

Reserve Capacity Mechanism Working Group

Minutes

Meeting No.	9
Location:	IMO Boardroom Level 17, 197 St Georges Terrace, Perth
Date:	Thursday 22 November 2012
Time:	Commencing at 12.30pm – 5.45pm

Attendees	Class	Comment
Allan Dawson	Chair	
Suzanne Frame	IMO	
Brad Huppatz	Market Generator (Verve Energy)	
Ben Tan	Market Generator	
Andrew Sutherland	Market Generator	
Shane Cremin	Market Generator	
Wendy Ng	Market Customer	
Steve Gould	Market Customer	
Stephen MacLean	Market Customer (Synergy)	
Andrew Stevens	Market Customer/Generator	
Geoff Gaston	Market Customer	Proxy
Jeff Renaud	Demand Side Management	
Geoff Down	Contestable Customer	
Brendan Clarke	System Management	
Wana Yang	Observer (Economic Regulation Authority)	
Lisa Taylor	Observer (Public Utilities Office)	
Apologies	Class	Comment
Patrick Peake	Market Customer	
Justin Payne	Contestable Customer	
Paul Hynch	Observer (Public Utilities Office)	
Also in attendance	From	Comment
Wayne Trumble	Observer (Griffin Energy)	
John Rhodes	Observer (Synergy)	
Fiona Edmonds	Observer (Alinta)	
Mike Thomas	Presenter (The Lantau Group)	
Dr Richard Tooth	Presenter (Sapere Research Group)	
Aditi Varma	Minutes	

Greg Ruthven	Observer (IMO)	
Natasha Cunningham	Observer (IMO)	

Item	Subject	Action
1.	<p>WELCOME AND APOLOGIES / ATTENDANCE</p> <p>The Chair opened the ninth and final meeting of the Reserve Capacity Mechanism (RCM) Working Group (RCMWG) at 12:30pm.</p> <p>The Chair welcomed the members in attendance and noted apologies from Mr Patrick Peake, Mr Justin Payne and Mr Paul Hynch. He acknowledged observers present from Griffin Energy, Synergy and Alinta.</p>	
2.	<p>MINUTES ARISING FROM MEETING 8</p> <p>The following amendments were noted:</p> <p>On page 6, Ms Wana Yang requested the following change:</p> <ul style="list-style-type: none"> <i>Ms Yang mentioned that it was not the quantity of excess capacity that was a concern. The concern stemmed more from an economic efficiency perspective because excess capacity indicated inefficient over-investment. She also noted that the Shared Capacity Cost was always borne by the Market Customers, irrespective of whether there was excess capacity or a shortfall.</i> <p>On page 7, Mr Brendan Clarke requested that the minutes reflect that no agreement was reached among working group members on the Reserve Capacity Price proposal. The Chair noted that such a change was not required as the minutes appropriately reflected that members had discussed the proposal. The minutes were silent on whether any agreement was reached. Mr Clarke then requested that his support for Option 3a be minuted.</p> <p><i>Action Point: The IMO to publish amended minutes of RCMWG meeting no.8 on the Market Web Site.</i></p>	IMO
3.	<p>ACTIONS ARISING</p> <p>Ms Suzanne Frame noted that Action Item 2 (The IMO to include information on the cost effectiveness of proposed solutions or harmonisation) remained a work in progress until a full suite of recommendations had been proposed.</p> <p>Ms Frame added that Action Items 3, 4 and 5 were completed subsequent to the last meeting.</p> <p>Ms Frame advised that Action Item 6, 7 and 8 would be addressed over the course of the meeting.</p> <p>Mr Greg Ruthven noted that further information on Action Item 4 – (Relevant Demand (RD) and scaled Individual Reserve Capacity Requirements (IRCR)) had been provided as part of the meeting papers. Mr Ben Tan questioned whether this action item would be discussed any further. Mr Tan noted that he was aware that further work had been undertaken to assess the extent of the issue, which would help working group members in deciding if this issue required</p>	

	<p>further attention. Mr Andrew Stevens noted that the numbers had changed since the last meeting. Mr Geoff Gaston observed that it was incorrect to compare Relevant Demand with scaled IRCR instead of unscaled IRCR, because Demand Side Programmes (DSPs) did not have control over the scale; instead they had control over the actual MegaWatt demand.</p> <p>Mr Tan queried if the main point of the discussion was the philosophy behind it; that a Load should not be able to sell more than it had bought. Mr Jeff Renaud noted that a similar philosophy had been applied in the PJM Capacity Market. He added that in his view the comparison should be made with the scaled IRCR as that was what the market paid for. Mr MacLean also supported the philosophy of not being able to sell more than you had bought. The Chair considered that this philosophy seemed fundamental to the discussion. Dr Steve Gould observed that the principal issue was whether, given that a DSM contributor is able to manage its Load, that a Market Customer could actually manage its IRCR by design, for example, by deliberately curtailing load so as to minimise the IRCR, whilst simultaneously maintaining high Relevant Demand. Mr Renaud responded that he was not aware of the extent to which this happened, but noted that it was a concern that could be addressed by capping RD at IRCR, and added that in his view, capping at the scaled IRCR would resolve the issue. He also observed that DSPs that had several Associated Loads did not have individual RD's for each load, so it was not possible to tease out the attributable value.</p> <p>The Chair asked if members would agree to adopt the principle that 'what was not bought could not be sold'. Members agreed to proceed as suggested.</p> <p><i>Action Item: The IMO to develop a Pre Rule Change Proposal to implement the principle: what was not bought cannot be sold, in the context of Relevant Demand and IRCR.</i></p>	IMO
4.	<p>AGENDA ITEM 5: Conditions for Demand Side Programme Dispatch</p> <p>The Chair invited Dr Richard Tooth to make his presentation. The following discussion points were noted:</p> <ul style="list-style-type: none"> • Mr Gaston noted that harmonisation of dispatch could not be interpreted in the true sense of the word because DSP dispatch conditions were proposed to be different from generators. He argued that a notice period of two hours for DSPs makes it easier for them to perform, whereas obligations were much more stringent on generators because they get dispatched even within their two hour gate closure. Mr Renaud noted that the obligation on System Management to give notice did not negate the requirement for DSPs to perform and that it was in System Management's interest to provide notice to DSPs to be prepared. • Mr Andrew Sutherland queried if Capacity Cost Refunds for non-performance by DSPs would still be much higher than those for generators. Mr MacLean answered that the 'understanding he received from the last meeting was that DSPs would fall in the same refund category as generators because now they would be subjected to unlimited hours of availability. Mr Renaud noted that DSPs would always be subject to a higher denominator for refunds. Discussion ensued on the capability of DSPs to respond 	

within minutes. In response to a query from Mr Tan, Mr Renaud noted that the capability of DSPs to respond within minutes varies across Loads, and reducing the two hour notice of dispatch would create a significant impact. Mr Gaston questioned why if it was indeed possible for DSPs to respond within minutes, they received the two hour notice of dispatch period from System Management rather than receiving a Dispatch Instruction, akin to what generators receive. He further added that managing the dispatch of different DSPs by giving them adequate notice should be the decision of the business owner, and considered that this should occur in the Balancing Merit Order. Mr Renaud argued that managing the dispatch of different DSPs in the current market would be practically impossible because currently all DSPs bid in at the same price and a random number generator is used for dispatch. Ms Frame noted that during Market Rules Evolution Plan meetings, votes were canvassed on the proposal for including DSPs in the Balancing Market; however there was no desire to progress that proposal at that time. Ms Frame queried members whether the priority of the proposal for DSM to participate in the Balancing Market had now changed. Mr Gaston considered that the question was whether DSM was being harmonised to perform like a generator in terms of dispatch. Ms Frame noted that the philosophical discussion around what was intended by “harmonisation” of demand and supply side sources of capacity occurred early in the working group meetings, and explained that the intent was not to make them identical, rather to more closely align their performance requirements to level the playing field.

- During discussion on Proposal 1¹; Mr Stevens noted that the decision for using any amount of DSM should be solely System Management’s responsibility and that it should be able to justify that decision accordingly. Mr Shane Cremin and Mr Brad Huppertz also agreed with this point. Mr MacLean observed that System Management might not be comfortable with making a decision which can be open to criticism. Dr Gould observed that the Power System Operation Procedure (PSOP) on Dispatch already included powers for System Management to issue Dispatch Advisories when it considered that the Operating State had changed from Normal to High-Risk. Having issued that Dispatch Advisory, System Management had unrestricted powers to use whatever it considered suitable. He further added that it seemed that the proposal would make an incremental adjustment on protections which already existed. Dr Tooth mentioned that this recommendation was not expected to change current behaviour.
- On Proposal 2²; members sought some clarification on whether DSPs could be dispatched as a priority by using the consumption decrease price. Mr Gaston noted that the proposal seemed to add another layer of complexity when in fact tie-breaking rules already existed. The Chair clarified that this was beyond the Balancing Merit Order and that a random number generator could

¹ Proposal 1: A rule is established to ensure that the DSM quantity dispatched is not more than can be reasonably justified to manage the uncertainty of the short-term requirements consistent with the Dispatch Criteria

² Proposal 2: the rank-based-on load size rule in the Non-Balancing Dispatch Merit Order be removed and replaced with a ranking based on time since last dispatch

	<p>not be integrated into this part of the system. Mr Tan queried if self-dispatches by DSPs could be considered when counting the most recent dispatch. In response to this query, Dr Tooth clarified that only dispatches conducted by System Management would be counted. Mr Renaud and Mr Clarke discussed whether System Management could conduct partial dispatches of DSPs for example, System Management only dispatching a DSP for a fraction of the total amount it had initially bid in. The Chair noted that clarity on this action item would be sought by the IMO.</p> <ul style="list-style-type: none"> • Dr Tooth noted that the discussion indicated that members agreed that rank based on load size needed to be removed and the point of contention was whether dispatch should instead be conducted on rank-based-on-time. Ms Wana Yang queried whether this logic should also exist for generators to facilitate consistency. In response, the Chair and other members noted that this would not be possible because generators are allowed to bid in different offer tranches at different values. • Discussion ensued on the possible scenarios in which DSPs would likely be dispatched. Dr Tooth noted that there would need to be an unlikely disaster scenario for all of the DSPs to simultaneously get dispatched. Mr John Rhodes argued that the proposal placed an unlimited liability on Market Customers who are contracting for an unknown level of risk. He queried as to why the burden of a disaster scenario, which is the principle behind the design of the Reserve Capacity Mechanism, should be placed on DSPs. Discussion ensued on the risk of unlimited dispatch for DSPs. Mr Cremin observed that the risk profile for DSPs was similar to that for generators. If generators went on outage for prolonged periods of time then they would be liable for refunds. Similarly, for DSPs the risk that they would be dispatched existed and must be built into their business risk plans. Members agreed that the market should not underwrite this risk for DSPs. Mr MacLean argued that unlimited hours of availability for DSPs constituted discrimination because by definition this technology could not be available for an unlimited time period. Mr Geoff Down noted that the risk depends on whether the DSP is a portfolio of programmes or a single large programme. He added that the market might lose some of the DSPs because of this unlimited availability criterion, as programmes will have to assess how much they have available to curtail. Discussion continued on what risk management techniques might be applied by DSPs as the new rule comes into play. • The Chair summarised the discussion and questioned members for their consent to move forward with the recommended proposals. He acknowledged that more work needed to be done on rule development and implementation. Members agreed to move forward as proposed. Mr MacLean did not agree with the proposal of unlimited hours of availability for DSPs. <p><i>Action Points:</i></p> <ul style="list-style-type: none"> • <i>On Proposal 2, the IMO to check whether System Management can dispatch DSM for a part of its full quantity.</i> • <i>The IMO to work through rule change development process on the recommended proposals.</i> 	<p>IMO</p> <p>IMO</p>
--	---	-----------------------

5. AGENDA ITEM 6: Dynamic Refunds Mechanism

The Chair invited Mr Mike Thomas to make his presentation. The following discussion points were noted:

- On the topic of recycling, Mr MacLean opined that the benefit being accorded to better performing resources had not been quantified and thus it was difficult to ascertain how the recommendations would improve the current situation.
- On the topic of recycling refunds by either availability versus dispatch, Mr Cremin disagreed with Mr Thomas that rebates should be based on availability. He noted that in this market Capacity Credits are paid three years in advance for capacity to be available even though it may never get used. He observed that Mr Thomas's proposed recycling approach attached more value to capacity which is available but rarely gets dispatched such as peaking units and DSPs. He added that such an approach should be balanced by a reduction in the compensation they get for Capacity Credits.
- Mr MacLean observed that the proposal did not present enough incentive for improvement. He added that if this change was implemented, it would imply that bilateral contracts might need to be rewritten as generators would now be able to recoup some of their costs through the recycling mechanism. Mr Stevens argued that this might be the case for only a few contracts, but most other contracts would not be affected.
- Discussion ensued on the topic of refund factors. Mr Sutherland noted that the principle behind Mr Thomas's refund factor proposal was that the value of capacity would be higher as the system reserve margin went lower. He added that payments on the revenue side, however, did not respond the same way i.e., higher payments for capacity as the system reserve margin went lower
- Discussion ensued on how Planned and Forced Outages would get treated under the dynamic refunds regime. While evaluating various options, Mr Gaston observed that a refund factor of 18 would translate into very high financing risks and that this was compounded by the fact that the Maximum Reserve Capacity Price was not a forecast-able figure. Mr Tan agreed with this observation. Mr Sutherland noted that as the refund factor gets high, generators would start building the risk margin into the energy price. Mr Gaston agreed that a high refund factor would price capacity out of the energy market.
- Mr Gaston noted that the underlying behaviour that the dynamic refunds regime was striving to correct was generators not coming back online from an outage as soon as possible. He observed that for peaking plants, even a refund factor of one was stringent enough to make them undertake repairs as soon as possible. He noted that baseload generators would be hit even harder when on outage as they would have to cover their energy prices by having to buy at high prices in the Balancing Market. He further added that the proposal did not seem to be having an effect on the incentives for generators to come back online from an outage. The Chair noted that the proposal was not trying to change current incentives; instead it was making the refunds regime more

	<p>reflective of system conditions. He added that it also had the extra benefit of incentivising better performing generation assets.</p> <ul style="list-style-type: none"> • Mr MacLean observed that the question for generators to consider was that if the recycling of refunds was implemented, how the generators would share the money between them. • The Chair asked members if the proposal should be progressed. Mr MacLean noted his objection to the proposal on the grounds that some bilateral contracts that were already in place would need to be re-written. Mr Gaston noted his support for Option C³ as long as the maximum refund factor remained at 6 and did not increase any further. However, he did not agree with the recycling mechanism as he was not convinced as to how this would translate into reduced cost for retailers. Mr Clarke noted his support for the recycling mechanism but added that the sharing of the pool of money between generators and retailers needed to be further clarified. He also noted his support for the option of recycling refunds to generators based on dispatch rather than availability because for System Management, a generator that may be able to start within minutes would be preferable to the one which may take hours. The Chair noted that the recommendations will be put forward to the IMO Board with an acknowledgement of the objections raised by some MAC members. He also added that the recommendations would be developed into rule changes and the rule change process would also offer members time to register their objections. <p><i>Action Item: The IMO to make recommendations to the IMO Board on the dynamic refunds regime whilst acknowledging the objections raised by some MAC members.</i></p>	IMO
6.	<p>AGENDA ITEM 7: Reserve Capacity Price</p> <p>The Chair invited Mr Mike Thomas to make his presentation on the Reserve Capacity Price. The following discussion points were noted:</p> <ul style="list-style-type: none"> • The Chair observed there were a number of factors contributing to excess reserve capacity. The current process was to move incrementally in the direction of incentivising the right outcome in the Reserve Capacity Mechanism. This did not necessarily mean that the excess capacity problem would get fixed or that the Reserve Capacity Mechanism would be shielded from the detrimental effects of other external factors such as commercial and government policy decisions. • Mr Clarke agreed that there was an excess capacity problem and added that the cost-benefit analysis conducted on the Planning Criterion suggesting that the reserve margin could be reduced to 7.6%, further reiterated this problem. Mr Clarke added that the Rule Change Proposal recently submitted to implement the 7.6% reserve margin (RC_2012_21) was a step in the right direction. • Ms Yang noted that the Market Rules allowed for the IMO to hold an auction if the Reserve Capacity Requirement was not met. 	

³ The following options were presented in Mr Thomas's presentation: Option A- IMO's proposal as presented in RDIWG meeting no.11; Option B- IMO's proposal with a minimum refund factor level; Option C- IMO's proposal linked to the Reserve Capacity Price.

The Chair observed that the auction had never taken place since market start. Mr Thomas noted that even if the auction had to happen, the market would have to go through several learning processes to adjust to the mechanism. Ms Yang also queried which one of the three capacity markets (PJM, NYISO and New England) had the most economically efficient auction. Mr Thomas observed that in any auction process, an administrative demand curve had to be instituted to avoid the high volatility in price.

- Mr MacLean opined that the contextual discussion was too little too late. He added that members had missed the opportunity of thinking through the context of the problem and could only just react to the proposals on the table. However, Mr Renaud argued that members had discussed the problem and the proposed solution many times over the past few months.
- Mr Tan noted that the underlying assumption was that generators which were already embedded in the market would hurt themselves and other generators by bringing in new capacity, but new Participants who have had no exposure to the market would not care as to what the price per Capacity Credit was, because they would get that anyway. Mr Cremin counter-argued that the new participant would only enter the market if it was profitable to do so. If the MRCP was also adjusted then the market would not remain that profitable anymore.
- Mr MacLean questioned whether the effect would be exactly the same if instead of the price curve starting at 110% of the MRCP and 97% of the Reserve Capacity Requirement (RCR), it was to simply commence at the intersection of the MRCP and the RCR. Mr Thomas replied that the result would not be the same because 110% was a higher number over the MRCP and strengthened the incentive for retailers to contract for new capacity as supply and demand approached balance. Discussion ensued over how reserve capacity is paid for when there is a shortfall in the market. Ms Yang confirmed that currently there is no price limit on Supplementary Reserve Capacity under the Market Rules.
- Mr Clarke argued that it was not clear why a generator would want to offer a contract to a retailer in the current situation. Mr Renaud suggested that a greater concern for the market should be the cost of excess capacity rather than the quantity. Mr Clarke observed that the cost benefit analysis recently conducted on the Planning Criterion recommending that the reserve margin should be reduced to 7.6% suggested that excess capacity should be zero. Mr Ruthven clarified that the reserve margin was to be used in determining the RCR, whereas the current discussion was considering the price outcomes when the quantity of capacity in the market exceeded the RCR. Mr Stevens added that it was important to note that from a retailer's perspective, the lowest cost for energy was the most beneficial outcome, but from a market's perspective, the matter at hand was how to shape the market so that excess capacity did not cost more. Mr Cremin echoed that point of view and added that the two numbers that were used to shape the capacity mechanism- the RCR and the MRCP were both prone to errors and Mr Thomas's proposal was just one way of sending the market a signal when to bring in or not bring in additional capacity. The Chair added that the market

should not bear the cost of that additional capacity.

- Mr Gaston observed that the Reserve Capacity Mechanism was a prescribed process and was never intended to provide a market based outcome. He added that the MRCP was known two years in advance and that acted as a signal for the market to bring in additional capacity. Discussion ensued among members on what had incentivised excess capacity to enter the market. Mr Cremin was of the view that so much excess would not exist in the current market if the MRCP had not been so volatile. The Chair disagreed with this point of view and observed that decisions around bringing in new capacity were not based on price alone. He added that the market must also be able to guard against a situation of shortfall.
- Mr MacLean observed that the price would be predictable if the IMO was able to reduce volatility in the MRCP and the entry of capacity would become regulated. Further, if the price signal was unable to bring in sufficient capacity, then the Market Rules allowed for an auction process to be carried out. He added that the auction process would be able to bring in excess capacity because it allowed the price to rise up to the MRCP. However, Mr Tan argued that an auction would be unlikely to bring in excess capacity because of the long lead time for a project to be built and ready.
- Discussion ensued on a retailer's desire to contract for capacity under the current mechanism. Mr Thomas argued that under the current mechanism there was very little incentive for a retailer to contract bilaterally for capacity. Mr MacLean observed that contracts were based on the future expectation of price and were forged for many years. As a result, what happened in the short-term would not be a big concern to the retailer. He stressed that the higher price reduction as suggested in Mr Thomas's proposal made the situation uncertain and difficult to contract in. Mr Down observed that the customers who had entered into contracts expecting a fixed price on energy would also be affected by any changes on the price. The Chair observed that parameters such as devaluation of the Australian dollar and the Weighted Average Cost of Capital which are not controllable by the IMO affect the MRCP.
- Mr Tan asked for some clarification on the numbers proposed in Mr Thomas's proposal. He noted his support for the structure and the theories that went behind it, but he was not convinced that the proposed numbers were correct. The Chair observed that if a change in slope were to be considered, it would need to be transitioned through using the IMO's transitional arrangements guidelines.
- The Chair canvassed members' opinions on proceeding further with the recommendations. Mr MacLean noted any change at present time would be too early because the effect of the changes in MRCP and load forecasting capacity still needed to play out. Mr Clarke noted that a case for change sooner rather than later existed because of the presence of excess capacity in the market. Mr Renaud noted that he was generally supportive of the changes as it seemed to be balanced around a reasonable pivot point of 7% excess capacity in the market. Mr Cremin noted

	<p>his view that the MRCP and the sliding scale should be delinked from each other. He supported the idea of implementing the change because it was a suitable way forward without completely changing the market. Ms Lisa Taylor asked if more analysis could be made available before this was progressed to the rule development stage. Mr Gaston did not support the proposal. Dr Gould observed that under the proposed mechanism, prices would rise sending a strong signal to retailers to contract bilaterally.</p> <ul style="list-style-type: none"> • The Chair offered that the IMO would conduct more analysis, including a proposed transition path, and send it via email to gauge MAC members' support. <p><i>Action Item:</i></p> <p><i>The IMO to conduct more analysis on Reserve Capacity Price, including a proposed transition path and send it via email to canvas MAC members' support.</i></p>	IMO
	<p>CLOSED</p> <p>The Chair thanked the members and declared the meeting closed at 5.45 pm.</p>	