Independent Market Operator

Reserve Capacity Mechanism Working Group

Minutes

Meeting No.	3
Location:	IMO Boardroom Level 3, 197 St Georges Terrace, Perth
Date:	Tuesday 17 April 2012
Time:	Commencing at 2.00pm – 5.30pm

Attendees	
Allan Dawson	Chair
Suzanne Frame	IMO
Neil Hay	System Management (Proxy)
Andrew Sutherland	Market Generator
Brad Huppatz	Market Generator (Verve Energy)
Corey Dykstra	Market Customer
Patrick Peake	Market Customer
Steve Gould	Market Customer
Stephen MacLean	Market Customer (Synergy)
Andrew Stevens	Market Customer/Generator
Jeff Renaud	Demand Side Management
Geoff Down	Contestable Customer
Justin Payne	Contestable Customer
Paul Hynch	Observer (Office of Energy)
Wana Yang	Observer (Economic Regulation Authority)
Additional Attendees	
Richard Tooth	Presenter (Sapere Research Group)
Mike Thomas	Presenter (The Lantau Group)
Aditi Varma	Minutes
Fiona Edmonds	Observer
Jenny Laidlaw	Observer
Greg Ruthven	Observer
Aaron Breidenbaugh	Observer (EnerNOC, USA)
Ken Schisler	Observer (EnerNOC, USA)
Paul Troughton	Observer (EnerNOC)

Apologies	
Ben Tan	Market Generator
Shane Cremin	Market Generator
Brendan Clarke	System Management

Item	Subject	Action
1.	**WELCOME AND APOLOGIES / ATTENDANCE** The Chair opened the third meeting of the Reserve Capacity Mechanism (RCM) Working Group (RCMWG) at 2:05pm. The Chair welcomed the members in attendance and noted apologies received from Mr Brendan Clarke, Mr Ben Tan and Mr Shane Cremin prior to the meeting. The Chair acknowledged Mr Neil Hay as proxy for Mr Clarke. The Chair also introduced Dr Richard Tooth from Sapere Research Group. The Chair also noted observers from EnerNOC, USA in attendance.	
2.	**MINUTES ARISING FROM MEETING 2** The minutes were accepted as a true and accurate record of the meeting.	
3.	**ACTIONS ARISING** The Chair noted that all action points from the previous meeting had been completed.	
4.	**PRESENTATION: Harmonisation of Demand Side and Supply Side Resources by Dr Richard Tooth, Sapere Research Group** The Chair invited Dr Richard Tooth to present his paper. The following points of discussion were noted: • On the issue of Availability Classes for Demand Side Management (DSM), Mr Jeff Renaud observed that the refund regime for DSM becomes more lenient in higher Availability Classes. However, it is more difficult to recruit customers in higher Availability Classes because of the associated opportunity costs of being available for greater number of hours. He also noted that Demand Side Aggregators (DSA) would generally absorb refunds for non-performance and would not pass those costs on to their customers as it creates disincentives for signing up to a demand management program. With regard to Dr Tooth's comment that there was potential for some DSM programmes to offer more availability, he observed that there was a range of loads with some being indifferent to providing greater availability and others being opposed because of the costs of potential production shut-downs. He added that a DSA, however, with a portfolio of customer loads would be in a position to mitigate that risk for individual market customers. • Discussion ensued on the order of dispatch of generators and DSM. Some members argued that the value provided by generators and DSM may be different because key variables such as response time to dispatch instructions from System Management for the two was different. • Discussion ensued on when DSM can be dispatched. Mr Neil	

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	Hay noted that under the current Availability Classes, System Management would not dispatch DSM if it believes that the peak of summer has not yet been reached. Mr Dykstra observed that this would imply DSM is considered to be the last resort. Mr MacLean queried if this implied that System Management would have different operational guidelines in early summer vis-a-vis late summer. Mr Hay disagreed with this and noted that consideration would be given to System Management's expectation that the peak summer day is yet to occur. • Mr Huppatz observed that this might indicate that DSM could be considered to be more valuable during peak summer (for example, from January to March) than during other months. Mr Geoff Down observed that some level of ~~uncertainty~~ flexibility needs to be factored in dispatch decisions. • Mr Renaud noted that in most markets DSM is used in emergency reliability conditions. He observed that in this case it seemed that the issue was not the dispatch of DSM itself but System Management's confidence level in dispatching DSM when faced with peaky circumstances early in summer. Mr Hay agreed with the statement and noted that if System Management was faced with the option of shedding load versus dispatching DSM, it would always dispatch DSM but it must give adequate consideration to the fact that that option would then be used up and would not be available if a similar circumstance occurred again. Mr Payne noted that the capacity provided by DSM in the market currently might be sufficient to provide some flexibility of dispatch for System Management. However, Mr Dykstra and Mr Stevens argued that dispatch decisions were constrained because of DSM availability limitations. Mr Renaud mentioned that DSM could strive to provide advanced technological tools to System Management for better dispatch decisions. However the issue was more around the prescriptive grid conditions needed to dispatch DSM rather than the actual hours of availability of it. • Mr Breidenbaugh observed that in the US, the issue was not so much the availability duration of DSM but how often and for how long it was dispatched. He added that an important concern for DSM providers was performance measurement over their availability duration as that happened during the peakiest periods. He also observed that in the PJM market, DSM is only dispatched during reserve deficiency situation. • Discussion continued on how DSM participates in the energy market. Members discussed that there is an extra monetary benefit that DSM is able to receive because of savings resulting from lower consumption for the load and the dispatch payment for the DSA. The Chair noted that this was one of the issues being considered in the discussion on harmonisation. • On the issue of fuel availability requirements, members discussed the capacity refund regimes for peaking facilities and DSM facilities. Mr Sutherland noted that a peaking generator would have to bear fixed expenses in the event of capacity refunds whereas a DSA could contractually control this expense by not paying the load that did not perform. Mr Peake noted that there was no economic justification as to why DSM could not be	

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	dispatched before a peaking generator if its marginal cost was lower. Mr Renaud noted the mechanism is based on value not cost to which Mr Peake responded that the value of the capacity provided by DSM changes throughout the Capacity Cycle. The Chair noted that this was an issue that is being considered in the discussion on harmonisation. He challenged the group to consider the inclusion of DSM in the balancing market as a potential solution for harmonisation of demand and supply side resources. Mr Breidenbaugh noted that it was important to note that DSM providers lose money if they are dispatched whereas peaking generators make money when they are dispatched. This implied that DSM providers would prefer not to be dispatched at times when the system operator wants them to. • The Chair noted that Dr Tooth had provided a spectrum of options which now need to be mapped on a continuum of pros and cons. He added that the group should consider that these solutions would affect many potential customers in Western Australia who are willing and able to provide curtailment. • Discussion ensued on potential solutions for harmonisation of demand side and supply side. Mr Breidenbaugh noted that changing availability requirements would require that DSAs review their portfolio of customers. However, changing other variables such as minimum hours of duration etc. would create unmanageable risks for DSA's because these variables affect all customers in the same way and little room for adaptability across portfolio is left for the DSA. Mr Renaud cautioned against over-specifying DSM requirements as that would severely limit the entry of DSM into the market. • The discussion concluded with the members agreeing that more work should be conducted on the potential solutions. The Chair noted that the solutions should be debated keeping in mind the right signals need to be provided at the right time. The Chair noted that some of these issues were also being assessed in PJM market. He encouraged members to send their feedback on potential solutions to the IMO. Members requested that information be provided on aspects of different capacity markets and on the dispatch of DSM since market start. Members also requested that the cost-effectiveness of different solutions should be presented. *Action Points:* • *RCMWG Members to provide feedback to the IMO on the proposed solutions for harmonisation of demand and supply side sources* • *The IMO to include information on the cost effectiveness of proposed solutions or harmonisation* • *The IMO to provide information to members on aspects of different capacity markets*	
5	**PRESENTATION: RCM Review Report-2 by Mr Mike Thomas, The Lantau Group** The Chair invited Mr Thomas to present his paper. The following points of discussion were noted:	

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	• On the issue of forecasting uncertainty, Mr Sutherland noted that forecasting error made a significant contribution to over-supply of capacity. Mr MacLean observed that because forecasts inherently have a level of uncertainty, the question to ponder is what protections exist in the market for existing loads to be shielded from the costs of committed loads not becoming available. • There was some discussion on the level of DSM contracted bilaterally in the market. Mr Breidenbaugh noted that if the intent was to encourage bilateral contracting, then DSM might be driven out of the market. Mr Thomas noted that the intent of the proposed solution was not to drive out any particular technology from the market. • On the table detailing factors to which capacity additions could be attributed, Mr Dykstra queried if data could be provided on capacity credits by facility. Further, Mr Dykstra noted that the objective was to make sure that at any time, the right price signal was available to anyone contemplating making capacity available to the market. He noted that the reserve capacity price should be set at the marginal value of a unit of capacity irrespective of the marginal cost associated with that unit of capacity. He added that the price-based solution may not be productive as it is an administrative tool and it might be more useful to consider a spigot control mechanism. Discussion ensued among members on the advantages and disadvantages of a spigot control mechanism vis-a-vis a price-based mechanism. Mr Breidenbaugh observed that most capacity markets have some form of administrative determination of variables such as downward sloping demand curve that ultimately determine the price. He observed that the cost of new entry should be well below the capacity price to encourage new technology. At the same time, it should reduce enough at appropriate times to signal the exit of inefficient technologies. • Discussion ensued among members on bilateral contracting in the market. The Chair noted that the market was quite concentrated on the retailer side. Mr Huppatz observed the reduction in reserve capacity price if a number of uncontracted capacity credits existed in the market. There was some discussion among members on whether the sliding scale of price determination should be reviewed annually. The Chair noted that there is always a lag time between cause and effect in the capacity mechanism. • The Chair concluded the discussion by noting that there may be some merit in the proposal. He observed that there is a balancing act between price incentive and the level of capacity resources. He encouraged members to provide feedback to the IMO on the proposed solution so that it could be developed further. *Action Points:* • *RCMWG Members to provide feedback to the IMO on the proposed sliding scale determination of Reserve Capacity Price.*	
6	**CLOSED** The Chair thanked all members for attending the meeting and added that the next meeting is tentative based on the development of the two work streams. He also noted that the next work stream on dynamic	

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	refund regime would be kick-started in the next meeting. He declared the meeting closed at 5.30 pm.	