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Dear Lyndon

**DISCUSSION PAPER: ANNUAL WEM REPORT TO THE MINISTER**

Thank you for providing us with the opportunity to comment on your Discussion Paper regarding the second Annual Wholesale Electricity Market Report to the Minister for Energy.

Please find attached the Independent Market Operator's responses to the individual issues raised in the Discussion Paper.

In preparing its submission, the IMO has been guided by the Market Objectives, set by the Electricity Industry Act 2004. The Wholesale Electricity Market over the last 12 months has encountered and been effected by many external disruptions and influences and has performed effectively and efficiently.

While some of the Market Objectives may take time to be fully realised, the Wholesale Electricity Market has already contributed towards their achievement:

- Sufficient capacity has been secured to meet peak demand, despite high peak demand growth.
- The Market has attracted strong interest from investors in new generation with 699 MW of new generation capacity in service, and over 1103 MW of additional independent generation under construction.
- The number of generators has increased with 7 new generators entering the market and additional 5 generators currently indicating their intent to enter the market.
- The number of retailers has increased with 5 new retailers/aggregators entering the market.
- At Market start Verve Energy accounted for around 90% of the market capacity, by 2009/10 Verve's market share is projected to be approximately 60%.
- Three new Market Participants (Alinta, Griffin and NewGen) having significant generation capacity in excess of 450 MW.

- New entry generation has a diversity of plant sizes, technologies and fuel types:
  - > 45% gas fired,
  - > 15% dual fuel,
  - > 25% coal fired,
  - ~ 10% renewable.
- Renewable energy contribution has substantially increased with renewable energy capacity in the SWIS doubling from 125MW to 250MW.
- The Market prices move with fundamentals recognising the cost of electricity during system peaks and during periods where fuel supplies are constrained.
- The Market has encouraged a number of existing generation units to undertake plant upgrades to improve reliability and efficiency.
- Market generators are placing a strong focus on plant maintenance to ensure generation units are more reliably at peak demand periods.
- System Management and Market generators are demonstrating a strong commitment to planning and scheduling of plant outages.

Good progress has been towards the achievement of the Market Objectives.

The IMO believes that any fundamental or substantial change to the market in the future needs to:

- be signalled well in advance,
- build on the performance and success of the current market; and
- be designed to be consistent with the Market Objectives.

I would welcome the opportunity to discuss with you our submission and other issues which arise in developing your report to the Minister for Energy.

Yours sincerely

ALLAN DAWSON  
CHIEF EXECUTIVE OFFICER

8 August 2008

## Discussion Paper: Annual Wholesale Electricity Market Report to the Minister for Energy

### Independent Market Operator's Responses

No.	Issue	Response
1	<p>The Authority invites comment on the impact of fuel supply and fuel prices on the market. In particular:</p> <ul style="list-style-type: none"> <li>• to what extent, and in what way, do current issues in regard to fuel supply or fuel prices impact on long-term investment decisions in the market; and</li> <li>• to what extent, and in what way, do current issues in regard to fuel supply or fuel prices impact on the day-to-day operation of the market, and outcomes in the market.</li> </ul>	<p><u>Background</u></p> <p>Fuel availability and price, especially of natural gas, has had a material impact on the market and is one of the key risks to the future efficiency and reliability of the market. Anecdotal evidence suggests that prices for natural gas supply have increased from \$2 to \$3/GJ three to four years ago to between \$6.50 and \$8/GJ for new contracts today.</p> <p><u>Long Term Investment Decisions</u></p> <p>As highlighted in the ERA discussion paper the IMO supports the proposition that investors in new generation are in the best position to evaluate fuel availability and fuel price.</p> <p>Over the last three capacity years (2006/07, 2007/08 and 2008/09) we have seen the development of three new gas fired base load generation plants (Cockburn, Pinjarra and NewGen Kwinana). However no gas fired base load plants are currently planned for development in the capacity years 2009/10 and 2010/11.</p> <p>The IMO is seeing an emergence of coal fired base load plant at Bluewaters (1 &amp; 2) and renewed interest in coal as a fuel source for base load plant. This trend would appear to suggest that the availability and price of natural gas is encouraging investors in new generation capacity to diversify their fuel sources away from natural gas.</p> <p>We would stress that the data set for evaluating any long term trend in generation fuel type is too small to rely upon.</p>

No.	Issue	Response
		<p><u>Impact on Day-to-Day Operation of the Market</u></p> <p>Prices in efficient electricity markets move with market fundamentals. If the cost of fuel increases, we would expect the price of electricity in the WEM to move with the underlying fundamentals and increase.</p> <p>This efficient market price signal is also reflected in the annual and monthly reset of energy price limits that incorporates changes in fuel costs.</p>

No.	Issue	Response
2	<p>The Authority invites comment on the impact of fuel constraints on the market. In particular:</p> <ul style="list-style-type: none"> <li>• to what extent, and in what way, do fuel constraints impact on the day-to-day operation of the market, and outcomes in the market;</li> <li>• to what extent, and in what way, does the design of the market exacerbate problems caused by significant fuel constraints; and</li> <li>• do current issues in regard to gas supply interruptions deter participation in the STEM.</li> </ul>	<p>Generally market prices have reflected medium to long term fuel constraints. Fuel constraints that are known in advance of the scheduling day will flow directly through to the electricity market and be reflected in the STEM and balancing prices.</p> <p>However, the day ahead nature of the market may not adequately allow prices to capture short term fuel constraints that become known after offers are submitted and the market is cleared on the scheduling day. That is, due to the current day-ahead pricing regime, fuel supply interruptions without notice will not be captured in the STEM and the balancing prices.</p> <p>Limits on gas supplies, uncertainty over gas availability and gas supply curtailments have a disruptive effect on the electricity market and create risks for generators. These heightened risks may discourage participation in STEM. The extent of the move away from STEM would be influenced by the level of price flexibility that the participants are able to build into their bilateral contracts.</p> <p>At present, Verve Energy, as the balancing provider, is scheduled by System Management to meet changes in the schedule between the day-ahead market processes and real-time and may be more exposed to the heightened risks.</p> <p>The day-ahead nature of the market combined with uncertainties around on-the-day fuel constraints or forced outages may expose the market to short term price signals that may not incentivise efficient behaviour from generators and loads. This represents a short term risk for the market until participants are able to reflect the changing circumstances in their STEM submissions.</p> <p>A related concern is that IPP schedules are fixed a day ahead – so an IPP generator does not have the flexibility to move generation between its own units or purchase from another generator on the day without incurring unfavourable deviation prices in balancing, even if this is economically efficient. Any improved scheduling and dispatch process would need to provide an effective way to revise generation schedules under these circumstances, and provide efficient prices that reflected those schedule revisions.</p>

No.	Issue	Response
		<p>The IMO confirms that the Market Rules define three operating states: a normal operating state, a high risk operating state and an emergency operating state, and that during the gas supply interruption at the beginning of 2008, the market was in an emergency operating state.</p> <p>The current Varanus Island gas disruption has been managed under the high risk operating state. This has allowed System Management to apply out of merit operating instructions to generators in order to preserve scarce fuel stocks (particularly diesel).</p> <p>The IMO agrees with the ERA's assessment that no penalties would have applied for out of merit operation instructed by System Management during that emergency or high risk operating state.</p> <p>The IMO believes that the three operating states as defined in the rules have proven to provide System Management and the market with sufficient scope to preserve system security.</p>

No.	Issue	Response
3	<p>The Authority invites comment on the application process for network access offers. In particular:</p> <ul style="list-style-type: none"> <li>• at what stage during the process of planning a new facility do applicants approach Western Power, and to what extent do applicants make applications for network access in advance of the timing of the reserve capacity cycle due to the perception that the application process may take some time;</li> <li>• to what extent has the timing of the application process affected participation in the reserve capacity mechanism for particular facilities;</li> <li>• to what extent is the application process, including the timing of the application process, transparent; and</li> <li>• if there is an issue with the application process, does the issue relate to the timing of the process, the transparency of the process, or both.</li> </ul>	<p>The IMO's experience in dealing with a wide range of stakeholders indicates that the length of time and transparency of the network access approval processes is a common issue raised by potential investors in the Wholesale Electricity Market. The uncertainty around these processes appears to be a key risk to the project development timelines. Investors are able to work around long lead-time milestones, but the uncertainty in timeframes and the potential ranges of outcomes due to the capital contribution framework and the current queuing policy do not have a positive impact on investor confidence.</p> <p>The IMO would support an improvement in the network access application and approvals process as well as more transparency in these processes.</p>

No.	Issue	Response
4	<p>The Authority invites comment on whether the risk that a network connection will not be delivered on time impacts on investment incentives, including incentives to invest in new facilities on particular parts of the network.</p>	<p>This issue has been raised with the IMO by stakeholders and project developers over the past few years. The current model seems to place most transmission-related project risk with the project developer, where the physical risk of delivery may be out of its control. If this assumption is correct the IMO would support appropriately targeted incentives.</p>
5	<p>The Authority invites comment on the determination of connection charges by Western Power, and the impact that these connection charges have on the effectiveness of the WEM. In particular:</p> <ul style="list-style-type: none"> <li>• to what extent do connection charges influence long-term investment decisions</li> <li>• do connection charges provide appropriate locational investment signals; and</li> <li>• is there sufficient transparency and predictability in the calculation of connection charges for participants to respond to the signals in making investment decisions.</li> </ul>	<p>The current arrangements surrounding deep connection charges prove to be problematic for the IMO in calculating the Maximum Reserve Capacity Price. The current arrangements produce a sub-optimal outcome for the SWIS, as deep connection charges are effectively included within each Capacity Credit that is not bilaterally traded.</p> <p>The IMO considers that reducing uncertainty in the determination of connection charges would be a positive move for the Wholesale Electricity Market in respect of this issue. Enhancing the regime would provide certainty to investors and would result in the improvement of the efficiency of the Reserve Capacity Mechanism.</p>



No.	Issue	Response
6	<p>The Authority invites comment on whether network planning processes are sufficiently responsive to developments in the WEM and whether network planning decisions are sufficiently transparent to participants.</p>	<p>Transmission capacity constraints and delays in new infrastructure are another significant risk to investment in new generation capacity and thus longer term reliability of supply. It should be noted that the market design assumes that the transmission system remains “unconstrained” with new developments. This could have an impact on new generation investment, as proponents are required to provide evidence of “firm” transmission access in order to secure capacity credits in the reserve capacity mechanism.</p>

No.	Issue	Response																												
7	<p>The Authority invites comment on the extent to which the reserve capacity mechanism, along with other elements of the WEM, provides appropriate incentives for investment in a mix of new generation plant. The Authority is interested in specific factors that might have deterred potential new investment in the market.</p>	<p>Provided below is a list of major generation projects that have either been delivered or have been publicly announced for entry to the Wholesale Electricity Market between 21 September 2006 and 1 October 2011. A total of 3023 MW has been identified in this list. Following this table is a figure showing the proportions of Capacity Credits by fuel type.</p> <table border="1" data-bbox="902 454 1576 992"> <thead> <tr> <th data-bbox="902 454 1417 491">Project</th> <th data-bbox="1417 454 1576 491">Fuel</th> </tr> </thead> <tbody> <tr> <td data-bbox="902 491 1417 528">Alinta Pinjarra Cogeneration</td> <td data-bbox="1417 491 1576 528">Gas</td> </tr> <tr> <td data-bbox="902 528 1417 564">Alinta Wagerup Gas Turbines</td> <td data-bbox="1417 528 1576 564">Gas/Liquids</td> </tr> <tr> <td data-bbox="902 564 1417 601">Alinta Wind Farm</td> <td data-bbox="1417 564 1576 601">Wind</td> </tr> <tr> <td data-bbox="902 601 1417 638">Coolimba Power</td> <td data-bbox="1417 601 1576 638">Coal</td> </tr> <tr> <td data-bbox="902 638 1417 675">Emu Downs Wind Farm</td> <td data-bbox="1417 638 1576 675">Wind</td> </tr> <tr> <td data-bbox="902 675 1417 711">Eneabba Energy</td> <td data-bbox="1417 675 1576 711">Gas</td> </tr> <tr> <td data-bbox="902 711 1417 748">Griffin Badgingarra Wind farm</td> <td data-bbox="1417 711 1576 748">Wind</td> </tr> <tr> <td data-bbox="902 748 1417 785">Griffin Bluewaters Power Station units 1 &amp; 2</td> <td data-bbox="1417 748 1576 785">Coal</td> </tr> <tr> <td data-bbox="902 785 1417 821">Griffin North Peak Power Station</td> <td data-bbox="1417 785 1576 821">Gas</td> </tr> <tr> <td data-bbox="902 821 1417 858">NewGen Kwinana</td> <td data-bbox="1417 821 1576 858">Gas</td> </tr> <tr> <td data-bbox="902 858 1417 895">NewGen Neerabup</td> <td data-bbox="1417 858 1576 895">Gas</td> </tr> <tr> <td data-bbox="902 895 1417 932">Perth Energy</td> <td data-bbox="1417 895 1576 932">Gas/Liquids</td> </tr> <tr> <td data-bbox="902 932 1417 968">WA Biomass</td> <td data-bbox="1417 932 1576 968">Biomass</td> </tr> </tbody> </table>	Project	Fuel	Alinta Pinjarra Cogeneration	Gas	Alinta Wagerup Gas Turbines	Gas/Liquids	Alinta Wind Farm	Wind	Coolimba Power	Coal	Emu Downs Wind Farm	Wind	Eneabba Energy	Gas	Griffin Badgingarra Wind farm	Wind	Griffin Bluewaters Power Station units 1 & 2	Coal	Griffin North Peak Power Station	Gas	NewGen Kwinana	Gas	NewGen Neerabup	Gas	Perth Energy	Gas/Liquids	WA Biomass	Biomass
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		<div data-bbox="1064 255 1680 805" data-label="Figure"> <table border="1"> <caption>Perceived Impediments to Entry into the Wholesale Electricity Market</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Gas</td> <td>46%</td> </tr> <tr> <td>Coal</td> <td>27%</td> </tr> <tr> <td>Dual Fuel</td> <td>16%</td> </tr> <tr> <td>Renewable</td> <td>11%</td> </tr> </tbody> </table> </div> <p data-bbox="896 885 1960 949">A number of issues are perceived as potential impediments to entry into the Wholesale Electricity Market, including:</p> <ul data-bbox="896 989 2027 1316" style="list-style-type: none"> <li>• Fuel constraints. Access to firm and interruptible natural gas supplies may have a significant impact on the overall success of the market, including the Reserve Capacity Mechanism.</li> <li>• Access to the transmission network. This may be a significant issue in the coming years and may impede the ability of the Reserve Capacity Mechanism to operate effectively.</li> <li>• The Emissions Trading Scheme and enhanced Renewable Energy Targets. Uncertainty around the details of these regimes may be impeding investment in the electricity generation sector.</li> <li>• The “capital squeeze”. Changing structure within financial markets may slow down investment as the cost of debt increases.</li> </ul>	Category	Percentage	Gas	46%	Coal	27%	Dual Fuel	16%	Renewable	11%
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No.	Issue	Response
		<p>The above issues are unlikely to impact on entry into the Wholesale Electricity Market in the immediate term. New generation plant, which is currently under construction, will secure the reliability on the system until late 2011. That is, the above impediments are not expected to impact on new entry before the 2011/12 Capacity Year.</p>

No.	Issue	Response
8	<p>The Authority invites comment on the appropriateness of the mechanism for determining the reserve capacity price. In particular:</p> <ul style="list-style-type: none"> <li>• does the reserve capacity price provide appropriate investment signals;</li> <li>• would investment signals be improved by a shift to a reserve capacity price that is determined using a mechanism more closely reflecting market outcomes;</li> <li>• what, if any, barriers currently exist that would impede a shift to a reserve capacity price that is determined by the market.</li> </ul>	<p>The IMO believes that any shift to a reserve capacity price that is determined by market mechanisms represents a significant structural change to the Wholesale Electricity Market design and would welcome discussion, analysis and consultation if the ERA identifies that this is an issue supported by the majority of Market Participants and stakeholders. It cautions that market-based mechanisms such as those proposed previously may have unintended outcomes.</p> <p>It appears that the proposed alternative is to require a reserve capacity auction every year. The IMO understands there may be significant risks with this approach. For instance, the likely bidding behaviour could compromise the success of the auction process. For example, given that existing plant has largely sunk costs, it could be expected that its owners may bid very low prices, perhaps zero. Auction prices can then be expected to be set by the marginal new/retiring plant. However, there is a question as to whether strong competition from new plant can be expected each year. If this is not the case, then the auction prices could be unstable – settling either at the cap or at zero in any year.</p> <p>Introducing a mandatory auction process may introduce significant levels of price volatility and uncertainty. This will necessarily impact on confidence levels within the investment community. These risks must be adequately analysed so that the positive outcomes already delivered by the Reserve Capacity Mechanism are not jeopardised.</p> <p>The IMO notes that, in consultation with industry participants, it has recently finalised substantial changes to the provisions surrounding the determination of the Maximum Reserve Capacity Price.</p> <p>These changes included significant reviews of the current process and included input from industry representatives, engineering contractors and economic consultants. Final consultation processes for the new Market Procedures are currently open.</p>

No.	Issue	Response
9	<p>The Authority invites comment on the extent to which the methodology for calculating reserve capacity refund payments promotes the market objectives, particularly in regard to reliability of supply. In particular:</p> <ul style="list-style-type: none"> <li>• to what extent do participants respond to signals provided by the structure of reserve capacity refund payments; and</li> <li>• if reserve capacity refunds reflected their impact on the market, how would this be expected to affect compliance or incentives to participate in the reserve capacity mechanism.</li> </ul>	<p>For the Reserve Capacity Mechanism to operate effectively, it is essential that there be a strong incentive for Market Generators to maintain reliable plant and to be fully available at peak times. At the same time there must also be an incentive for good performance at other times of the year when scheduled outages reduce available system capacity.</p> <p>During the review of the refunds mechanism conducted with industry in 2007, stakeholders supported the view that the current refunds regime provides the appropriate incentives.</p> <p>Market efficiency is also increased by providing strong incentives to maintain plant reliability, thus avoiding the need to increase the reserve margins on the system and for additional investments in new capacity.</p> <p>The refund levels must be sufficient to encourage good operational performance but not so high as to deter investment or force capacity providers to include an excessive risk component into their pricing. Again, during the review of the refunds mechanism conducted with industry in 2007, stakeholders supported the view that the current refunds regime maintains the appropriate balance between these two objectives.</p> <p>An alternative refunds mechanism was considered by industry during the 2007 review of refunds. This alternative made refunds proportional to demand on the system or proportional to the generation capacity reserve margin at the time of an outage.</p> <p>However, the industry Working Group, which conducted the review, was concerned that while this may appear to be an attractive concept, it would increase the uncertainty and therefore risk to generators and investors. Under this approach the refund incurred from an outage would be dependant on the availability of other generators and the demand during the outage period.</p> <p>This methodology would make it impossible to accurately forecast the financial implication of a forced outage.</p>

No.	Issue	Response
		<p>The current refunds mechanism allows generators to estimate the cost of any forced outage and take this into consideration when assessing the total cost and benefits of further investment in maintenance.</p> <p>The alternative methodology was rejected by the Working Group.</p>

No.	Issue	Response
10	<p>The Authority invites comment on the effect of moving the STEM closer to real-time or of introducing multiple gate closures. In particular:</p> <ul style="list-style-type: none"> <li>• would this encourage greater participation in the STEM or improve outcomes in the STEM, including through improved price signals;</li> <li>• would the benefits to participants outweigh the costs to participants; and</li> <li>• what, if any, barriers are there to such a change and what do these barriers suggest for the timing of such a change.</li> </ul>	<p>As previously indicated in response to Issue No.2, the day ahead nature of the market may not adequately allow prices to capture short term fuel constraints that become known after offers are submitted and the market is cleared on the scheduling day. The day ahead nature of the market may also create risks for generators that may discourage their participation in the STEM.</p> <p>At present, Verve Energy, as the balancing provider, is scheduled by System Management to meet changes in the schedule between the day-ahead market processes and real-time. Prices are based upon the day ahead STEM submissions, however, and may not reflect the final dispatch. This non-cost-reflective pricing is not economically efficient. A related concern is that IPP schedules are fixed a day ahead – so an IPP generator does not have the flexibility to move generation between its own units or purchase from another generator on the day without incurring unfavourable deviation prices in balancing, even if this is economically efficient.</p> <p>The above issues are not unique to the SWIS – many markets around the world have faced similar issues. The response has generally been a movement towards markets closer to real-time, and towards more sophisticated scheduling and pricing that accounts for physical and security constraints on generators and on the transmission system. However, it should also be recognised that there is a trade-off between the efficiencies of such markets and the costs their implementation and ongoing operations would impose on a very small power system such as the SWIS.</p> <p>The two options contemplated in the Discussion Paper to resolve the above issues appear to be - moving the STEM closer to real-time or introducing multiple gate closures (i.e. rebidding).</p>



No.	Issue	Response
		<p>Moving the STEM closer to real time:</p> <ul style="list-style-type: none"> <li>• Would allow more dispatch reflective prices since the STEM submissions would incorporate up-to-date information on outages and fuel availability. The shorter the interval in advance of real-time that this is done the more the final MCAP price will reflect the actual dispatch. It would also allow IPPs to adjust their positions at a late stage if they required this.</li> <li>• Could reduce the residual amount of balancing required by Verve Energy, since the day-ahead view of participants may deviate more from their actual generation/consumption than their view closer to real-time.</li> </ul> <p>However, there are also serious issues to be confronted if the STEM is moved very close to real-time. The most important of these is probably reliability. To ensure a reliable dispatch System Management would continue to require robust processes to plan the dispatch from a day ahead. Any attempt to ignore this and plan the dispatch solely in the last hours before real-time could place the reliability of the power system at risk. In addition participants also need advance planning of their unit commitments and fuel usage for the following day, and may not find it acceptable to leave these decisions too late.</p> <p>A more comprehensive solution to the tension between the need for a day-ahead dispatch plan and the flexibility of adjustments to dispatch closer to real-time is to allow multiple gate closures or rebidding. This would mean that an initial dispatch plan is created a day ahead, but that changes are allowed up to a point closer to real-time, provided that those changes could be accommodated. A similar re-scheduling process is already in place, but is internalised within System Management, primarily using Verve Energy plant, for example in responding to forced outages by adjusting the dispatch.</p>

No.	Issue	Response
		<p>This option could contribute to the Market Objectives by increasing the economic efficiency and competition in the scheduling and dispatch process. Under this option prices would be better able to reflect actual dispatch costs because they would be based on offers made closer to real time, i.e. rebidding would allow participants to respond to fuel limitations and forced outages. This would also allow participants other than Verve Energy to contribute more effectively to the scheduling and dispatch process. The pre-dispatch process on the other hand would maintain system security by commencing a day ahead, scheduling ancillary services and energy to meet forecast requirements and by providing a periodically updated schedule for the dispatch day.</p> <p>A potential disadvantage of a rebidding process may be that market power could become more visible if dominant participants have the opportunity to rebid. Market power concerns would diminish as competition in the market grows, but may persist for some time, so the timing of such a change may need to be carefully considered.</p> <p>Redesigning the market to allow for multiple gate closures would add considerable complexity and cost, and would require a substantial implementation effort by the IMO, System Management and Market Participants. A move to change the market design in this direction would need to be carefully analysed to ensure that its benefits outweigh the overall implementation costs.</p>

No.	Issue	Response
11	<p>The Authority invites comment on the extent to which Verve Energy's exposure to forecasting errors in the balancing market impacts on the effectiveness of the market.</p> <p>The Authority invites comment on barriers to the introduction of competitive balancing, and what these barriers suggest for the shift to more competitive balancing arrangements</p>	<p>There appear to be two linked underlying issues, which impact on both Verve Energy and other Market Participants:</p> <ul style="list-style-type: none"> <li>• The current market design does not provide mechanisms to handle unexpected events between the clearing of the STEM and real time. Under the current mechanism, balancing prices do not always reflect the final dispatch and this impacts on the balancing generator – Verve Energy. In addition, IPPs do not have the flexibility to move generation between their own units or purchase from another generator within the dispatch day without incurring unfavourable deviation prices in balancing.</li> <li>• There also appears to be a desire to allow IPPs to contribute towards balancing more effectively where this makes sense economically.</li> </ul> <p>With respect to the second issue, the gradually reducing proportion of the market that is supplied by Verve Energy over time may make it increasingly difficult for Verve Energy to remain the sole balancing provider. To resolve this issue, other generators would need to be able to contribute effectively to the balancing process, i.e. provide competitive balancing energy. This will require an economically efficient process that allows generators to manage their risks with respect to schedules and prices, as otherwise they may be unwilling to participate. Any changes in this direction need to ensure that the process captures the opportunities for lower cost dispatch while not exposing participants to additional risks.</p> <p>It should be noted that a move to treat Verve Energy as any other Market Participant may result in a substantially less efficient dispatch, since System Management would not be able to manage issues, such as Verve Energy's unit commitment schedule and fuel use, over the day as effectively as it does today.</p>

No.	Issue	Response
		<p>An issue of concern if competitive balancing is introduced prematurely would relate to the level of competition in the balancing process. Although Verve Energy is diminishing in relative size, it continues to supply a very considerable portion of the market and this should be taken into account when considering the timing of changes to the market design. To establish an effective competitive balancing process, competition in the provision of balancing energy would have to be present in each half hour and in each part of the system merit order. Therefore, the timing of changes to the current design needs to be considered carefully.</p> <p>It should be noted that to implement a competitive balancing mechanism the IMO's IT systems would require a new market clearing module, revised participant interfaces and settlement systems. It is also noted that System Management's systems and processes would also need considerable work. In addition, Market Participants will need sufficient time to adapt and put in place the necessary systems. It could be that a comprehensive solution to this issue will take a considerable time to design and implement, perhaps in the range of three to five years.</p>

No.	Issue	Response
12	<p>The Authority invites comment on the delivery of ancillary services, particularly in regard to the competitive delivery of ancillary services.</p>	<p>Market Rule 3.11.8 indicates that System Management may enter into an Ancillary Service Contract with a Rule Participant other than Verve Energy where:</p> <ul style="list-style-type: none"> <li>• it does not consider that it can meet the Ancillary Service Requirements with Verve Energy's Registered Facilities; or</li> <li>• the Ancillary Service Contract provides a less expensive alternative to Ancillary Services provided by Verve Energy.</li> </ul> <p>Under Market Rule 3.11.9, where System Management intends to enter into an Ancillary Service Contract, it must:</p> <ul style="list-style-type: none"> <li>• seek to minimise the cost of scheduling and dispatching facilities to meet the Ancillary Service Requirements in each Trading Interval; and</li> <li>• give consideration to using a competitive tender process, unless System Management considers that this would not meet the cost minimisation requirements.</li> </ul> <p>System Management and the IMO are currently working on a draft System Management Ancillary Services Procurement Plan that would define the requirements and timelines of a competitive Ancillary Services procurement process.</p>

No.	Issue	Response
13	<p>The Authority invites comment on the impact that wind energy will have on the effectiveness of the WEM. In particular:</p> <ul style="list-style-type: none"> <li>• to what extent, if any, will additional wind energy impose costs on the market, and will these costs be borne by the wind energy facilities or by other participants; and</li> <li>• do the existing arrangements for network connection charges provide signals to wind energy facilities that reflect the impact of these facilities on the market.</li> </ul>	<p>A substantial and rapid increase in the penetration of intermittent wind generation in the SWIS has the potential to cause material reliability and security issues including:</p> <ul style="list-style-type: none"> <li>• Reduced availability and reliability of generation capacity on the system, which may require an increase of the system's reserve margin and installation of additional stand-by generation.</li> <li>• Short-term fluctuations in output of intermittent plant, which could lead to system frequency variations.</li> <li>• High levels of overnight generation output coinciding with low system demand which would require output from highly efficiency thermal plant to be curtailed and the operating regimes of base load plant materially changed.</li> </ul> <p>The IMO considers that there are potential costs related to the above issues, which need to be identified and quantified, and mechanisms to efficiently allocate the costs must be developed.</p>

No.	Issue	Response
14	<p>The Authority invites comment on the incentives for DSM to participate in the market. In particular:</p> <ul style="list-style-type: none"> <li>• what, if any, barriers exist that would prevent the participation of DSM that could otherwise provide capacity at a price competitive with new generation; and</li> <li>• would an alternative structure for payments for DSM, or an alternative treatment of DSM within the market, encourage the participation of DSM in a way that promotes the market objectives.</li> </ul>	<p>As noted by the ERA, the IMO has recently conducted a review of provisions related to DSM which included extensive consultation with existing and potential DSM providers. Rule changes have now been proposed as a result of this process. The review also proposed a number of measures to streamline and reduce the costs of System Management's processes related to the scheduling and dispatch of DSM.</p> <p>The remaining issue appears to be whether an alternative reserve capacity payment structure for DSM would provide for increased DSM participation. Under the current reserve capacity mechanism all providers of reserve capacity receive the same reserve price from the IMO – generators and DSM programs receive the same payment. The question is whether this structure of reserve capacity payments is suitable for DSM projects. DSM projects typically have relatively small capacity costs but relatively high activation costs, compared with generation projects which, by comparison, have substantial capacity costs and potentially lower activation costs.</p> <p>The IMO is keen to examine with industry whether payments for DSM should be restructured to better reflect its cost structure, including whether the potential complexity associated with a change to the structure would be justified. It is noted that even with the present structure a Market Customer acting as a DSM aggregator could elect not to pass through the total payments created by the Capacity Credits regime, but could sculpt incentives to the end-use customer in a manner that fits its risk profile.</p>

No.	Issue	Response
15	<p>The Authority invites comment on the rule change process and procedures, the consultation process for rule change proposals and the time taken to have a rule change proposal considered and finalised.</p>	<p>Several participants have commented that the rule change process takes a long time to complete.</p> <p>The standard rule change process, which adheres to the following timelines prescribed in the Market Rules, currently takes more than 19 weeks to complete:</p> <ol style="list-style-type: none"> <li>1. The first Public Submission period is 30 Business Days from the date the IMO has published the Rule Change Notice for the proposal.</li> <li>2. The IMO must publish a Draft Rule Change Report within 20 Business Days of the end of the submission period.</li> <li>3. The second Public Submission period is for a minimum of 20 Business Days from the date the Draft Rule Change Report is published.</li> <li>4. Within 20 Business Days after the end of the second Public Submission period, the IMO must publish a Final Rule Change Report.</li> </ol> <p>There are two obvious ways to streamline these timelines. The timelines for steps 1, 3 and 4 above could be reduced significantly. While it is appropriate that the rule change process proceeds in an efficient and timely manner, it should also provide sufficient time for consultation and analysis. Further, some rule changes would be more complex and others would be simpler and a single timeline may not always deliver efficient outcomes.</p> <p>The IMO considers that the efficiency of the Market Rule Change processes should be examined in light of best regulatory practice with the objective to streamline the existing prescribed timelines. Any changes to the processes and timelines should provide sufficient flexibility to allow the IMO Board to consider proposed Rule Changes in Session.</p>



No.	Issue	Response
16	The Authority invites comment on whether System Management remaining within Western Power impacts on the effectiveness of the market and, if so, in what way.	The IMO makes no submission on this issue.
17	The Authority invites comments on measures to improve price transparency in the market.	The IMO considers that transparency is one of the key prerequisites for effective and efficient market design and operation. The IMO is committed to review its website over 2008/09 to make it more user friendly and this task is included in its Operational Plan.
18	The Authority invites comments on what, if any, impact retail market arrangements have on the WEM, and what implications this has for the effectiveness of the WEM.	At this stage, the IMO makes no submission on this issue.
19	The Authority invites comment on the effect that the Ministerial Directions to Verve Energy and Synergy and the Vesting Contract have on outcomes in the market.	At this stage, the IMO makes no submission on this issue.

No.	Issue	Response
20	<p>The Authority invites comment on the processes for planning the development of the market over the longer term. In particular:</p> <ul style="list-style-type: none"> <li>• to what extent do existing arrangements provide scope for, and transparency in regard to, the development of the market; and</li> <li>• what aspects, if any, of the development of the market should be addressed in a more systematic manner, and in what forum.</li> </ul>	<p>In accordance with the IMO's 2008/09 Operational Plan, the IMO intends to submit a three-year Market Rules Evolution Plan for the Market Advisory Committee's consideration. The Plan will incorporate a list of issues raised by various stakeholders since the commencement of the Market.</p> <p>The Market Advisory Committee will be requested to consider the prioritisation of the issues, as well as the timing of the various market development reviews proposed to address some of the issues raised.</p> <p>Some of these issues may take a considerable period of time to address, and may require a substantial implementation effort. The possible implications of these longer term issues should be considered to ensure that no short-term steps are taken that may inhibit long term solutions.</p> <p>To assist the consideration of such broader issues the IMO proposes to initiate, in conjunction with the Economic Regulation Authority, the Office of Energy and Market Participants, the development of a long term market roadmap. This high level roadmap would identify the steps required to facilitate the achievement of the long term objectives of the market and its stakeholders (e.g. competitive balancing and potentially a real-time market).</p>