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Dear Chris

DISCUSSION PAPER: ANNUAL WEM REPORT TO THE MINISTER

The Independent Market Operator (IMO) thanks the Economic Regulation Authority (ERA) for the opportunity to comment on the "Discussion Paper: Annual WEM Report to the Minister".

The IMO's submission against each of the discussion points is attached.

The IMO would like to take this opportunity to comment on the frequency of some of the reporting requirements under this review process. It is difficult to undertake a strategic review of market effectiveness on an annual basis. This is particularly the case when making assessments of the economic efficiency and reliability aspects of the Wholesale Market Objectives.

The IMO considers that an assessment of the effectiveness of the market may be more valuable if it was completed on a two or three year cycle. A longer timeframe would allow the benefits from new initiatives to be realised and enable the ERA to assess the market from a more strategic viewpoint.

While the ERA largely focuses on the Short-term Energy Market (STEM) and the Balancing there appears little consideration of the impact of bi-lateral contracts on the overall market effectiveness. Given the current trading volumes for bi-lateral contracts in the market being approximately 90% the IMO considers that to accurately assess the efficiency measures for the market as a whole, the collective impact of bilateral trading arrangements must be assessed.

If you would like to discuss any of the points raised in our submission, or require further information, please contact me on (08) 9254 4333.

Yoursusincerely

AZAN DAWSON CHIEF EXECUTIVE OFFICER

14 August 2009

Discussion Points	IMO response
Discussion Point 1	The IMO considers that the Wholesale Market Objectives serve the Wholesale Electricity Market well.
The Authority invites comment on whether the Wholesale Electricity Market Objectives are appropriate and the extent to which the Wholesale Electricity Market is effective in meeting these objectives.	

REFINEMENTS TO THE EXISTING WHOLESALE ELECTRICITY MARKET DESIGN

Issue: Network Connection Applications, Access Rights and Capital Contributions for Shared Network Assets

Discussion Point 2

The Authority invites comment on the extent to which the risk that a network connection application will not be offered on time impacts on investment incentives, including incentives to invest in new facilities in particular geographic locations of the network.

Certification of new facilities under the Reserve Capacity Mechanism (RCM) is critical to the viability of new generation projects in the Wholesale Electricity Market (WEM).

Certification is predicated based on Market Participants receiving network access from Western Power and being able to connect to the system in time for each summer peak season.

Through interactions with Market Participants a number of observations can be made about the network connection process:

- A common complaint made by project developers is being able to progress network access applications in a timely manner; and
- Consistency of information provided by Western Power is both problematic and confusing.

Improvements to streamline the access application process would be beneficial and help to facilitate entrance to the WEM of a wider range of new generation projects.

It is understood that there is little spare capacity across the existing network. It is common for a number of proposed projects to be seeking access in one area of the network. This creates complexity in network studies because of the interaction and order of applications under the present access queuing approach.

Access to the transmission system can be a significant barrier to entry for generators wishing to operate in the South West interconnected system (SWIS). At its most extreme, insufficient capacity

Discussion Points	IMO response
	may place system reliability at risk. The IMO strongly supports improvements to network access application processes.
Discussion Point 3	The IMO's experience with the Reserve Capacity certification process, suggests that requiring a
The Authority invites comment on network connection applications. In particular:	significant bond is useful as, among other things, it shows that a proponent is committed to progressing the project.
 to what extent would it be appropriate for Western Power to require that a sizeable bond be lodged with an application for network access; 	The IMO also manages a process of assessing the status of each new facility entering the Reserve Capacity Mechanism. The outcome of this assessment has a direct impact on the position in the "queue" for being assigned Capacity Credits. This process works well to differentiate between projects and there may be merit in adopting a similar approach to assess applications for network access.
 to what extent would it be appropriate for Western Power to discriminate between connection applicants (other than based on their places in the sequence of the relevant queue); and 	
 if other means of discrimination between connection applicants are appropriate, taking into consideration Western Power's queuing guide, what should be the basis for such discrimination. 	
Discussion Point 4	The IMO makes no submission on this discussion point.
The Authority invites comment on the application of capital contributions for shared network assets charged by Western Power.	
Issue: Decommitment of Thermal Plant	
Discussion Point 5	In its report, the ERA noted that a key issue is the extent to which both the owners of must-run plant and Verve Energy face appropriate signals in the market regarding the economic efficiency implications

Discussion Points

The Authority invites comment on the decommitment of thermal plant. In particular:

- to what extent is the overnight decommitment of thermal plants consistent with the Market Objectives; and
- given that System Management will be guided by the Dispatch Merit Order and by system reliability considerations, to what extent is System Management's approach for decommitting plant overnight appropriate, transparent and predictable.

IMO response

of de-commitment.

The current bidding arrangements for the STEM (Market Generator must offer prices in its Portfolio Supply Curve reflecting its reasonable expectation of Short Run Marginal Cost (SRMC)) were put in place at Energy Market Commencement to incentivise competitive outcomes and the efficient allocation of resources.

Market Generator's SRMC pricing methodology for each Trading Interval in the WEM, as defined by the ERA's discussion paper, incorporates the following:

- sunk costs (zero value in economic opportunity terms);
- variable costs:
- avoidable fixed costs; and
- shutdown costs.

The current methodology for determining SRMC means that avoidable fixed costs and shutdown costs are only considered in the Trading Interval in which they occur. After which, they become sunk costs with a zero economic value when determining SRMC.

This means that start up costs are expected to be recovered over one Trading Interval. Given the potentially high level of these costs, it may be economically viable for a Market Generator to make a payment to the market to allow the Facility to run at minimum generating levels and avoid the cost of plant restart.

The IMO is currently preparing a Rule Change Proposal which will clarify how a Market Generator may offer prices within its Portfolio Supply Curve which may be low or negative contingent on the prices reflecting its reasonable expectation of the SRMC of generating the relevant electricity.

The IMO considers that this rule change will clarify how Market Participants should reflect avoidable costs in their Portfolio Supply Curve offers. This will potentially increase overnight competition and provide a more appropriate price signal to the market.

Issue: Penetration of Intermittent Generation

Discussion Points	IMO response
Discussion Point 6 The Authority invites comment on issues surrounding the penetration of intermittent generation in the Wholesale Electricity Market. In particular, what approach is required to	The WEM Market Advisory Committee (MAC) has established the Renewable Energy Generation Working Group to consider and assess system and market issues related to renewable energy. The Working Group comprises representatives from the IMO, Government, System Management, Networks, Market Participants and the renewable energy industry. The Working Group's focus is on issues related to:
balance system security and avoid discrimination against any generation	intermittent renewable energy generation;
technology.	Capacity Credits allocated to intermittent generators through the Reserve Capacity Mechanism; and
	the impact on demand for Ancillary Services and system security at times of low load.
	A scoping study has been completed identifying a number of works packages to progress these issues and the IMO has commissioned a project manager to expedite the process. Detailed studies are planned to commence shortly for completion in the first half of 2010.
	The IMO has recently had \$704k funding approved as part of its 2009/10 Operational Plan to engage a dedicated project manager and undertake the Renewable Energy Generation works program.
	The IMO has since appointed Tenet Consulting to manage the works program. Tenet's proposed works management schedule will be presented to the Working Group at the end of August 2009.
Issue: Transparency of Outages	
Discussion Point 7 The Authority invites comment on the	The IMO considers that there is merit in assessing the adequacy of plant outage information with a view to wider dissemination of information.
adequacy of plant outage information in light of:	The IMO notes the following from both its Draft and Final Rule Change Reports for RC_2009_05:
 the potential benefits and costs of wider dissemination of outage information; and the IMO's analysis of outage 	"While reviewing the Draft Rule Change Report for RC_2009_05 the IMO Board requested a broader review of the transparency around outages and the overall outage planning process. This review will be prioritised by the MAC in relation to the other issues on the proposed issues log, in accordance with current practices."
 the IMO's analysis of outage information dissemination in relation to the proposed Rule change 	This review is currently classified as a medium priority and therefore likely to be progressed in the next

Discussion Points	IMO response
RC_2009_05 Confidentiality of Accepted Outages.	6 – 12 months.
Issue: Ancillary Services Procurement	
Discussion Point 8 The Authority invites comment on what factors	As part of the initial development of the Market Rules Evolution Plan the IMO met with most WEM stakeholders. These discussions enabled the IMO to identify a number of issues to be prioritised by the MAC for future work.
may inhibit a generator from participating in the competitive procurement of ancillary services.	Introducing markets in Ancillary Services was included in the list of issues for MAC prioritisation. This was ranked fifth out of the thirteen issues. Therefore it is unlikely that a full review will be undertaken within the next 18 months. However, this work is linked to the IMO's work on Balancing and STEM (identified as part of the Evolution Plan process), which may lead to benefits in this area.
	There are a number of other initiatives underway which may make it more favourable for generators to participate in the competitive procurement of Ancillary Services.
	The review of Ancillary Services Standards and Requirements Study is almost complete (required under clause 3.15.1 of the Market Rules). This report recommends, among other things, that changes be made to reduce the dominance of Verve Energy in the provision of Ancillary Services. The final report will recommend a basis for setting the price for Ancillary Services.
Issue: Location Signals to New Generation	
Discussion Point 9 The Authority invites comment on any concerns in respect of the provisions of	The location of new generation is driven by a range of factors including access to land, environmental issues, access to and cost of fuel supply (including transport costs), access to water for cooling and direct impacts from the electricity market including the type of plant and transmission costs.
location signals to new generation and how these concerns may be addressed within the context of the Market Rules.	To minimise costs developing a generation project, it is important that decisions on plant location take due account of all relevant issues. For this to happen, all cost impacts for different locations must be seen by project developers when assessing potential locations.

In relation to transmission cost impacts, it is understood that present network access arrangements are

Discussion Points	IMO response
	built on a user pays principle. This is reflected in network tariffs and capital contribution policies.
	Present market arrangements presume an unconstrained network. Consequently, market pricing is uniform across the network, except as modified by transmission losses.
	Given the maturity of the electricity market in Western Australia, uniform pricing appears appropriate at present given that much of the SWIS network is strongly interconnected. However, continuing with an unconstrained network model may not, in the long term, optimise the overall cost of delivering electricity to end users. For this reason, at some point it will be reasonable to consider a multi-nodal market design.
	The complexity of multi-nodal models has associated market and reliability costs which would need to be considered in detail. This would be a significant change from the present arrangements.
	In the present Western Australia model, the provision of Network Control Services provides a way to deal with those network constraints that are identified. As noted by the Authority, the WEM incorporates a mechanism by which Network Control Services can be procured – where these are determined to be preferable to network augmentation. This mechanism provides a clear locational signal where appropriate.
Issue: Metering	

Discussion Point 10

The Authority invites comment on the key benefits and costs of installing revenue-quality meters at Verve Energy's plants in place of relying on System Management's Supervisory Control and Data Acquisition (SCADA) data.

The Authority also invites comment on the key benefits and costs of using estimated meter readings for the first round of settlement instead of waiting for all interval meters to be read by the metering data agent.

The IMO considers that all Market Generators should be using Interval Meters and that there should be an obligation on the Meter Data Agent to ensure that such Interval Metering is correct. The inaccuracy of SCADA is an issue which affects wholesale settlement, the Notional Meter and Market Fees.

With regards to the lag of receiving meter data, it would be beneficial if the Meter Data Agent were able to promptly provide meter data by the end of each month to enable the IMO to settle monthly transactions with shorter delays. Delays in settlement have real implications for the prudential risks and associated costs carried by Market Participants. The IMO notes that many markets globally are trending to shorter settlement periods. The IMO supports any initiative which simplifies and/or speeds up the settlement processes.

Discussion Points	IMO response		· .	
Issue: Competitive Balancing				
Discussion Point 11 The Authority invites comment on competitive balancing. In particular, ahead of the introduction of competitive balancing, to what extent is it appropriate to: • require the equivalent of a Resource Plan from Verve Energy; • enhance reporting in respect of outages by unit, and fuel usage changes from plan; and • make any other operational changes.	As part of the development of the Market Rules E stakeholders. These discussions enabled the IMO to ide MAC for future work. Several Market Participants raised competitive balancin part of the MAC prioritisation of issues, this was ranked MAC. The IMO recently contracted Concept Consulting to a accommodate competitive Balancing. It was noted that be excessive in the SWIS as it would potentially increase costs currently). Two options were identified for introducing competitive E reducing real time Balancing needs. This wo mechanism and avoid more complex price based. opening up Balancing to direct competition. The result in more complex price based dispatch systems and accommodate commitment timeframes and opening up to in summary, some of the initial groundwork has been indication from Market Participants that opening the	entify a number of a grass an area for the differst out of the the assess whether the a fully competitive transaction costs. Balancing: Salancing: Salancing: Salancing: Salancing: Salancing: Salancing: Salancing: Salancing greated dispatch system system ship would introduct stems. Salancing market of the completed in the Balancing arrays.	f issues to be further analy nirteen issue the current really earlier edition of the current really earlier edition interest arrangements area anangements	resis and review. As as presented to the market design can market is likely to has low transaction on a STEM style live disciplines but sts with regard to lits.
	desirable. The MAC has endorsed the completion encourages stakeholders who are not on the MAC to industry class representative.	of further work	on this iss	ue and the IMO
Issue: Rule Change Process				
Discussion Point 12	As part of the development of the Market Rules Exstakeholders. These discussions enabled the IMO to ide			

Discussion Points	IMO response
The Authority invites comment on the Rule change process. In particular, given the potential for the more active Market Participants to be better placed to argue their position on Rule change proposals, the Authority invites comment on:	MAC for future work. The Rule Change Process was included in the list of issues for MAC prioritisation. Reviewing the Rule Change Process was ranked eighth out of the thirteen issues put to the MAC. Given this level of priority, it is unlikely that a full review of the Rule Change Process will be undertaken within the next 18 months. The full ranking can be found on the IMO's website.
 whether there is sufficient balance in the Market Participant classes represented on the Market Advisory Committee; and whether a better resourced Independent Market Operator could address concerns relating to the self-interested positions taken by Market Participants. 	Additionally, the IMO has completed its review of the MAC Constitution and Operating Practices. As part of this review, the IMO assessed the balance of Market Participant classes represented on the MAC. As a result of this assessment, the IMO considered that the current composition of the MAC was appropriate. However, it was noted in the MAC meeting minutes that "membership [will] be looked into as the market develops (and structural change occurs)" The IMO notes the importance of access to information for all key stakeholders and agrees that exclusion from the MAC should not be a detriment. There are many ways in which information flows should work for the MAC process, for example, non-MAC participants and stakeholders:
	can access all MAC meeting minutes via the IMO website;
	can discuss issues with their MAC industry class representative;
	may raise and discuss issues with the IMO; and
	may, at the discretion of the Chair attend a MAC meeting if it is appropriate to do so.
	Currently, membership to any Working Group is open to all Rule Participants. The IMO has proposed rule changes to allow other interested stakeholders to be a member of Working Groups.
Discussion Point 13	The IMO makes no submission on this discussion point.
The Authority invites comment on:	
 the extent to which the Rule change process could be reasonably delineated to separate operational from more strategic matters; and 	

Discussion Points	IMO response
 whether a different assessment process should apply to strategic Rule changes. 	
Issue: Performance of the Independent Marke	et Operator, System Management and the Economic Regulation Authority
Discussion Point 14	The IMO makes no submission on this discussion point.
The Authority invites comment on the effectiveness of the Independent Market Operator, System Management and the Economic Regulation Authority.	
FUNDAMENTAL CHANGES TO THE WHOLES	ALE ELECTRICITY MARKET DESIGN
Issue: Network Planning Approach	
Discussion Point 15	The IMO makes no submission on this discussion point.
The Authority invites comment on options for promoting efficiency in network planning and investment that are consistent with the Reserve Capacity Mechanism requirements.	
Issue: Short Term Energy Market	
Discussion Point 16	In developing the Market Rules Evolution Plan, the IMO met with a number of WEM stakeholders.
The Authority invites comment on the gate closure timing in the Short Term Energy Market (STEM). In particular, given that the issue of STEM gate closure timing will be considered as a part of the proposed road map process, the Authority invites comment on:	Several Market Participants raised a number of areas the STEM can benefit from further analysis: Trade volume, price relevance and STEM predictability; Moving closer to real time or multiple gate closures; Transparency of STEM offers; and

Discussion Points	IMO response
leaving the STEM gate closure as it is;	Preliminary calculation of Marginal Cost Administered Price (MCAP) (closer to real time).
moving STEM gate closure closer to	As part of the MAC prioritisation of issues, the review of the STEM was ranked third out of the thirteen issues.
the start of the trading day.	The IMO is currently drafting a scoping document to encapsulate the specific issues to be addressed in the Market Rules Evolution Plan. This is due to be presented to the MAC in October 2009.
Discussion Point 17	The IMO considers that the STEM is beneficial to the Wholesale Electricity Market, especially with the entry of new generators.
The Authority invites comment on the benefits provided by the Short Term Energy Market (STEM).	There has been significantly more trading in the STEM over the last nine months, first with NewGen and then Griffin entering the market. Prior to October 2008, the largest STEM activity was around 1.7%. With the arrival of NewGen, STEM activity increased to reach a peak in November of 6.0%.
Issue: Price Caps and Bidding Rules	
Discussion Point 18 The Authority invites comment on the appropriateness of the price caps and bidding rules in the Wholesale Electricity Market.	Several Market Participants have raised with the IMO the issue of whether two energy price caps are needed, or if the lower cap could be removed.
	The review of the appropriateness of the price caps was ranked seventh out of the thirteen issues identified by the MAC as part of the Market Rules Evolution Plan.
	Given this ranking, and the complexity of the higher-ranked priority areas, it is unlikely that a review of the appropriateness of the energy price caps will be undertaken within the next 18 months.
Issue: Reserve Capacity Mechanism	
Discussion Point 19	The IMO makes no submission on this discussion point.
The Authority invites comment on the appropriateness of the Reserve Capacity Mechanism for determining the Reserve Capacity Price. In particular:	

Discussion Points	IMO response		
 is there any evidence demonstrating that overall pricing signals provided in the Wholesale Electricity Market (for capacity and energy) are encouraging an inappropriate mix of plant; and 			
 are there alternative mechanisms, or changes to the Reserve Capacity Mechanism, that could better achieve the Market Objective of promoting the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West Interconnected System. 			
Discussion Point 20	The present two year lead-time has been chosen as the shortes typical conventional plant.	t time that would allow o	onstruction of
The Authority invites comment on the merits of moving the Reserve Capacity Mechanism to more than 2 years in advance of the relevant Capacity Year, and the extent to which such a change could assist in resolving network access application problems.	As noted by the Authority, in previous years, concern has been a Capacity Cycle not fitting well with the development of longer plant.		
	In response to this, the IMO proposed a change to the Market Reserve Capacity. This rule change has been progressed throu completed the second round of public submissions.		
	The proposed changes allow for allocation of Capacity Credit process, providing the certainty needed to facilitate development equal footing with shorter lead-time plant types.		
	The timing of forecasts used to determine capacity needs in the changed by the proposed new rule - these are still set two years		would not be
	Moving to a longer lead-time will increase the level of uncertain Requirement.	ty when setting the Res	erve Capacity
	For example, analysis of the accuracy of each of the 2005, 2		

Discussion Points	IMO response				
	2008/09 summer peak demand demonstrates a trend to increased forecast error with increased forecast lead-time. (This analysis has corrected for temperature and delay to major loads). While this only provides a snapshot, inaccuracies will increase with longer lead-times.				
	Forecast	2008/09 Maximum	Forecast Accuracy		7
		demand = 3515	MW	%	
	2005 (Temperature Corrected)	3356.19	-158.68	-4.5%	1
	2006 (Temperature Corrected)	3400.42	-114.45	-3.3%]
	2007 (Temperature Corrected)	3508.74	-6.14	-0.2%	
	2008 (Temperature Corrected)	3529.36	14.49	0.4%] .
Discussion Point 21 The Authority invites comment on the extent to	Market Rule 4.26.1 (the Refund table) has been reviewed a number of times since M Commencement:		Market		
The Authority invites comment on the extent to which changes to the Reserve Capacity refund					
mechanism can better promote the Market Objectives.					
- Discources.	RC_2008_24: Commissioning Tests for Intermittent Generators; and				
	RC_2008_20: DSM- Operational Issues (specific rule to commence 1 October 2009).				
	Each time, the Rule Change Proposal has been assessed as either being consistent with or furthering the Wholesale Market Objectives.				
	Additionally, the IMO rejected RC_2008_35: Capacity Refund Mechanism- New Generators.				
	The review of the Reserve Capacity Mechanism was included for prioritisation in the Market Rules Evolution Plan. This was ranked second of the thirteen issues identified.				
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Discussion Points	IMO response
Discussion Point 22	The IMO makes no submission on this discussion point.
The Authority invites comment on whether the Reserve Capacity refund mechanism should be included for consideration as part of the road map proposed in the Authority's 2008 review of the market.	
Issue: Incentives for Demand Side Manageme	ent
Discussion Point 23 The Authority invites comment on the extent to which the regulatory arrangements surrounding	Demand Side Management (DSM) arrangements in the WEM have been the subject of extensive consideration and consultation over the last several years. This has lead to the introduction of a suite of changes to Market Rules associated with DSM.
the incentives for parties to engage in Demand Side Management are appropriate.	The WEM has been particularly successful in incorporating DSM and has attracted several specialist DSM suppliers to the market for the 2010/11 year leading to:
	153.5 MW of Capacity Credits being assigned to DSM; and
	 eight participants providing DSM with the level of DSM assigned Capacity Credits increasing to 292 MW.
	It is expected that the DSM contribution will continue to grow over time.
INDUSTRY STRUCTURE AND REGULATORY	SETTINGS
Issue: Impact of Structural Issues	
Discussion Point 24	The IMO makes no submission on this discussion point.
The Authority invites comment in respect of the impact of structural issues on the effectiveness of the market and achievement of the Market Objectives.	