Government of **Western Australia**
Department of **Mines, Industry Regulation and Safety**
Energy Policy WA

Minutes

Meeting Title:	Cost Allocation Review Working Group (**CARWG**)
Date:	30 August 2022
Time:	12:30pm – 2:23pm
Location:	Microsoft TEAMS

Attendees	Company	Comment
Dora Guzeleva	Chair	
Oscar Carlberg	Alinta Energy	
Daniel Kurz	Summit Southern Cross Power	
Rebecca White	Collgar Wind Farm	
Noel Schubert	Small-Use Consumer Representative	
Mark McKinnon	Western Power	
Jason Froud	Synergy	12:30pm – 2:00pm
Genevieve Teo	Synergy	
Paul Arias	Shell Energy	
Mena Gilchrist	AEMO	
Cameron Parrotte	Woodside	
Grant Draper	Marsden Jacob Associates (**MJA**)	
Peter McKenzie	MJA	
Stephen Eliot	Energy Policy WA (**EPWA**)	
Shelley Worthington	EPWA	

Apologies	From	Comment
Tom Frood	Bright Energy	

Item	Subject	Action
1	**Welcome and Agenda** The Chair opened the meeting at 12:30pm.	
2	**Meeting Apologies/Attendance** The Chair noted the attendance as listed above.	
3	**Minutes of CARWG Meeting 2022_06_07** Draft minutes of the CARWG meeting held on 7 June 2022 were distributed in the meeting papers on 24 August 2022.	

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	The CARWG accepted the minutes as a true and accurate record of the meeting.	
	ATCION: CARWG Secretariat to publish the minutes of the 7 June 2022 CARWG meeting on the CARWG web page as final.	**CARWG Secretariat (31/08/2022)**
4	**Action Items** The papers was taken as read. The Chair noted that Ms Gilchrist has provided a response on action item 5 and that this item is closed.	
5	Mr Draper restated the objectives and guiding principles for the review and the priority for the assessment of services; and noted that the policy assessment will consider the causer-pays and beneficiary-pays principles, where practical and applicable. Mr Draper provided an overview of timeline for the review. **Assessment of the Methods to Allocate Market Fees** Mr Draper noted that MJA has modelled the impact of the following three options on Market Participants: • the current Wholesale Electricity Market (**WEM**) method; • the National Energy Market (**NEM**) method; and • a hybrid method. Mr Draper noted the following regarding the analysis of the hybrid method: • Market Fees were not allocated to network companies because it would be inefficient to charge fees to network companies that would then pass through the costs in their Access Arrangement. • For generators, the fees were allocated 50% on capacity and 50% on generation output, and was based on sent out generation, but could include marginal loss factors and looking at generation to the node. • For market customers, the fees were allocated 50% on grid demand and 50% on Individual Reserve Capacity Requirement (**IRCR**). • For simplicity, the Market Fee analysis only covered AEMO fees, not Coordinator Fees or Economic Regulation Authority (**ERA**) Fees. Mr Arias recalled discussion from a previous meeting that consideration would be given to an option where Market Fees would be allocated directly to customers and asked if this had been progressed. • Mr Draper noted that this idea arose because of an Ofgem (UK) recommendation to allocate Balancing Service Use of System (**BSUoS**) fees directly to customers. However,	

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	allocating fees directly to customers was viewed as a significant departure from the current arrangements. • Ms Guzeleva noted that the causer-pays principle is key, that generators are a large causer of AEMO costs, and that shifting all Market Fees to consumers may reduce the incentive for generators to scrutinize AEMO costs. • Mr Arias noted that consumers will ultimately incur the costs from the Market Fees and contended that putting the fees first through the generators in such a highly contracted market would introduce inefficiencies. • Ms Guzeleva suggested that causer-pays is a more important principle than efficiency and we would not be abiding by that key principle if we allocate costs directly to consumers. • Mr Schubert agreed that causer-pays should be the dominant principle, and that it could be argued that consumers cause all of the costs, but noted that this would remove incentives from upstream providers. • Ms White suggested that there is a competitive neutrality issue because Synergy could not pass Market Fees on to customers via regulated tariffs, but that other retailers would have to pass them on, which would make them less competitive. Ms White suggested there is a greater case for levying Essential System Services (**ESS**) costs on generators because this is more likely to incentivise generators to change their behaviour to minimise costs. • Ms Guzeleva noted that the retail market is outside of the scope of the WEM and that allocating costs to retailers is the only way that costs can be passed to end users. • Ms Guzeleva noted that the majority of AEMO's costs are from market processes that deal with market generators, including; certification, capacity credits, obligations, refunds, dispatch and market development. • Ms White agreed that generators cause most of AEMO's costs, and that causer-pays is a good principle when it can send signals to people to change their behaviour. Ms White suggested that the beneficiary-pays principle is appropriate if the causer-pays approach does not send signals for market participants to change their behaviour. • Mr Arias noted that the bilateral contract market may prevent these costs from being passed through to customers, that allocating Market Fees to generators would not incentivise behavioural change, and that the ERA is responsible for scrutiny of AEMO costs. • Mr Arias noted that the only behaviour that the current allocation mechanism incentivises is behind the meter	

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	(**BTM**) investment, which is creating other problems and costs and is caused by customers. • Ms Guzeleva suggested that the current Market Fee allocation method should be retained if agreement cannot be reached on a causer-pays method. • Mr Carlberg suggested that generators cannot pass through Market Fees, so it is not efficient to levy these costs on generators and suggested that market reform is driving most of AEMO's cost increases. • Ms Guzeleva noted that most of the current market reforms are benefiting generators through moving closer to real time and from having competitive ESS markets, and that the majority of generators have been pushing for those reforms. Ms Guzeleva agreed that MJA could do the analysis for an option to pass costs to consumers on a per MWh basis and present this along with other options at the CARWG meeting in September 2022. Mr Draper indicated that this analysis would not be based on gross MWh because there is no mechanism to measure gross MW hours due to the lack of smart metering. In presenting the results of MJA's analysis on slides 11-13, Mr Draper noted that allocating fees based on capacity leads to bigger changes for units that have low capacity factors, whereas units with higher capacity factors see a fee reduction. Mr Kurz asked why the analysis for Bluewaters was not included. Mr Draper indicated that the analysis had been done for every generator in the system, but that only selected units had been presented, and ~~it~~ that all analysis could be shared. Ms Guzeleva noted the main point was that peaking plant would pick up more fees with allocation based on mix of MW and MWh. Mr Draper noted that the analysis of the impact of the options for allocating Market Fees on retailers (slide 14) was based on confidential information and was therefore not shared. However, using IRCR as part of the allocation method would result in Synergy paying relatively more and other retailers paying relatively less. Mr Kurz noted that the market exists to deliver electricity to end consumers and the goal is to determine the most effective way to allocate costs of that energy to the customer. Mr Draper noted that, if parties cannot react to the price signal from the Market Fees, then the hierarchy suggests that cost allocation should move from the causer-pays principle to the beneficiary-pays principle, and that the market reforms are happening for a variety of reasons, including decarbonisation, and are benefiting a range of parties, not just consumers.	

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	Ms Guzeleva noted that residential consumers also cannot react to Market Fees and are not the only beneficiary. **Assessment of the Methods to Recover Frequency Regulation Costs** Mr Draper indicated that three methods have been considered to allocate frequency regulation costs: • the current WEM method; • the NEM causer-pays method; and • a proposed new Tolerance Method. Ms White ~~sought~~ asked if the NEM causer-pays method referred to taking SCADA every four seconds, matching that against the target and then summing the deviation between that target and the SCADA point for every four second interval within a trading interval. Mr Draper replied that was correct. Mr McKenzie provided an overview of the approach to analyse the NEM causer-pays method: • For both Lower and Raise, MJA looked back at the deviations at a plant level, using the 28-day monthly reports for about three years, and put together a distribution of the expected deviation based on a per MW of installed capacity for each technology type. This gave an outlook of the performance of each technology type and a variation. • MJA applied this distribution to the installed capacities in the WEM, used that to produce a Monte Carlo model, and ran a few hundred simulations to get a breakdown of the contributions between demand and generators, and to further breakdown the generation contributions into technology types. Mr McKenzie presented the results from the simulations and compared the cost allocations for the current WEM method and the NEM causer-pays method (slides 22-27). • Ms White asked if there is a skew on slides 22 and 23, and if that indicated more demand for the upward or downward service. ○ Mr McKenzie noted the deviation is much bigger on raise than on lower for both wind and solar, and that the raise had a bigger variation for solar and wind because it is harder for solar to push up generation than down. • Mr Parrotte asked if slide 27 shows the 'ideal' that we should be trying to achieve in the Frequency Regulation cost allocation, based on one month data simulation, and if deviations of units providing Ancillary Services had been excluded.	

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	○ Mr Draper noted that MJA had looked at the full capacity and included units providing the ancillary services, and indicated that MJA could adjust for this. ○ Mr Parrotte indicated that this might explain why Open Cycle Gas Turbines (**OCGTs**) have a higher representation, as they do most of the frequency regulation. Mr Draper agreed that OCGTs are likely overrepresented and would have less variation once this adjustment is made. ○ Mr Schubert ~~noted~~ agreed that this is probably why - OCGTs participate more in the frequency regulation - and noted that solar down is more likely to happen due to cloud cover, whereas solar cannot go higher than it does on a clear day. • Ms White asked if you deviate downwards, and your next SCADA point is above your target, would you take the difference between the previous SCADA point and the new SCADA point, or between the new target and the new SCADA point. ○ Mr McKenzie indicated that MJA did not look at the difference between SCADA points, rather the difference between the dispatch targets and the SCADA points. Mr Draper noted that the current methodology does not provide an incentive to the participants that cause deviations to look at strategies to reduce the deviations, and that there are numerous behaviours that could result from adopting the NEM causer-pays method. Mr Parrotte noted that Load recovery cost was also presently based on MWh, yet it is load variability that drives Frequency Regulation quantity, and therefore cost. Ms White noted the NEM approach seems sensible in principle and has the benefit of it already being in use in the NEM, and asked if there is any indication of how much it would cost for AEMO to implement. • Mr Draper noted that AEMO had spreadsheet models and had invested in those overheads. • Ms Guzeleva noted that consistency with the NEM has benefits given that many market participants operate across state borders. Mr McKenzie presented on the methodology and results for the analysis of the tolerance method (slides 29-35). Mr Draper noted a correction to slide 32 – MJA had included the aeros in with the heavy frame units and indicated that aeros will be split out in the later analysis.	

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	Mr Draper noted that, whilst AEMO proposed the tolerance method, it does not currently use or plan to use this method in the NEM. Instead, the NEM is looking at changes to its current causer-pays methodology. Ms Guzeleva noted the tolerance method is relatively complex and it is important to consider simplification because lack of predictability has been raised as an issue. In response to a question from Ms White, Mr Draper indicated that the results are presented by technology group to keep it confidential and that moving into particular plants and technologies would require another step. Mr Draper noted that the results for the NEM causer-pays method and tolerance method have similar patterns and provide similar incentives. The recommendation is to adopt the NEM causer-pays method to allocate Frequency Regulation cost to Generators and Loads in the WEM because it is more transparent and is already in use in the NEM. Ms Gilchrist noted that a rule change proposal is under consideration in the NEM that includes an incentive payment for generators that contribute to helping correct frequency deviations and asked if consideration was given to how this might affect generators in the WEM. Mr Draper noted they had not modelled the rule changes, just the current methodology. Mr Parrotte asked if the NEM method would result a 50/50 generator/load allocation. • Mr Draper responded that was correct and that when we looked at the very ~~the~~ causes of the variations, the finding was that it was 50/50 between generators and loads. • Mr Parrotte noted that the allocation is currently about 20% generators and 80% load, so this is quite a change, and asked if the load allocation would to continue to be based on MWh, noting that it would be good to be variability based, but this would require meters on every customer. Mr Draper noted that Loads in the NEM are allocated the residual after everything else is allocated. • Mr Parrotte sought to clarify if retailer allocations account for whether the retailer has a lot of flat loads versus a retailer with lots of variable loads, or if it was purely a MWh allocation. Mr McKenzie indicated that NEM allocations are on a MWh basis for each region. Ms White asked if there was a view on how the split may change over time. Ms Guzeleva noted the split is likely to move more to load than generation. Mr Draper agreed, as solar and wind take actions to improve their forecasting or incorporate storage into their sites.	

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	Assessment of Methods to Allocate of Contingency Reserve Raise Costs Mr Draper noted that there may be a problem with how the runway approach applies to aggregated facilities as they are currently defined under the WEM Rules (slides 39-40). Mr Draper noted that network contingencies are a part of the existing runway method. Mr Schubert and Mr Parrotte asked if the network should be charged if it forms the largest contingency. Ms Guzeleva noted that this may be the case. Ms White noted that this was considered when the runway method was designed and agreed that it may be a good principle. ~~Mr Draper responded that network contingencies are a part of the existing runway method.~~ Mr Draper clarified that networks will not be charged Contingency Reserve Raise costs calculated using the runway method but will be charged one third of the Rate of Change of Frequency (RoCoF) costs calculated using the runway method. Ms White provided the example of Collgar having an aggregated facility with two connection points and two halves and can operate separately. Mr Draper suggested that this would mean that Collgar's contingency would be half its capacity. Ms Guzeleva noted that this issue was picked up in the final stages of Tranche 5, where it was agreed that this should be fixed, but EPWA ran out of time to fix it in Tranche 5.	
	ACTION: EPWA to present analysis for an option to allocate Market Fees only to customers at the CARWG meeting in September 2022.	**EPWA (27/09/2022)**
7	**Next Steps** A set of proposals will be presented to the CARWG for discussion at its meeting on 27 September 2022 and will then be taken to the MAC on 11 October 2022.	
8	**General Business** No general business was discussed. The next CARWG meeting is scheduled for 27 September 2022.	

The meeting closed at 2:23pm.

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