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## Wholesale Electricity Market Rule Change Proposal Submission Form

### RC\_2013\_20 Changes to the Reserve Capacity Price and the dynamic Reserve Capacity refund regime

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#### Submission

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

#### Background

The Wholesale Energy Market (WEM) operates a market for generation capacity separately to the market for energy. Providers of capacity are accredited with Certified Reserve Capacity (CRC) which can be traded bilaterally with retailers or through the Independent Market Operator (IMO) at a default price.

The default, or administered price for capacity is set by the Economic Regulation Authority (ERA) for one year at a time on the recommendation of the Independent Market Operator (IMO) and informed by public consultation. The ERA determines the Maximum Reserve Capacity Price (MRCP) which sets the maximum price in case of a reserve capacity auction. The MRCP also forms the basis for the default administered price that applies to all CRC that is not traded via a bilateral contracts but settled via the settlement processes run by the IMO.

Capacity providers that fail to make their capacity available, other than for pre-approved outages, are exposed to financial penalties via the refund mechanism for capacity credits. Different refund rates apply depending on the time of year and day when the capacity is

unavailable. The current refund multipliers range from 25% to 600% of the administered capacity price that applies at any given time. The maximum refund that a CRC provider may be liable for in a Capacity Year is the total value of the Capacity Credits that have been unavailable for dispatch through the year.

Funds that are collected from capacity credit refunds are currently redistributed to Market Customers in proportion to their share of the Individual Reserve Capacity Requirements (IRCR).

Following a number of initiatives, including reviews by the Lantau Group and discussions at the Reserve Capacity Mechanism Working Group (RCMWG) and at the Market Advisory Committee (MAC) a number of recommendations for improving the way the reserve capacity market within the WEM operates have been put forward. In this Rule Change Proposal, the IMO attempts to address the following issues:

- 1. The formula for calculating the administered price for CRC:** Currently the administered price for CRC is set at 85% of the MRCP as determined by the ERA if no reserve capacity auction is held. When an auction is held<sup>1</sup>, the administered price is set to the MRCP level. The administered price is then further scaled back in proportion to any oversupply of capacity credits compared to the capacity credit requirement. The “scaling back” is on the basis of a 1:1 relationship. In other words, if there is a 10% oversupply of capacity credits, the administered price is scaled back by 10%. It has been argued by a number of parties participating in the review process that the 1:1 relationship in the scaling of the administered price is an insufficient signal to deter overinvestment in reserve capacity.
- 2. The ceiling price in Reserve Capacity Auctions:** The IMO has also identified that the current MRCP may be an insufficient economic signal to encourage investment in reserve capacity during times of under-supply. This is because the way the MRCP is derived at the moment estimates an average or expected cost of supplying capacity rather than a marginal cost of supplying capacity.
- 3. The naming convention for the administered default capacity price:** As outlined above, the current MRCP reflects an average or benchmark cost of providing capacity rather than a marginal cost. The MRCP naming convention may therefore be misleading.
- 4. Making refund factors more dynamic:** Refund factors are currently static. There is no direct relationship between the refund factor and the amount of CRC available on the system at the time that a CRC provider is on outage and therefore is liable for a refund. CRC providers that experience a forced outage at a time when the system has an adequate capacity cushion may be liable for high refunds despite there being no “scarcity” of capacity on the system. On the flip side, CRC providers may be exposed to relatively benign refunds during off-peak periods even in situations where capacity may be tight on the system, for example due to a high level of planned outages coinciding with an unusually high level of forced outages.
- 5. The refund rates that apply for Demand Side Programmes (DSPs):** Another Rule Change Proposal, RC\_2013\_10 “Harmonisation of Supply-Side and Demand-Side

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<sup>1</sup> This is yet to occur in the WEM which has been operating since September 2006.

Capacity Resources” is currently being progressed through the rule change process. RC\_2013\_10 proposes amendments to the way that DSPs are exposed to refund payments for non-provision of capacity. The proposals in RC\_2013\_10 link DSP refunds to the static refund factors described in 4 above. If the static refund factors for generators were to change to be dynamic refund factors, it would be necessary to consider how to best align refunds for DSPs with this new approach to refund factors.

6. **Allocation of the proceeds from capacity credit refunds:** The Lantau Group identified that allocating the proceeds from capacity credit refunds to Market Customers rather than to providers of CRC represents an inefficient value transfer and is merely a “windfall gain” for Market Customers. This inefficiency may translate into higher energy prices as generators have to take into account the estimated amount of capacity refund costs they will incur when entering into bilateral contracts.

## Change Proposal

The IMO submitted Rule Change Proposal 2013 20 “Changes to the Reserve Capacity Price and the dynamic Reserve Capacity refund regime” on 10 January 2014.

The IMO has proposed to amend the Market Rules to address each of the six issues identified above as follows:

1. **The formula for calculating the administered price for CRC:** The IMO has proposed to sharpen the economic incentives to avoid imbalances in the supply of CRC by introducing a much sharper reduction in the administered price in case of over-supply of capacity. Instead of a 1:1 relationship, the IMO has proposed that the slope of the capacity price curve be set to -3.75 in case of oversupply of capacity in the market. At the same time, the IMO has proposed that in case of under-supply, the administered price for CRC should be allowed to increase to a level 10% above that which is currently set by the ERA to represent the MRCP.
2. **The ceiling price in Reserve Capacity Auctions:** As a natural consequence of allowing the MRCP to increase to a level 10% above that which is currently set by the ERA, the IMO has proposed to allow the ceiling price in any Reserve Capacity Auction to increase to this new proposed level.
3. **The naming convention for the administered default capacity price:** The IMO has proposed to rename the Maximum Reserve Capacity Price to the Benchmark Reserve Capacity Price to reflect the current practice of calculating a benchmark rather than a marginal price.
4. **Making refund factors more dynamic:** The IMO has proposed to scrap the current static refund table and replace it with refund factors that are dynamic. The proposed new refund factors will range between 0.25 and 6 (as is the case at the moment). The minimum refund factor will range between 0.25 and 1, with the minimum refund factor increasing from 0.25 towards 1 depending on the level of unavailability for the Facility in question over the previous 90 days. The minimum refund factor will apply in Trading Intervals where the capacity cushion is at least 1,500MW. The refund factor will then increase gradually to a maximum of 6, which will be reached when the capacity cushion is 750MW or less. The increase in the refund factor is directly linked to the level of the capacity cushion.

5. **The refund rates that apply for Demand Side Programmes (DSPs):** The IMO has proposed that DSP's be exposed to the proposed new dynamic refund factors to ensure consistency in treatment of DSPs and other capacity providers.
6. **Allocation of the proceeds from capacity credit refunds:** The IMO has proposed that revenue collected from capacity credit refunds be distributed between holders of CRC rather than to Market Customers. To be eligible to share in the refunds CRC holders would need to have produced output (or in the case of DSPs, reduced output) in the last 30 days preceding the Trading Interval that the refund relates to. CRC providers that meet the eligibility criterion would share in the refunds in proportion to the capacity that they had available in the Trading Interval that the refunds relate to.

The IMO has proposed that all amendments take effect from the 2016 Capacity Year.

### **Perth Energy's Views**

Perth Energy is concerned that these material changes to the Reserve Capacity Mechanism and Reserve Capacity Price have the potential to conflict with the broader WEM Review outcome being undertaken by the Government this year. Adopting any of these material changes proposed by the IMO at present will have a detrimental impact on market confidence and cause unnecessary instability.

In terms of process and consistency of industry policy, we therefore strongly recommend the IMO to suspend material Rule change proposals until the WEM Review program has been completed. Perth Energy considers it imperative that the IMO should consult with the Government to coordinate any further changes to WEM as material Rule changes of this nature are complex and expensive in terms of impact on market participants.

Having said that, Perth Energy can provide some technical views over the proposed changes.

### **CRC Pricing**

We have for some time advocated reviewing the way the Reserve Capacity market operates to reduce price volatility. . .

The proposed changes to the calculation of the administered price are significant and would result in an even more volatile pricing regime than currently the case, in a market considered to be appropriately an infrastructure market. Stability of earnings is paramount in this market to avoid substantial risks being priced into project financing costs. If implemented, the changes would seriously dent investor confidence with potential long term adverse impacts for private sector investment in generation capacity in the WEM.

### **Dynamic Refunds**

Perth Energy agrees with the principles behind the shift to dynamic refund factors. Using dynamic refund factors allows Market Participants to be exposed to cost signals that are more reflective of the actual scarcity of capacity rather than being linked to fixed factors that may at times be completely divorced from the demand/supply balance of capacity on the system. If this particular aspect of the change proposal could be implemented at relatively

low cost it may in our view be worth considering progressing as a standalone change proposal. However, if significant costs are associated with this change we propose that this aspect of the Rule Change Proposal also be deferred until the WEM Review is undertaken.

With regards to the redistribution of the capacity refunds Perth Energy does not consider there to be any rationale for directing these refunds to capacity providers rather than to Market Customers as is currently the case. We note that the IMO and some of its advisors are of the view that as long as Market Customers are getting the product they have paid for (i.e. safe and reliable power supply) there should be no need to provide them with a refund when capacity is unavailable. There are flaws in this view.

First, the same logic could be applied to the proposed new redistribution to capacity providers: Capacity providers that deliver the product that they are being paid to deliver have been fully compensated and there is no need to provide them with any further payment. Second, the current way of distributing the refunds is logical in that customers are getting a refund whenever some of the product is not being delivered (whether that non-delivery has any tangible impact or not).

The current methodology also ensures that these benefits flow in a more direct way back to customers rather than an indirect way via generators. In a competitive market it should not really matter whether such refunds are directed to generators or retailers as the end result should always find its way to the customer's bottom line.

However, Perth Energy considers that it would be reasonable to make an allowance for normal forced outage ratios and the impact forced outages have on capacity credit refunds when determining the MRCP. Explicitly allowing for some "expected refunds" when determining the MRCP would ensure that efficient generators are able to survive in the market with forced outage ratios that are in line with industry practice. At the same time, generators would continue to have strong financial incentives to minimise forced outages and ensure a high level of availability of their plant.

In light of the comments we have made above, we would advocate delaying proceeding with any proposed changes to the way the capacity refunds are redistributed and await the outcome of the WEM Review.

### **Demand Side Management**

If there is to be some early Rule Change Proposals from the IMO, they should be directed to the treatment of DSM. Perth Energy continues to be extremely concerned with the significant amount of CRC awarded to demand side providers of capacity. For the 2015/16 Capacity Year, a total of 551MW of CRC has been awarded to demand side providers. This represents almost the entire oversupply of CRC for that year (564MW).

We remain of the view that demand side providers are not capable of delivering the same CRC product that conventional generators deliver. Evidence is that demand side products are not dispatched into the energy balancing market as generators are. They also do not have the same significant financial incentives to stay around and ensure that they are able to deliver capacity to the system as conventional generators do. This is because their investment in their Facility has an alternative value (the primary purpose of the Facility) and their investment would not be stranded if capacity payments from the WEM were no longer available. Conventional generators do not have any alternatives to sourcing revenue from

the provision of energy and capacity and hence have a much stronger incentive to perform well in the WEM.

Some steps are being taken to improve the value of the current demand side provision of capacity through RC 2013 10 “Harmonisation of Supply-Side and Demand-Side Capacity Resources”. The steps proposed in RC 2013 10 include increased availability requirements and a requirement for telemetry at demand side provider sites to allow System Management close to real time visibility of the Facility’s ability to provide capacity. Although the proposed amendments are improvements on the current situation, they also miss the point. We do not believe that demand side should be provided with CRC.

In our view, demand side load reduction should not be allocated CRC but should instead have the opportunity to be competitively procured in the market by retailers for CRC replacement value if such value in fact exists, or as a complimentary ancillary service of load reduction to System Management.

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

Perth Energy considers that there are aspects of this change proposal that may facilitate achievement of certain Market Objectives<sup>2</sup> whilst other aspects may be to the detriment of certain Market Objectives.

At a high level, Perth Energy is concerned that any significant change in this area of the Market Rules at a time when we consider it likely that a comprehensive, Government led review of the Western Australian energy market may be imminent may turn out to be costly and very short lived to the detriment of end energy users in Western Australia who will ultimately bear the cost of any changes. Perth Energy is therefore concerned that regardless of the merits of individual components of the change proposal there may be significant detrimental impacts on the long-term cost of supplying electricity in the WEM and therefore a detrimental impact on Market Objective (d). Perth Energy urges the IMO to coordinate with the Government in this regard. .

At the technical and market objectives (b) and (d) levels, Perth Energy does not support the proposed changes to the calculation of the administered price.

The introduction of dynamic refund factors may be a positive step and could more closely align the cost signals in the rebate mechanism to the actual scarcity of capacity at the time

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<sup>2</sup> (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.

when a rebate payment is made. This should lead to better cost reflection which should have a positive impact on Market Objectives (a), (b) and (d).

However, redistributing refunds to capacity providers rather than Market Customers is irrational and would not contribute any positive impact on capacity delivery. Perth Energy therefore considers there would be a detrimental impact on Market Objective (d) as costs associated with the change will find their way through to end customers and increase the cost of delivering electricity.

Perth Energy considers it much more critical for the IMO to focus on reducing the large costs to consumers associated paying full CRC price to demand side products when these are not generation capacity in any way or form in reality or under the Rules.

**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 may need to update its IT systems relating to processing IMO settlements. The proposed amendments to refund factors and distribution of the refund monies may also impact on the way that retailers contract with customers. We are yet to quantify the impact of these potential changes.

**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.