

363 Wellington Street Perth WA 6000 GPO Box L921 Perth WA 6842 T: (08) 9326 4911 F: (08) 9326 4595

Electricity Networks Corporation ABN 18 540 492 861

TTY users: 1800 13 13 51 www.westernpower.com.au

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Dr Troy Forward Manager Market Administration and System Capacity Independent Market Operator PO Box 7096 **CLOISTERS SQUARE** PERTH WA 6850

Dear Troy

Review of Ancillary Service Requirements, Process and Standards

Please find attached a submission on the Second Draft Report for the above review.

Should you have any further questions regarding this matter, please do not hesitate to contact Alistair Butcher on 9427 5787.

Yours sincerely

**Phil Kelloway Branch Manager** 

**Planning and Market Operations** 

**System Management** 

UA1041

#### **ATTACHMENT 1**

## System Management Submission: Review of Ancillary Service Requirements, Process and Standards

As indicated previously, System Management welcomes the review of Ancillary Services, but would recommend caution in proposing changes to the Market Rules.

At this stage of the Market, less than three years since commencement, the existing methodology for procurement of Ancillary Services has not been tested to determine its effectiveness in providing competitive outcomes.

Whilst there is anecdotal evidence that the current pricing model in the Market Rules is not reflective of the true costs, System Management submits that in the absence of data demonstrating deficiencies with the current framework there is significant risk that changes to the Market Rules relating to procurement may introduce market inefficiencies.

With this in mind, there are many obstacles with regard to Ancillary Services that are inevitable; not least because of the impacts of the Mandatory Renewable Energy Target (MRET) and the Carbon Pollution Reduction Scheme (CPRS).

In offering comments on the Second Draft Report, System Management has endeavoured to avoid detail and has responded on the basis of recommendations found in the report.

### **Recommendation 1: Definition of Ancillary Services**

No change to the Market Rules regarding the definition of Ancillary Services is recommended at this time. However, a watching brief on DSM technologies capable of providing Load Following, such as smart metering, is recommended. Existing definitions effectively cover all Ancillary Services for the WEM as it exists today.

System Management supports this recommendation.

### **Recommendation 2: Determination of Load Following**

No change to the Market Rules in the determination of Load Following is recommended at this time. The existing determination criteria can adequately respond to changes in the market.

In the first submission, System Management suggested that the Market Rules surrounding Load Following may require review to include a forward-looking component.

Following discussion with the IMO, System Management is comfortable that the current Market Rules for the determination of Load Following includes a forward-looking component and therefore does not require revision.

System Management supports this recommendation.

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### **Recommendation 3: Determination of Spinning Reserve**

The Market Rules on the determination of Spinning Reserve be revisited to reflect "performance based" criteria as in the Technical Rules. Although the current determination is the economically optimal and lowest technically acceptable volume of spinning reserve, this change will allow the determination of Spinning Reserve to be optimised as generation parameters on the WEM change.

System Management supports this recommendation.

### Recommendation 4: Determination of Load Rejection

No change to the Market Rules in the determination of Load Rejection Reserve Services is recommended at this time. The existing determination criteria can adequately respond to changes in the market.

System Management supports the recommendation that Rule Changes are not required. However, System Management notes that the current cost to the Market for Load Rejection is zero, and that it is expected that a more cost-reflective price will be needed.

# Recommendation 5: Use of common machines for Load Following and Spinning Reserve

The Renewable Energy Generation (REG) working group review the use of common machines to supply Load Following and Spinning Reserve services in the context of increased wind generation within the WEM. With the increase in wind generation penetration on the SWIS, the risk of a concurrent Load Following and Spinning Reserve event will increase.

System Management fully supports this recommendation, and suggests that this review occur as soon as possible as the requirements for Load Following are expected to increase dramatically in the next few years. This is due to several factors including the MRET and potentially the CPRS depending on legislated outcomes.

System Management has currently commissioned studies of the impacts of the MRET and CPRS, which will form part of the Program of Works on the impact of intermittent generation<sup>1</sup>. Preliminary results indicate that the Load Following requirement for 2011 (Capacity Year 2009) will increase from the current 60 MW to 150 MW due to increases in intermittent generation that will occur in 2010. This will have a large impact on the amount of Contingency Reserve available to ensure Power System Stability in the event of failure of a scheduled generator. This will also impact upon dispatch, particularly during low load periods.

Further, due to the impact upon Contingency Reserves detailed above, System Management suggests that the review consider removing the inclusion of Load Following from the definition of Spinning Reserve.

 $http://www.imowa.com.au/Attachments/RuleChange/SKM\_ScopeOfWorkImpactsOf\_IntermittentGene\ ration.pdf.$ 

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<sup>&</sup>lt;sup>1</sup> For more information please refer to:

## Recommendation 6: Development of Ancillary Service procurement mechanism

Develop the Ancillary Service procurement mechanism to ensure adequate quantities of generation / DSM with the required capabilities are available. Studies demonstrate that the introduction of a mid-merit generators (higher efficiency, fast start, fast reponse, simple cycle gas turbines eg LMS100) would decrease the cost of the Optimised Dispatch Market by over \$10 million per annum and increase the security of supply. At the moment there are limited market mechanisms to support Non-Verve Energy Generators in the development of these technologies.

System Management supports this recommendation in so far as it does not alter the governance regime for procurement. For further details on the governance regime for procurement, please see comments made against other recommendations.

### **Recommendation 7: Verve dominance in Ancillary Services**

Changes should be made in order to reduce the reinforcement of the dominance of Verve Energy in the provision of Ancillary Services. Studies demonstrate that procuring Spinning Reserve and Load Following from all existing market participants will decrease the cost of the Optimised Dispatch Market by \$21 million per annum whilst improving system security. This would be achieved with no additional capital investment.

System Management wishes to reiterate that the "dominance" of Verve Energy in the Ancillary Services market may in fact be an outcome of Verve Energy's obligation to provide all Ancillary Services, the short life of the Market, and the barriers to procurement (which was addressed by RC 2008 38).

Until the competitive procurement process has secured significant suppliers of ancillary services from IPP providers, Verve dominance would appear inevitable.

System Management submits that it is too early to suggest Market Rule changes to reduce any perceived "dominance" of Verve Energy in the Market.

### Recommendation 8: Real-time Market for Ancillary Services

A real time market for the procurement of Ancillary Services is not implemented at this time. Evidence concludes that a full real-time market for Ancillary Services in the SWIS would result in a suboptimal outcome.

System Management fully supports this recommendation. In addition to the evidence that such a market would result in sub-optimal outcomes, there is a method for procurement specified in the Market Rules, and this is yet to be fully tested.

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### Recommendation 9: Set rate for providers

SKM recommend a regulated rate for each Ancillary Service be set and applied to all providers. Depending on the process for the dispatch of Ancillary Services (recommended for further consideration by this study) this regulated rate may be fixed or linked to MCAP. SKM believes there is a lack of sufficient competition in the WEM to support a full competitive tender process at this time. Further, the Ancillary Service market should support and reinforce competition in the energy market to best meet the market objectives. Finally, there is a need to provide certainty of revenue streams for new entrants into the Ancillary Service market.

While System Management supports the conclusion that the WEM cannot support a full competitive tender process at this time, the recommendation for a regulated rate is concerning. This seems to imply that the current procurement mechanism is insufficient. As System Management has previously stated, the method for procurement specified in the Market Rules is yet to be properly tested. Until the procurement process is properly tested any perceived lack of cost reflectiveness in pricing can only be perception.

Further, the recommendation for a regulated rate does not seem to be supported by evidence or comments from Participants, nor does the recommendation indicate the body to make such a recommendation, or the process that should be followed. A regulated rate approach also carries a significant risk of non-cost reflective pricing and market inefficiency.

Under the current Market Rules, System Management may only enter into a contract with a provider other than Verve Energy where it is a less expensive alternative (MR 3.11.8). Due to the difficulty in forecasting MCAP, a regulated rate would effectively prevent System Management from entering into contracts with any provider other than Verve Energy. In addition, were this recommendation to be followed, further changes to the Market Rules would be required to indicate the method of selection of providers of Load Following or Spinning Reserve.

Currently, with the commencement of RC\_2008\_38, all providers of Load Following and Spinning Reserve have a set rate which is linked to MCAP. However, this rate is a proportion of Margin\_Peak and Margin\_Offpeak (which is a percentage of MCAP), and therefore successful bidders will have the lowest proportion.

Finally, the recommendation cannot apply to all types of Ancillary Service. While this recommendation does not apply to System Restart Services, as they are outside the scope of the study, neither can the recommendation apply to Dispatch Support Services. System Management would emphasise that Dispatch Support Services are location and need specific and therefore a specific rate cannot be set and applied to all providers.

In summary, System Management cannot support this recommendation at this time, and considers that insufficient detail has been provided and insufficient analysis performed.

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### **Recommendation 10: Procurement**

A Standard Form Agreement with standard specifications for the provision of each of the Ancillary Services should be developed as soon as possible. The Spinning Reserve standard form of agreement should attempt to be neutral to the technology used to provide the service as long as the solution is able to meet the technical requirements. SKM's view is that this is likely to be the most cost effective solution.

System Management supports this recommendation, and has, in fact, been working towards this for the last year. Standard Form Agreements for System Restart were completed last year, and two procurement processes are near finalisation.

To put this in context, it would be worth reviewing the current procurement process.

Of the five types of Ancillary Services, three are being actively procured. These are Load Following, Spinning Reserve and System Restart. The other two types do not require procurement at this time. This is because Load Rejection is provided by Verve Energy at zero cost to the Market, and the requirements for Dispatch Support Services are highly specific and therefore cannot be determined in advance, precluding the development of Standard Form arrangements. It should be noted, however, that System Management anticipates the requirement for Load Rejection to increase which may lead to a procurement process.

The current status of procurement for Load Following, Spinning Reserve and System Restart is as follows. As previously indicated, a procurement process for Load Following and Spinning Reserve could not proceed until RC\_2008\_38 (or an alternative) commenced. System Management has been developing Standard Form agreements for these services and System Management intends to announce a competitive tender process for Load Following before the end of the year.

Thus, Recommendation 10 is virtually met.

### Recommendation 11: Penalties for non-provision of Ancillary Services

Implementation of a penalty regime for failure to provide a declared Ancillary Service is recommended. Based on results of international comparisons.

System Management does not support any change to the Market Rules regarding this, as a penalty regime is already established. Penalties for failure to provide an Ancillary Service are best dealt with contractually (in fact, existing contracts for provision of Spinning Reserve already including penalty arrangements). In addition, Verve Energy already faces a penalty regime by virtue of MR 7.6A.4.

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