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## Wholesale Electricity Market Rule Change Proposal Submission Form

### RC\_2013\_09 Incentives to Improve Availability of Scheduled Generators

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#### Submitted by

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#### Submission

- Please provide your views on the proposal, including any objections or suggested revisions.**

#### Background

The total outage rate of some generators in the South West Interconnected System (SWIS) has been persistently high since market start and well above levels experienced in other jurisdictions. The high total outage rates seem to relate mostly to high levels of planned outages. This issue has been highlighted by the Economic Regulation Authority (ERA) on a number of occasions in its annual reports on the operation of the WEM and has also been debated by the Independent Market Operator (IMO) Board.

There are many incentives in the Wholesale Electricity Market (WEM) Rules to encourage generators to make their plant available for dispatch in the WEM. Generators receive capacity credit payments in return for making their plant available. When generators are not available due to unforeseen circumstances (a forced outage) they must make capacity refund payments to the IMO. These refunds provide an economic incentive to ensure availability of generators. The IMO also has the ability to reduce the amount of capacity credits awarded to non-performing generators.

To ensure safe and reliable operation it is necessary with regular maintenance of generation facilities. Such maintenance is allowed for in the Market Rules and is referred to as planned outages. Generators do not have to make capacity refund payments for outages that are planned and have been approved by System Management.

Five generators in the SWIS have experienced outage rates in excess of 30%. Most of the outages for these generators have been approved by System Management and therefore classified as planned outages which do not attract the capacity credit refund payment obligation.

### **Issues**

The IMO Board has expressed a desire to provide more powerful incentives for Scheduled Generators to be available for dispatch in the WEM. A number of issues with the operation of the current Market Rules have been identified as follows:

1. The IMO's ability to respond to generators with prolonged high levels of outages is inflexible. Clause 4.11.1(h) provides the IMO with the ability to reduce the amount of capacity credits for generators that have experienced either a forced outage rate of 15% or a combined planned and forced outage rate of 30% over a period of 3 years. However, the clause only allows the IMO to award the full amount or no capacity credits at all. It cannot reduce the amount by for example 20%.
2. There is little guidance in the Market Rules in relation to the factors that the IMO must consider when making its decision under clause 4.11.1(h).
3. The 30% total outage level that must be exceeded before the IMO can intervene is high compared to normal outage levels experienced in other jurisdictions.

### **Change Proposal**

The IMO submitted RC 2013 09 "Incentives to Improve Availability of Scheduled Generators" on 18 June 2013. The IMO proposed to make the following amendments to the Market Rules:

1. Amend clause 4.11.1(h) to give the IMO more flexibility in its decision on how to respond to generators with prolonged, high outage levels. The IMO would be able to assign a level of capacity credits between zero and the full allocation.
2. Provide a list of factors in the Market Rules that the IMO may consider when making its decision to potentially reduce the number of capacity credits under 4.11.1(h).
3. Reduce the level of overall outages that will trigger the ability for the IMO to intervene from the current 30% level to a new 20% level. At the same time the forced outage ratio that may trigger intervention by the IMO will be reduced from the current 15% level to 10%. These changes will be phased in from 2016/17 to 2020/21.
4. Make the IMO's decisions under clause 4.11.1(h) (to reduce the amount of capacity credits awarded) reviewable decisions.
5. Introduce a financial consequence of having prolonged (over a 36 month period), high total outage rates. The financial consequences of prolonged outages are proposed to

be that generators pay normal capacity refunds for all outages (forced and planned) once they go above a threshold of trading intervals for planned outages in a rolling three year period. This threshold is proposed to be 7,800 Trading Intervals, which equates to an average annual planned outage factor of 14.8%.

6. The 7,800 Trading Interval threshold will be reviewed within 5 years.
7. Provide the IMO with the ability to require monitoring of a non-performing generator by an independent auditor.

## **Perth Energy's Views**

Perth Energy supports the proposed changes to the Market Rules.

The capacity credit payment that all capacity providers receive is significant and is intended to reflect the economic cost of providing generation capacity to the WEM. Generators with excessively high planned outage rates are effectively being paid for a service that they are not providing. This creates issues of inequity between performing and non-performing generators and also between Market Customers and the non-performing generators.

Prolonged unavailability of generators also has the potential to negatively impact on the efficiency of the energy and ancillary services markets in the WEM. This would particularly be the case if the generator that is unavailable has a low short run marginal cost (SRMC) and would therefore normally be dispatched in the energy and / or ancillary services markets. Unavailability of such plant may lead to higher clearing prices in those markets than would otherwise be the case.

In the longer run, investment decisions around building new and retiring old generators may also be skewed by the fact that it is possible to retain unreliable, old generators without necessarily being significantly impacted financially. It may also lead to a need to carry a higher reserve margin than would otherwise be necessary to compensate for the high outage levels of some plant.

In addition to the economic impacts there will also be negative impacts on system security and reliability if outage levels continue to stay at high levels.

Perth Energy considers that the proposed amendments would significantly improve the incentives on generators to make their plant available to the system and to retire plant that have come to the end of their economic life. The effect of this should be improved system security and reliability as well as more efficiently operating energy markets in the WEM.

Perth Energy welcomes the inclusion of a list of factors to guide the IMO in making its decisions on reducing capacity credits awarded to a generators and the proposal to make these decisions reviewable. This improves transparency and may reduce risk for potential investors in the WEM.

**2. Please provide an assessment whether the change will better facilitate the achievement of the Market Objectives.**

Perth Energy considers that the proposed amendments would improve the efficient operation of the WEM by improving the incentives on all generators to be available to bid their energy into the market. This is also likely to positively impact on competition in both generation and retail and lead to lower prices for end users. With improved availability of the SWIS generation portfolio it is also likely that system security and reliability will be enhanced. Perth Energy therefore considers the proposed amendments will positively impact on the achievement of Market Objectives<sup>1</sup> (a) relating to economic efficiency, safety and reliability, (b) relating to competition, and (d) relating to the long-term cost of electricity.

Perth Energy has not identified any impacts on the remaining Market Objectives.

**3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing these changes.**

Perth Energy has not identified any impacts to our business.

**4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.**

Perth Energy will not require any lead time to implement the proposed changes.

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<sup>1</sup> 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.