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Dear Wana

2011 Annual Wholesale Electricity Market Report to the Minister for Energy

System Management appreciates the opportunity to provide a submission on the matters raised in the Economic Regulation Authority's (ERA) discussion paper for the 2011 Annual Wholesale Electricity Market Report to the Minister for Energy.

System Management has reviewed the discussion paper and prepared the attached submission.

As the ERA is aware, System Management's primary function in the Wholesale Electricity Market (WEM) is to operate the power system in a secure and reliable manner. System Management's response is from this perspective.

System Management welcomes the opportunity to discuss any of the matters raised in its submission with the ERA. Please direct any queries in this regard to Gavin White, Manager Market Strategic Development, on 9427 5787.

Yours sincerely



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SYSTEM MANAGEMENT

Submission to the Economic Regulation Authority's Discussion Paper for the 2011 Wholesale Electricity Market Report to the Minister for Energy

Background

System Management is a segregated business unit of Western Power with particular functions conferred under the Wholesale Electricity Market Rules. It has considered each of the nine discussion items raised by the Economic Regulation Authority (ERA) in its discussion paper and provided comment below for those matters that are related to its functions for the secure and reliable operation of the power system.

What is the likely impact of a possible re-merger of Verve Energy and Synergy on the Wholesale Electricity Market (WEM)?

System Management submits that the impacts of a re-merger of Verve Energy and Synergy on the WEM would be significant. In particular, market power concerns would affect the operation of the WEM. The efficacy of governance, reserve capacity, registration, settlements and arrangements for facility dispatch would need further consideration if such a merger were to proceed.

Does the design of the Wholesale Electricity Market (WEM) provide the most efficient outcomes with meeting climate change policies?

System Management holds the view that further work is required in understanding the impacts of solar, wind, other renewable sources and Demand Side Programmes in the bilateral, balancing and ancillary services markets. The impacts are likely to be reflected primarily on the commitment and dispatch outcomes for the conventional generation fleet and will consequently reflect on market prices and subsequently on the cost of operating the South West Interconnected System (SWIS) in a secure and reliable manner.

System Management is concerned with the potential for the erosion of SWIS stability margins, leading to these margins reaching critical levels such that SWIS disturbances may result in cascading failures. In its submission to the Independent Market Operator (IMO) in relation to RC_2011_10 for the Competitive Balancing and Load Following Market¹ System Management identified several such issues, specifically in relation to the removal of an enforceable obligation to offer capacity.

There is currently insufficient consideration of the need in the SWIS for better coordination between the WEM Rule changes associated with balancing and load following ancillary services and the present trend to high levels of uptake of renewable generation sources such as wind and solar, at both the micro and macro level.

¹ System Management's submission to RC_2010_10 at http://www.imowa.com.au/RC_2011_10

The Office of Energy's work on constrained network access will lead to major changes to the SWIS dispatch, network operations and market outcomes. Impacts on the Reserve Capacity Mechanism from high penetrations of micro and macro renewable energy sources will also need to be considered.

System Management believes that the next five years are critical in the SWIS. There is less opportunity for geographical diversity to help smooth out the impacts of intermittency on the SWIS. The pace of direct and secondary technology changes are accelerating, as is the pace of change in the policy environment, both within and external to Western Australia.

The current market reform process is not broad enough to properly weigh up the energy management, economic and social policy outcomes of these initiatives. The WEM needs to continue to evolve to satisfy the changes required to respond to climate change policies.

Further work in developing a proper understanding and a vision that is sufficiently broad to integrate the large scale market systems with small and micro scale network, tariff structure, metering, grid management, supply and demand side possibilities is required.

What impact does Demand Side Management (DSM) have on the achievement of the efficiency, reliability and security objectives of the Wholesale Electricity Market?

System Management recognises that DSM has a role to play in the WEM, although it has previously highlighted issues relating to increases in DSM capacity making up the increases in capacity on the SWIS.

Currently the majority of DSM is nominated to be provided in the 24 hour availability class. Without increases to the availability class of DSM, there is a boundary on the maximum capacity contribution that should be provided by DSM to the SWIS, before that contribution impacts on security and reliability.

System Management's position on these issues were presented to the Market Advisory Committee (MAC) and various working groups. The ERA is invited to consider System Management's presentation to MAC and the MAC meeting minutes available at http://www.imowa.com.au/MAC_38.

Historically DSM capacity has been dispatched in limited circumstances, typically during extreme events such as the gas supply issues that arose from the Varanus Island incident in February 2011. The non-balancing facility concept for DSM in the proposed new Competitive Balancing and Load Following Markets does not change this. This market framework governing the dispatch of DSM capacity has market efficiency implications. In particular the dispatch of DSM is not based on lowest short run marginal cost and may result in an economically inefficient dispatch order.

This market efficiency issue is exacerbated by the Reserve Capacity Mechanism (RCM) under the current market framework. The RCM provides payments for DSM on the same footing as for conventional capacity, whereas the annual hours of DSM availability are

significantly restricted.

System Management queries whether the value of DSM is similar to that of conventional capacity when it is unable to provide dispatchable capacity to allow planned outages of generation capacity for maintenance and other reasons. With significantly restricted availability, DSM is essentially unavailable for dispatch as an alternative capacity to a generator on a long term planned or unplanned outage. Conventional capacity is clearly the only capacity that can meet this requirement.

Neither the proposed Competitive Balancing/Load Following Market arrangements nor the current RCM resolve the issues around DSM.

System Management notes that the IMO's 2011 Statement of Opportunities acknowledges operational limitations regarding the scheduling of DSM that may result in the overestimation of the capacity that can be provided by DSM. As stated in the 2011 SOO, the IMO has undertaken to review the methodology further prior to the 2012 SOO².

What impact does the outage planning process have on the achievement of the efficiency, reliability and security objectives of the Wholesale Electricity Market?

The findings of PA Consulting's recently completed outage planning review concluded that the outage planning process is functioning well, albeit with some minor issues to be addressed. Importantly, in relation to bias with the outage planning process, PA Consulting reported *"We found no evidence of bias in the operation of the outage planning system to date"*.

The review findings support System Management's view that the current outage planning process satisfactorily meets the reliability and security objectives of the WEM.

The ERA's discussion paper noted that the review recommended System Management consider expanding the current Power System Operating Procedure to include how fuel composition might factor into its considerations in the outage approval processes.

The criteria for determining whether an outage should be approved are clearly set out in the WEM Rules. These criteria do not expressly require System Management to make clear how fuel composition is taken into consideration in the process. Having said this, System Management certainly considers fuel in the context of constraints on generation that may occur due to the unavailability of fuel types.

The ERA's discussion paper sets out a further three recommendations from PA Consulting's review. The recommendations relating to the interface between generation and network outages and the timelines of outage approvals are addressed in System Management's response to the review. The ERA is invited to review this response at <http://www.imowa.com.au/n4540.html>.

² 2011 Statement of Opportunities at <http://www.imowa.com.au/n176.html>

In relation to the third issue concerning information disclosure, PA Consulting's review found no evidence of bias in the outage planning process, but did identify opportunities for more information disclosure to the market.

The current WEM Rules determine the class of confidentiality of information for submitted, accepted and approved outage requests. System Management's processes comply with those confidentiality requirements.

The IMO in its Market Evolution Program for the introduction of the Competitive Balancing and Load Following Markets proposes to give itself the authority to determine the confidentiality of information as 'public' or 'restricted' and, if restricted, which parties would have access to that information (proposed clause 10.2.1(a) of RC_2011_10).

Such impacts may occur where, due to an inappropriate designation of material, Market Participants are incentivised not to reveal to System Management information that it requires to conduct its planning and system operation functions.

However, System Management sees no reason for outage planning information to be restricted provided it does not compromise SWIS security or reliability. System Management is available to work with the MAC and the IMO to consider amendments to the Market Rules that would facilitate improved disclosure of information to Market Participants.

Of further note is that while System Management is not expressly required to, it does make outage information available through the following as confirmed by PA Consulting's review:

- Market Participants can view the schedule of planned outages through the Market Participant Interface (MPI)³;
- Market Participants can view outages for their own facilities in the MPI;
- Transmission outage data and any likely generation constraints are provided through the Short Term Project Assessment of System Adequacy reporting. This information is publicly available through the IMO website.

In the context of market efficiencies, System Management notes that the STEM price spikes referred to in the ERA's discussion paper are an outcome of the current market design and ultimately reflect the response of participants to changing market conditions from time to time.

The changes proposed under the Competitive Balancing and Load Following markets will see changes to the STEM and improvements in the ability for Market Participants to reposition themselves in terms of market exposure in light of changing conditions. The

³ Section 3.4.2 of the ERA's discussion paper suggests that scheduled outage information is only available to Western Power. Market Participants have access to the schedule of planned outages through the MPI.

ERA may wish to consider the proposed changes prior to finalising its view on these market efficiency issues.

System Management is committed to engaging with the IMO and market participants in any process to respond to the issues raised through PA Consulting's review and those that may arise from the ERA's review concerning outage planning.

How effective is the Rule Change process, and its governance structure, in promoting the efficiency, reliability and security objectives of the WEM?

In its responses to the ERA's 2009 and 2010 discussion papers, System Management submitted that in many jurisdictions the rule change process is not governed by the same body responsible for market operation and administration. System Management proposed that consideration should be given to further investigation of pursuing this model⁴.

System Management has in recent public submissions to rule change proposals expressed governance related concerns. For example, in its response to RC_2010_25 System Management highlighted that the proposed rules are a major departure from that initially proposed by the IMO in RC_2010_25 in relation to the capacity value of intermittent generation. System Management was concerned that this sets a precedent for using the IMO's draft report as a mechanism to introduce major changes to an original rule change proposal⁵.

In its submission to RC_2011_12 which proposes to give the IMO power to extend timelines in the procedure change process, System Management expressed concerns with the proposal as drafted. The application of the proposed power sought by the IMO could see decision making being primarily driven by administrative priorities rather than balancing the needs of the market and its participants⁶.

System Management raised broader governance issues concerning transparency, accountability and quality of process in its response to the most significant rule change proposal since market start, RC_2011_10 for the Competitive Balancing and Load Following Market⁷. System Management supports the view espoused by the ERA that strategic and major structural energy policy consideration associated with market reforms, such as those proposed in RC_2011_10, should be handled by the Office of Energy rather than the IMO.

⁴ System Management's 2009 and 2010 public submissions to the ERA at http://www.erawa.com.au/2/532/42/annual_wholesale_electricity_market_report_to_the_.pm

⁵ System Management's submission to RC_2010_25 at http://www.imowa.com.au/RC_2010_25

⁶ System Management's submission to RC_2011_12 at http://www.imowa.com.au/RC_2011_12

⁷ System Management's submission to RC_2010_10 at http://www.imowa.com.au/RC_2011_10

System Management invites the ERA to review the submissions referred to above and in particular, its response to RC_2011_10. The content of these submissions give further support to System Management's previously expressed views.

System Management also takes this opportunity to submit that revisions could be made to the current Rule Change process to better cater for Rule Change proposals that are significant or extensive in nature. The existing process does not sufficiently cater for these proposals that require detailed consideration by the members of MAC. Proposals of this nature also require sufficient time to be given to the Market, its participants and other stakeholders for their detailed consideration.

System Management also suggests that consideration should be given to improving disclosure and transparency of the MAC proceedings. The decisions of the MAC and its individual members should be appropriately disclosed. For major issues, this could be achieved by documenting the names of the MAC members and whether the members have supported or rejected a particular proposal.

Are there any other strategic, policy or high level issues, including those raised in the Discussion Paper, that are impacting on the effectiveness of the WEM in meeting the Wholesale Market Objectives?

System Management notes the progression of electricity pricing towards pricing that is cost reflective and takes the opportunity to submit that more information is required to be made available on the transition to fully cost reflective pricing.

In the context of the proposed introduction of the Competitive Balancing and Load Following Market, System Management expresses its support for these changes in terms of the future strategic direction of the WEM. However, there are a range of critical issues that are required to be addressed in order for System Management to effectively exercise its function to operate the power system in a secure and reliable manner under the proposed amendments.

Rather than repeat these critical issues in this submission, System Management refers the ERA to its detailed response to the RC_2011_10 available at http://www.imowa.com.au/RC_2011_10. System Management seeks the ERA's support to address these critical issues and welcomes the opportunity to discuss these further.