CON N

1. INTRODUCTION 3
2 CALL FOR SECOND ROUND SUBMISSIONS...4
3.

N OD C ON

On 21 December 2009 the Independent Market Operator (IMO) submitted a Rule Change Proposal regarding the amendment of clauses 6.20.7, 6.20.9, 6.20.10 and the proposed new clause 6.20.9A of 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:

The key dates in processing this Rule Change Proposal, as amended in the extension notice, are:

Please note the commencement date is provisional and may be subject to change in the Final Rule Change Report.

The IMO's draft decision is to accept the Rule Change Proposal as proposed in the Rule Change Proposal and modified following the first submission period. The detailed reasons for the IMO's decision are set out in section 5 of this report.

In making its draft decision on the Rule Change Proposal, the IMO has taken into account:

- the Wholesale Market Objectives;
- the practicality and cost of implementing the proposal;
- the views of the Market Advisory Committee (MAC); and
- the submissions received.

All documents related to this Rule Change Proposal can be found on the IMO website: http://www.imowa.com.au/RC_2009_35.

CALL O COND O ND BM ON

The IMO invites interested stakeholders to make submissions on 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 5.00pm, **edne d y Ap** .

The IMO prefers to receive submissions by email (using the submission form available on the IMO website: http://www.imowa.com.au/rule-changes) to: market.development@imowa.com.au

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

ndependen M e Ope o
Attn: Manager Market Development and System Capacity
PO Box 7096
Cloisters Square, PERTH, WA 6850
Fax: (08) 9254 4399

L C AN O O AL

. *Submission Details*

N e	Troy Forward

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 IMO submitted that the proposed Amending Rules will better achieve Wholesale Market Objective (a) by transparently reflecting the current approach to calculating the price limits in the Market Rules. The IMO considered that by embedding current accepted practices into the Market Rules a more transparent and efficient approach to undertaking the review will result. This is because interested parties will no longer need to refer to the draft and final reports to understand the approach adopted in undertaking the review.

The IMO considered that the proposed Amending Rules were consistent with the remaining Wholesale Market Objectives.

Perth Energy is of the view that price limits are not a natural part of any well functioning, competitive market. Perth Energy therefore supports measures which act to improve competition in the Wholesale Electricity Market (WEM) to the point where it is no longer necessary to rely on artificial limits on prices.

Perth Energy makes a number of comments regarding the Rule Change Proposal. These relate to the:

- perceived conflict between the SRMC bidding principle and the inclusion of a Profit Margin when calculating the price limits;
- approach adopted to calculate the Risk Margin, including the applicable statistical percentiles; and
- use of short run average cost .

Perth Energy supports the IMO's proposal to allow for additional consultation on the price limits when the IMO considers it necessary.

Further details of Perth Energy's comments and the IMO's response are contained in the table in section 4.3 of this report.

Wholesale Market Objectives

Perth Energy is concerned that it is conceivable that the marginal generator in the SWIS will not in all instances be compensated for its marginal cost when called to generate. This is a matter of interest to financiers of new generators and over time this may lead to a lessening of competition in the WEM. Perth Energy considers that this would be detrimental to Wholesale Market Objectives (a) and (b).

Public Forums and Workshops

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

. The IMO's response to submissions received during the First Submission Period

During the first submission period a number of points were raised regarding the IMO's proposed amendments to the Market Rules. The IMO's response to each of the issues is presented in the table over the page:

C e	e	Co en. C n e e e ed	MO e pon e
All	Perth Energy	Price Limits are not a natural part of any well functioning competitive market.	The IMO notes that the price limits were a design feature included at market start, and constitute just one aspect of the market power mitigation strategy. The basic premise is that a competitive market should have a price equivalent to the fixed costs of a peaking plant operating at low levels. Under a competitive market there would be no need for a price cap. But given that the WEM was dominated by one large generator at market start a price cap was required to protect consumers. The Rule Change Proposal does not propose any amendments to the fundamental basis for the need to determine price limits nor does it propose to amend any other market power mitigation features which had been incorporated at market start. Consequently the IMO has not undertaken any assessment of the continued need for the price caps as a part of this rule change. The IMO does however note that the Market Rules require the ERA to review the methodology for setting the price limits no later than the fifth anniversary of first Reserve Capacity Cycle. This review includes among other things an assessment of the effectiveness and appropriateness

C e	e	Co en C n e e e ed	

C e	e	Co en. C n e e e ed	MO e pon e
			the market under high demand or low reserve supply conditions.
6.20.7 (b)	Perth Energy	New rules would imply that the Market Participant with the marginal generator in the SWIS will be out of pocket 20% of the time when it is running on natural gas and 10% of the time when it is running on distillate fuel. Market Rules should ensure that the price limits allow for cost recovery, even in the worst case scenario and not merely most of the time	The IMO considers that the price limits should allow for cost recovery but notes that there are a large range of risks faced by Market Participants that could be potentially incorporated when determining the appropriate Risk Margin to apply. The IMO notes that it is not however feasible to cover every possible scenario when applying the Risk Margin given the inherent inability to identify all potential risks. The IMO also notes the price limits are a market design feature to mitigate market power. To be effective the price limits need to be both low enough to mitigate market power and high enough to ensure that new entrant peaking plants are not discouraged. The IMO notes that the range of 80-90% is typical of risk margins observed in electricity markets where traders can not accurately predict future market conditions and yet must strike a fixed price for the purposes of managing uncertainty. The IMO considers that the Risk Margin based on 80% probability provides a Maximum STEM Price which is in keeping with current market operations. The IMO notes that the appropriateness of the 90% probability for assessing the parameters of the Alternative Maximum STEM was raised by MMA during the 2009 review and will be considered further during the 2010 review. Following from the outcomes of the 2010 review further changes to the Market Rules may be required. Further, the ERA is required to undertake an assessment of the effectiveness of the price limits within 5 years of the first Reserve Capacity Cycle. The IMO considers that the appropriateness and effectiveness of the price limits as a market power mitigation strategy would be best addressed during this review. In addition, the proposed drafting has been amended to remove the level of detail on the calculation of the Risk Margin for consistency with the level of detail provided for the other variables included in determining the Maximum STEM Price and Alternative Maximum STEM Price. The details of the margins used for each review will be provided in the IMO's draft report, prepared under clause 6.20.9, thereby providing Market Participants with an opportunity to consult on the proposed ranges. To ensure transparency of this process in the Market Rules, clause 6.20.9 has been amended to require

C e	e	Co en C n e e e ed	MO e pon e
			the draft report to reflect any changes to the values of the Risk Margins or other variables adopted in undertaking the study.
6.20.7 (b)	Perth Energy	The percentiles applied for the two price limits should be the same	The IMO notes that it has revised the drafting to reduce the level of detail on

C e	e	Co en C n e e e ed	MO e pon e
		lower value marginal loss factor that applied to a generator connected to the SWIS, or alternatively, if the highest cost generator can be identified, the marginal loss factor of that generator	Turbine rather than simply stating "for that generator" in the Market Rules and has amended the proposed Amending Rules accordingly. The IMO notes that this amendment ensures consistency which the drafting approach adopted for clause 6.20.7(b) i.- iv.
6.20.7(b) i	Perth Energy	Queries whether the clause should be referring to short run marginal cost	The IMO notes that it was intended that this clause refers to SRAC to allow for the recovery of startup and shutdown costs over the continuous hours the generators dispatch. This is consistent with the approach adopted by MMA in previous years when calculating the price limits. The concept of SRMC is not currently defined in the Market Rules, but rather a document prepared by ERA outlines the costs which can be included in determining the SRMC of a generator. The IMO notes that it is currently in discussion with the ERA on whether a similar approach to defining SRAC may be appropriate. The IMO notes that it is currently discussing this issue further with the ERA and will present the outcomes of this discussion in the Final Rule Change Report.
Market Objectives	Perth Energy	Perth Energy is concerned that it is conceivable that the marginal generator in the SWIS will not in all instances be compensated for its marginal cost when called to generate. This is a matter of interests to financiers of new generators and overtime this may lead to a lessening of competition in the WEM. This would be detrimental to Wholesale Market Objectives (a) and (b).	As noted previously, the IMO disagrees that the price limits should allow for cost recovery even in the worst cost scenario and notes that estimating the price limits assuming worst case scenario would have little impact as a market power mitigation strategy. The IMO notes the proposed Amending Rules will simply embed existing practices and therefore increase transparency around the approach adopted during the review.
6.20.7	LGP	STEM and Balancing prices now rarely attain the maximum value, in which case the revised approach would be of only academic consequence	As noted above, the IMO intends to re-examine the percentiles used in calculating the price limits during the 2010 review.

. Additional Amendments to the Amending Rules

Following the first public submission period the IMO has made some changes to the proposed Amending Rules to address some of the issues discussed in section 4.3. The IMO has also revised the drafting around the probability percentiles used in the calculation of the Risk Margin to remove the level of detail prescribed.

These changes are as follows (~~deleted text~~, added text):

iii. Heat Rate is the mean heat rate at minimum capacity for

. *Wholesale Market Objectives*

The IMO considers that the Market Rules as a whole, if amended, will be consistent with the Wholesale Market Objectives.

o e e M e O ec e		Con en w o ec e
(a)	to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system	Yes
(b)	to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors	Yes
(c)	to avoid discrimination in that mavoosoiu3454(m)-14.5567(a)3.87771258(e)-9.0386(n)-9.0372(c)-0.827691(o)-	

A ND X LL D A L O O O AL

B c o nd

The Energy Price Limits (price limits) constitute a set of limits comprising the Maximum Short Term Energy Market (STEM) Price, the Alternative Maximum STEM Price and the Minimum STEM Price. Clause 6.20.6 of the Market Rules requires the IMO to annually review the appropriateness of the price limits.

In undertaking an annual review the IMO may propose revised values for the Maximum STEM Price and the Alternative Maximum STEM Price. The Minimum STEM Price to apply at any time is the Maximum STEM Price multiplied by negative one.

The applicable formula for calculating the price limits is set out in clause 6.20.7 (b) and is as follows:

(1 + Profit Margin) × (Variable O&M + (Heat Rate × Fuel Cost))/Loss Factor

Further details pertaining to the definition of the price limits are provided in the Market Rules.

McLennan Magasanik Associates (MMA), an independent consultant, was engaged by the IMO to undertake the 2009 Energy Price Limits review. MMA was also engaged in both 2007 and 2008 to undertake the review. One of the objectives of the 2009 review was to determine whether the cost assumptions, and previously used methodology for determining the price limits, are still suitable and if appropriate, recommend rule changes. The management of uncertainty in the calculations was also an important element of the review.

As an outcome of undertaking the 2009 review, MMA highlighted issues surrounding the use of Profit Margin when calculating the price limits and suggested that this should be replaced with Risk Margin. Further details pertaining to this issue are outlined below.

e

As first identified by MMA during the 2007 price limits review, the purpose of and basis for the use of a Profit Margin in clause 6.20.7(b) is seen to be problematic. In particular, it was considered that the reference to Profit Margin when calculating the price limits is inconsistent with the principle of generators bidding according to their Short Run Marginal Costs (SRMC).

The economic rationale for incorporating a Profit Margin in the calculation of the price limits, as outlined by MMA in the 2009 final report, is as follows:

> ***In the presence of strong competition, a generator would be very near to its SRMC having regard to its operational decisions in order to maximise its profits. This works on the basis that bids above SRMC would be expected to miss out on profitable production as it could be displaced by lower priced bids. However, the last loaded generator having the highest costs has the opportunity to set the market prices without any competition from the supply side, since there are no***

Profit Margin could be set to zero or interpreted as a Risk Margin so as to make the Maximum STEM Price realistic from a commercial perspective.

every month when the Alternative Maximum STEM Price is revised, and that the annual review and consultation process provides sufficient scope for interested stakeholders to run average cost exceeds the mean short run average cost; and

b. the Risk Margin is calculated for the Alternative Maximum STEM Price as the proportion by which the 90th percentile of the probability distribution for the short run average cost exceeds the mean short run average cost;

ii. Variable O&M is the mean variable operating and maintenance cost for a 40 MW open cycle gas turbine generating station, expressed in $/MWh, and includes, but is not limited to, start-up related costs;

iii. Heat Rate is ~~based on~~ the mean heat rate at minimum capacity for a 40 MW open cycle gas turbine generating station~~'s~~, ~~heat rate at minimum capacity,~~ expressed in GJ/MWh;

iv. Fuel Cost is the mean unit fixed and variable fuel cost for a 40 MW open cycle gas turbine generating station, expressed in $/GJ; and

v. Loss Factor is the marginal loss factor for the generator relative to the Reference Node.

Where the IMO must determine appropriate values for the factors described in paragraphs (i) to (v) as applicable to the Maximum STEM Price and Alternative Maximum STEM Price.

6.20.10. In conducting the review required by clause 6.20.6 ~~T~~the IMO must prepare a draft report describing how it has arrived at a proposed revised value of an Energy Price Limit. The IMO must publish the draft report on the Marke.71325(e)1.9.(i)14.247(t)F28