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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>	TBA
<b>Urgency:</b>	High
<b>Change Proposal title:</b>	<b>Intermittent Load Refund Maximum</b>
<b>Market Rule(s) affected:</b>	4.28A.1(b)

### 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:

Clause 4.28A.1 determines the Intermittent Load Refund. An Intermittent Load is normally served by its own generator and as such it has a significantly reduced Individual Reserve Capacity Requirement (IRCR) payment obligation. Occasionally the Intermittent Load could draw from the system, for example, when its generator is experiencing a full or partial outage. When this happens the Intermittent Load is liable for a payment – the Intermittent Load Refund.

A Market Customer who registered an Intermittent Load could reduce the refund by nominating a capacity requirement for the Intermittent Load. An IRCR is then determined from the nominated capacity requirement but is limited to a contribution to the system's reserve margin.

The Intermittent Load Refund is determined through the steps outlined below. The Trading Interval refund is first determined in accordance with either (a) or (b) and then summed up over the Trading Intervals in the Trading Month and over all Intermittent Loads registered by the Market Participant. The refund is then capped under (c).

- a) If the generator serving the Intermittent Load is on a planned outage then:
  - i. If the Intermittent Load draws from the system less than 103% of its nominated capacity requirement then the refund capacity is zero
  - ii. If the Intermittent Load draws from the system more than 103% of its nominated capacity requirement then the refund capacity is its excess draw from the system over 103% of its nominated capacity requirement
- b) If the generator serving the Intermittent Load is not on a planned outage then:
  - i. If the Intermittent Load is not drawing on the system or draws less than 3% of its nominated capacity requirement then the refund capacity is zero
  - ii. If the Intermittent Load draws from the system more than 3% of its nominated capacity requirement then the refund capacity is its excess draw from the system over 3% of its nominated capacity requirement
- c) The total participant refund for a Trading Month is determined from summing up the refunds determined under either (a) or (b) above for all the Intermittent Loads registered by the participant and using the same refund rates applicable to Scheduled Generators. It is then capped at no more than the maximum determined in accordance with (d) below
- d) The monthly maximum refund for a participant is the 12-month value of its nominated capacity requirements for its Intermittent Loads calculated at the Monthly Reserve Capacity Price less the cumulative refunds the participant has made since the start of the Capacity Year.

The cap in (d) above mimics the maximum refund that applies to generators.

However, in the case of an Intermittent Load there is no reserve capacity supplied into the market. The Intermittent Load is not earning a Reserve Capacity Credit payment that has to be refunded to the market when the reserve capacity is not supplied. The Intermittent Load Refund is not a refund as in the case of a generator but a payment for the use of reserve capacity provided by the market. It is not appropriate to cap refunds in the case of an Intermittent Load and clause 4.28A.1(b) should therefore be removed.

Further, as the Market Rules are currently worded, this maximum refund is set by the same nominated capacity requirement. This forces the nominated capacity requirement to determine both the level the Market Customer has chosen to draw from the market, in anticipation of its Intermittent Load generator planned outage, and the refund cap. The refund the market is entitled to from the Intermittent Load when the Intermittent Load is drawing from the system should also cover the excess load the Intermittent Load is drawing over the capacity the Intermittent Load has nominated. The maximum the Intermittent Load can draw from the system is its maximum consumption capability – the physical maximum. It is not appropriate to cap this by the capacity the Market Customer has nominated in registration.

This rule change proposal is to remove the refund cap in the case of Intermittent Loads.

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

The proposed rule change could be progressed under the standard rule change process.

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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)

4.28A.1 The IMO must determine for each Intermittent Load registered to Market Participant p the amount of the refund ("Intermittent Load Refund") to be applied for each Trading Month m in respect of that Intermittent Load as the sum over all Trading Intervals t of Trading Day d in the Trading Month m of the product of: ~~using the methodology for determining Capacity Cost Refunds as described in clause 4.26.3 assuming:~~

- (a) ~~that the applicable value of Y in the Refund Table described in clause 4.26.1 is that which applies for Scheduled Generators; and~~
- (b) ~~that the Maximum Refund defined in the Refund Table described in clause 4.26.1 is, for a given Intermittent Load and Trading Month, set to equal the value of Reserve Capacity payments that would have been made to the generation system described in clause 2.30B.2(a) for the 12 Trading Months commencing at the start of the Trading Day of the previous 1 October assuming that the IMO had procured Reserve Capacity from it for each of those months equal to the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c) at the prevailing Monthly Reserve Capacity Price.~~
- (c) ~~that the Capacity Shortfall for Trading Interval t of Trading Day d and Trading Month m~~ which ~~is the greater of zero and:~~

- i. double the MWh of the Intermittent Load metered during that Trading Interval (where for the purpose of this calculation the metered amount should be defined at the meter rather than being Loss Factor adjusted so as to be measured at the Reference Node), less;
- ii. if the generating system described in clause 2.30B.2(a) is undergoing a Planned Outage or a Consequential Outage, the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less
- iii. 3% of the quantity nominated for that Intermittent Load by its Market Customer in accordance with clause 4.28.8(c); less
- iv. for Trading Intervals where the temperature data described in clause 4.28A.2 shows a temperature in excess of 41°C and the generating system described in clause 2.30B.2(a) is not undergoing a Planned Outage, Forced Outage or a Consequential Outage, the capacity reduction, if any, specified in accordance with clause 2.30B.3(b)(i).

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

The proposed rule change 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” by ensuring that Intermittent Loads contribute to a more equitable share of the reserve capacity cost.

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

##### **Costs**

It will be necessary to make some changes to the IMO settlement systems to remove the Intermittent Load Refund cap. The cost of this change is yet to be confirmed.

##### **Benefits**

The proposed rule change supports the Market Objectives as outlined in section 4 of this proposal.