

Minutes

Meeting Title:	Market Advisory Committee (MAC)
Date:	20 November 2018
Time:	09:30 PM – 12:05 PM
Location:	Training Room No. 1, Albert Facey House 469 Wellington Street, Perth

Attendees	Class	Comment
Stephen Eliot	Chair	
Matthew Martin	Minister's Appointee – Small-Use Consumer Representative	
Martin Maticka	Australian Energy Market Operator (AEMO)	
Dean Sharafi	System Management	
Will Bargmann	Synergy	
Kei Sukmadjaja	Network Operator	Proxy for Margaret Pырchla
Jacinda Papps	Market Generators	
Shane Cremin	Market Generators	
Wendy Ng	Market Generators	
Patrick Peake	Market Customers	
Geoff Gaston	Market Customers	
Steve Gould	Market Customers	
Geoff Down	Contestable Customers	Proxy for Peter Huxtable

Apologies	Class	Comment
Andrew Stevens	Market Generators	
Margaret Pырchla	Network Operator	
Sara O'Connor	Economic Regulation Authority (ERA) Observer	
Peter Huxtable	Contestable Customers	

Also in attendance	From	Comment
Jenny Laidlaw	RCP Support	Minutes
Richard Cheng	RCP Support	Presenter

Erin Stone	Public Utilities Office (PUO)	Presenter
Mike Hales	AEMO	Presenter
Aditi Varma	PUO	Presenter 9:35 to 9:55 AM
Natalie Robins	ERA	Presenter
Duncan MacKinnon	Australian Energy Council	Observer
Scott Davis	Australian Energy Council	Observer
Oscar Carlberg	Synergy	Observer
Noel Schubert		Observer
Daniel Kurz	Bluewaters Power	Observer
Laura Koziol	RCP Support	Observer
Greta Khan	RCP Support	Observer

Item	Subject	Action
1	Welcome The Chair opened the meeting at 9:30 AM and welcomed members and observers to the 20 November 2018 MAC meeting.	
2	Meeting Apologies/Attendance The Chair noted the attendance as listed above.	
3(a)	Minutes from Previous Meeting Draft minutes of the MAC meeting held on 12 September 2018 were circulated on 8 October 2018. The Chair noted that Mr Dean Sharafi had suggested the following change: <i>Page 5, Section 5, third last paragraph:</i> ...Mr Sharafi considered that the ESB was established because the Federal Government did not approve the last recommendation of the Finkel Review, and the WEM was in a better position compared with the NEM in that there was only one government and one network operator involved. ... Subject to this change, the MAC accepted the minutes as a true and accurate record of the meeting. Action: RCP Support to amend the minutes of the 12 September 2018 meeting to reflect the agreed changes and publish on the Rule Change Panel's (Panel's) website as final.	RCP Support

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3(b)	<p>Minutes from MAC Workshop on Constrained Off Payments</p> <p>Draft minutes of the MAC workshop held on 24 October 2018 to discuss constrained off payments were circulated to attendees on 7 November 2018. The Chair noted that a revised draft, showing tracked changes suggested by Alinta Energy and AEMO, was distributed in the meeting papers.</p> <p>Subject to these changes, the MAC accepted the minutes as a true record of the workshop.</p>	<p>RCP Support</p>
	<p>Action: RCP Support to amend the minutes of the 24 October 2018 MAC workshop on constrained off payments to reflect the agreed changes and publish on the Panel’s website as final.</p>	
4	<p>Action Items</p> <p>The closed action items were taken as read.</p> <p>Action 19/2017: Open – to be progressed as part of the Wholesale Electricity Market (WEM) Reform Program.</p> <p>Action 33/2017: On hold until early 2019.</p> <p>Actions 23/2018 and 24/2018: Mr Mike Hales gave a presentation to the MAC about what information AEMO is able to publish regarding constrained on and constrained off payment amounts under the Market Rules; and what information could be provided to Market Participants early to allow them to predict the size of their constraint payment obligations, which would allow them to budget for these payments. A copy of the presentation is available on the Panel’s website. The following points were discussed.</p> <ul style="list-style-type: none"> • In response to a question from Ms Jenny Laidlaw, Mr Hales advised that actual constraint payment quantities for individual Market Participants were settlement data and therefore confidential, but that aggregated quantities were probably not confidential. • Dr Steve Gould asked whether there was a simple way that AEMO could publish an indicative \$/MWh cost estimate, rather than require individual Market Customers to develop their own calculations. Mr Hales replied that this would require AEMO to re-develop the constraint payment calculations, as it did not own the code for the current settlement calculations. AEMO did not intend to undertake this work until 2019 due to competing priorities. • Mr Daniel Kurz noted that a Market Customer cannot determine its actual constrained off payment costs from its Non-STEM Settlement Statements, because the costs are reported as part 	

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	<p>of an aggregated amount that includes other costs. Bluewaters had been in recent discussions with AEMO about how to ascertain these costs. Mr Hales agreed that the information could not be determined from a Market Customer's Non-STEM Settlement Statement.</p>	
	<ul style="list-style-type: none"> The Chair sought the views of the MAC on how much benefit Market Participants would get from AEMO publishing Theoretical Energy Schedule (TES) values, as proposed by AEMO. Mr Shane Cremin noted that the reason for the proposed publication was the current high levels of constrained off payments, and questioned whether the TES values could be published before the likely implementation date of a rule change to reduce the magnitude of these payments. 	
	<p>Ms Laidlaw asked whether Market Participants were likely to develop their own processes to estimate their constraint payment costs if these costs were expected to materially reduce in the near future. Mr Cremin thought that it might still be helpful for Market Participants to be able to predict their constraint payment costs, even if they are much smaller in future. Mr Kurz noted that access to actual cost information was more important for Bluewaters.</p>	
	<ul style="list-style-type: none"> In response to a question from Mr Cremin, Mr Hales confirmed that the publication of TES values would require a minor system change but no rule changes. Mr Kurz asked whether AEMO intended to publish historical TES values as well as new values going forward. Mr Hales replied that AEMO could look into the provision of historical values if this would be useful for Market Participants. Mr Kurz indicated that publication of TES values for the periods of high constraint payments in March and April 2018 would be very beneficial. 	
	<ul style="list-style-type: none"> The MAC supported the publication of TES values to assist Market Participants to estimate their upcoming constraint payment costs. 	

5 **MAC Market Rules Issues List**

The MAC noted the recent updates to the MAC Market Rules Issues List (**Issues List**).

The Chair noted that the PUO had advised that it will consider Issue 11 (whole-of-system planning oversight) as part of the WEM Reform Program. The Chair sought the views of the MAC on whether Issue 11 should therefore be closed or placed on hold pending the outcomes of the WEM Reform Program. The MAC agreed with the suggestion made by Ms Wendy Ng and Mr Matthew Martin to place the issue on hold pending the outcomes of the WEM Reform Program.

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	<p>The MAC also agreed to put Issue 12 on hold pending outcomes of the WEM Reform Program.</p> <p>The Chair noted that Issues 20/38, 44 and 48 will be closed because Pre-Rule Change Proposals addressing the issues (RC_2018_06: Full Allocation of Spinning Reserve Costs, and RC_2018_07: Removal of constrained off compensation for Network Outages) have been presented to the MAC.</p> <p>The Chair sought the views of the MAC on three potential issues that were raised during the 24 October 2018 MAC workshop on constrained off payments but not included in RC_2018_07.</p> <ul style="list-style-type: none"> • <u>Whether the method used to calculate constrained off compensation should be amended to better reflect the actual costs incurred by Market Generators:</u> after some discussion, the MAC agreed to include this issue in the Issues List and place it on hold until a decision on RC_2018_07 is made, and if the Rule Change Proposal is approved, the changes have been in place for 12 months. • <u>Whether the Minimum STEM Price (currently -\$1,000/MWh) should be increased to reduce the potential magnitude of constrained off compensation (e.g. by restoring the former practice of setting the Minimum STEM Price to the Maximum STEM Price multiplied by -1):</u> the MAC agreed to include this issue in the Issues List and place it on hold pending the outcomes of the ERA's next review of the methodology for setting the Energy Price Limits under clause 2.26.3 of the Market Rules. <p>Mr Cremin asked when the ERA's next review was due to be completed. Dr Natalie Robins noted that Ms Sara O'Connor discussed the proposed date with the MAC earlier in 2018, but agreed to report back to the MAC with an updated delivery date.</p> <ul style="list-style-type: none"> • <u>How to manage potential future scenarios in which multiple generating units that are connected to the same line constitute the largest credible contingency, without imposing excessive constraint payment costs on Market Customers:</u> <p>Ms Laidlaw recollected that the PUO was considering this issue as part of the WEM Reform Program. Mr Patrick Peake asked whether the issue should be considered by the PUO or the ERA, given his concern that the problem was due to Western Power allowing some Market Generators to have low-cost access to the network at the expense of other Market Generators. Mr Martin was uncertain whether the issue was included in the schedule for the WEM Reform Program.</p> <p>There was some discussion about the causes of the issue, who should be responsible for resolving the issue, and whether there</p>	

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	<p>was a need for a central planning function for the South West interconnected system. Dr Robins noted that the discussion paper for the ERA's annual report to the Minister was soon to be published and suggested that stakeholders could raise the issue when providing feedback on the discussion paper.</p> <p>The Chair agreed to discuss the issue with the Chair of the WEM Reform Program's Strategic Consultative Group and report back on the outcomes of that discussion to the MAC.</p> <p>The MAC agreed to include an issue about the need to provide Market Customers with timely advance notice of their upcoming constraint payment liabilities in the Issues List, and to place it on hold pending the implementation of AEMO's proposed changes to the Outstanding Amount calculation in 2019.</p>	
	<p>Action: The ERA to provide an update to the MAC on the expected completion date for the ERA's next review of the methodology for setting the Energy Price Limits under clause 2.26.3 of the Market Rules.</p>	ERA
	<p>Action: The MAC Chair to raise the issue of how to manage potential future scenarios in which multiple generating units that are connected to the same line constitute the largest credible contingency with the Chair of the WEM Reform Program's Strategic Consultative Group; and to report back on the outcomes of that discussion to the MAC.</p>	MAC Chair
6	<p>Update on the Network and Market Reform Program</p> <p>Mr Martin provided the following updates on the WEM Reform Program.</p> <ul style="list-style-type: none"> • The PUO intends to publish a consultation paper for the WEM Reform Program in early December 2018. The paper is expected to cover the main features of the proposed new market design, a discussion of issues with and options for changes to the Wholesale Market Objectives, and the proposed approach to the cost-benefit analysis for the WEM Reform Program changes. Mr Martin expected the consultation period would be open for six to eight weeks. • Mr Martin noted that the PUO had previously worked with its Reserve Capacity Mechanism (RCM) Working Group on the approach for changes to the certification process to account for constrained network access. The PUO intends to go back to the working group in the near future to re-test that approach before publishing a paper with further details for comment. • The PUO's ancillary services work was continuing and it expects to publish a paper in February 2019 outlining the types of 	

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	<p>services that will be needed for the market going forward, and then start work on the procurement methods for those services. Mr Martin emphasised that the PUO intends to seek feedback on the relevant issues from the Market Design and Operation Working Group (MDOWG) and Power System Operation Working Group (PSOWG) on these types of papers before finalising a consultation paper.</p>	
	<ul style="list-style-type: none"> • The PUO is working on energy storage and intends to publish a consultation paper in February 2019. • In addition to the work being undertaken through the PSOWG on individual features of the power system security arrangements, the PUO is looking at the architecture and governance of those arrangements, such as what aspects should be covered in the Market Rules, the Technical Rules and the Network Quality and Reliability of Supply Code. A paper on this subject is expected to be published in early 2019. • The PUO has sent the final report for the proposed RCM pricing changes to the Minister for endorsement, and has started work on drafting the Amending Rules to implement those changes. The PUO plans to have the new rules in place to take effect from the 2019 Reserve Capacity Cycle. • The network access team is working on a Cabinet submission for approval to draft legislation to be introduced into Parliament in 2019. 	
	<p>Ms Ng asked about the outcomes of the submissions provided by stakeholders on the proposed constrained network access changes. Mr Martin replied that the PUO was working through the submissions and using them as input into the drafting process. In response to a question from Dr Gould, Mr Martin advised that the PUO was seeking approval to publish the submissions.</p>	
	<p>In response to a question from Mr Peake, Mr Martin clarified that there was no specific working group for market power mitigation. The PUO was working on the ERA's recommendations in relation to the Electricity Generation and Retail Corporation regulatory scheme, and drafting a paper to outline its future approach. A separate, second phase of reform would look at the new market design and consider what consequential changes were necessary to the market power mitigation arrangements.</p>	
	<p>Mr Martin noted that the MDOWG was not expected to meet until early 2019.</p>	
	<p>Mr Sharafi noted that the PSOWG had now met three times and gave an overview of the topics covered to date. Mr Sharafi advised that future meetings would cover further work on the constraint framework and the development of reliability standards.</p>	

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	<p>Mr Cremin questioned the basis for deciding what WEM Reform Program work was to be undertaken by AEMO and charged to Market Participants, vs what was to be undertaken by the PUO and paid by Government. Mr Martin replied that the working assumption was that the PUO would work on policy design matters while AEMO would look at operationalising the policy design. The PUO intended to take responsibility for all rule drafting.</p> <p>There was some discussion about the rationale for AEMO's early involvement in the market design process and how the program will be funded. Mr Cremin considered that the program costs are likely to be significant and the basis for allocating those costs was not logical.</p>	
7	<p>AEMO Procedure Change Working Group (APCWG) Update</p> <p>Mr Sharafi noted that AEMO's internal review of the new Monitoring and Reporting Protocol had taken longer than anticipated. Following discussions with the ERA, AEMO intended to conduct a further round of consultation in early 2019 because of the length of time that had passed since the formal consultation period.</p> <p>The MAC noted the update on AEMO's Market Procedures.</p>	
8(a)	<p>Overview of Rule Change Proposals</p> <p>The MAC noted the overview of Rule Change Proposals.</p>	
8(b)	<p>Indicative Rule Change Proposal Work Program</p> <p>The MAC noted the indicative Rule Change Proposal work program.</p>	
8(c)	<p>PRC RC_2018_06 – Full Runway Allocation of Spinning Reserve Costs</p> <p>Mr Martin noted that the PUO was seeking comments on its Pre-Rule Change Proposal: Full Runway Allocation of Spinning Reserve Costs (RC_2018_06) before its formal submission into the rule change process; and that the issue addressed by the proposal had been discussed by the MAC on several occasions.</p> <p>Ms Aditi Varma provided an overview of the Pre-Rule Change Proposal. The following points were discussed.</p> <ul style="list-style-type: none"> Mr Kurz noted that Bluewaters had raised concerns with the block method for Spinning Reserve cost allocation for several years, and thanked the PUO for developing the Pre-Rule Change Proposal. Mr Kurz considered that the full runway method is a more appropriate cost allocation method and would remove inefficiencies that affect the Bluewaters Facilities. Mr Kurz had no issues with the drafting of the proposal. 	

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	<ul style="list-style-type: none"> • Ms Varma noted that the drafting was reviewed by AEMO and RCP Support and updated to reflect their comments, but welcomed any further comments from members and observers. • Ms Varma advised that AEMO’s preliminary cost estimate was around \$250,000, but requested that AEMO review this figure and provide any new update. Mr Martin Maticka responded that based on its re-estimates, AEMO intended to include a range between \$220,000 and \$290,000 for the proposal in its Allowable Revenue submission for the July 2019-June 2022 Review Period. • Mrs Jacinda Papps asked whether the magnitude of the proposal’s benefits had been assessed. Ms Varma replied that the PUO undertook some static analysis using 2017 historical data, which indicated, for example, that smaller generators were able to receive benefits of up to \$1 million across generators. <p>Mr Cremin considered that the issue with the current block methodology was that it deterred Market Generators from offering inexpensive capacity into the Balancing Market and reducing the Balancing Price. Mr Cremin asked whether any analysis had been done on effects of removing this disincentive on energy costs. Ms Varma replied that the PUO had not undertaken this analysis but agreed it might be worth undertaking.</p> <p>In response to a question from Mr Cremin, Mr Kurz advised that while Bluewaters had only assessed the effect on its own dispatch levels, the removal of the effective 200 MW cap imposed by the block method would encourage it to offer additional low-cost capacity into the Balancing Market.</p> <p>Ms Varma agreed to take the question on notice and report back to the MAC. Mr Cremin expected that the analysis would show potential savings of millions of dollars per year, and considered the change should have been made when it was first suggested in 2014.</p> <ul style="list-style-type: none"> • The Chair noted that the MAC and the Panel previously assigned a Medium urgency rating to the issue. There was some discussion about the relative urgency of the Pre-Rule Change Proposal compared with other proposals that were either open or likely to be submitted in the near future, such as the Pre-Rule Change Proposal: Removal of constrained off compensation for network outages (RC_2018_07). The MAC agreed that RC_2018_06 should retain its Medium urgency rating. • Mrs Papps considered that the issue of new generator connections on a single line increasing the Spinning Reserve 	

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	<p>requirement was a higher priority issue than the one being addressed by RC_2018_06.</p> <ul style="list-style-type: none"> • Most MAC members and observers were supportive of the proposal and its submission into the formal rule change process. However, Mr Will Bargmann advised that Synergy was not yet able to provide comments on the proposal, and intended to do so as part of the formal consultation process. • Mrs Papps asked how AEMO intended to rank two Facilities with the same output level in a Trading Interval. There was general agreement that the choice of method would have no effect on the cost allocation outcomes. 	
	<p>Action: The PUO to consider undertaking further analysis to assess the likely effect on energy market prices of moving to a full runway approach for Spinning Reserve cost allocation.</p>	<p>PUO</p>
8(d)	<p>PRC RC_2018_07 – Removal of constrained off compensation for Network Outages</p> <p>Mr Martin noted that the issue addressed by the Pre-Rule Change Proposal: Removal of constrained off compensation for Network Outages (RC_2018_07) was identified as a high priority issue at the 12 September 2018 MAC meeting. The MAC workshop held to consider the issue on 24 October 2018 focussed on constrained off payments due to network outages and different options to remove those payments. Workshop attendees agreed that option 3 (requiring AEMO to issue an Operating Instruction where a Facility is constrained off due to a network outage) was the most preferable, and the PUO committed to draft a Rule Change Proposal to take the matter forward.</p> <p>Mr Martin noted that the PUO engaged Ms Erin Stone to assist it with the development of the Rule Change Proposal. The PUO hoped that, with high-level support from the MAC, the proposal could be implemented by around April 2019, to address any issues that may arise if there is a seasonal aspect to the network outages that caused the high constraint payments in 2018.</p> <p>Ms Stone provided the MAC with an overview of the Pre-Rule Change Proposal. Ms Stone noted that the proposal would need to be progressed using the Standard Rule Change Process and reiterated Mr Martin’s suggestion that it be progressed as quickly as possible under that process. The following points were discussed.</p> <ul style="list-style-type: none"> • Ms Ng asked whether Operating Instructions were to be issued for all or only some network outages. Ms Laidlaw noted that the intention discussed at the workshop was that if System Management dispatched a Scheduled Generator or Non-Scheduled Generator down out of merit because of a 	

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	<p>network outage, then afterwards it would issue an Operating Instruction for the period to the Market Generator, which would switch off any constraint payments.</p>	
	<ul style="list-style-type: none"> Mrs Papps asked whether a Market Generator might receive an Operating Instruction that dealt with some past intervals and some future intervals. Ms Laidlaw questioned the need to issue Operating Instructions in advance because the current Dispatch Advisory and Dispatch Instruction mechanisms were sufficient to meet the operational requirements. Ms Laidlaw agreed with Mrs Papps that the use of Operating Instructions was intended to be a retrospective settlement solution rather than an operational tool. 	
	<p>There was some discussion about where the retrospective nature of these Operating Instructions should be clarified (e.g. in the text of the Rule Change Proposal, the Power System Operation Procedure: Dispatch, or the Market Rules themselves).</p>	
	<ul style="list-style-type: none"> Mrs Papps questioned whether the proposed amendments would have an adverse effect on the certification of a Non-Scheduled Generator. There was general agreement that the output of a Non-Scheduled Generator should be estimated for the relevant certification Trading Intervals in the same way as if it had an approved Consequential Outage. 	
	<ul style="list-style-type: none"> Ms Laidlaw questioned whether Operating Instructions were issued to the Balancing Portfolio; and whether Synergy should be made ineligible for constraint payments because the output of one of its generators was reduced, since in most cases the output of another Synergy generator would be increased by a corresponding quantity. Mr Sharafi agreed to confirm how and whether Operating Instructions were used for the Balancing Portfolio and report back to the PUO and the MAC. 	
	<ul style="list-style-type: none"> Ms Ng asked whether consideration had been given to the implications of the proposal on a contracted Scheduled Generator that was constrained down because of a network outage and then obliged to buy energy from the Balancing Market to meet its contracted position. Ms Laidlaw noted that the proposed outcome is similar to the outcome for a Scheduled Generator that is disconnected by a network outage, in that the Market Generator does not have to pay Capacity Cost Refunds but is not eligible for any compensation. 	
	<p>Mr Peake suggested that Western Power should be required to pay compensation in these circumstances as an incentive to optimise its maintenance. Ms Kei Sukmadjaja noted that Western Power tries to minimise the impact of its outages as</p>	

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	<p>much as possible, but there are sometimes inevitable situations where network outages have to happen.</p> <ul style="list-style-type: none"> • In response to a question from Mr Cremin, Ms Stone and Mr Maticka confirmed that AEMO considered the implementation costs would be low. • Mr Kurz noted that Market Generators had specific obligations to respond to Operating Instructions and questioned whether the same obligations should apply to the proposed retrospective Operating Instructions. Ms Laidlaw replied that RCP Support was aware of the issue but considered it should be relatively easy to specify different response obligations for the retrospective Operating Instructions. <p>The MAC supported the submission of RC_2018_07 into the formal rule change process once the PUO had considered the issues raised during the MAC discussion. The MAC confirmed the High urgency rating it previously assigned to the proposal.</p>	
	<p>Action: AEMO to provide advice to the PUO and the MAC about how and whether Operating Instructions are used for the Balancing Portfolio.</p>	AEMO
8(e)	<p>Pre-PRC – Adjusting Non-STEM Settlements Using Latest Available Data</p> <p>Mr Hales gave a presentation to the MAC about two issues in the non-STEM settlement adjustment process that AEMO considers should be addressed by a change to the Market Rules. Mr Hales noted that AEMO wished to consult with the MAC, as required under clause 2.5.1A of the Market Rules, before commencing the development of a Rule Change Proposal to address the issues. A copy of the presentation is available in the meeting papers.</p> <p>Mrs Papps noted that she developed a Pre-Rule Change Proposal in 2012 to allow Minimum and Maximum TES values to be recalculated. Mrs Papps agreed it made sense to not recalculate prices, but did not understand why the recalculation of TES values, which are quantities rather than prices, was not allowed. Ms Laidlaw suggested that the restriction was mainly to avoid IT costs. Mr Hales advised that AEMO would consider whether the recalculation of TES values should be allowed as part of its development of the Rule Change Proposal.</p> <p>The MAC agreed that AEMO should develop a Pre-Rule Change Proposal to address the two issues raised in the presentation.</p>	
9	<p>Treatment of Storage Technologies in other Jurisdictions</p> <p>Dr Robins gave a presentation to the MAC on the treatment of storage technologies in other jurisdictions. A copy of the presentation</p>	

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	<p>is available in the meeting papers. The following points were discussed.</p>	
	<ul style="list-style-type: none"> • In response to a question from Mr Cremin, Dr Robins confirmed that previously in the Great Britain market any type of storage was assigned a capacity value equivalent to 96.11% of its rated capacity. However, the de-rating factor for 30-minute duration batteries was recently reduced from 96.11% to 17.89%. Mr Cremin considered the changes mirrored the WEM's experience with Demand Side Programmes. • Dr Robins noted a proposal in the Great Britain market to prohibit network operators from operating storage assets, due to the potential impacts on competition in the market. Mr Peake observed that Western Power was involved in various battery trials and micro-grid developments, but did not have a retail licence and was not required to comply with the obligations of a retail licence holder. Mr Cremin noted that network operators in the National Electricity Market were restricted from buying and selling electricity via storage assets except through a ring-fenced entity. • Mr Martin advised that the PUO was working with AEMO on how to facilitate energy storage in the WEM. The PUO considered the best option was for large scale storage to initially provide ancillary services via contract-based arrangements, with a view to having these facilities fully participate in the future ancillary service markets. 	
	<p>The PUO was also working with Tesla, AEMO and Western Power on options for storage; and intended to talk with the ERA about the findings of its investigations. The PUO's first focus was on the ancillary services that will be needed going forward, as it considered energy storage has a large role to play in the provision of those services.</p>	
	<p>Mr Martin noted that various small-scale storage trials were also underway, along with work on a virtual power plant proposal for the Goldfields.</p>	
	<ul style="list-style-type: none"> • Mr Noel Schubert considered that in some situations the quickest, easiest and most cost-effective solution was for a network company to install a battery or micro-grid; and that regulatory barriers should not inhibit sensible solutions. Mr Martin noted that the PUO intended to publish a paper in the near future on standalone power systems, and would be seeking consultation before looking at the different approaches that can be followed for standalone power systems. • Mr Cremin suggested that changes to the Individual Reserve Capacity Requirement rules could be used to incentivise the 	

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	<p>efficient use of small-scale storage; and that changes to the Technical Rules were also needed to remove unnecessary barriers to the participation of storage in the market.</p>	
	<ul style="list-style-type: none"> In response to a question from Mr Peake, Mr Martin advised that he was unaware of any current policy initiatives to subsidise batteries. 	
10	<p>Review of the MAC Constitution and MAC Appointment Guidelines and the 2019 MAC Composition Review</p>	
	<p>The Chair noted that on 13 November 2018 the Panel published an invitation for submissions on proposed amendments to the MAC Constitution and MAC Appointment Guidelines. The proposed amendments include, among other things, changes to more evenly distribute the terms for discretionary MAC members, so that an approximately even number of positions expire each year. This will address the current imbalance that has caused seven discretionary positions to expire in February 2019 but only two discretionary positions to expire in February 2020. The Chair advised that the submission period would close on 10 December 2018.</p>	
	<p>In addition, a call for nominations for the seven positions that are due to expire in February 2019 was due to be published at the end of November 2018.</p>	
	<p>In response to a question from Mr Maticka, the Chair advised that the Panel had not yet decided how it would determine which nominees to appoint for only one year.</p>	
	<p>Mr Maticka asked whether the composition review had considered situations where a member, whose tenure only covered another one or two meetings, left the MAC. The Chair replied that there was some discussion of this matter in the invitation for submissions.</p>	
	<p>Mr Maticka suggested that the Panel make its selection criteria less onerous to streamline the assessment process.</p>	
11	<p>MAC Schedule</p>	
	<p>The MAC noted the MAC meeting schedule for the remainder of 2018/19.</p>	
12	<p>General Business</p>	
	<p>The Chair noted that the ERA recently experienced a problem with its back-end systems, which delayed the publication of submissions received for the recent calls for further submissions on Rule Change Proposals: Omnibus Rule Change (RC_2014_07) and Removal of Market Operation Market Procedures (RC_2015_01). The problem has been corrected and the submissions are now available on the Panel's website.</p>	

The meeting closed at 12:05 PM.