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## Wholesale Electricity Market Pre Market Rule Change Discussion Paper

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### Submitted by

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<b>Date submitted:</b>	6 November 2007
<b>Urgency:</b>	Normal
<b>Change Proposal title:</b>	<b>SWIS Reliability Planing Criteria</b>
<b>Market Rule(s) affected:</b>	4.5.9

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### Introduction

This Pre Market Rule Change Discussion Paper can be posted, faxed or emailed to:

**Independent Market Operator**

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The discussion paper should 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:

The Planning Criteria to be used in the Long Term Projected Assessment of System Capacity, which is published in the Statement of Opportunities Report, are set out in clause 4.5.9 of the Market Rules. One criteria is that there must be sufficient capacity to meet the forecast peak demand plus a reserve margin based, in part, on the size of the largest generating unit on the system.

Because the size of the largest generating unit may not change for some years, it is likely that the reserve margin will shrink as the maximum demand on the system grows. It is therefore proposed that the reserve margin be set at the larger of the largest unit size, as at present, or a defined percentage of the forecast maximum demand. This latter term means that the reserve margin will increase in proportion to the forecast maximum demand.

This rule change is proposed as a result of a study, undertaken by CRA International, which has been published on the IMO website. In making this proposal, the IMO has been assisted by an Advisory Group representing Market Participants and other stakeholders.

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### 2) Explain the reason for the degree of urgency:

This change should be implemented before the next Long Term Projected Assessment of System Adequacy is undertaken in May-June 2008.

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

Clause 4.5.9

“The Planning Criterion to be used by the IMO in undertaking a Long Term PASA study is there should be sufficient capacity in each Capacity Year during the Long Term PASA Planning Horizon to:

(a) meet the forecast peak demand (including transmission losses and allowing for Intermittent Loads) supplied through the SWIS ~~even after the outage of the largest generation unit~~ plus a reserve margin equal to the greater of 8.2% of the forecast peak demand or the maximum capacity, measured at 41°C, of the largest generating unit and while maintaining the Minimum Frequency Keeping Capacity for normal frequency control. The forecast peak demand should be calculated to a probability level that the forecast would not be expected to be exceeded in more than one year out of ten; ...”

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

This proposed rule change is intended to ensure that system reliability is maintained at a satisfactory level as total system load increases. As such, it supports the Market Objective “to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system”. It achieves this by facilitating sufficient certified reserve capacity onto the system to ensure that the level of involuntary supply interruptions is kept to a minimum. The proposed change will maintain system reliability at the level that is currently in place, as determined by the existing market rule, as system forecast demand increases.

The nominated reserve margin has been developed through a process that incorporated input from Market Participants and other interested parties. Comparisons with reliability criteria in other markets were obtained through a consultancy that reviewed reserve margins applying in other jurisdictions. A cost-benefit analysis of the change to the reserve plant margin was also undertaken.

Involuntary supply interruptions impose significant costs on end-use customers. These comprise both indirect costs, such as loss of amenity and loss of production, and direct costs associated with the installation and operation of back-up generation. This proposed rule change therefore also supports the Market Objective “to minimise the long-term cost of electricity supplied to customers from the South West interconnected system”.

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**5) Provide any identifiable costs and benefits of the change:**

The cost of system reserve will rise as the quantity of reserve on the system increases as a result of higher forecast maximum demand. However, this cost increase would be offset by savings that would result from the lower risk of involuntary interruptions to customer supply.

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