

**Independent Market Operator**  
**Reserve Capacity Mechanism Working Group**

**Minutes**

<b>Meeting No.</b>	5	
<b>Location:</b>	IMO Boardroom Level 3, 197 St Georges Terrace, Perth	
<b>Date:</b>	Thursday 12 July 2012	
<b>Time:</b>	Commencing at 2.05pm – 5.05pm	
<b>Attendees</b>		
Allan Dawson	Chair	
Suzanne Frame	IMO	
Andrew Sutherland	Market Generator	
Brad Huppatz	Market Generator (Verve Energy)	
Ben Tan	Market Generator (arrived at 2.20pm)	
Shane Cremin	Market Generator	
Wendy Ng	Market Customer	
Patrick Peake	Market Customer	
Steve Gould	Market Customer	
John Rhodes	Market Customer (Synergy) (proxy)	
Andrew Stevens	Market Customer/Generator	
Jeff Renaud	Demand Side Management	
Peter Huxtable	Contestable Customer (proxy)	
Justin Payne	Contestable Customer	
Wana Yang	Observer (Economic Regulation Authority)	
Paul Hynch	Observer (Public Utilities Office)	
<b>Additional Attendees</b>		
Richard Tooth	Presenter (Sapere Research Group)	
Mike Thomas	Presenter (The Lantau Group)	
Aditi Varma	Minutes	
Fiona Edmonds	Observer	
Jenny Laidlaw	Observer	
<b>Apologies</b>		
Brendan Clarke	System Management	
Stephen MacLean	Market Customer (Synergy)	
Geoff Down	Contestable Customer	
Wayne Trumble	Observer (Griffin Energy)	

## KEY DECISIONS REGISTER

### A] HARMONISATION OF DEMAND SIDE AND SUPPLY SIDE RESOURCES (WORK STREAM 2)

- *The IMO to relax its requirement for Facilities to have firm fuel supply contracts in place if the capacity refund mechanism is assessed to provide sufficient commercial incentives for Facilities to be available when required.*
- *The revised DSM availability requirements for the 2013 Reserve Capacity Cycle will be as follows:*

<i>Days of Availability</i>	<i>All Business Days</i>
<i>Dispatch events per year</i>	<i>Unlimited</i>
<i>Hours per day</i>	<i>6 hours</i>
<i>Total hours available</i>	<i>Unlimited</i>
<i>Earliest Start</i>	<i>10:00 AM</i>
<i>Latest Finish</i>	<i>8:00 PM</i>
<i>Minimum notice period of dispatch</i>	<i>2 hours + day before notice (best endeavours) of probable dispatch</i>

- *All DSPs to provide a telemetry service that enables real time information on availability and performance to be recorded for the 2013 Reserve Capacity Cycle onwards (noting a period of transition to apply for existing DSPs, up to mid-2015)*
- *Remove the ‘third-day rule’ from the 2013 Reserve Capacity Cycle onwards — whereby a DSP dispatched for a third continuous day is not subject to capacity refunds.*
- *Incorporate into the Market Rules ability for DSP’s to be dispatched outside of nominated availability limitations on a best efforts basis (i.e. with no implications for capacity refunds for non-performance).*

### B] RESERVE CAPACITY PRICE (WORK STREAM 1)

- *The IMO to include The Lantau Group’s proposal into the final list of recommendations. The proposal includes:*
  - *Determine the slope and escalation factor for the Reserve Capacity Price.*
  - *Rename the Maximum Reserve Capacity Price to an expected or a benchmark Reserve Capacity Price.*

Item	Subject	Action
1.	<p><b>WELCOME AND APOLOGIES / ATTENDANCE</b></p> <p>The Chair opened the fifth meeting of the Reserve Capacity Mechanism (RCM) Working Group (RCMWG) at 2:05pm.</p> <p>The Chair welcomed the members in attendance and noted apologies from Mr Stephen MacLean and Mr Geoff Down. In addition to the apologies he noted that Mr Brendan Clarke was absent and Mr Wayne Trumble was expected to attend the meeting as a requested observer.</p>	
2.	<p><b>MINUTES ARISING FROM MEETING 4</b></p> <p>The minutes were accepted as a true and accurate record of meeting 4.</p>	
3.	<p><b>ACTIONS ARISING</b></p> <p>Ms Suzanne Frame noted that work would be ongoing to assess the cost-effectiveness of proposed options for harmonisation of demand side and supply side capacity resources (Action Item 2). With respect to Action Item 7, she noted that the workshop on oversupply of capacity was held on 4 July 2012 and had most members in attendance. The Chair noted his appreciation for the members' participation in the workshop and also thanked Mr Mike Thomas for facilitating it.</p>	
4.	<p><b>HARMONISATION OF DEMAND SIDE AND SUPPLY SIDE RESOURCES (WORK STREAM 2)</b></p> <p>The Chair invited Dr Richard Tooth to present his paper.</p> <p>The following points of discussion were noted:</p> <ul style="list-style-type: none"> <li>• On the issue of firm fuel supply contracts, Mr Andrew Sutherland noted his agreement with increased flexibility in providing commercial incentives to improve reliability. He added that there are no force majeure provisions in a gas supply crisis, and that if incidents like Varanus Island or North-West Shelf happened, then generators should not have massive penalties imposed when gas prices are high. Mr Patrick Peake questioned the need for higher commercial incentives when, in his opinion, the capacity refunds are already sufficiently high to ensure adequate supply of fuel. Mr Shane Cremin observed that caution needs to be exercised because with increase in capacity refunds or penalties, incentives also get created to not be available in the first instance. Dr Tooth noted that proposed greater weight being placed on commercial incentives to ensure adequate fuel supplies had an inherent interdependency with the capacity refunds work stream.</li> <li>• On the topic of performance requirements of Demand Side Management (DSM), Mr Jeff Renaud noted his support for the proposals, but he added that the current formula used for capacity refunds for DSM would have to be adjusted when new performance requirements are imposed. He proposed that DSM should be subject to the same capacity refunds table as generators. He noted this streamlining was important as currently DSM can lose a full year's capacity payments via the application of refunds for a total period of 24 hours. He also noted that there could be some benefits in reordering the Dispatch Merit Order. Ms Jenny Laidlaw noted that this had already happened through a Rule Change before</li> </ul>	

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	<p>commencement of the Balancing Market.</p> <ul style="list-style-type: none"> <li>• There was some discussion on how DSM is dispatched to cover the peak. Mr Cremin questioned how individual loads actually respond to a dispatch event- if the dispatch event is for a substantial number of hours, do the loads ramp back up at the end of the event? Mr Renaud responded that within EnerNOCs portfolio, different Demand Side Programmes (DSPs) will tend to be used differently to respond in accordance with the nature of the associated loads comprising that DSP.</li> <li>• Discussion ensued on the flexibility available to System Management to dispatch DSM when they need to if the hours of availability of a DSP are increased to unlimited. Discussion also ensued on telemetry provision from DSM. Members also discussed what impacts they might expect to see if enhanced performance requirements are enforced on DSM.</li> <li>• Mr Ben Tan queried if EnerNOC and WaterCorp would experience a significant reduction in the capacity of their portfolios as a result of the proposed changes. Both Mr Renaud and Mr Huxtable noted that it was difficult to predict at that moment, but that expectations would be that the structure of their DSPs would need to be reviewed and that associated loads that had limited flexibility to respond to the new requirements would exit the market.</li> <li>• The Chair noted that the proposals presented would be recorded as key decisions.</li> <li>• Mr Andy Stevens and Mr Renaud noted that the working group should define the system operating conditions when all DSM should be available for unlimited dispatch.</li> </ul> <p><b>Decision Points:</b></p> <ul style="list-style-type: none"> <li>• <i>The IMO to relax its requirement for Facilities to have firm fuel supply contracts in place if the capacity refund mechanism is assessed to provide sufficient commercial incentives for Facilities to be available when required.</i></li> <li>• <i>The revised DSM availability requirements for the 2013 Reserve Capacity Cycle will be as follows:</i></li> </ul> <table border="1" data-bbox="413 1527 1169 2078"> <tbody> <tr> <td><i>Days of Availability</i></td> <td><i>All Business Days</i></td> </tr> <tr> <td><i>Dispatch events per year</i></td> <td><i>Unlimited</i></td> </tr> <tr> <td><i>Hours per day</i></td> <td><i>6 hours</i></td> </tr> <tr> <td><i>Total hours available</i></td> <td><i>Unlimited</i></td> </tr> <tr> <td><i>Earliest Start</i></td> <td><i>10:00 AM</i></td> </tr> <tr> <td><i>Latest Finish</i></td> <td><i>8:00 PM</i></td> </tr> <tr> <td><i>Minimum notice period of dispatch</i></td> <td><i>2 hours + day before notice (best endeavours) of probable dispatch</i></td> </tr> </tbody> </table>	<i>Days of Availability</i>	<i>All Business Days</i>	<i>Dispatch events per year</i>	<i>Unlimited</i>	<i>Hours per day</i>	<i>6 hours</i>	<i>Total hours available</i>	<i>Unlimited</i>	<i>Earliest Start</i>	<i>10:00 AM</i>	<i>Latest Finish</i>	<i>8:00 PM</i>	<i>Minimum notice period of dispatch</i>	<i>2 hours + day before notice (best endeavours) of probable dispatch</i>	
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	<ul style="list-style-type: none"> <li>• All DSPs to provide a telemetry service that enables real time information on availability and performance to be recorded for the 2013 Reserve Capacity Cycle onwards (noting a period of transition to apply for existing DSPs, up to mid-2015)</li> <li>• Remove the 'third-day rule' from the 2013 Reserve Capacity Cycle onwards — whereby a DSP dispatched for a third continuous day is not subject to capacity refunds.</li> <li>• Incorporate into the Market Rules an ability for DSP's to be dispatched outside of nominated availability limitations on a best efforts basis (i.e. with no implications for capacity refunds for non-performance).</li> </ul>	
5	<p><b>DYNAMIC RESERVE CAPACITY REFUND REGIME (WORK STREAM 3)</b></p> <p>The Chair introduced Mr William Street from the IMO and invited him to present a brief history of the Rule Development Implementation Working Groups (RDIWG) previous deliberations on the development of a dynamic reserve capacity refunds regime.</p> <p>The following points of discussion were noted:</p> <ul style="list-style-type: none"> <li>• Mr Sutherland noted whilst the concept was considered workable in the RDIWG, the level of refunds themselves was too high. Mr Stevens agreed that the refunds were designed to apply at peak periods rather than at low reserve margin periods, making it a blunt proxy.</li> <li>• Mr John Rhodes noted that the uncertainty of a dynamic capacity refunds would be difficult for a new generator entering the market. He added that Synergy would prefer a fixed refund profile for a new generator transitioning to a dynamic system after having been being commissioned for a year.</li> <li>• The Chair observed that a dynamic capacity refund mechanism comes with a level of uncertainty which would put focus on System Management's outage approvals process.</li> <li>• Mr Brad Huppatz noted Verve Energy's support for the dynamic regime but added that increasing risk and uncertainty must be balanced by a lowering of expected refunds.</li> <li>• Mr Peake observed that a peaking plant is penalised steeply and unfairly when it is actually dispatched when the forecast is wrong, retailers need to buy from STEM, a generator has broken down or gas is not available. He noted that as refunds increase, the cost of finance for a peaking unit will increase. Unlike larger Market Generators that can spread their losses across a number of facilities in their portfolio, a peaking unit can actually go out of business if it is exposed to very high penalties in the event of a Forced Outage. Mr Shane Cremin supported Mr Peake's point and added that getting the value of available capacity right was quite difficult. He suggested that a potential measure could be the rolling average of a generator's actual performance taking into account the level of Forced or Planned Outages.</li> <li>• Mr Tan asked if outages data would be forecast and published on the IMO's website. Mr Stevens noted that what a generator needs to know is when there is reserve margin available and some level of this information was already available in the market. The Chair observed</li> </ul>	

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	<p>that the objective of the current system was to incentivise facilities to be available. Mr Stevens observed that the refund regime did not in itself incentivise a base-load generator to be more available than needed. It was rather a refund that generators would try to avoid by patching up machines to stay online as much as possible rather than taking an outage and fixing them completely. He added that generators would try to do their maintenance to avoid Forced Outages, and bring plant back online to avoid refund. Mr Rhodes noted that that was an appropriate outcome as it means that the market has full capacity and energy prices will be lower. Discussion ensued on why a generator would not take out a Planned Outage when it identifies an issue with the machines.</p> <ul style="list-style-type: none"> <li>• Mr Mike Thomas observed that there were two issues at hand- one around how sharp the refunds should be for generators to encourage them to solve their problems faster and second, whether it's the right level of refund for that type of problem. He added that in The Lantau Group's previous work, they were trying to assess a balanced approach to measure against expected levels of performance.</li> <li>• Discussion ensued on the differential effects of a dynamic refunds regime on different kinds of generators. Mr Peake noted his concern that a sharper refund regime can potentially put a peaking plant out of business. Mr Sutherland expressed his concern with the effects of high refunds on new, more reliable plants in comparison to old, less reliable plants.</li> <li>• Dr Tooth noted that the main concern for generators seemed to be that there was no creative way to pool their risk effectively. Members discussed what refund multiplier could be considered suitable. The Chair noted that a dynamic refunds regime comes with an inherent uncertainty which would expose smaller generating units to a greater level of commercial risk. He added that the purpose of markets is to provide an enabling environment for businesses to manage their risk and make sound business decisions.</li> <li>• Members discussed the pros and cons of allowing for a certain percentage of Forced Outage rates followed by stricter refunds for non-performance. However, Mr Rhodes observed that Forced Outage rates are accounted for in bilateral contracts and so a retailer should not be paying twice for the cost of Forced Outages. Mr Stevens pointed out that the amount of reserve margin could be considered as a threshold for enforcing high refunds on generators. The Chair noted that dynamic refunds design was a complex issue and that Mr Thomas would be assigned to this work stream.</li> </ul> <p><b>Action Point:</b></p> <ul style="list-style-type: none"> <li>• <i>The Lantau Group to investigate the options for implementing a dynamic capacity refund mechanism and present to the RCMWG for discussion.</i></li> </ul>	<p><b>The Lantau Group</b></p>
<p>6.</p>	<p><b>RESERVE CAPACITY PRICE (WORK STREAM 1)</b></p> <p>The Chair invited Mr Thomas to present the conclusions from the workshop that took place on 4 July 2012. The following discussion points were noted:</p>	

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	<ul style="list-style-type: none"> <li>• Mr Sutherland noted that if the steeper slope doesn't incentivise bilateral contracting then there would be a major problem for financing merchant plants. Mr Rhodes agreed that increase in bilateral contracting was an obvious outcome of the steeper slope.</li> <li>• Mr Tan and Mr Stevens reiterated their concerns raised previously with respect to how the steeper slope would stop a retailer coming in and incentivising additional capacity to bring down their portfolio of costs.</li> <li>• Mr Tan questioned if Mr Thomas had considered a floor price on the slope to mirror the cap as financing plants in the future would depend on the financier's expectation of the Maximum Reserve Capacity Price (MRCP). With a huge swing in that price, raising finance would be very difficult. Mr Thomas observed that from a value management perspective, a floor price could be implemented. A suggestion of 50% of MRCP was made.</li> <li>• Mr Tan also questioned if Mr Thomas thought enough had been done already with the change in MRCP.</li> <li>• Mr Rhodes noted that enough evidence had not been shown to say that steepening the slope will produce better outcomes for the market.</li> <li>• Ms Wana Yang noted that she was not convinced that the steeper slope formula would solve the excess capacity problem, as even with the reduction in the price, new capacity had entered the market. She also argued that the current practice of assigning Capacity Credits to any Facility that had received Certified Reserve Capacity creates a shared reserve capacity cost burden on Market Customers. This was an inefficient market outcome which implied that a cap should be implemented on the Shared Reserve Capacity Cost.</li> <li>• General discussion ensued on the pros and cons of assigning Capacity Credits only to the level of the Reserve Capacity Requirement and implementing an auction mechanism. Mr Thomas noted that the steeper slope approach could be considered a transitional short term arrangement that could eventually lead to discussions around an auction mechanism.</li> </ul> <p><b>Decision Points:</b></p> <ul style="list-style-type: none"> <li>• <i>The IMO to include The Lantau Group's proposal into the final list of recommendations.</i></li> <li>• <i>The IMO to consider adding a floor price to the Reserve Capacity Price.</i></li> </ul>	<p style="text-align: center;"><b>IMO</b></p> <p style="text-align: center;"><b>IMO</b></p>
	<p><b>CLOSED</b></p> <p>The Chair thanked the members and declared the meeting closed at 5.05 pm.</p>	