

Independent Market Operator

Renewable Energy Generation Working Group

Minutes

Meeting No.	14	
Location:	Meeting Room 8, Perth Convention Exhibition Centre 21 Mounts Bay Road, Perth	
Date:	Thursday, 22 July 2010	
Time:	1:00 pm – 4:00 pm	
Attendees		
Troy Forward	Independent Market Operator (IMO)	Chair
Greg Ruthven	IMO	Minutes
Michael Carr	Tenet Consulting	
Matthew Rosser	Pacific Hydro	
Dr. Steve Gould	Landfill Gas & Power	
Kyle Jackson	Mid West Energy	
Shane Cremin	Griffin Energy	
Andrew Woodroffe	Skyfarming	
Ian McCullough	OoE	
Chris Brown	ERA	
Brooke Eddington	OoE	
Pablo Campillos	DMT Energy	
John Rhodes	Synergy	
Tom Pearcy	Western Power	
Wendy Ng	Verve Energy	
Matthew Fairclough	System Management	
Brendan Clarke	System Management	
Rob Rohrlach	Energy Response	

Apologies		
Phil Kelloway	Systems Management	
Andrew Everett	Verve Energy	
John Vendel	Pacific Hydro	
Corey Dykstra	Alinta	
Anwar Mohammed	SunPower	
Alistair Craib	Collgar Wind Farm	

Item	Subject	Action
1.	<p>WELCOME</p> <p>The Chair opened the meeting at 1:08 pm and welcomed all attendees to the Renewable Energy Generation Working Group (REGWG) meeting.</p>	
2.	<p>MEETING APOLOGIES / ATTENDANCE</p> <p>Apologies were noted as listed above.</p> <p>The Chair welcomed Wendy Ng from Verve Energy who was attending in place of Andrew Everett.</p>	
3.	<p>MINUTES OF PREVIOUS MEETING</p> <p>The minutes of the 24 June 2010 REGWG meeting were previously circulated to members for review and comment. Some changes were requested by Ian McCullough and Troy Forward and were incorporated prior to distribution with the meeting papers on 19 July.</p> <p>No further comments were received.</p> <p><i>Action: The IMO to make accept the amended minutes of the 24 June 2010 Meeting and publish as final.</i></p>	IMO
4.	<p>ACTIONS ARISING</p> <p>All action items were complete other than:</p> <ul style="list-style-type: none"> • Action Item 23: This action had been pending the outcome of MAC pathway decision. The Chair proposed that the REGWG finalise Work Package 3 and deliver this to MAC. ROAM Consulting can then be asked to brief the new working group that will be established under the MAC to implement the pathway decision. This was accepted by the REGWG. • Action Item 24: The Chair suggested that the impact of 	

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	<p>forecasting is more of an operational issue. This action will not be progressed by REGWG and can be assessed in a separate review of ancillary services.</p> <ul style="list-style-type: none"> • Action Item 35: The NIEIR 30-year forecasts have used a different starting point to the forecasts used by ROAM, which were extrapolated from the 2009 Statement of Opportunities. Also, NIEIR's objective was to assess the relative effect of policy scenarios so the forecast numbers may be inaccurate. Given this, the forecasts used by ROAM appear to be robust for the purposes of REGWG analysis. The material impact of the NIEIR forecast issues is still under review. The IMO will review this with the Office of Energy. • Action Item 36: The REGWG progress report to the August MAC meeting will outline the proposed resolution strategy for Work Packages 2, 3 and 4. • Action Item 38 and 39: MMA's numerical assessment of the valuation methods and summary of the merits and impacts of the Load for Scheduled Generation (LSG) technique will be presented at the August REGWG meeting. • Action Item 43: ROAM has suggested that the costs that were calculated for Scenario 2 under the dispatch-modelling could be roughly scaled according to the load following requirement to estimate the costs for the other plant scenarios. However, they would not recommend using the scaled numbers for any further analysis. • Action Item 44: System Management to discuss with ROAM if required after reviewing the final Work Package 3 report. 	
5.	<p>WORK PACKAGE 2: ANALYSIS OF VALUATION OPTIONS</p> <p>The Chair advised that MMA had provided initial results to the IMO today, and that it would require some time to review and validate these. Members agreed with the Chair's offer to distribute the results to members once this review is complete.</p> <p><i>Action:</i></p> <ul style="list-style-type: none"> • <i>IMO to distribute MMA analysis to REGWG members by Friday 30 July 2010.</i> <p>Shane Cremin enquired about the decision process. He highlighted that MMA had performed significant analysis to develop their valuation method, but that other methods had been proposed by REGWG members with less analysis performed. He suggested that additional proposals could be put forward and asked how these would be considered.</p> <p>The Chair explained that System Management and the Office of Energy had raised concerns with the MMA method from the</p>	IMO

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	<p>perspective of reliability of performance. System Management was then asked to provide an alternative proposal in light of these concerns, with the REGWG to be given the opportunity to review the relative merit of the different proposals.</p> <p>Kyle Jackson asked whether the same weight should be given to the subsequent proposals and to the MMA proposal derived from extensive expert analysis. The Chair indicated that MMA was not exposed to the same operational reliability considerations as System Management.</p> <p>Mr Cremin pointed out that there may be inconsistencies in one or more of the proposals with the way that thermal plant is assessed. He advised that the 90th percentile output is a more rigorous requirement than is required for other capacity types.</p> <p>Mr Jackson asked if MMA had assessed solar plants. The Chair indicated that MMA had included results delivered for solar plant.</p> <p>The REGWG discussed the evaluation process in detail. The following decision criteria were proposed:</p> <ul style="list-style-type: none"> • Transparency and simplicity • Continuity of valuation (reflecting the regulatory/cost risk to existing facilities) • Volatility • Practicality • Robustness (addresses principle of capacity) <p>The Chair indicated that this list of criteria was aligned with those that MMA had been asked to consider. The Chair offered to extend MMA's comparison to include additional criteria suggested here.</p> <p>Pablo Campillos asked whether the criteria should be prioritised. Mr Jackson suggested that they would be difficult to quantify.</p> <p>Mr Cremin suggested that reliability should be considered separately if there was concern that the Planning Criteria would be breached. The Chair noted that the five-yearly review of the Planning Criteria was scheduled to begin in 2011.</p> <p>Ian McCullough explained that MMA had performed equalisation studies to assess reliability. They had modelled their preferred, reliability-based Loss of Load Probability (LOLP) method but did not recommend it as it relied on a small quantity of data. They did, however, use it to benchmark the results of their other methods. They recommended the 750-interval assessment as volatility was low, the valuation was somewhat conservative and the valuation level aligned well with the LOLP method. It was noted that System Management is concerned that the LOLP method is based on limited historical information and is not reflective of their view of the market.</p>	

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	<p>Mr Cremin noted that the decision must be assessed against the market objectives. Steve Gould advised that MAC members are obliged to take decisions from a “whole of market” perspective, but that this is not necessarily the case in Working Groups.</p> <p>The Chair also asked members to consider reliability concerns, ancillary services costs, investment signals and other factors in making their decision.</p> <p>Rob Rohrlach asked whether the Federal Government’s 20% renewable generation target should be taken into account. The REGWG agreed that there is no firm policy on this in WA, thus it should not be considered.</p> <p>The Chair advised that MMA had not been requested to provide a report to accompany their numerical assessment of the valuation proposals and asked whether a report would be of value. Dr Gould said that a report would provide more substance when the REGWG recommendation was provided to MAC. The Chair agreed to request a report from MMA to accompany their analysis.</p> <p><i>Action:</i></p> <ul style="list-style-type: none"> • <i>IMO to request MMA to write a report to accompany the numerical assessment of the valuation proposals.</i> <p>The REGWG discussed the timing of the decision-making process. It was agreed that the relative merits be discussed in detail at the next meeting and the decision made at the subsequent meeting. It was also agreed that the two meetings be held closer together, with perhaps both meetings to be held within the next 6 weeks.</p> <p><i>Action:</i></p> <ul style="list-style-type: none"> • <i>IMO to advise members of revised meeting times in August and September.</i> <p>Mr McCullough suggested that the REGWG may not reach a consensus decision. He suggested that the IMO may need to present a range of opinions to the MAC. The Chair indicated that an agreed or preferred option could be provided to MAC while identifying those who did not agree and their reasons.</p> <p>Matthew Rosser suggested that an advocate for each method be proposed to assist the debate. The Chair suggested that this would place pressure & responsibility on the advocates and the outcome may be influenced by the ability of the advocates to debate rather than the strength of their cases. Mr Cremin suggested that people will advocate anyway.</p> <p>Dr Gould noted that System Management has a key stake in this decision and that other proponents should provide reasons why other proposals are better than System Management’s</p>	<p style="text-align: center;">IMO</p> <p style="text-align: center;">IMO</p>

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	<p>proposal. Matthew Fairclough reiterated System Management's objective to maintain reliability of supply, and System Management's reliability-related concern with the 750-interval method.</p> <p>The Chair suggested that the REGWG could ask System Management to evaluate the relative merits of the 3 proposals from the reliability perspective. Mr Cremin agreed that reliability is an issue, but questioned whether this is the right forum.</p> <p>The REGWG continued to debate the relative merits of the proposals and the key decision criteria.</p> <p>Mr McCullough explained that the REGWG had engaged an expert who advised a valuation level while System Management had suggested another level. He indicated that one of System Management's concerns was that the 750 intervals selected for the assessment would include some intervals away from peak demand. However, the use of 750 intervals was nominated in order to best approximate the reliability-based LOLP technique. He suggested that System Management should directly explain why they felt this was inappropriate, something that has not yet been done. Mr Fairclough explained System Management's concerns over the availability of only 3 years of real data and the use of simulated data. The Chair indicated that there may be a case for a conservative position in the near term given the current lack of data. Mr Rosser suggested that it could always be argued that there was insufficient data. He advised that two years of data is typically sufficient to achieve 90% accuracy for long-term average output. Tom Percy said that this might apply for energy modelling but that contribution to peak load was the key measurement and that two years may not be sufficient for this.</p> <p>Mr McCullough explained that Proposal 1 attempted to address the concern that other methods were not focused on intervals of key importance. He explained that the method was not developed to deliver a particular valuation level, but recognised the importance of assessing fleet performance and reducing volatility.</p> <p>Dr Gould said that high volatility sends mixed investment signals and is difficult to quantify for system forecasts. The REGWG expressed a consensus view that low volatility is vital given that high volatility can negatively affect income streams, investment signals and maintenance of system reliability.</p> <p>Mr Percy asked whether further analysis could be done to evaluate wind output on hot days.</p> <p>Mr Cremin pointed out that any evaluation of load-shedding scenarios should consider causes other than wind farms. He suggested that diesel supply could be compromised in later days of a heatwave and that gas supply can be compromised by upstream issues such as gas plant outages.</p>	

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	<p>Mr Rosser proposed to retain the existing valuation method. He said that this is already operational and equates reasonably well to MMA's valuation level, although slightly conservative. Mr Cremin advised that a flat valuation level is impractical as a wind farm should be valued differently if it experiences low wind levels during peak times. Mr McCullough said that each of the proposed methods largely addresses this, and provide a locational signal. Mr Rosser noted that wind farm proponents are currently locating facilities according to optimal wind resources. The Chair said that there is some evidence of new proponents not having regard for contribution to system reliability at peak times.</p>	
6.	<p>WORK PACKAGE 3: FINAL REPORT</p> <p>The Chair advised that the IMO only received the final report from ROAM on 21 July. He apologised that the deliverables for this Work Package are not coming when desired. He advised that the IMO will review and validate the changes and will distribute the report prior to the next meeting. He requested that members provide feedback via email and offered to distribute comments to group if requested for informal discussion.</p> <p>Mr Jackson enquired about estimates of costs for intermittent generators. The Chair said that this work contained a number of elements. ROAM had been asked to formulate the cost allocation methodology to allow the appropriate changes to the Market Rules. The initial ROAM report indicated that they do not propose any change to the Ancillary Services definition.</p> <p>Other elements in the area of Ancillary Services include the magnitude of the Load Following requirement, the procurement of Ancillary Services and scheduling. These are generally considerations for System Management. The Chair noted that System Management has separately proposed to develop a competitive Ancillary Services market. The Chair suggested that these elements could be referred directly to System Management or passed to MAC to be developed by the appropriate body. Mr Fairclough agreed that referral to MAC is a sound proposal, as did all attendees.</p> <p><i>Actions:</i></p> <ul style="list-style-type: none"> • <i>IMO to validate and distribute the Work Package 3 final report.</i> • <i>IMO to refer other elements of Ancillary Services (magnitude of Load Following, procurement and scheduling) to MAC.</i> 	<p style="text-align: center;">IMO</p> <p style="text-align: center;">IMO</p>
7.	<p>WORK PACKAGE 4: DRAFT REPORT</p> <p>The Chair noted that Mr Percy had prepared a presentation on the Technical Rules changes, but recommended that this be</p>	

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	<p>deferred until the next meeting.</p> <p>The Chair explained that he has been made aware of the ERA Technical Rules Committee. The REGWG would still hear the presentation from Mr Percy and finalise the SKM report, but proposed that the REGWG then hand the Work Package 4 outcomes over to that Committee. He indicated that he had discussed this possibility with Peter Hawken, the Chair of the Committee. The REGWG agreed with this proposal.</p> <p>The Chair noted that comments had been received from Western Power and System Management on the draft Work Package 4 report. He indicated that the IMO would work with these groups and SKM to ensure comments reflected and to deliver a final report, hopefully to the next meeting.</p> <p><i>Actions:</i></p> <ul style="list-style-type: none"> • <i>SKM to deliver a final Work Package 4 report, ensuring that comments are reflected.</i> • <i>IMO to refer the final Work Package 4 report to the ERA's Technical Rules Committee.</i> 	<p style="text-align: center;">SKM</p> <p style="text-align: center;">IMO</p>
8.	<p>GENERAL BUSINESS</p> <p>Mr Fairclough advised that he is transferring to a new role in Western Power and that this would be his last REGWG meeting. He thanked the group for their engagement. The Chair thanked Matthew for his constructive and valuable contribution to the Working Group and wished him luck in his new role.</p>	
9.	<p>NEXT MEETING</p> <p>The next meetings had been scheduled for 26 August and 23 September. However, these will be brought forward in light of the above discussions to facilitate the Group's decision on the valuation proposals.</p>	
<p>CLOSED The Chair declared the meeting closed at 3.25 pm.</p>		