



Meeting Agenda

Meeting Title:	Market Advisory Committee
Date:	Tuesday 14 December 2021
Time:	9:30 AM – 10:50 AM
Location:	<p>Level 1, 66 St. Georges Terrace (MAC members and statutory observers only)</p> <p>Observers who would like to attend the meeting are to seek approval from the Chair by noon on Friday 10 December 2021 by email to energymarkets@energy.wa.gov.au.</p> <p>Approved observers will be sent an invitation to attend the meeting online by COB on Monday 13 December 2021.</p>

Item	Item	Responsibility	Type	Duration
1	Welcome and Agenda	Chair	Noting	3 min
2	Meeting Apologies/Attendance	Chair	Noting	2 min
3	Minutes of Meeting 2021_11_02	Chair	Decision	5 min
4	Action Items	Chair	Discussion	5 min
5	Market Development Forward Work Program	Chair/Secretariat	Discussion	5 min
6	Update on Working Groups			
	(a) AEMO Procedure Change Working Group	AEMO	Discussion	5 min
7	Rule Changes			
	(a) Overview of Rule Change Proposals	Chair/Secretariat	Noting	5 min
8	Cost Allocation Review – Scope of Work and Working Group Formation	Chair	Decision	25 min
9	Update on the Amending Rules implementing the Energy Transformation Strategy	EPWA	Discussion	15 min
10	Schedule of MAC Meetings for 2022	Chair	Approval	5 min
11	General Business	Chair	Discussion	5 min

Item	Item	Responsibility	Type	Duration
	Next meeting: Tuesday 8 February 2022 (TBC)			

Please note, this meeting will be recorded.



Minutes

Meeting Title:	Market Advisory Committee (MAC)
Date:	2 November 2021
Time:	9:30am – 11:10am
Location:	Level 1, 66 St Georges Terrace, Perth

Attendees	Class	Comment ¹
Peter Kolf	Chair	
Martin Maticka	Australian Energy Market Operator (AEMO)	Videoconference (VC)
Dean Sharafi	AEMO	
Zahra Jabiri	Network Operator	VC
Jo-Anne Chan	Synergy	VC
Paul Keay	Small-Use Consumer Representative	
Noel Schubert	Small-Use Consumer Representative	
Geoff Gaston	Market Customer	
Timothy Edwards	Market Customer	
Patrick Peake	Market Customer	
Wendy Ng	Market Generator	
Jacinda Papps	Market Generator	VC to 10:45am
Tom Frood	Market Generator	VC
Peter Huxtable	Contestable Customer	
Noel Ryan	Observer appointed by the Minister	
Rajat Sarawat	Economic Regulation Authority (ERA) observer	VC

Also in Attendance	From	Comment
Dora Guzeleva	MAC Secretariat	Observer
Stephen Eliot	MAC Secretariat	Observer VC
Jenny Laidlaw	MAC Secretariat	Observer VC

¹ (VC) indicates attendance via videoconference

Also in Attendance	From	Comment
Laura Koziol	MAC Secretariat	Observer VC
Erin Stone	Point Global	Observer VC
Rebecca White	Collgar Wind Farm	Observer VC
Mark McKinnon	Western Power	Observer VC

Apologies	From	Comment
Daniel Kurz	Market Generator	

Item	Subject	Action
1	<p>Welcome</p> <p>The Chair opened the meeting at 9:30am with an Acknowledgement of Country and welcomed members and observers to the 2 November 2021 MAC meeting.</p> <p>The Chair reported that he had met with several parties since the last MAC meeting, including:</p> <ul style="list-style-type: none"> • Mr Simon Adams and Ms Caroline Brown (Squire Patton Boggs); and • Ms Sally McMahon (Sally McMahon and Associates). <p>The MAC noted these meetings and that there were no conflicts of interest.</p>	
2	<p>Meeting Apologies/Attendance</p> <p>The Chair noted the attendance as listed above.</p>	
3	<p>Minutes of Meeting 2021_09_21</p> <p>Draft minutes of the MAC meeting held on 21 September 2021 were circulated on 7 October 2021. The Chair noted that a revised draft of the minutes showing some changes was distributed in the meeting papers.</p> <p>The MAC accepted the revised minutes as a true and accurate record of the meeting.</p> <p>Action: MAC Secretariat to publish the minutes of the 21 September 2021 MAC meeting on the Coordinator's Website as final.</p>	MAC Secretariat
4	<p>Action Items</p> <p>The closed action items were taken as read.</p> <p><u>Action item 12/2021</u></p> <p>The Chair noted that the MAC Secretariat met with Mr Noel Schubert and Mr Dean Sharafi on 12 October 2021. The MAC agreed that action item 12/2021 be closed.</p>	

Item	Subject	Action
5	<p>Market Development Forward Work Program</p> <p>The paper was taken as read.</p> <p>Ms Dora Guzeleva noted that the MAC Secretariat had not received any requests to add additional items to the forward work program since the last meeting.</p> <p>Ms Guzeleva noted that the next MAC meeting is scheduled for 14 December 2021 and that any requests to add an issue to the work program will need to be provided to the MAC Secretariat by 1 December 2021.</p>	
6	<p>Update on Working Groups</p> <p>(a) AEMO Procedure Change Working Group (APCWG)</p> <p>Mr Martin Maticka noted that there are currently no open Procedure Change Proposals. Mr Maticka noted that AEMO held a workshop to discuss possible changes to the WEM Procedure: Prudential Requirements, that it was currently collating the feedback from the workshop and that it is planning to send out papers and invitations for an APCWG meeting by 1 December 2021.</p> <p>Mr Maticka noted that Mr Greg Ruthven had left AEMO and that Mr Stuart Featham would be the acting Chair of the APCWG while AEMO determined who would replace Mr Ruthven.</p>	
7	<p>Rule Changes</p> <p>(a) Overview of Rule Change Proposals</p> <p>The Chair noted that all open Rule Change Proposals are currently on hold and that:</p> <ul style="list-style-type: none"> • RC_2018_03 (Capacity Credit Allocation Methodology for Intermittent Generators), RC_2019_01 (The Relevant Demand calculation) and RC_2019_03 (Method used for the assignment of Certified Reserve Capacity to Intermittent Generators) will be addressed as part of the review of the Reserve Capacity Mechanism; and • RC_2014_05 (Reduced Frequency of the Review of the Energy Price Limits and the Maximum Reserve Capacity Price) and the Pre-Rule Change Proposal RC_2020_04 (Balancing Facility Loss Factor Adjustment) would likely be addressed by other work that is currently underway. 	
8	<p>Approval of the Terms of Reference for the Reserve Capacity Mechanism Working Group</p> <p>The Chair noted the paper.</p> <p>Ms Guzeleva noted that Energy Policy WA (EPWA) was seeking nominations for the Working Group and that members could be from within and outside of the MAC. Ms Guzeleva noted that Working Group members would be expected to contribute to the</p>	

Item	Subject	Action
	<p>work, including by assisting in the analysis and the development of papers.</p> <p>Mr Patrick Peake asked whether setting of the Reserve Capacity Price was within the scope of the Reserve Capacity Mechanism (RCM) Review. Mr Peake noted that the price regime has changed over the last 10 to 15 years and that the current price regime was discouraging investment. In particular, under the current price regime, an excess in renewable generation would reduce the Reserve Capacity Price for dispatchable generation even if there was a need to encourage dispatchable generation.</p> <p>Ms Guzeleva answered that the method of setting the Benchmark Reserve Capacity Price (BRCP) would be assessed under step 4 of the review but that the setting of the actual BRCP would remain the ERA's responsibility.</p> <p>Mr Peake emphasised that it is important to avoid setting up a mechanism that does not encourage investment.</p> <p>The Chair noted that stakeholders would have the opportunity to provide input on these aspects of the RCM during the review.</p> <p>Ms Wendy Ng asked if fuel requirements for the certification of Scheduled Generators would be assessed as part of the review. Ms Guzeleva answered that this would be assessed as part of Step 3.</p> <p>Mr Maticka noted that the RCM review should account for other ongoing work, such as the Whole of System Plan and the Distributed Energy Resources Road Map. Mr Maticka asked how these initiatives interrelate with the RCM Review. Ms Zahra Jabiri agreed that it is important to consider interdependencies with other work currently underway. Ms Guzeleva answered that EPWA would ensure that the review would account for interdependencies with related work and that EPWA is open to implementing any urgent changes in advance of finalising the review.</p> <p>Mr Maticka asked if any rule changes resulting from the review would be implemented by the Minister or through the formal Rule Change Process under the WEM Rules. Ms Guzeleva answered that the changes are expected to go through the formal Rule Change Process.</p> <p>Mr Maticka noted that AEMO agrees with the Terms of Reference for the Working Group.</p> <p>Ms Jabiri noted that Western Power supports the Terms of Reference for the Working Group.</p> <p>Ms Jabiri suggested including Dispatchable Loads in the RCM Review as it is becoming more important to be able to control loads. Ms Guzeleva noted that the WEM Rules do not currently give Dispatchable Loads access to all revenue streams in the WEM. Ms Guzeleva considered that the treatment of</p>	

Item	Subject	Action
	<p>Dispatchable Loads that are part of a Demand Side Programme and the participation of these loads in the energy market will be assessed as part of the RCM Review, but other aspects of Dispatchable Loads will have to be addressed outside of the RCM Review, most likely as part of the second stage of the Energy Transformation Strategy.</p> <p>Mr Schubert noted that loads should be able to bid into the wholesale market in the future. Ms Guzeleva clarified that loads will be able to register as Scheduled Facilities in the new market and will be available for dispatch.</p> <p>Mr Schubert noted that the <u>applicable</u> reliability criteria <u>criterion</u> has historically been about high demand situations, but high system stress is now also happening in low load situations in the middle of the day.</p> <p>Mr Sharafi noted that some system stress situations would need to be addressed outside of the RCM.</p> <p>Ms Jabiri asked about the extent to which Dispatchable Loads would be assessed under the RCM Review. Mr Tom Froid agreed that Dispatchable Loads should be considered.</p> <p>Ms Guzeleva clarified that the participation of Dispatchable Loads in the RCM is in scope for the review, but not participation in the energy market. Any related issues identified during the RCM Review will be logged and a separate study would be needed to holistically assess Dispatchable Loads.</p> <p>The Chair suggested including the holistic assessment of Dispatchable Loads in the WEM in the MAC forward work program. Ms Guzeleva agreed that this could be added if the MAC wanted, but no further comments were made.</p> <p>Ms Jabiri asked about the process for nominating representatives for the Working Group. Ms Guzeleva indicated that nominations should be made to the MAC Secretariat email address by the end of Tuesday 9 November 2021 (NB: the deadline was later extended to close of business Thursday 11 November 2021).</p> <p>Ms Guzeleva indicated that EPWA would chair the Working Group and that EPWA was in the process of procuring a consultant for the RCM Review.</p> <p>Mrs Papps asked if Working Group members could bring different subject matter experts to different meetings.</p> <p>Mrs Papps and Mr Sharafi considered that this would be important to get the most value out of the Working Group.</p> <p>Ms Guzeleva indicated that different subject matter experts could attend Working Group meetings as long as they had the capacity to contribute to the work and it did not contribute to unnecessarily revisiting issues.</p>	

Item	Subject	Action
	<p>Mr Rajat Sarawat asked if the definition of capacity would be assessed as part of the review. Mr Sarawat considered it is important to debate the definition of capacity to avoid a highly inefficient outcome.</p> <p>Ms Guzeleva answered that the definition of capacity should be addressed early in the review when assessing which system stress situations should be addressed by the RCM or by Essential System Services (ESS).</p> <p>The MAC approved the Terms of Reference for the RCM Review Working Group.</p>	
9	<p>Scope of Works for the Cost Allocation Review</p> <p>The Chair noted the papers for Agenda Item 9 and asked the MAC to discuss the draft Scope of Works for the Cost Allocation Review.</p> <p>Mr Sharafi indicated that AEMO supports commencement of the review as it will help the long-term efficiency of the market and reduce ESS costs.</p> <p>Mr Mark McKinnon asked what the nomination process would be for the Working Group for the Cost Allocation Review. Ms Guzeleva indicated that the plan was for the MAC to discuss the Terms of Reference for the Working Group at its next meeting and to seek nominations after that.</p> <p>Mr Sharafi suggested that the Scope of Works should be specific about what is not in scope of the review, such as network charges. Ms Guzeleva agreed that this can be done.</p> <p>Ms Rebecca White asked if all of the settlement equations in Chapter 9 that include cost recovery components would be reviewed. Ms Guzeleva answered that the review will not duplicate the work done in the previous year. Ms Guzeleva noted that the allocation of Contingency Raise and Contingency Lower costs was sending a good signal to the causers of these requirements, but that the allocation of Regulation costs need further review. Ms White considered that it will be difficult to implement a better cost allocation for Regulation services until 5-minute meter data is available. There was further discussion about the complications of implementing a causer-based allocation of Regulation services cost.</p> <p>Ms Jo-Anne Chan noted that a lot of work is underway (commencement of the new market, development of the Energy Rules WA and transitioning to a 5-minute settlement) and that the impact of the new ESS markets is currently unknown. Therefore, Ms Chan suggested delaying the Cost Allocation Review by two years.</p> <p>Mr Sharafi indicated that 5-minute meter data is not needed to establish the demand for ESS because SCADA data can be used.</p>	

Item	Subject	Action
	<p>Mr Sharafi indicated that the Cost Allocation Review can also have benefits in terms of reducing the volatility of intermittent generators, so it is important to deal with this issue now.</p>	
	<p>Mr Schubert agreed that it is important to commence the review now.</p>	
	<p>Ms White agreed that using SCADA data might be technically feasible but indicated that regulatory barriers to use of SCADA data for settlement of Regulation costs arose under the <i>National Measurements Act</i>. This is not just a mathematical exercise, there are regulatory challenges, as we cannot change the <i>National Measurements Act</i>.</p>	
	<p>Mr Schubert suggested that work could be done to understand who should be allocated Regulation costs before a decision is made on the data <u>needed</u> – a decision could be made down the track if it is found that there is not sufficient data to operationalise the rules.</p>	
	<p>Mr Sharafi indicated that it will be difficult to operate the system with the increased penetration of intermittent generation if there is no incentive to firm the intermittent capacity.</p>	
	<p>The Chair suggested that there is a real need to proceed with the work, but that some issues may need to be attended to later.</p>	
	<p>Ms Guzeleva suggested that the Scope of Works needs to be clearer on the staging of the review – a general policy review of the key objectives needs to be done first and then practical matters can be considered.</p>	
	<p>Mr Sharafi reiterated his concerns about the increased level of intermittent generation on the system and indicated that this issue has been dealt with elsewhere by requiring intermittent generation to firm up their capacity when they bid into the market. Mr Sharafi indicated that some markets obtain increased certainty by:</p>	
	<ul style="list-style-type: none"> • not taking energy from intermittent generators above what they forecast; and • charging intermittent generators for ESS if they provide energy below their forecast. 	
	<p>Mr Geoff Gaston indicated that it is also important to consider Market Fees and recommended that consideration should be given to the philosophy of charging Market Fees on a per megawatt-hour basis. Mr Gaston also suggested that consideration should be given to splitting Market Fees between fixed and variable prices.</p>	
	<p>Ms Guzeleva indicated that some desktop research can be done on this issue in step 1 of the review but suggested that this may be a very complex and high cost proposition.</p>	
	<p>The Chair suggested that the Cost Allocation Review needs to move forward and asked the MAC to come to a view on whether the review should proceed, subject to some further planning on the stages for the review.</p>	

Item	Subject	Action
	<p>Ms Guzeleva indicated that a revised Scope of Works for the review and a Terms of Reference for a MAC Working Group can be tabled at the December 2021 MAC meeting for review and approval.</p> <p>Mr McKinnon asked for clarification of the statement at the bottom of page 2 of the draft Scope of Works that "...at least initially, AEMO will recover costs for NCESS contracts from Market Participants based on the proportion of their Load's metered consumption to total consumption."</p> <p>Ms Guzeleva indicated that cost recovery for NCESS is complex because both AEMO and Western Power can procure NCESS, and for different reasons. Ms Guzeleva indicated that it is difficult to conceptualise a single method to allocate these costs to the parties that cause them, so the rules will initially take a simple approach.</p> <p>Mr McKinnon sought clarification that the initial approach is to recover NCESS costs from market participants based on loads' metered consumption versus total consumption, and that this approach may change following this review. Ms Guzeleva confirmed that this is the case.</p> <p>Ms Guzeleva indicated that work has not been done on what services may be procured by AEMO and Western Power under the NCESS, so a simple cost allocation method will be used to allow the NCESS framework to commence in early 2022.</p> <p>Mr Tim Edwards indicated that the biggest over-simplification in the cost allocation method is that the allocation is proportioned on a monthly basis rather than on a per interval basis, so some participants are paying a lot more for load following than those that cause the issue. Mr Edwards suggested that it would be a simple rule change to correct this.</p> <p>Ms Guzeleva indicated that AEMO is going through a massive exercise to move the market from monthly aggregation to five-minute dispatch and settlement. Ms Guzeleva suggested that it would not be appropriate, in the middle of this process, to make a change to charge frequency control services on a more frequent basis, particularly given that the new market start date has been delayed by 12 months because AEMO and market participants are struggling to make the current changes.</p> <p>Mr Maticka observed that there are two reviews underway, plus the DER Roadmap, and we still have to make the changes to commence five-minute settlement. Mr Maticka commented that the MAC needs to be clear about the boundaries for what is to be covered under the each of these initiatives to ensure we are not covering issues twice and needs to make sure that the highest impact items are dealt with as a priority.</p> <p>Mr Sharafi indicated that the Scope of Works for the Cost Allocation Review needs to be very focused.</p>	

Item	Subject	Action
	<p>The MAC confirmed that it supports commencement of the Cost Allocation Review, subject to reviewing the revised Scope of Works in December 2021.</p> <p>Acton: MAC Secretariat to table a revised Scope of Works for the Cost Allocation Review and a Terms of Reference for a Cost Allocation Review Working Group for review and approval at the 14 December 2021 MAC meeting.</p>	<p>MAC Secretariat</p>
<p>10</p>	<p>Use of Flexible Loads to address Low Load Issues in the SWIS</p> <p>The Chair noted that Mr Schubert had prepared a paper for Agenda Item 10 and invited Mr Schubert to provide an overview.</p> <p>Mr Schubert noted that two presentations at the last MAC meeting considered issues with managing low load:</p> <ul style="list-style-type: none"> • “The View from the Cockpit” by Mr Sharafi; and • “Low Load Project” by Mr Noel Ryan, Ms Teresa Smit and Mr Nathan Kirby. <p>Mr Schubert noted that there is flexible load in the market that could help increase demand in low load situations <u>if it had the right commercial incentives</u>. Mr Schubert indicated that he is interested in two types of flexible load <u>(as described in the paper)</u>:</p> <ul style="list-style-type: none"> • Dispatchable Load, <u>dispatched when it is needed</u>; and • <u>Non-dispatchable flexible</u> load that could be encouraged to <u>move to, or turn on in, low load times temporarily or permanently, without being dispatched</u>. <p>Mr Schubert indicated <u>gave some</u> examples of each type of flexible loads, <u>elaborating on some listed in the paper</u>.</p> <p>Mr Schubert questioned why some flexible loads are not shifting consumption to the middle of the day when the wholesale market prices are low or negative, and suggested that this is likely because incentives have not been passed through to the customers.</p> <p>Mr Schubert asked the MAC whether bilateral contracts between generators and retailers or wholesale customers are inhibiting flexible load to move to the middle of the day.</p> <p>Ms Jacinda Papps stated <u>indicated</u> that the MAC should not discuss terms and conditions of customer contracts and that this discussion is edging into areas with <u>has potential</u> competition law issues.</p> <p><u>The Chair suggested that the MAC could discuss contracts in general terms.</u></p> <p>Ms Papps excused herself from the meeting at 10:45am.</p> <p>Mr Peter Huxtable indicated that Western Power tariffs, <u>such as the RT5 and RT6 reference tariffs with their rolling twelve-month maximum demand charges</u>, inhibit the Water Corporation from doing things with their flexible loads. Ms Dora Guzeleva noted that Western Power is going through an Access Arrangement process</p>	

Item	Subject	Action
	<p>and the issues noted by Mr Huxtable can be conveyed to Western Power and the ERA.</p> <p>Ms Ng indicated that she also would not be able to discuss contractual matters. Ms Guzeleva noted several other online participants have indicated they would also not be able to continue with the discussion (Ms Chan, Ms White and Mr Sarawat).</p> <p>Ms Jabiri advised that Western Power was available to discuss tariff-related matters directly with market participants.</p> <p>The Chair noted EPWA needs to understand the drivers for flexible loads to make recommendations on tariffs that will incentivise customer responses. Ms Guzeleva noted that EPWA is working on flexible load issues and referred to the “Low Load” presentation at the last MAC meeting.</p> <p>Mr Sharafi noted that, from a system security perspective, orchestration of load is an integral part of any successful energy transition, and we need to somehow make the load flexible, such as through the DER Roadmap.</p> <p>The Chair indicated that the Low Load Project is underway, and Ms Guzeleva also pointed out that EPWA is managing some tariff pilots.</p>	
11	<p>General Business</p> <p>Mr Timothy Edwards noted that the closure of WA borders due to COVID-19 restrictions was impeding development and implementation of much needed internationally-funded storage-based investments <u>in the SWIS</u>. Mr Edwards noted concern that these impediments may divert some of the needed investment to other countries. Mr Edwards asked if there was a mechanism for the MAC to request conditional exemptions for such investments to ensure WA is not missing the opportunity to get the needed electrical storage.</p> <p>The Chair noted that he expects that the Government is aware of this. The Chair considered that there was nothing that he could do about the issue but that he would raise the matter with the Coordinator.</p>	
	<p>The meeting closed at 11:10am.</p>	



Agenda Item 4: MAC Action Items

Market Advisory Committee (**MAC**) Meeting 2021_12_14

Shaded	Shaded action items are actions that have been completed since the last MAC meeting.
Unshaded	Unshaded action items are still being progressed.
Missing	Action items missing in sequence have been completed from previous meetings and subsequently removed from log.

Item	Action	Responsibility	Meeting Arising	Status
12/2021	MAC Secretariat to meet with Mr Noel Schubert to discuss mechanisms to develop options to increase the role of loads in addressing low load issues.	MAC Secretariat	2021_09_21	Closed The MAC Secretariat met with Mr Schubert and Mr Dean Sharafi on 14 October 2021 and the MAC discussed this matter at its meeting on 2 November 2021 (Agenda Item 10).
17/2021	MAC Secretariat to publish the minutes of the 21 September 2021 MAC meeting on the Coordinator's Website as final.	MAC Secretariat	2021_11_02	Closed The minutes were published on the Coordinator's Website on 24 November 2021.

Item	Action	Responsibility	Meeting Arising	Status
18/2021	MAC Secretariat to table a revised Scope of Work for the Cost Allocation Review and a Terms of Reference for a Cost Allocation Review Working Group for review and approval at the 14 December 2021 MAC meeting.	MAC Secretariat	2021_11_02	<p>Closed</p> <p>The revised draft Scope of Work for the Cost Allocation Review and the draft Terms of Reference for the Cost Allocation Review Working Group are tabled for discussion by the MAC under Agenda Item 8.</p>



Agenda Item 5: Market Development Forward Work Program

Market Advisory Committee (**MAC**) Meeting 2021_12_14

The Market Development Forward Work Program is provided in Table 1.

In addition:

- Table 2 lists the issues to be considered in the review of the Reserve Capacity Mechanism (**RCM Review**);
- Table 3 lists the issues to be considered in the review of the allocation of Market Fees and Essential System Services (**ESS**) costs (**Cost Allocation Review**); and
- Table 4 lists other issues to be addressed via the Market Development Forward Work Program.

Stakeholders may raise issues for consideration by the MAC at any time by sending an email to the MAC Secretariat at energymarkets@energy.wa.gov.au. Stakeholders should submit issues for consideration by the MAC two weeks before a MAC meeting so that the MAC Secretariat can include the issue in the papers for the MAC meeting, which are circulated one week before the meeting.

Recommendation

The MAC Secretariat recommends that the MAC reviews and discusses the updates to the Market Development Forward Work Program.

Table 1 – Market Development Forward Work Program

Review	Issues	Status and Next Steps
RCM Review	A review of the RCM, including a review of the Planning Criterion.	<ul style="list-style-type: none"> • The MAC Secretariat is in the process of procuring a consultant to assist with the RCM Review. The period for lodging offers has closed and the offers are being assessed. • The MAC has formed the RCM Review Working Group. A web page has been created for the Working Group at https://www.wa.gov.au/government/document-collections/reserve-capacity-mechanism-review-working-group that includes: <ul style="list-style-type: none"> ○ the Scope of Works for the RCM Review; ○ the Terms of Reference for RCM Review Working Group; and ○ information on membership of the RCM Review Working Group. • The MAC Secretariat has not yet scheduled the initial meeting for the RCM Review Working Group because it could not identify a time in early December 2021 when all members are available and because the consultant has not yet been engaged.
Cost Allocation Review	A review of: <ul style="list-style-type: none"> • the allocation of Market Fees, including behind the meter (BTM) and Distributed Energy Resources (DER) issues; • cost allocation for Essential System Services; and • Issues 2, 16, 23 and 35 from the MAC Issues List (see Table 3). 	<ul style="list-style-type: none"> • The MAC Secretariat has: <ul style="list-style-type: none"> ○ updated the draft Scope of Work for the Cost Allocation Review; and ○ drafted a Terms of Reference for a Cost Allocation Review for consideration by the MAC – see Agenda Item 9. • Under Agenda Item 8, the MAC is asked to: <ul style="list-style-type: none"> ○ support commencement of the Cost Allocation Review; ○ review and provide comments on the updated Scope of Work; ○ approve the creation of the Cost Allocation Review Working Group; and ○ approve the Terms of Reference for the Working Group.

Table 1 – Market Development Forward Work Program

Review	Issues	Status and Next Steps
Procedure Change Process Review	A review of the WEM Procedure Change Process to address issues identified through Energy Policy WA's consultation on governance changes.	<ul style="list-style-type: none"> This review will commence in mid-2022.
Forecast quality	Review of Issue 9 from the MAC Issues List (see Table 4).	<ul style="list-style-type: none"> This review has been deferred.
Network Access Quantity (NAQ) Review	Assess the performance of the NAQ regime, including policy related to replacement capacity, and address issues identified during implementation of the Energy Transformation Strategy (ETS).	<ul style="list-style-type: none"> This review will be commenced after completion of the RCM Review.
Short Term Energy Market (STEM) Review	Review the performance of the STEM to address issues identified during implementation of the ETS.	<ul style="list-style-type: none"> This review has been deferred.

Table 2 – Issues to be Addressed in the RCM Review

Id	Submitter/Date	Issue	Status
1	Shane Cremin November 2017	<p>IRCR calculations and capacity allocation</p> <p>There is a need to look at how IRCR and the annual capacity requirement are calculated (i.e. not just the peak intervals in summer) along with recognising BTM solar plus storage. The incentive should be for retailers (or third-party providers) to reduce their dependence on grid supply during peak intervals, which will also better reflect the requirement for conventional ‘reserve capacity’ and reduce the cost per kWh to consumers of that conventional ‘reserve capacity’.</p>	To be considered in the RCM Review.
3	Shane Cremin November 2017	Penalties for outages.	To be considered in the RCM Review.
4	Shane Cremin November 2017	Incentives for maintaining appropriate generation mix.	To be considered in the RCM Review.
14/36	Bluewaters and ERM Power November 2017	<p>Capacity Refund Arrangements:</p> <p>The current capacity refund arrangement is overly punitive as Market Participants face excessive capacity refund exposure. This refund exposure is well more than what is necessary to incentivise the Market Participants to meet their obligations for making capacity available. Practical impacts of such excessive refund exposure include:</p> <ul style="list-style-type: none"> • compromising the business viability of some capacity providers – the resulting business interruption can compromise reliability and security of the power system in the SWIS; and • excessive insurance premiums and cost for meeting prudential support requirements. 	To be considered in the RCM Review.

Table 2 – Issues to be Addressed in the RCM Review

Id	Submitter/Date	Issue	Status
		<p>Bluewaters recommended imposing seasonal, monthly and/or daily caps on the capacity refund. Bluewaters considered that reviewing capacity refund arrangements and reducing the excessive refund exposure is likely to promote the Wholesale Market Objectives by minimising:</p> <ul style="list-style-type: none"> • unnecessary business interruption to capacity providers and in turn minimising disruption to supply availability; which is expected to promote power system reliability and security; and <p>unnecessary excessive insurance premium and prudential support costs, the saving of which can be passed on to consumers.</p>	
30	Synergy November 2017	<p>Reserve Capacity Mechanism</p> <p>Synergy would like to propose a review of WEM Rules related to reserve capacity requirements and reserve capacity capability criteria to ensure alignment and consistency in determination of certain criteria. For instance:</p> <ul style="list-style-type: none"> • assessment of reserve capacity requirement criteria, reserve capacity capability and reserve capacity obligations; • IRCR assessment; • Relevant Demand determination; • determination of NTDL status; • Relevant Level determination; and • assessment of thermal generation capacity. <p>The review will support Wholesale Market Objectives (a) and (d).</p>	To be considered in the RCM Review.

Table 2 – Issues to be Addressed in the RCM Review

Id	Submitter/Date	Issue	Status
56	Perth Energy July 2019	<p>Issues with Reserve Capacity Testing</p> <ul style="list-style-type: none"> Market Generators that fail a Reserve Capacity Test may prefer to accept a small shortfall in a test (and a corresponding reduction in their Capacity Credits) than to run a second test. There is a discrepancy between the number of Trading Intervals for self-testing vs. AEMO testing. There is ambiguity in the timing requirements for a second test when the relevant generator is on an outage. <p>There is ambiguity on the number of Capacity Credits that AEMO is to assign when certain test results occur.</p>	To be considered in the RCM Review (except that the first bullet may be out scope, in which case it will be added to Table 4).
58	MAC October 2019	<p>Outage scheduling for dual-fuel Scheduled Generators</p> <p>'0 MW' outages are currently used to notify System Management when a dual-fuel Scheduled Generator is unable to operate on one of its nominated fuels. There is no explicit obligation in the WEM Rules or the Power System Operation Procedure: Facility Outages to request/report outages that limit the ability of a Scheduled Generator to operate using one of its fuels. In terms of the provision of sent out energy (the service used to determine Capacity Cost Refunds), it is questionable whether this situation qualifies as an outage at all.</p> <p>More generally, the WEM Rules lack clarity on the nature and extent of a Market Generator's obligations to ensure that its Facility can operate on the fuel used for its certification, what (if anything) should occur if these obligations are not met, and the implications for outage scheduling and Reserve Capacity Testing.</p> <ul style="list-style-type: none"> (See section 7.2.2.5 of the Final Rule Change Report for RC_2013_15.) 	To be considered in the RCM Review (or may be out of scope, in which case it will be added to Table 4).

Table 3 – Issues to be Addressed in the Cost Allocation Review

Id	Submitter/Date	Issue	Status
2	Shane Cremin November 2017	Allocation of market costs – who bears Market Fees and who pays for grid support services with less grid generation and consumption?	To be considered in the Cost Allocation Review.
16	Bluewaters November 2017	<p>BTM generation is treated as reduction in electricity demand rather than actual generation. Hence, the BTM generators are not paying their fair share of the network costs, Market Fees and ancillary services charges.</p> <p>Therefore, the non-BTM Market Participants are subsidizing the BTM generation in the WEM. Subsidy does not promote efficient economic outcome.</p> <p>Rapid growth of BTM generation will only exacerbate this inefficiency if not promptly addressed.</p> <p>Bluewaters recommends changes to the WEM Rules to require BTM generators to pay their fair share of the network costs, Market Fees and ancillary services charges.</p> <p>This is an example of a regulatory arrangement becoming obsolete due to the emergence of new technologies. Regulatory design needs to keep up with changes in the industry landscape (including technological change) to ensure that the WEM continues to meet its objectives.</p> <p>If this BTM issue is not promptly addressed, there will be distortion in investment signals, which will lead to an inappropriate generation facility mix in the WEM, hence compromising power system security and in turn not promoting the Wholesale Market Objectives.</p>	To be considered in the Cost Allocation Review.
23	Bluewaters November 2017	<p>Allocation of Market Fees on a 50/50 basis between generators and retailers may be overly simplistic and not consider the impacts on economic efficiency.</p> <p>In particular, the costs associated with an electricity market reform program should be recovered from entities based on the benefit they receive from the</p>	To be considered in the Cost Allocation Review.

Table 3 – Issues to be Addressed in the Cost Allocation Review

Id	Submitter/Date	Issue	Status
		<p>reform. This is expected to increase the visibility of (and therefore incentivise) prudence and accountability when it comes to deciding the need and scope of the reform.</p> <p>Recommendations: to review the Market Fees structure including the cost recovery mechanism for a reform program.</p> <p>The cost saving from improved economic efficiency can be passed on to the end consumers, hence promoting the Wholesale Market Objectives.</p>	
35	ERM Power November 2017	<p>BTM generation and apportionment of Market Fees, ancillary services, etc.</p> <p>The amount of solar PV generation on the system is increasing every year, to the point where solar PV generation is the single biggest unit of generation on the SWIS. This category of generation has a significant impact on the system and we have seen this in terms of the daytime trough that is observed on the SWIS when the sun is shining. The issue is that generators that are on are moving around to meet the needs of this generation facility but this generation facility, which could impact system stability, does not pay its fair share of the costs of maintaining the system in a stable manner. That is, they are not the generators that receive its fair apportionment of Market Fees and pay any ancillary service costs but yet they have absolute freedom to generate into the SWIS when the fuel source is available. There needs to be equity in this equation.</p>	To be considered in the Cost Allocation Review.

Table 4 – Other Issues

Id	Submitter/Date	Issue	Status
9	Community Electricity November 2017	Improvement of AEMO forecasts of System Load; real-time and day-ahead.	Consideration of this issue has been deferred.
22	Bluewaters November 2017	<p>Prudential arrangement design issue: clause 2.37.2 of the WEM Rules enables AEMO to review and revise a Market Participant’s Credit Limit at any time. It is expected that AEMO will review and increase Credit Limit of a Market Participant if AEMO considers its credit exposure has increased (for example, due to an extended plant outage event).</p> <p>In response to the increase in its credit exposure, clause 2.40.1 of the WEM Rules and section 5.2 of the Prudential Procedure allow the Market Participant to make a voluntary prepayment to reduce its Outstanding Amount to a level below its Trading Limit (87% of the Credit Limit).</p> <p>Under the current WEM Rules and Prudential Procedure, AEMO can increase the Market Participant’s Credit Limit (hence increasing its prudential support requirement) despite that a prepayment has already been paid (it is understood that this is AEMO’s current practice).</p> <p>The prepayment would have already served as an effective means to reduce the Market Participant’s credit exposure to an acceptable level. Increasing the Credit Limit in addition to this prepayment would be an unnecessary duplication of prudential requirement in the WEM.</p> <p>This unnecessary duplication is likely to give rise to higher-than-necessary prudential cost burden in the WEM; which creates economic inefficiency that is ultimately passed on the end consumers.</p>	<p>AEMO held an AEMO Procedure Change Working Group (APCWG) meeting on 30 November 2021 to discuss amendments to the WEM Procedure: Prudential Requirements that are intended to address this issue. AEMO will provide an update on this meeting under Agenda Item 6(a).</p> <p>At its meeting on 21 September 2021, the MAC agreed to keep Issue 22 open until it is clear whether AEMO’s Procedure Change Proposal to amend the WEM Procedure: Prudential Requirements will address all of Issue 22.</p>

Table 4 – Other Issues

Id	Submitter/Date	Issue	Status
		<p>Recommendation: amend the WEM Rules and/or procedures to eliminate the duplication of prudential burden on Market Participants.</p> <p>The resulting saving from eliminating this unnecessary prudential burden can be passed on to end consumers. This promotes economic efficiency and therefore the Wholesale Market Objectives.</p>	

MARKET ADVISORY COMMITTEE MEETING, 14 December 2021

FOR NOTING

SUBJECT: UPDATE ON AEMO'S MARKET PROCEDURES

AGENDA ITEM: 6(A)

1. PURPOSE

Provide a status update on the activities of the AEMO Procedure Change Working Group and AEMO Procedure Change Proposals.

2. AEMO PROCEDURE CHANGE WORKING GROUP (APCWG)

	Most recent meetings	Next meeting
Date	30 November 2021	TBC
Market Procedures for discussion	Market Procedure: Prudential Arrangement	TBC

3. AEMO PROCEDURE CHANGE PROPOSALS

The status of AEMO Procedure Change Proposals is described below, current as at 14 December 2021. Changes since the previous MAC meeting are in **red text**. A procedure change is removed from this report after its commencement has been reported or a decision has been taken not to proceed with a potential Procedure Change Proposal.

ID	Summary of changes	Status	Next steps	Indicative Date
AEPC_2021_04	Changes to reduce the Credit Limit assessment period and to correlate STEM and Non-STEM exposure for calculation of a Market Participant's Credit Limit	Call for Submissions is being drafted	Consultation Period Opens	17/12/2021



Agenda Item 7(a): Overview of Rule Change Proposals (as at 7 December 2021)

Market Advisory Committee (**MAC**) Meeting 2021_12_14

- Changes to the report since the previous MAC meeting are shown in **red font**.
- The next steps and the timing for the next steps are provided for Rule Change Proposals that are currently being actively progressed by the Coordinator of Energy (**Coordinator**) or the Minister.

Indicative Rule Change Activity Until the Next MAC Meeting

Reference	Title	Events	Indicative Timing
RC_2014_05	Reduced Frequency of the Review of the Energy Price Limits and the Maximum Reserve Capacity Price	Publication of extension notice to extend the deadline for the Draft Rule Change Report to 31/12/2022.	Mid-December 2021
RC_2018_03	Capacity Credit Allocation Methodology for Intermittent Generators	Publication of extension notice to extend the deadline for the Draft Rule Change Report to 31/12/2022.	Mid-December 2021
RC_2019_01	The Relevant Demand calculation	Publication of extension notice to extend the deadline for the Draft Rule Change Report to 31/12/2022.	Mid-December 2021
RC_2019_03	Method used for the assignment of Certified Reserve Capacity to Intermittent Generators	Publication of extension notice to extend the deadline for the Final Rule Change Report to 31/12/2022.	Mid-December 2021

Rule Change Proposals Commenced since the Report presented at the last MAC Meeting

Reference	Submitted	Proponent	Title	Commenced
None				

Rule Change Proposals Awaiting Commencement

Reference	Submitted	Proponent	Title	Commencement
None				

Rule Change Proposals Rejected since Report presented at the last MAC Meeting

Reference	Submitted	Proponent	Title	Rejected
None				

Rule Change Proposals Awaiting Approval by the Minister

Reference	Submitted	Proponent	Title	Approval Due Date
None				

Formally Submitted Rule Change Proposals

Reference	Submitted	Proponent	Title	Urgency	Next Step	Date
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Fast Track Rule Change Proposals with Consultation Period Closed

None						
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Fast Track Rule Change Proposals with Consultation Period Open

None						
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Reference	Submitted	Proponent	Title	Urgency	Next Step	Date
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Standard Rule Change Proposals with Second Submission Period Closed

RC_2019_03	17/12/2020	ERA	Method used for the assignment of Certified Reserve Capacity to Intermittent Generators	High	Publication of Final Rule Change Report	31/12/2021
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Standard Rule Change Proposals with Second Submission Period Open

None						
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Standard Rule Change Proposals with First Submission Period Closed

RC_2014_05	02/12/2014	IMO	Reduced Frequency of the Review of the Energy Price Limits and the Maximum Reserve Capacity Price	Medium	Publication of Draft Rule Change Report	31/12/2021
RC_2018_03	01/03/2018	Collgar Wind Farm	Capacity Credit Allocation Methodology for Intermittent Generators	Medium	Publication of Draft Rule Change Report	31/12/2021
RC_2019_01	21/06/2019	Enel X	The Relevant Demand calculation	Medium	Publication of Draft Rule Change Report	31/12/2021

Standard Rule Change Proposals with the First Submission Period Open

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Pre-Rule Change Proposals

Reference	Proponent	Description	Next Step	Date
RC_2020_04	Rule Change Panel	Balancing Facility Loss Factor Adjustment	Consult with the MAC on the priority for development of a Rule Change Proposal	TBD

Rule Changes Made by the Minister and Awaiting Commencement

Gazette	Date	Title	Commencement
2021/166	28/09/2021	Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 2) Rules 2021	<ul style="list-style-type: none"> • Schedule D will commence immediately after the commencement of: <ul style="list-style-type: none"> ○ the Amending Rules in Schedule C of the <i>Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020</i> specified in Part 4 of the commencement notice published on 28/05/2021 in Gazette 2021/96, that commence on 01/03/2022; and ○ the Amending Rules in Schedule D of the <i>Wholesale Electricity Market Amendment (Miscellaneous Amendments No.1) Rules 2021</i>, that commence on 01/03/2022. • Schedule E will commence on 1 June 2022. • Schedule F will commence on 1 July 2022. • Schedule G will commence at times specified by the Minister in notices published in the Gazette.
2021/96	28/05/2021	Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 1) Rules 2021	<ul style="list-style-type: none"> • Schedule D will commence immediately after the commencement of the <i>Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020</i> specified in Part 4 of the commencement notice published on 28/05/2021 in Gazette 2021/96, that commence on 01/03/2022. • Schedule E will commence at times specified by the Minister in notices published in the Gazette: <ul style="list-style-type: none"> ○ The Amending Rules specified in Part 1 of the commencement notice published on 28/09/2021 in Gazette 2021/166 will commence on 01/03/2022. ○ The Amending Rules specified in Part 2 of the commencement notice published on 28/09/2021 in Gazette 2021/166 will commence on 01/07/2022.
20201/17	18/01/2021	Wholesale Electricity Market Amendment (Governance) Rules 2021	<ul style="list-style-type: none"> • Schedule C will commence immediately after the commencement of the Amending Rules in clauses 50 and 62 of Schedule C of the <i>Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020</i>.

Gazette	Date	Title	Commencement
2020/214	24/12/2020	Wholesale Electricity Market Amendment (Tranches 2 and 3 Amendments) Rules 2020	<ul style="list-style-type: none"> • Amending Rules in Schedule C will commence at the times specified by the Minister in notices published in the Gazette: <ul style="list-style-type: none"> ○ The Amending Rules specified in Part 4 of the commencement notice published on 28/05/2021 in Gazette 2021/96 will commence on 01/03/2022. ○ The Amending Rules specified in Part 3 of the commencement notice published on 28/09/2021 in Gazette 2021/166 will commence immediately after the commencement of the Amending Rules in Schedule D of the <i>Wholesale Electricity Market Amendment (Miscellaneous Amendments No. 1) Rules 2021</i>, that commence on 01/03/2022. ○ The Amending Rules specified in Part 4 of the commencement notice published on 28/09/2021 in Gazette 2021/166 will commence on 01/09/2022. ○ The Amending Rules specified in Part 5 of the commencement notice published on 28/09/2021 in Gazette 2021/166 will commence on 06/12/2022.



Agenda Item 8: Cost Allocation Review – Scope of Work and Working Group Formation

Market Advisory Committee (**MAC**) Meeting 2021_12_14

Background

At its meeting on 2 November 2021, the Market Advisory Committee (**MAC**) considered a draft Scope of Work for a review of the allocation of Market Fees and Essential System Services (**ESS**) costs to Market Participants (**Cost Allocation Review**).

The MAC generally supported that there is a need to conduct the Cost Allocation Review, but some members suggested that there were higher priorities for Wholesale Electricity Market reforms, and that the review should be deferred.

The MAC confirmed that it supported commencement of the Cost Allocation Review, subject to reviewing a revised Scope of Work in December 2021.

The MAC assigned an action to the MAC Secretariat, as follows:

MAC Secretariat to table a revised Scope of Work for the Cost Allocation Review and a Terms of Reference for a Cost Allocation Review Working Group for review and approval at the 14 December 2021 MAC meeting.

The MAC Secretariat has:

- updated the Scope of Work for the Cost Allocation Review to clarify the timing and staging of the review (**Attachment 1**); and
- drafted a Terms of Reference for the Cost Allocation Review Working Group (**Attachment 2**).

Recommendation

That the MAC:

- (1) reviews and provides comments on the updated proposed Scope of Work for the Cost Allocation Review (**Attachment 1**);
- (2) approves the establishment of the Cost Allocation Review Working Group; and
- (3) approves the Terms of Reference for the Cost Allocation Review Working Group (**Attachment 2**).

Attachments

- (1) Draft Scope of Work for the Review of the Allocation of Market Fees and Essential System Services Costs
- (2) Terms of Reference – Cost Allocation Review Working Group

Draft Scope of Work for the Review of the Allocation of Market Fees and Essential System Services Costs

1. Introduction

1.1 Review Requirements

During the Energy Transformation Strategy (**ETS**) development and implementation process, some stakeholders identified issues with the allocation of Market Fees and Essential System Services (**ESS**) costs to Market Participants. However, time constraints during the ETS prevented the Energy Transformation Taskforce from fully addressing all of these concerns.

Further, the Market Advisory Committee (**MAC**) maintains a Market Development Forward Work Program to track and progress issues that have been identified by stakeholders. Several issues on the current Market Development Forward Work Program relate to the allocation of market costs – see Appendix 1.

Therefore, the Coordinator of Energy (**Coordinator**) plans to undertake a review of the allocation of Market Fees and ESS costs (**Cost Allocation Review**).

The Coordinator plans to conduct the Cost Allocation Review under clause 2.2D.1 of the Wholesale Electricity Market (**WEM**) Rules in 2022 and to develop any WEM Rules resulting from the review in 2023. Clause 2.2D.1(h) of the WEM Rules confers the function on the Coordinator to consider and, in consultation with the MAC, progress the evolution and development of the WEM and the WEM Rules.

1.2 Background

1.2.1 Energy Transformation Strategy

Amending Rules were developed under the ETS to change how the costs of ESS are allocated. These Amending Rules will commence on 1 October 2023.

The Energy Transformation Taskforce undertook extensive consultation on the allocation of ESS costs, including via the ‘Market settlement: Implementation of five-minute settlement, uplift payments and Essential System Services settlement’ paper, published on 1 December 2019.¹

1.2.2 Allocation of Market Fees

The following fees are specified in the WEM Rules:

- Market Fees to recover AEMO’s costs for its market operation services, system planning services and market administration services;
- System Operation Fees to recover AEMO’s costs for its system operation services;

¹ <https://www.wa.gov.au/system/files/2019-12/Information%20paper%20-%20Market%20Settlement%20-%20Implementation%20of%20five-minute%20settlement%20-%20uplift%20payments%20and%20ESS%20settlement%20-%20December%202019.pdf>

- Regulator Fees to recover the Economic Regulation Authority's (**ERA**) costs for its monitoring, compliance, enforcement and regulation services; and
- Coordinator Fees to recover the Coordinator's costs for the Coordinator's functions under the WEM Rules plus the costs and expenses for the Chair of the MAC.

AEMO determines and publishes the Market Fee, System Operation Fee, Regulator Fee and Coordinator Fee rates, which are set to cover the budgeted costs for AEMO, the ERA and the Coordinator, plus any under/over-spend from the previous year.

Each Market Participant is charged these fees based on the Market Fee, System Operation Fee, Regulator Fee and Coordinator Fee rates and their Metered Schedule² for all of their Registered Facilities and Non-Dispatchable Loads for all Trading Intervals for the day.

AEMO also charges Application Fees and Reassessment Fees, which are set to recover the average costs of processing each type of application.

1.2.3 Allocation of Co-Optimised ESS Costs

From 1 October 2023, there will be five co-optimised ESS:

- Regulation services:
 - Regulation Raise;
 - Regulation Lower;
- Contingency Reserve services:
 - Contingency Reserve Raise;
 - Contingency Reserve Lower; and
- Rate of Change of Frequency (**RoCoF**) Control Service.

The Table in Appendix 2 indicates how the costs for each co-optimised ESS will be allocated as of 1 October 2023, including:

- the risks that will be covered by each ESS;
- a description of each ESS; and
- an indication of how the costs for each ESS will be allocated.

1.2.4 Allocation of Other ESS Costs

Other ESS include:

- System Restart Service; and
- Non-Co-optimised ESS (**NCESS**).

Costs for System Restart Services are determined by contracts between AEMO and service providers, and the contract costs are recovered from Market Participants based on the proportion of their Loads' metered consumption to total consumption.

² The Metered Schedule is determined for each Facility the net quantity of energy generated and sent-out or consumed by the Facility or Non-Dispatchable Load during the Trading Interval. A single Metered Schedule is determined for each Trading Interval for the Non-Dispatchable Loads without interval meters that are served by Synergy equal to the Notional Wholesale Meter.

The WEM Rules regarding NCESS are under development and will be Gazetted and implemented in early 2022. NCESS costs will be determined by contracts between AEMO or Western Power and service providers. Western Power will recover the costs for its NCESS contracts via its network tariffs,³ and it is proposed that, at least initially, AEMO will recover costs for its NCESS contracts from Market Participants based on the proportion of their Loads' metered consumption to total consumption.

2. Project scope

2.1 Objectives

The objectives for the Cost Allocation Review are to:

- (1) develop a method to align the allocation of fees with the causer-pays principle, to the extent practicable and efficient; and
- (2) develop a method to align the allocation of ESS costs with the causer-pays principle, to the extent practicable and efficient.

2.2 Guiding principles

The guiding principles for the Cost Allocation Review are that the fee and cost allocation methodologies should:

- (1) Meet the Wholesale Market Objectives:
 - (a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
 - (b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
 - (c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
 - (d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
 - (e) to encourage the taking of measures to manage the amount of electricity used and when it is used.
- (2) Be cost-effective, simple, flexible, sustainable, practical and fair.
- (3) Provide effective incentives to Market Participants to operate efficiently to minimise the overall cost to consumers.
- (4) Use the causer-pays principle, where practicable and efficient.

Where a causer can be identified for an ESS cost, the causer-pays principle would ensure that costs are allocated to parties in a way that gives the causer an incentive to manage their impact on that cost.

³ Allocation of Western Power's NCESS costs is out of scope for the Cost Allocation Review.

2.3 Issues to be Considered

The Cost Allocation Review will consider the allocation of Market Fees and the aspects of the allocation of ESS costs that were not fully considered under the ETS. The matters that are to be considered in the review include:

- (1) Does the current allocation of Market Fees provide an incentive to Market Participants to minimise the quantum of the fees, or would an alternative mechanism be better able to provide such an incentive?⁴
- (2) Is the causer-pays principle adequately applied to the following ESS:
 - (a) Regulation Services;
 - (b) Contingency Reserve Raise Services;
 - (c) Contingency Reserve Lower Services;
 - (d) RoCoF Control Services;
 - (e) System Restart; and
 - (f) NCESS?
- (3) Where the causer-pays principle is not applied adequately to allocation of ESS costs, how can cost allocation be improved to align more closely with that principle?⁵

The Cost Allocation Review will consider additional issues that are identified in consultation with the stakeholders, including the issues listed in Appendix 1.

3. Stakeholder engagement

The Cost Allocation Review will be undertaken in close consultation with the MAC and with the support of a dedicated MAC Working Group. Participation in the Working Group will not be limited to MAC members.

Under clause 2.5.1C of the WEM Rules, the Coordinator must consult with the MAC before commencing the development of a Rule Change Proposal.

⁴ For example, consideration could be given to charging Market Fees on a fixed and variable basis.

⁵ For example, it could be argued that the costs for Regulation Services should be recovered from the causers of the frequency deviations, according to their contribution to the requirement for the service, including:

- for Non-Scheduled Facilities, according to their deviation from forecast;
- for Scheduled Facilities, according to their deviation from dispatch; and
- for Loads according to their volatility.

4. Project Schedule

Tasks/Milestones	Timing
Consult with the MAC on the scope of work for the review.	December 2021
Establish MAC Working Group.	January 2022
Engage consultant(s) to assist with the review.	January-March 2022
Initial MAC Working Group meeting	April 2022
Step 1 – Policy Assessment	
(a) Literature Review of the methodologies to allocate Market Fees and ESS costs in other jurisdictions.	April-June 2022
(b) In consultation with the Working Group, assess whether the current allocation method for the Market Fees and for the costs for each of the ESS are aligned with the causer-pays principle and, if not, whether they should be.	May-June 2022
Step 2 – Practicality Assessment	
(c) In consultation with the Working Group, for the fees and costs that are not aligned with the causer-pays principle: <ul style="list-style-type: none"> identify the options that can be practically applied in the WEM to allocate fees and each cost; assess each option against the guiding principles; model the impact on the options on Market Participants; and recommend a preferred option for each fees and cost. 	July-August 2022
Step 3 – Methodology Development	
(d) Develop the details of the cost allocation methodologies, in consultation with the MAC Working Group.	September - October 2022
(e) Develop and publish a consultation paper on the design for the allocation methodologies and seek stakeholder comments.	November-January 2023
(f) Develop and publish an information paper on the detailed design for the allocation methodologies.	March 2023
Step 4 – Formal Rule Change	
(g) Develop one or more Rule Change Proposals for consideration by MAC, and approval by the Coordinator and Minister.	April 2023
(h) Commencement rule changes.	Depending on data availability and fit with the ETS reforms.

Appendix 1: Related Issues from the Market Development Forward Work Program

The following four issues from the Market Development Forward Work Program relate to the Cost Allocation Review.

Issue 2: Allocation of market costs – who bears Market Fees and who pays for grid support services with less grid generation and consumption?

Issue 16: BTM generation is treated as reduction in electricity demand rather than actual generation. Hence, the BTM generators are not paying their fair share of the network costs, Market Fees and ancillary services charges.

Therefore, the non-BTM Market Participants are subsidizing the BTM generation in the WEM. Subsidy does not promote efficient economic outcome.

Rapid growth of BTM generation will only exacerbate this inefficiency if not promptly addressed.

Bluewaters recommends changes to the WEM Rules to require BTM generators to pay their fair share of the network costs, Market Fees and ancillary services charges.

This is an example of a regulatory arrangement becoming obsolete due to the emergence of new technologies. Regulatory design needs to keep up with changes in the industry landscape (including technological change) to ensure that the WEM continues to meet its objectives.

If this BTM issue is not promptly addressed, there will be distortion in investment signals, which will lead to an inappropriate generation facility mix in the WEM, hence compromising power system security and in turn not promoting the Wholesale Market Objectives.

Issue 23: Allocation of Market Fees on a 50/50 basis between generators and retailers may be overly simplistic and not consider the impacts on economic efficiency.

In particular, the costs associated with an electricity market reform program should be recovered from entities based on the benefit they receive from the reform. This is expected to increase the visibility of (and therefore incentivise) prudence and accountability when it comes to deciding the need and scope of the reform.

Recommendations: to review the Market Fees structure including the cost recovery mechanism for a reform program.

The cost saving from improved economic efficiency can be passed on to the end consumers, hence promoting the Wholesale Market Objectives.

Issue 35: BTM generation and apportionment of Market Fees, ancillary services, etc.

The amount of solar PV generation on the system is increasing every year, to the point where solar PV generation is the single biggest unit of generation on the SWIS. This category of generation has a significant impact on the system and we have seen this in terms of the daytime trough that is observed on the SWIS when the sun is shining. The issue is that generators that are on are moving around to meet the needs of this generation facility but this generation facility, which could impact system stability, does not pay its fair share of the costs of maintaining the system in a stable manner. That is, they are not the generators that receive its fair apportionment of Market Fees and pay any ancillary service costs but yet they have absolute freedom to generate into the SWIS when the fuel source is available. There needs to be equity in this equation.

Appendix 2: Allocation of Co-Optimised ESS

ESS	Risk	Service Description	Cost Allocation
Regulation Raise	Generation and load varying from target/forecast within the interval, leading to upward deviation from load forecast that causes the frequency to drop below 50 Hz.	Reserve MW to respond upwards during dispatch interval when load is greater than generation.	Allocated to Market Participants in proportion to their Regulation Contributing Quantity. The Regulation Contributing Quantity is essentially the sum of the absolute values of Metered Schedules for a Market Participant's Semi-Scheduled Facilities, Non-Scheduled Facilities and Non-Dispatchable Loads. Synergy's Notional Wholesale Meter is treated as a single Non-Dispatchable Load.
Regulation Lower	Generation and load varying from target/forecast within the interval, leading to downward deviation from load forecast during an interval that causes the frequency to go above 50 Hz.	Reserve MW to respond downwards when load is less than generation.	
Contingency Reserve Raise	Loss of generation.	Reserve MW to respond to loss of generation to restore frequency to an acceptable level.	Allocated using the modified runway method. ⁶ The costs are allocated to Scheduled Facilities and Semi-Scheduled Facilities, based on their energy, Contingency Reserve Raise and Regulation Raise in a Dispatch Interval.
Contingency Reserve Lower	Loss of load.	Reserve MW to respond to loss of load to restore frequency to an acceptable level.	Allocated to Market Participants based on the proportion of their Loads' metered consumption to total consumption per Trading Interval.

⁶ The modified runway method is specified in Appendix 2A, as it will apply from 1 October 2023 (see the WEM Rules Consolidated Companion Version (<https://www.wa.gov.au/government/publications/wem-rules-consolidated-companion-version>)).

ESS	Risk	Service Description	Cost Allocation
RoCoF Control Service	<p>Rapid frequency changes can cause problems for automatic detection of frequency changes, and potentially result in damage or trip-off of generators and other system components. The RoCoF Control Service provides inertia.</p>	<p>The required quantity of RoCoF Control Service is a function of:</p> <ul style="list-style-type: none"> • contingency size; • Contingency Reserve quantity; and • total inertia on the system. <p>RoCoF Control Services has two functions:</p> <ul style="list-style-type: none"> • the Minimum RoCoF Control Requirement to ensure RoCoF is restricted to below maximum limit; and • the Additional RoCoF Control Requirement, to allow trade-off between the quantity of Contingency Reserve Services required and the quantity of inertia required in the power system. 	<p>Allocated in two parts:</p> <ul style="list-style-type: none"> • The Minimum RoCoF Control Requirement is shared equally (1/3 each) between: <ul style="list-style-type: none"> ○ Network Operators; ○ Generators (Registered Facilities with generation or storage systems); and ○ Non-Dispatchable Loads and Scheduled Loads. <p>The Generator and Load shares are allocated to specific Registered Facilities and Loads in proportion to their Metered Schedules.</p> • The Additional RoCoF Control Requirement (to trade off with Contingency Reserve Services) is allocated to Registered Facilities using the modified runway method. <p>Members of each group can be exempted from the Minimum RoCoF Control Requirement if they can demonstrate to AEMO that their Facility's Ridethrough Capability is greater than or equal to the RoCoF Safe Limit.</p>



Terms of Reference

Cost Allocation Review Working Group

14 December 2021

1. Background

The Coordinator of Energy (**Coordinator**) has commenced a review of the allocation of Market Fees and Essential System Services (**ESS**) costs to Market Participants (**Cost Allocation Review**) under clause 2.2D.1 of the Wholesale Electricity Market (**WEM**) Rules. Clause 2.2D.1(h) confers the function on the Coordinator to consider and, in consultation with the Market Advisory Committee (**MAC**), progress the evolution and development of the WEM and the WEM Rules.

Energy Policy WA developed a Scope of Work for the Cost Allocation Review in consultation with the MAC. The Scope of Work is available on the Coordinator's Website at: [<link>](#). The Scope of Work for the Cost Allocation Review includes:

- objectives and guiding principles for the review;
- issues to be considered;
- stakeholder engagement; and
- the project schedule.

The MAC has established the Cost Allocation Review Working Group under clause 2.3.17(a) of the WEM Rules to assist the Coordinator with the Cost Allocation Review.

2. Scope of the Working Group

The Cost Allocation Review Working Group has been established to provide expert advice and analysis on all aspects of the allocation of Market Fees and ESS costs identified in the Scope of Work, including:

- identification of issues with the current approach to allocation of Market Fees and ESS costs and options to address these issues;
- application of the causer pays principle to Market Fees and ESS costs;
- review of Energy Policy WA's analysis underpinning the Cost Allocation Review; and
- support for the high-level and detailed design for changes to the approach to allocate Market Fees and ESS costs.

3. Membership

Energy Policy WA will provide the Chair of the Cost Allocation Review Working Group.

Any Market Participant or other interested stakeholder may nominate a person for membership on the Cost Allocation Review Working Group for approval by the Chair.

All members of the Cost Allocation Review Working Group are required to contribute their time and resources to complete specific analysis and other tasks as requested by the Chair.

There are no restrictions on the number of Cost Allocation Review Working Group members. However, the Chair of the Cost Allocation Review Working Group may only approve one member from each organisation.

The Chair of the Cost Allocation Review Working Group will have discretion to allow additional subject matter experts or consultants to attend specific meetings or workshops, either generally or on a case-by-case basis.

Energy Policy WA will provide administrative support to the Cost Allocation Review Working Group.

4. Documentation

Energy Policy WA will establish a Cost Allocation Review Working Group webpage on its website. Any discussion papers, meeting papers and meeting minutes will be posted to this page.

Market Participants and other stakeholders may register with Energy Policy WA to receive email communications regarding the Cost Allocation Review Working Group, including notices of publication of papers on the Cost Allocation Review Working Group webpage.

5. Responsibilities of Meeting Attendees

A person attending a Cost Allocation Review Working Group meeting is expected to:

- have suitable knowledge and experience to engage in and contribute to discussions relevant to the specific meeting;
- prepare for the meeting, including by reading any meeting papers distributed before the meeting;
- participate as a general industry representative rather than representing their company's interests; and
- complete actions requested by the Chair, which may include undertaking of analysis or preparation of papers for discussion by the Working Group.

6. Administration

Energy Policy WA will provide secretariat support for the Cost Allocation Review Working Group.

Energy Policy WA will ensure contact details for the Cost Allocation Review Working Group are maintained on the Cost Allocation Review Working Group webpage.

The Chair of the Cost Allocation Review Working Group will convene meetings of the working group in accordance with the timelines in the Scope of Work for the Cost Allocation Review.

Energy Policy WA will prepare and distribute all meeting correspondence to the Cost Allocation Review Working Group via email. Energy Policy WA will endeavour to provide the following documentation by email to the Cost Allocation Review Working Group members:

- notices of meetings, agendas, and relevant meeting papers at least 5 Business Days prior to the meeting; and
- key outcomes and actions emerging from each meeting no more than 5 Business Days following the meeting.

All meeting documentation will be published on Energy Policy WA's website as soon as practicable after it has been sent to the Cost Allocation Review Working Group members.

Meetings will generally be held online via TEAMS but may sometimes be held in person. Meeting minutes are to record meeting attendance, main outcomes of discussion, agreed recommendations to the MAC and action items. Meetings will be recorded to assist with development of minutes.

7. Reporting Arrangements

The Cost Allocation Review Working Group Chair must provide a report to the MAC on the Cost Allocation Review Working Group's activities at each MAC meeting. The reports must include, at a minimum:

- details of all Cost Allocation Review Working Group meetings since the last report to the MAC, including the date of the meeting and the key outputs of each meeting;
- the date of the next meeting and the issues to be considered (if known); and
- any recommendations from the Working Group to the MAC.

8. Projected Timeline

Tasks/Milestones	Timing
Consult with the MAC on the Scope of Work for the review.	December 2021
Establish Working Group.	January 2022
Engage consultant(s) to assist with the review.	January-March 2022
Initial Working Group meeting	April 2022
Step 1 – Policy Assessment	
(a) Literature Review of the methodologies to allocate Market Fees and ESS costs in other jurisdictions.	April-June 2022
(b) In consultation with the Working Group, assess whether the current allocation method for the Market Fees and for the costs for each of the ESS are aligned with the causer-pays principle and, if not, whether they should be.	May-June 2022
Step 2 – Practicality Assessment	
(c) In consultation with the Working Group, for the fees and costs that are not aligned with the causer-pays principle: <ul style="list-style-type: none"> • identify the options that can be practically applied in the WEM to allocate fees and each cost; • assess each option against the guiding principles; • model the impact on the options on Market Participants; and • recommend a preferred option for each fee and cost. 	July-August 2022

Tasks/Milestones	Timing
Step 3 – Methodology Development	
(d) Develop the details of the cost allocation methodologies, in consultation with the Working Group.	September - October 2022
(e) Develop and publish a consultation paper on the design for the allocation methodologies and seek stakeholder comments.	November-January 2023
(f) Develop and publish an information paper on the detailed design for the allocation methodologies.	March 2023
Step 4 – Formal Rule Change	
(g) Develop one or more Rule Change Proposals for consideration by MAC, and approval by the Coordinator and Minister.	April 2023
(h) Commencement rule changes.	Depending on data availability and fit with the ETS reforms.

9. Contact Details

Rule Participants and other stakeholders may contact the Cost Allocation Review Working Group Secretariat at energymarkets@energy.wa.gov.au. Documentation and information related to the Cost Allocation Review Working Group will be published on Energy Policy WA's website.



Government of Western Australia
Energy Policy WA

Tranche 5 WEM Amending Rules

MAC Meeting

14 December 2021

Working together for a
brighter energy future.

ETS Amending Rules Schedule

Work package	June	July	August	Sept	Oct	Nov	Dec	2022
TRANCHE 0 - GAZETTED <ul style="list-style-type: none"> Governance of constraints Technical Rules change management, etc 								
TRANCHE 1 - GAZETTED <ul style="list-style-type: none"> Generator Performance Standards Framework Frequency Operating Standards and Contingency Events Frameworks 								
TRANCHE 2 - GAZETTED <ul style="list-style-type: none"> Foundation Market Parameters (incl. STEM) Frequency Co-optimised ESS Scheduling and Dispatch Market Settlement, etc 								
TRANCHE 3 - GAZETTED <ul style="list-style-type: none"> Reserve Capacity Mechanism (RCM) Prioritisation and Network Access Quantities Framework Participation of storage/hybrid facilities in the RCM, etc 								
TRANCHE 4A - GAZETTED <ul style="list-style-type: none"> Transitional Arrangements (e.g. ESS accreditation) Changes and Rules commencement to facilitate 2021 RCM, etc. 								
TRANCHE 4B – GAZETTED (28 September) <ul style="list-style-type: none"> UFLS & System Restart Change management for specified Technical Standards Changes to shortfalls/refunds – not-in-service capacity and ESR Remaining changes to facilitate 2021 and 2022 RCM Changes and Rules commencement to facilitate 2022 RCM 								
TRANCHE 5 (December) <ul style="list-style-type: none"> Determination of AEMO's Allowable Revenue Non-Cooptimised ESS Framework Participation and Registration framework Intermittent Loads Changes to RCOQ and Reserve Capacity testing rules Market Information Framework 								
TRANCHE 6 (2022) <ul style="list-style-type: none"> Typographical & Reference Errors Manifest errors / omissions 								Timing TBC
Drafting instructions and rule drafting	Stakeholder consultation		Ministerial approval, publication of the Amending Rules and Gazettal					

Tranche 5 WEM Amending Rules

- **Transitional Provisions for the implementation of WEM Reform related WEM Procedures**
- **Monitoring the Effectiveness of the Market**
- **Determination of AEMO's Allowable Revenue**
- **Intermittent Loads**
- **Non – Co-optimised Essential System Services (NCESS) Framework**
 - A requirement for Western Power to prepare and publish a Transmission System Plan
 - Conditions that would trigger the NCESS procurement process
 - Transparent process for soliciting expressions of interest followed by a tender process
 - Dispatch and settlement rules to enable NCESS contracts to be integrated into market processes
- **Market information**
- **Reserve capacity testing**
- **Other minor amendments**



Agenda Item 10: Schedule of MAC Meetings for 2022

Meeting 2021_12_14

The Market Advisory Committee (**MAC**) meets on a six-weekly cycle, commencing in February each year. The MAC Secretariat has developed the proposed schedule for MAC meetings for 2022, with meeting timing to avoid public holidays and school holidays, as indicated in the table below.¹

The MAC is asked to consider and accept the proposed schedule for MAC meetings for 2022, noting that the schedule may need to be adjusted once the independent Chair of the MAC is appointed.²

Month	Proposed MAC Meetings
January 2022	
February 2022	9:30am on Tuesday 8 February 2022
March 2022	9:30am on Tuesday 22 March 2022
April 2022	
May 2022	9:30am on Tuesday 3 May 2022
June 2022	9:30am on Tuesday 14 June 2022
July 2022	9:30am on Tuesday 26 July 2022
August 2022	
September 2022	9:30am on Tuesday 6 September 2022
October 2022	9:30am on Tuesday 18 October 2022
November 2022	9:30am on Tuesday 29 November 2022
December 2022	

¹ Note that the Gas Advisory Board (**GAB**) meetings have been scheduled for Thursday 24 March 2022 and Thursday 22 September 2022, and that the Coordinator is in the process of establishing the Pilbara Advisory Committee (**PAC**) and will set a PAC a meeting schedule for 2022 after the committee has been established.

² The Minister for Energy is currently running a process to appoint the independent Chair(s) of the MAC, GAB and PAC in early 2022.