consumption, where

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 the Reserve Capacity (in MW), and the difference between the Relevant Demand set in clause 4.26.2C and twice the absolute value of the metered quantity (in MWh) measured in the Trading Interval; and

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

ii. the price defined in clause 6.11A.1(d)(ii) that was current at the time of the Trading Interval for the Curtailable Load (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval),

……..

~~7.7.5D. For the purpose of determining the quantity described in clause 6.17.6(d)(i) for a Curtailable Load for each Trading Interval the quantity is the level of curtailment requested by System Management in its Dispatch Instructions.~~

7.7.10 When System Management has issued a dispatch instruction to a Curtailable Load to reduce demand it may issue a further instruction terminating the requirement for the Curtailable Load to reduce demand providing that:

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

(b) The minimum period for which the Curtailable Load has been instructed to reduce demand is not less than two hours.

2.5. The IMO's Initial Assessment of the Proposal

The IMO decided to proceed with the proposal on the basis of its preliminary assessment, which indicated that the proposal was consistent with the Wholesale Market Objectives. This preliminary assessment was published in a Rule Change Notice on 18 July 2008.

3. SUBMISSIONS

The IMO received four submissions, from Alinta Sales, Landfill Gas and Power, Synergy and System Management on the changes proposed by the IMO. The submissions are summarised below, and the full text is available on the IMO website.

3.1. Market Advisory Committee

The Market Advisory Committee (MAC) was first advised of the proposed rule changes at its meeting on 14 May 2008, when the chair of the DSM Working Group presented the proposed amendments to the rules resulting from the group's deliberations.

At the meeting, MAC members were concerned about the retrospective nature of some of the proposed amendments. This concern was raised specifically in regard to loads, already signed up as DSM under the current Market Rules, being subjected to testing upon commencement of the proposed amendments.

Some members also raised concerns over the commercial impacts of the testing regime over the longer term and argued that mandatory testing, involving an actual reduction to a load, may be so costly to the end customer that the amount of DSM offered in the market may reduce.

MAC agreed that the "testing" rules should apply from the start of the 2010/11 Capacity Year and that all providers of DSM should be advised about those changes by the IMO as soon as practicable. MAC also agreed that the proposal should go back to the DSM Working Group to include indication of the timeframes for commencing application of the changes.

Following the MAC meeting, the Working Group met again to amend its proposal to include a timetable for implementation. This was presented to MAC members for review out of session. No member expressed any concerns about the proposed implementation timetable and the revised proposal was published as a formal Rule Change Proposal on the IMO website.

3.2. Submission from Alinta Sales Pty Ltd (Alinta)

Alinta submitted that despite not agreeing on all parts of the proposal it believes that on balance the proposal represents an improvement on the current market rules and that it should progress further through the rule change process, as it has the potential to improve achievement of Wholesale Market Objectives (a) and (b).

In its submission, Alinta raised the following key points:

- Alinta was concerned that the introduction of physical testing measures may effectivey exclude potential DSM providors, due to the associated cost of lost

production during the extent of the test. Alinta therefore would prefer to retain the current methodology of only testing the communications system.

- Alinta submitted that it accepts the rationale for excluding DSM from registering in availability class 1. However, Alinta sought clarification from the IMO when the changes to exclude DSM from availability class 1 will commence.

- Alinta proposed to exclude trading intervals when facilities are undergoing outages or are subject to force majeure from the 32 intervals proposed to be used to determine the level of the curtailable load.

- In regard to the dispatch of groups, Alinta submitted that it would like certainty that larger loads, if called, will be dispatched in full unless they indicate the capacity to be part dispatched.

- Alinta questioned the requirement to provide estimates of available capacity to System Management and requested confirmation that the certified capacity would be determined by the process as set out under the Reserve Capacity Mechanism.

Further, Alinta considered that the rules relating to DSM portfolios may need more consideration. The main issue raised by Alinta was allowing retailers to cover their capacity credit obligations for a DSM programme from a pool of customers. This also includes allowing retailers to select loads from a pool to cover dispatch instructions issued by System Management.

3.3. Submission from Landfill Gas & Power Pty Ltd (LGP)

LGP expressed its general support for the bulk of the Rule Change Proposal as a pragmatic improvement of the current system. However, LGP submitted that in order to strengthen DSM as a viable alternative to generation in the market, the DSM product must be standardised. In order to achieve this, LGP argued that the following clauses in the proposal need to be amended:

- Clause 4.25A.3 should state that a Verification Test is successful if 100% curtailability is achieved, rather than the 10% currently proposed.
- The IMO or System Management should nominate the Verification Tests under clauses 2.29.8B and 4.25A, rather than it being a self nominated test from the Rule Participant.
- In regard to clause 4.12.8 exempting Curtailable Loads from being called on a third consecutive day, LGP notes that system maxima often relate to the third or fourth consecutive hot day and therefore this clause should be removed.

LGP also submitted that in general it would prefer to have DSM in Dispatch Groups of a minimum of 20 MW, rather than the currently discussed minimum size of 1 MW.

3.4. Submission from Synergy

Synergy expressed its general support for the Rule Change Proposal. However, it also submitted that it has identified some issues in regard to the proposed timelines, especially regarding the retrospective nature of some of the proposed amendments. Specifically, Synergy was concerned about the following proposed amendments:

- In regard to the proposed amended clause 4.8.3, Synergy argued that some of its existing loads under contract can not meet the requirements of having the same, or better, availability as the DSM program. To avoid unfair consequences to existing customers, Synergy requested that the changes to clause 4.8.3 do not commence until the 2010/11 Capacity Year.
- Synergy submitted that it would not want the IMO to apply the amendments to clause 4.11.4A, requiring DSM capacity not to exceed the relevant demand, until 2011, even for new loads.
- Synergy submitted that it will not accept the way refunds are proposed for curtailable loads, based on the new concept of relevant demand, unless the IMO can prove that the current refund mechanism is ineffective.
- Synergy requested that in the calculation of the relevant demand, clause 4.26.2C, trading intervals where a load was undergoing maintenance or was issued a dispatch instruction from System Management should be excluded from the intervals used to determine the relevant demand. Failing to do so would, according to Synergy, underestimate the DSM delivered to the market and potentially skew other calculations. Synergy also requested the IMO to provide a list of the 32 intervals in 2007/08 which would be used for determining the relevant demand.
- In order to allow adequate time for renegotiation of customer contracts signed under the current provisions, Synergy requested that clause 4.26.2C should not commence until 2010/11.

3.5. Submission from System Management

System Management submitted that since some of the proposed amending rules will require amendments to System Management's Power System Operating Procedures, commencement of these amending rules should be in tandem with the commencement of the required amendments to System Management's procedures.

3.6. Public Forums and Workshops

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

4. THE IMO'S ASSESSMENT AND DECISION

4.1. Assessment

4.1.1. Submissions

While all parties responding within the prescribed submission period expressed general support for the Rule Change Proposal, there were some specific issues raised in the submissions. Below are the IMO's responses to these issues.

Tests

Alinta submitted that it would prefer to retain communcation tesing rather than having mandatory physical tests. LGP, on the other hand, submitted that the physical verification tests should test for 100% curtailability, rather than the proposed 10%.

The IMO notes the difference in opinion among Market Participants on this issue. It was also discussed extensively in the DSM Working Group and in the Market Advisory Committee. Although opinions vary, it was agreed that, in order to bring the testing procedure more in line with that applied to generators, some form of physical testing should replace the current communications verification test. To account for the concerns raised by Alinta, the Working Group agreed to limit the curtailability in the verification tests to 10% of the certified capacity, rather than 100%, as advocated by LGP in its submission. The commencement date for the amended verification test rules was set to 1 October 2010, to allow for a smooth transition for exisiting loads, signed up to DSM programmes under the current provisions.

LGP submitted that the IMO or System Management should nominate the Verification Tests under clauses 2.29.8B and 4.25A, rather than it being a self nominated test by the Rule Participant. This issue was discussed in the DSM Working Group and, in order to further minimise the negative impact of the test on the relevant loads, it was agreed that the retailer should be allowed to plan the time of the test with the customer. The IMO would still verify the amount of load curtailed during the tests, to determine whether the test was successful or not.

Alinta also argued against the Reserve Capacity tests and the impact on their customers. The proposed amendments provide for the IMO to conduct a full test where a Curtailable Load has not responded to a Dispatch Instruction during a "hot season". It has been agreed to only conduct these tests at the end of the "hot season" and only when availability cannot be observed during normal operation, i.e as a response to a dispatch Instruction issued by System Management. These provisions would minimise the impact on retailers and their customers.

DSM in availability class 1

Alinta requested clarification as to when the rules relating to DSM not being eligible for availability class 1 will commence. The IMO notes that the rules will commence as soon as practicable after the rule change process is complete and apply from the next round of certification in 2009.

Determination of relevant demand

Both Alinta and Synergy requested that intervals where loads were undergoing maintenance or curtailed under instruction from System Management be excluded from the determination of the relevant demand. Alinta requested that intervals where loads were subject to force majeure also be excluded. The IMO considers that allowing for force majeure is against the intent of section 4.23 of the Market Rules, which states that there is no force majeure conditions associated with Capacity Credits. However, the IMO agrees that reduced consumption due to maintenance or dispatch instructions from System Management should be considered in the determination. The IMO proposes to address this by adding a sub-section to clause 4.26.2C as follows:

4.26.2C. The IMO must:

……

(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, the IMO must set the Relevant Demand based on the IMO's estimate of the Curtailable Load consumption during those intervals.

Synergy requested a list of the 32 intervals which would be used to determine the relevant demand. This will be made available by the IMO once the relevant system changes allowing this to be calculated have been implemented. In the meantime, the IMO can provide a preliminary list to participants upon request.

Full dispatch of larger loads

Alinta submitted that it would like certainty that larger loads, if called, will be dispatched in full unless they indicate the capacity can be part dispatched. The IMO notes that there can be no guarantee of this, as the actual amount required to be dispatched is dependant on system security needs. The retailer will receive dispatch instructions from System Management for the amount of load reduction required. The retailer would then determine which loads from its DSM programme to dispatch.

Provision of data to System Management

Alinta questioned the process of providing estimates of available capacity to System Management. Alinta also requested confirmation that the Curtailable Load capacity would be determined by the process as set out under the Reserve Capacity Mechanism.

The reason for providing available capacity information to System Management is that, since it will no longer have a process of outage approval for curtailable loads, System Management will need the information to determine load availability on a daily basis. System Management will develop a process outlining the form in which this information is to be provided. The IMO confirms that this process would not influence certification of the capacity of the loads, which will be determined through the provisions under the Reserve Capacity Mechanism.

Load availability and aggregation

Synergy submitted that the requirements for loads to have the same availability as the DSM program with which they are associated should not commence until the 2010/11 Capacity Year. However, the IMO notes that since clause 2.30.3 of the Market Rules already allows aggregation of loads to meet this requirement and this limits the impact on participants, commencing this change as soon as practicable remains important.

In regard to Alinta's proposal that retailers be allowed to cover their DSM programme obligations and dispatch instruction quantities from a pool of loads, the IMO considers that this is an issue which would require careful consideration and analysis. Therefore it is best handled outside of this rule change proposal, for example by a future MAC Working Group.

Load size not exceeding Relevant Demand

Synergy submitted that amendments to clauses 4.11.4A and 4.26.2C, requiring DSM capacity not to exceed its relevant demand, should not commence until 2011 as Synergy's customer contracts were drafted in accordance with current market rules.

While noting that the timetable for implementation was agreed by the Working Group, on which Synergy was represented, the IMO understands the concern regarding existing contracts and proposes to continue to apply the existing methods for Curtailable Loads' registration in the current Reserve Capacity cycle until the new rules are implemented.

To enable this, the IMO proposes to amend clause 4.26.2D(a)(ii) so that Capacity Shortfalls are measured against the certified capacity for the individual load, rather than the relevant demand. This means that the shortfall can be measured appropriately regardless as to whether the capacity has been determined before are after the rule changes come into effect. The amendments to the clause are (additions compared to the proposal underlined, removed text strikethrough):

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

(a) for capacity certified in accordance with clause 4.10.1(f)(i)(1), the greater of

i. zero; and

ii. the required decrease, in MW, as a result of System Management's Dispatch Instruction minus the load reduction, where the load reduction is equal to the Certified Reserve Capacity assigned by the IMO to that Curtailable Load ~~Relevant Demand set in clause 4.26.2C~~ minus twice the absolute value Metered Schedule for the Trading Interval, and

……

The IMO advises that these rules will apply for new loads from rule commencement, while already registered loads will remain as they are until all loads associated with a DSM programme are re-certified for the purpose of each new capacity year. During this re-certification the relevant demand, and thus the maximum curtailability of each load, will be determined for each load in the DSM programme.

The IMO considers that clause 4.11.4A also needs to be clarified as follows (the added words are underlined):

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.

Proposed refunds for curtailable loads

Synergy submitted that it would not support the proposed refund mechanism based on the relevant demand unless the IMO can show that the current refund mechanism for curtailable loads is ineffective. The IMO notes that currently there is no working refund mechanism for curtailable loads. The proposed refunds will apply to loads which did not respond to an instruction from System Management, which is in line with the intent of the Rules that capacity credits not available when required should be subject to refunds.

Additional Issues raised by LGP

LGP submitted that clause 4.12.8 exempting Curtailable Loads from being called on a third consecutive day, should be removed. This was discussed by the DSM Working Group. Due to the potentially high cost to the end customer in curtailing its load, a maximum requirement of two consecutive days for a single load was deemed acceptable. It is worth noting that this restriction only applies to the individual loads. A DSM programme, unless it is called in its entirety, can be called for more than two consecutive days.

LGP also submitted that it would prefer to have DSM in Dispatch Groups of a minimum of 20 MW, rather than the currently discussed minimum size of 1 MW. The IMO notes LGP's submission and, while not disagreeing on the merits of this proposal, advises that the proposed minimum size of 1MW reflects the preference of the majority of the DSM Working Group.

Amendments to System Management's Power System Operating Procedures

The IMO agrees with System Management's submission that commencement of amended clauses must be timed with required amendments to System Managements Power System Operating Procedures. However, since all changes relevant to the Operating Procedures are not scheduled to commence until 2010 or later, there is adequate time for any procedure change process to be completed.

4.1.2. Additional Amendments

In addition to the amendments made in response to submissions received, the IMO has during the submission period considered that some additional amendments need to be made as follows:

System Management testing

As the Reserve Capacity tests for DSM are proposed to be in the form of actual tests and not simulated curtailments, clause 4.25.9 needs to be amended with the reference to simulation mode removed. This amendment will be effective from 1 October 2010, together with the other clauses relating to Reserve Capacity tests.

4.25.9. In conducting a test, System Management:

……..

(d) must, in the case of an Interruptible Load or a Curtailable Load allow sufficient time for arrangements to be made for the Facility to be triggered ~~in a simulation mode only~~;

….

Clause 4.25.4E

The IMO considers that clause 4.25.4E should be clarified, as follows:

4.25.4E. Where the Capacity Credits associated with a Curtailable Load are reduced in accordance with clause 4.25.4C the Market Participant must refund all Reserve Capacity Payments associated with ~~those~~ the reduced Capacity Credits for the relevant Reserve Capacity Year to the IMO.

Consequential change to Clause 7.13.1(eC)

The proposed amending rules will remove clause 7.7.5D. The IMO considers that it is therefore necessary to make the following consequential amendments to clause 7.13.1(eC) to remove the reference to clause 7.7.5D:

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 MW~~h~~, in the consumption of each Curtailable Load, by Trading Interval, as a result of System Management Dispatch Instructions~~, as determined in accordance with clause 7.7.5D,~~ where this is to be used in settlement as the quantity described in clause 6.17.6(d)(i).

Commencement of clause 7.7.10

In the commencement table, the amendments to clause 7.7.10 were not included. These amendments are proposed to commence as soon as practicable after the Rule Change is approved.

Commencement Dates for Market Rule Changes

With the additional commencement dates noted above, the proposed amended rules will commence at the following dates :

Rule Number	Subject	Commencement Date
2.29.8A	Interval Meters required.	As soon as practicable after the Rule Change is approved
2.29.8B	Verification Test required within 20 days of certification.	1 October 2010
2.29.9A	Minimum activation notice of 4 hours.	For all registrations from 1 April 2009 so as to apply to summer 2009/10.
4.8.3	Loads must have same availability as DSM program	As soon as practicable after the Rule Change is approved
4.10.1	DSM to be available noon to 8 pm.	Next round of Certification (in 2009 for 2011/12)
4.11.1	Certification precision to be 0.001 MW	As soon as practicable after the Rule Change is approved
4.11.4	DSM cannot be Availability Class 1	As soon as practicable after the Rule Change is approved
4.11.4A	Capacity of DSM to be determined by its Relevant Demand	Next round of Certification (in 2009 for 2011/12)
4.12.8	Obligation drops to zero after two days of dispatch at maximum	Next round of Certification (in 2009 for 2011/12)
4.14.1	Capacity precision to be 0.001 MW	As soon as practicable after the Rule Change is approved
4.25.1	DSM verification only to apply to period between October and March	1 October 2010
4.25.2	DSM verification testing to require load reduction for one Trading Interval	1 October 2010
4.25.3B	Activation of DSM deemed to be a Reserve capacity Test	1 October 2010
4.25.4	Reserve Capacity testing	1 October 2010
4.25.4E	Capacity Payments to be refunded if capacity credits surrendered to IMO	As soon as practicable after the Rule Change is approved
4.25.4F	Capacity cannot offer supplementary	As soon as practicable after

	reserve capacity in the year that capacity credits are surrendered	the Rule Change is approved
4.25.9	System Management testing of Loads	1 October 2010
4.25A.1	Verification test	1 October 2010
4.25A.2	Verification test	1 October 2010
4.25A.3	Verification test	1 October 2010
4.25A.4	Verification test	1 October 2010
4.25A.5	Verification test	1 October 2010
4.26.1	Refunds	As soon as practicable after the Rule Change is approved
4.26.1C	Refunds	As soon as practicable after the Rule Change is approved
4.26.2	Refunds	As soon as practicable after the Rule Change is approved
4.26.2C	Determination of Relevant Demand	As soon as practicable after the Rule Change is approved
4.26.2D	Determination of capacity shortfall	As soon as practicable after the Rule Change is approved
4.26.2E	Calculation of refund	As soon as practicable after the Rule Change is approved
4.26.3	Calculation of refund	As soon as practicable after the Rule Change is approved
4.26.3A	Calculation of refund	As soon as practicable after the Rule Change is approved
6.17.6	Calculation of Dispatch Payment.	1 October 2011
7.7.10	Cancellation of dispatch instructions	As soon as practicable after the Rule Change is approved
7.13.1EC	Additional data to be provided by System Management to be used in settlement	As soon as practicable after the Rule Change is approved

4.1.3. The IMO's Assessment

According to clause 2.4.2 of the Market Rules *"the IMO must not make Amending Rules unless it is satisfied that the Market Rules, as proposed to be amended or replaced, are consistent with the Wholesale Market Objectives".*

The IMO considers that the proposed Amending Rules will have the following impact on how the Market Rules address the Wholesale Market Objectives:

Impact	**Wholesale Market Objectives**
Allow the Market Rules to better address objective	a and b
Consistent with objective	c, d and e
Inconsistent with objective	-

The IMO's assessment against market objective (a) is as follows:

(a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;

The proposed amendments allow the Market Rules to better address market objective (a) by ensuring that DSM contributes effectively to the reliable operation of the market. The changes ensure that System Management can rely upon DSM in a similar manner to generation Facilities.

(b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors

The proposed amendments allow the Market Rules to better address market objective (b) by ensuring that DSM can be used more effectively as a competitive product. The changes also provide greater opportunities for specialist DSM providers to enter the market in competition with existing retailers.

In accordance with Clause 2.4.3(b) of the Market Rules, in deciding whether or not to make Amending Rules, the IMO must also have regard to the practicality and cost of implementing the Amending Rules.

The proposed changes will require changes to the Wholesale Electricity Market Systems operated by the IMO. The cost estimate for all system changes has been estimated at around $95,000. There will also be additional administrative costs to support the amended procedures. This cost has been estimated to involve up to 0.2 additional staff of the IMO. No other costs have been identified in relation to the implementation of the proposed changes.

4.2. IMO's Draft Decision

The IMO's draft decision is to implement the amendments to clauses 2.29.5, 2.29.8A, 2.29.8B, 2.29.9A, 2.29.9B, 2.29.9C, 4.8.3(e), 4.10.1(f), 4.11.1(i), 4.11.4, 4.11.4A, 4.12.8, 4.14.1, 4.25.1(a), 4.25.1(c), 4.25.2(b)(ii), 4.25.3B, 4.25.4, 4.25.4E, 4.25.4F, 4.25.9, 4.25A, 4.25A.1, 4.25A.2, 4.25A.3, 4.25A.4, 4.25A.5, 4.26.1, 4.26.1C, 4.26.2, 4.26.2C, 4.26.2D, 4.26.2E, 4.26.3, 4.26.3A, 6.17.6(d), 7.7.5D, 7.7.10 and 7.13.1(eC) of the Wholesale Electricity Market Rules as proposed by the IMO in its Rule Change Proposal and further amended in this Draft Rule Change Report.

The IMO has made its draft decision on the basis that the resulting Amending Rules will allow the Market Rules to better address the Wholesale Market Objectives.

The wording of the relevant Amending Rules is presented in section 6 of this Report.

5. CALL FOR SUBMISSIONS

The IMO wishes to receive submissions regarding this Draft Rule Change Report. The submission period is 20 Business Days from the publication date of this Report.

Submissions must be delivered to the IMO by close of business on Monday 27 October 2008.

The IMO prefers to receive submissions by email to marketadmin@imowa.com.au using the submission form available on the IMO website:
http://www.imowa.com.au/10_5_1_b_rule change proposal.htm

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

Independent Market Operator
Attn: Manager Market Administration
PO Box 7096
Cloisters Square, Perth, WA 6850
Fax: (08) 9254 4399

6. PROPOSED AMENDING RULES

The IMO proposes to implement the following amendments to the Market Rules (added words are underlined and deletions are shown with ~~strikethrough~~):

2.29.6 Subject to clause 2.29.9 and 2.29.8A, a Market Customer that owns ….

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

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

2.29.9A A Rule Participant may not register a Curtailable Load after 1 April 2009 where the minimum notice period required for dispatch exceeds four hours.

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

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

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:

……..

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

4.10.1. The information to be submitted with an application for certification of Reserve Capacity must pertain to the Reserve Capacity Cycle to which the certification relates and must include:

……..

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

……..

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

vi. the maximum number of times the block can be called to provide Reserve Capacity during a 12 month period;

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

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

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:

……..

(i) the Certified Reserve Capacity assigned to a Facility is to be expressed to a precision of 0.001~~5~~ MW.

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

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

4.12.8. Where a Curtailable Load 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 shall be zero.

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

Dispatchable Loads with at least two blocks holding Certified Reserve Capacity in different Availability Classes, for each block in respect of which it holds Certified Reserve Capacity (expressed in MW to a precision of 0.001~~5~~ MW):

……

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

(a) in the case of a generation system can, during the term the Reserve Capacity Obligations apply, operate at its maximum Reserve Capacity Obligation Quantity at least once during each of the following periods and ~~in the case of a generation system,~~ 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

……

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

4.25.2. The verification referred to in clause 4.25.1 can be achieved:

……

(b) by the IMO:

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

ii. in the case of Interruptible Loads, Curtailable Loads and Dispatchable Loads, requiring System Management, in accordance with clause 4.25.7, to test the ~~process and systems to activate a reduction in demand without requiring~~

~~demand to actually reduce,~~ Facility's ability to reduce demand to the required level for not less than one Trading Interval and the Facility successfully passing that test.

4.25.3B. If a Curtailable Load fails a Reserve Capacity test under clause 4.25.2(b) and is activated prior to a second Reserve Capacity test being undertaken in accordance with clause 4.25.4 then the activation shall be deemed to be the second Reserve Capacity test.

4.25.4. Subject to clause 4.25.3B, the ~~The~~ IMO must, in the event that a Facility fails a Reserve Capacity test under clause 4.25.2(b), 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:

……..

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

4.25.4E. Where the Capacity Credits associated with a Curtailable Load 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.

4.25.4F. A Market Participant may not offer a curtailable load for Supplementary Reserve Capacity if the curtailable load has had its Capacity Credits reduced in accordance with clause 4.25.4C for any part of that Capacity Year.

4.25.9. In conducting a test, System Management:

……

(d) must, in the case of an Interruptible Load or a Curtailable Load allow sufficient time for arrangements to be made for the Facility to be triggered ~~in a simulation mode only~~;

……

4.25A. Verification Test for a Curtailable Load

4.25A.1. A Rule Participant must undertake a Verification Test of each Curtailable Load registered by the Rule Participant:

(a) within 20 Business Days of registration of the Curtailable Load, or

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

4.25A.2. To undertake a Verification Test the Rule Participant will activate the Curtailable Load and advise the IMO of the Trading Intervals during which the Verification Test was conducted.

4.25A.3. The Verification Test is failed if a reduction in demand equal to at least 10% of the Capacity Credits is not identified from the Curtailable Load meter data.

4.25A.4. Where a Verification Test is failed the IMO must reduce the Capacity Credits assigned to the Curtailable Load to zero.

4.25A.5. Where the Verification Test is failed the Rule Participant may request a second Verification Test be undertaken. If the Curtailable Load fails this second Verification Test then the Capacity Credits assigned are to remain at zero until the end of the relevant Reserve Capacity Year.

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

……

4.26.1C. If a Market Participant holding Capacity Credits associated with a Curtailable Load fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to the IMO calculated in accordance with the provisions of this clause 4.26.

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

4.26.2C. The IMO must:

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

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

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

i. Available Meter Data, or

ii. Load information provided by the Rule Participant, or

iii. Other relevant information.

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

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

(a) for capacity certified in accordance with clause 4.10.1(f)(i)(1), the greater of

i. zero; and

ii. the required decrease, in MW, as a result of System Management's Dispatch Instruction minus the load reduction, where the load reduction is equal to the Certified Reserve Capacity assigned by the IMO to that Curtailable Load minus twice the absolute value Metered Schedule for the Trading Interval, and

(b) for capacity certified in accordance with clause 4.10.1(f)(i)(2), the greater of

i. zero; and

ii. twice the absolute value of the Metered Schedule minus the Stipulated Default Load.

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

4.26.3 For each Market Participant holding Capacity Credits, the IMO must determine the amount of the refund ("**Capacity Cost Refund**") associated with a generation system to be applied for Trading Month m. The Capacity Cost Refund is the lesser of:

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

(b) the Participant Forced Outage Refund plus the sum over all Trading Intervals t in Trading Month m of the Net STEM Refund,

where the Net STEM Refund is the product of:

i. the Off-Peak Trading Interval Rate or Peak Trading Interval

Rate determined in accordance with the Refund Table applicable to Trading Interval t; and

ii. the Net STEM Shortfall in Trading Interval t.

4.26.3A. The Capacity Cost Refund associated with a Curtailable Load 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:

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

Where:

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

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

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:

…….

(d) the sum over all Curtailable Loads registered by the Market Participant of the amount that is the product of:

i. the quantity by which the Curtailable Load ~~was instructed by System Management to~~ reduced its consumption, where

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 the

Reserve Capacity (in MW), and the difference between the Relevant Demand set in clause 4.26.2C and twice the absolute value of the metered quantity (in MWh) measured in the Trading Interval; and

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

ii. the price defined in clause 6.11A.1(d)(ii) that was current at the time of the Trading Interval for the Curtailable Load (accounting for whether the Trading Interval is a Peak Trading Interval or an Off-Peak Trading Interval),

……..

~~7.7.5D. For the purpose of determining the quantity described in clause 6.17.6(d)(i) for a Curtailable Load for each Trading Interval the quantity is the level of curtailment requested by System Management in its Dispatch Instructions.~~

7.7.10 When System Management has issued a dispatch instruction to a Curtailable Load to reduce demand it may issue a further instruction terminating the requirement for the Curtailable Load to reduce demand providing that:

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

(b) The minimum period for which the Curtailable Load has been 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 MW~~h~~, in the consumption of each Curtailable Load, by Trading Interval, as a result of System Management Dispatch Instructions~~, as determined in accordance with clause 7.7.5D,~~ where this is to be used in settlement as the quantity described in clause 6.17.6(d)(i).

7. GENERAL INFORMATION ABOUT RULE CHANGE PROPOSALS

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

In order for the proposal to be progressed, the change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the Wholesale Market Objectives. The market objectives 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

(e) to encourage the taking of measures to manage the amount of electricity used and when it is used

A Rule Change Proposal can be processed using a Standard Rule Change Process or a Fast Track Rule Change Process. The standard process involves a combined 10 weeks public submission period. Under the shorter fast track process the IMO consults with Rule Participants who either advise the IMO that they wish to be consulted or the IMO considers have an interest in the change.