

## Minutes

<b>Meeting Title:</b>	Market Advisory Committee ( <b>MAC</b> )
<b>Date:</b>	13 November 2019
<b>Time:</b>	1:00 PM – 2:00 PM
<b>Location:</b>	Training Room No. 2, Albert Facey House 469 Wellington Street, Perth

<b>Attendees</b>	<b>Class</b>	<b>Comment</b>
Stephen Eliot	Chair	
Matthew Martin	Minister's Appointee – Small-Use Consumer Representative	
Martin Maticka	Australian Energy Market Operator ( <b>AEMO</b> )	
Dean Sharafi	System Management	
Sara O'Connor	Economic Regulation Authority ( <b>ERA</b> ) Observer	
Dominic Regnard	Synergy	Proxy for Andrew Everett
Kei Sukmadjaja	Network Operator	Proxy for Margaret Pырchla
Daniel Kurz	Market Generators	
Chris McDonagh	Market Generators	Proxy for Jacinda Papps
Wendy Ng	Market Generators	To 1:50 PM
Andrew Stevens	Market Generators	
Patrick Peake	Market Customers	
Geoff Gaston	Market Customers	
Tim McLeod	Market Customers	
Peter Huxtable	Contestable Customers	

<b>Apologies</b>	<b>Class</b>	<b>Comment</b>
Andrew Everett	Synergy	
Margaret Pырchla	Network Operator	
Jacinda Papps	Market Generators	

<b>Also in Attendance</b>	<b>From</b>	<b>Comment</b>
Aditi Varma	Energy Transformation Implementation Unit (ETIU)	Observer
Rebecca White	ETIU	Observer
Mark Katsikandarakis	AEMO	Observer
Nicole Markham	AEMO	Observer
Dimitri Lorenzo	Bluewaters	Observer
Julian Fairhall	ERA	Observer
Noel Schubert	ERA	Observer
Rajat Sarawat	ERA	Observer
Jo-Anne Chan	Synergy	Observer
Erin Stone	Perth Energy	Observer
Jenny Laidlaw	RCP Support	Observer
Laura Koziol	RCP Support	Minutes
Natalie Robins	RCP Support	Observer
Sandra Ng Wing Lit	RCP Support	Observer

<b>Item</b>	<b>Subject</b>	<b>Action</b>
<b>1</b>	<b>Welcome</b>	
	The Chair opened the meeting at 1:00 PM and welcomed members and observers to the 13 November 2019 special MAC meeting.	
<b>2</b>	<b>Meeting Apologies/Attendance</b>	
	The Chair noted the attendance as listed above.	
<b>3</b>	<b>Rule Change Proposal RC_2019_05: Amending the Minimum STEM Price definition and determination</b>	
	Mr Dominic Regnard provided an overview of Synergy's Rule Change Proposal: Amending the Minimum STEM Price definition and determination (RC_2019_05). The following points were discussed:	
	<u>The general issue addresses</u>	
	<ul style="list-style-type: none"> <li>Mr Daniel Kurz noted that before 2012, the Minimum STEM Price was the negative of the Maximum STEM Price and was changed to -\$1,000/MWh when the Balancing Market was introduced. Mr Kurz considered that the market had changed since then and that the Minimum STEM Price was never really intended to set the Balancing Price.</li> </ul>	

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	<ul style="list-style-type: none"> <li>• Mr Kurz and Mr Andrew Stevens noted that the Minimum STEM Price exposes Market Generators to significantly higher risk than the Maximum STEM Price.</li> <li>• Mr Martin Maticka noted that most generators were not required to bid at the Minimum STEM Price but that there was not much differentiation between the offers at the floor. Mr Maticka asked what the rationale was for so many Market Generators bidding at the floor and if that could mean that there was not enough price discrimination.</li> </ul> <p>Mr Stevens noted that Market Generators may bid at - \$1,000/MWh because they do not want to decommit their units. This was either because they are Ancillary Service Providers that must bid at the Minimum STEM Price or because they must fulfil contracts and therefore bid the relevant minimum generation at the floor. Mr Stevens noted that, while there is a price at which a Facility should decommit, the problem in the Wholesale Electricity Market (<b>WEM</b>) is that a Facility could be dispatched to decommit for only one Trading Interval and to recommit in the next Trading Interval. Mr Stevens noted that for certain Facilities decommitting for 30 minutes was technically problematic regardless of the price.</p> <p>Mr Maticka noted that, irrespective of the level of the Minimum STEM Price, it is likely that Facilities would be faced with being decommitted and recommitted from one Trading Interval to the next if the price reaches the floor because of the tiebreaker rule that randomly decides which of two identically priced quantities will be dispatched.</p> <p>Mr Stevens noted that turning a Facility off for 30 minutes was always inconvenient, if not uneconomical, and that the Minimum STEM Price just affects the scale of the problem. Mr Stevens suggested that several Facilities would bid at the floor even if the Minimum STEM Price was -\$10,000/MWh, and those Facilities would be subject to the tiebreak.</p> <ul style="list-style-type: none"> <li>• Ms Laidlaw asked how much the risk of infeasible dispatch was influencing bidding behaviour. Mr Regnard noted that currently the only way to reflect the technical minimum generation was to bid it at the floor.</li> </ul> <p>Ms Wendy Ng noted that while the discussion was about Trading Intervals, Facilities were really dispatched in 10-minute intervals and it was possible to be asked to decommit and recommit in 10-minute intervals.</p>	

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•	<p>Mr Maticka considered that the issue had two parts and asked which problem RC_2019_05 was trying to solve.</p> <ul style="list-style-type: none"> <li data-bbox="376 360 1158 539">○ One issue was how to compensate Ancillary Service Providers exposed to negative prices during times of low demand. This issue might not be solved by changing the Minimum STEM Price but could be solved through other measures.</li> <li data-bbox="376 562 1158 965">○ The other issue was how to achieve a commercial delineation to decide which plant to decommit at different points of demand. Mr Maticka noted that there were currently Intermittent Generators priced at -\$1,000/MWh but that it would only become important to decide which plant to decommit if there was a system security issue and that otherwise the tiebreaker rule was used. Mr Maticka noted that there was not much visibility which plants would have to decommit if it came to the tiebreaker as the selection was random.</li> </ul>	
•	<p>Mr Stevens expressed his opinion that the issue to be addressed was the economic risk of contracting long for whatever reason.</p>	
•	<p>Mr Stevens noted that penetration by renewable generation would be unpredictable over the next five years and there would be uncertainty about the rules governing the Network. Mr Stevens considered that the risk for Ancillary Services Providers to generate at -\$1,000/MWh would lead to a significant increase in LFAS prices.</p>	
•	<p>Mr Patrick Peake noted that RC_2019_05 was aiming to mitigate the exposure of Ancillary Service Providers to the Minimum STEM Price and that he considered it more appropriate to address the issue as part of the Ancillary Services workstream of the Government's Energy Transformation Strategy.</p>	
	<p>Mr Peake noted that Synergy was actively marketing behind the meter PV and has been the major investor in wind generation which was part of the reason that the price for Ancillary Services was increasing.</p>	
	<p>Mr Regnard noted that the Balancing Market and the Ancillary Services market were fundamentally intertwined.</p>	
•	<p>Mr Stevens noted that the market would be significantly reformed in around three years and that in the meantime the risks associated with negative prices should be reduced. Mr Steven noted that the current risk could lead to incredibly high LFAS costs.</p>	

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•	<p>Mr Dean Sharafi noted that the price for Ancillary Services should value the service properly and that including such a big exposure in the forward pricing would not send the right incentives. Ancillary Service Providers would either have to include this risk in their prices or pull out of the Ancillary Services market if they could. Mr Sharafi agreed that this risk needs to be addressed but noted that there might be other ways to do so.</p>	
	<p>Mr Regnard considered that the key question was to find an appropriate floor price for the energy market and that exposure for Ancillary Service Providers was a consequential issue.</p>	
•	<p>Mr Geoff Gaston noted that some of the Intermittent Generation might be backed by Power Purchase Agreements (PPAs) that incentivise bidding at the Minimum Floor Price because payment for the energy generated is unrelated to the Balancing Price. Mr Gaston noted that this might be a contracting failure that would need to be addressed by the relevant Market Participants. Mr Gaston considered that inverter-connected Facilities that did not incur any costs for decommitting and recommitting would be expected to decommit long before the price reached <math>-\\$1,000/\text{MWh}</math>. Mr Stevens agreed that Intermittent Generators should decommit at around <math>-\\$140/\text{MWh}</math>.</p>	
	<p><u>Annual review and appropriate level of the Minimum STEM Price</u></p>	
•	<p>Mr Maticka raised the concern that the higher the floor, the more bids would be placed at the floor price. Mr Maticka considered that if the Minimum STEM Price is raised to <math>-\\$200/\text{MWh}</math>, then more generation would be bid at the floor and the likelihood for coal fired power plants to be decommitted before other Facilities would increase (as long as there was no system security issue).</p>	
	<p>Mr Stevens noted that he expected that there was a large chasm between the negative price at which renewable generation would decommit, which is based on the revenue from large-scale generation certificates (LGC) vs bids at the Minimum STEM Price. Mr Stevens considered that the Minimum STEM Price should be changed to the level of this chasm.</p>	
	<p>Mr Kurz noted that there was a big gap in the Balancing Merit Order between around <math>-\\$250/\text{MWh}</math> and the Minimum STEM Price and if the Minimum STEM Price was set at a level below this gap, the outcome would be the same in</p>	

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	<p>terms of delineation while reducing the risk exposure for generators.</p>	
	<p>Mr Regnard noted that the intention of RC_2019_05 was to reduce the exposure for Market Generators during incidents were the Balancing Price reached the floor without increasing the occurrence of those incidents.</p>	
	<ul style="list-style-type: none"> <li>• Mr Dean Sharafi agreed that it would be appropriate to regularly review the Minimum STEM Price as is common practice in other markets. Mr Sharafi noted that the fundamental concepts of the market were changing, so a fixed Minimum STEM Price is not fit for purpose.</li> <li>• Mr Stevens noted that he considered that the current risk for Market Generators could translate into a system security issue and that he supports a review of the floor price.</li> <li>• Mr Sharafi noted that the changes should reduce the exposure to very high prices. Mr Sharafi noted that negative prices were not needed for contractual reasons but for fundamental technical reasons because, for example, coal fired power plants cannot easily recommit after decommitting and must stay decommitted for a long period of time. Mr Sharafi noted that there had to be enough price discrimination to identify Facilities that could decommit and recommit without any cost.</li> </ul>	
	<p>Ms Ng noted that there were no Scheduled Generators that could decommit and recommit without any costs.</p>	
	<p>Mr Peake noted that Generators other than Synergy were offering services such as fast start and emergency services which they were not payed for.</p>	
	<p>Mr Peake asked if savings in LFAS costs from the proposal would be passed on to the customers. Mr Stevens answered that the price would increase less. Mr Stevens noted that while there were some benefits for Market Customers to be paid \$1,000/MWh for their consumption, the Market Generators should not be exposed to this risk in such a small market. Mr Stevens noted that the whole point of the Reserve Capacity market was to underpin investment while putting a narrow band around the energy price.</p>	
	<ul style="list-style-type: none"> <li>• Mr Peake noted that the heavy investments in solar and wind generation had significantly reduced the Reserve Capacity Price and that therefore the Reserve Capacity Price should also be reviewed if the Minimum STEM Price would be reviewed.</li> </ul>	

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•	Mr Chris McDonagh noted that a review could lead to an even lower Minimum STEM Price.	
	Ms Koziol noted that Synergy was proposing that the Minimum STEM Price be set to reflect the decommitment cost of the plants with the highest costs to decommit. Ms Koziol asked if the decommitment costs were higher than \$1,000/MWh.	
	Mr McDonagh answered that a plant would have to recover its decommitment and start-up costs in a single Trading Interval therefore a price of -\$1,000/MWh would not be incentive to decommit. Mr McDonagh noted that he considered that the issue was a market design issue and not related to the actual price in the Trading Interval.	
•	Mr Kurz suggested setting two levels of Minimum STEM Price for different Facility types (like the maximum STEM Price and the Alternative Maximum STEM Price).	
•	Mr Peake asked if Synergy had done any work to determine what the new Minimum STEM Price should be.	
	Mr Regnard answered that the price should reflect decommitment costs and, upon request, confirmed that Synergy was currently bidding at decommitment costs where possible.	
	Mr Noel Schubert asked if Synergy's bidding behaviour had changed since the incident on 13 October 2019.	
	Mr Regnard answered that while Synergy might have bid different in hindsight the actual bidding practice had not changed.	
•	Ms Sara O'Connor sought clarification on whether the method of setting the Minimum STEM Price was proposed to be subject to the ERA's five yearly review of the methodology to determine the Energy Price Limits.	
	Ms Koziol confirmed that RC_2019_05 was proposing to include the methodology for determining the Minimum STEM Price in the ERA's five-yearly methodology review.	
	<u>Discussion of incident on 13 October 2019</u>	
•	There was some discussion about the incident on 13 October on which the Balancing Price was -\$1,000/MWh in two non-consecutive Trading Intervals (12:00 and 13:00)	
	Mr Mark Katsikandarakis stated that the generation mix during the Trading Intervals in question had been around 40% coal fired power plants, about 50% gas fired power plants and about 10% Non-Scheduled Generators. Mr Katsikandarakis also noted that around 50% of the	

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	<p>generation was associated to the provision of Ancillary Services.</p> <p>About 1,200MW was bid at -\$1000/MWh on 13 October 2019 and not enough load. Mr Sharafi noted that this situation could repeat itself in the future.</p> <p>Mr Julian Fairhall queried how much of the 1,200MW bid at the floor was associated with Ancillary Services. Mr Sharafi indicated that less than half of the generation would have been associated with Ancillary Services. Mr Fairhall concluded that this provided for a big buffer of generation that did not have to be bid at the floor. Mr Regnard noted that at the time of bidding there was no indication that the price could drop to -\$1000/MWh and that coal fired power plants had been bid in to serve the evening peak.</p> <p>There was some discussion about the bidding behaviour of Intermittent Generators and Mr Maticka noted that the Non-Scheduled Generators that were non-balancing active Intermittent Generators had to bid at the floor.</p> <p>Mr Regnard noted that at the time of bidding, the forecast had not indicated that the price could drop to -\$1,000/MWh.</p> <p>Mr Maticka agreed that the forecast price had not been -\$1,000/MWh and that the tranches had been very small so that a small error in the forecast could lead to a massive price change. Mr Sharafi noted that the forecast accuracy was expected to decrease with the increase of generators connected under Generator Interim Access (GIA) in the market.</p> <p>Mr Stevens noted that the Ancillary Services market would not change for the next three years and that Ancillary Service providers would get caught at -\$1,000/MWh more frequently generating massive losses.</p> <p>Mr Fairhall noted that not all the Facilities bid at the floor could be unable to decommit.</p> <p>Mr Stevens noted that this was a result of different Market Participants bidding the minimum generation of their coal fired power plants at the floor to participate in the market for the day.</p> <p>Mr Stevens noted that the issue would not be a problem if this was a once-a-year event but that he suspected this could happen more frequently over the next few years.</p> <p>Mr Stevens noted that this was an unreasonable risk for thermal power plants which were needed to provide system security.</p>	



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Mr Sharifi noted that the forecast price for one of the Trading Intervals in question in the half hour before the start of the interval had been -\$10/MWh. Mr Katsikandarakis added that in that instance, a forecasting inaccuracy of only 2.5 MW had caused the Balancing Price to change from -\$10/MWh to -\$1,000/MWh. Ms Laidlaw noted that the dispatch may have even happened assuming the price to be -\$10/MWh.

#### Market power

- Ms Koziol asked for feedback on whether an obligation could be introduced to not bid below decommitment costs in case of Market Power.
- Mr Stevens noted that with the current forecasting issues and price volatility it would be impossible to know if one would set the price at the time of bidding, which would make such an obligation impractical.

#### Principles to determine Min STEM Price in Market Rules

- Ms Koziol asked for feedback on whether the principles to be considered when determining the Minimum STEM Price should be included in the Market Rules.
- Mr Maticka noted that the Market Rules should be very clear about how AEMO was supposed to determine the Minimum STEM Price.
- Ms Koziol asked if the Rules should be more prescriptive than the provision of principles.
- Mr Maticka answered that principles could be interpreted in many ways, so the Market Rules should be more prescriptive.
- Mr Katsikandarakis suggested that the Minimum STEM Price should be prescribed in the same detail as the Maximum STEM Price.
- Mr Maticka noted that the Rules should also outline the purpose of the Minimum STEM Price (i.e. if it is to manage the risk of exposure or if it is to provide for delineation of plants to come off) as this might affect the methodology.

#### Principles suggested by Synergy

- Ms Koziol sought feedback on the principles that Synergy had proposed should be considered in setting the Minimum STEM Price.

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	<ul style="list-style-type: none"> <li>• Mr Stevens noted that if the review would result in a lower Minimum STEM Price, then the risk of increasing LFAS Prices would need to be mitigated.</li> <li>• Mr Maticka noted that this was the core question about the objective of the Rule Change Proposal. Mr Maticka asked if the objective was to mitigate the risk of LFAS prices being affected by the Balancing Price getting to -\$1,000/MWh or to find an order to decommit plants? Mr Maticka noted that there might be a way to mitigate the risk of the floor price affecting LFAS prices without changing the Minimum STEM Price.</li> <li>• Ms Koziol asked if there was a floor price that would reduce the risk for LFAS costs and still allow for delineation.</li> <li>• Mr Maticka noted that there were currently already several Facilities not providing Ancillary Services that were priced at the floor.</li> <li>• Ms Koziol asked MAC members and Observers to provide the Rule Change Panel with information on their decommitment costs to support the assessment of the Rule Change Proposal. Ms Koziol emphasised that any such information would be handled confidentially.</li> </ul>	
	<p><u>Non-balancing active Facilities</u></p> <ul style="list-style-type: none"> <li>• Ms Laidlaw asked what should happen to non-balancing active Facilities that were currently obliged to bid at the floor.</li> <li>• Mr Stevens noted that it might be a good idea to make those Facilities decommit at a certain price but that this would result in implementation costs for these Facilities.</li> </ul>	
	<p><u>Urgency rating</u></p> <ul style="list-style-type: none"> <li>• The Chair sought feedback on the urgency rating for the Rule Change Proposal.</li> <li>• Mr Peake noted that it the issue was not a serious threat for the market and that considering the other Rule Change Proposals currently in process it should be rated as medium.</li> <li>• Mr Stevens suggested that the urgency rating should be high, not essential.</li> <li>• The Chair summarised that Synergy had proposed an urgency rating of Essential and that most of the MAC members suggested a high urgency rating (Mr Peake was the exception).</li> </ul>	

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Item	Subject	Action
10	<b>General Business</b>	
	The Chair noted that the Panel was going to commence its annual MAC composition review. The call for nominations for the four positions that are due to expire was due to be published on 2 December 2019.	

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**The meeting closed at 2:00 PM.**