

Minutes

Meeting Title:	WEM Investment Certainty Review (WIC Review)
Date:	24 January 2024
Time:	9:30 AM to 12:20 PM
Location:	Microsoft TEAMS

Attendees	Company	Comment
Dora Guzeleva	Chair	
Mena Gilchrist	AEMO	
Graham Pearson	Australian Energy Council	
Oscar Carlberg	Alinta Energy	
Daniel Kurz	Bluewaters Power 1 Pty Ltd	
Francis Ip	BLT Energy Pty Ltd	
Tom Frod	Bright Energy Investments	
Jake Flynn	Collgar Wind Farm	
Liz Aitken	Empire Carbon and Energy	
Dr Matt Shahnazari	ERA	
Noel Schubert	Expert Consumer Panel	
Luke Skinner	Expert Consumer Panel	
Patrick Peake	Perth Energy	
Paul Arias	Shell Energy	
Shane Cremin	Summit Southern Cross Power Pty Ltd	Joined 10:15am
Rhiannon Bedola	Synergy	
Peter Huxtable	Water Corporation	
Valentina Kogon	Western Power	
Tim Robinson	Robinson Bowmaker Paul (RBP)	
Eija Samson	RBP	
Shelley Worthington	EPWA	
Tonia Curby	EPWA	

Item	Subject	Action
1	Welcome The Chair opened the meeting with an Acknowledgment of Country and welcomed members.	

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<p>2-3 Meeting Attendance and Minutes</p> <p>The meeting attendance was as listed above.</p> <p>The Chair noted that the Minutes from 6 December 2023 were approved and published.</p>		
<p>4 RCP Curve – final proposals</p> <p>Mr Bowmaker presented the final proposals for the Reserve Capacity Price (RCP) curve and summarised discussion from previous WICRWG meetings.</p> <ul style="list-style-type: none"> Mr Carlberg noted that there are factors outside of price which pose barriers to entry, and noted the delayed response to a capacity price signal due to project timelines. Mr Schubert asked whether EPWA plans to consider roadblocks outside of the RCP for new facilities entry. Mr Skinner responded that this is the role of PoweringWA. <p>The Chair responded that this is the purpose of the WIC Review and noted other initiatives including discussions with the Commonwealth on the Capacity Investment Scheme (CIS) which seek to address these roadblocks.</p> <ul style="list-style-type: none"> Mr Skinner considered that shortfalls in capacity may be due to broader uncertainty, which may not be mitigated through RCP changes. Mr Flood noted the high degree of risk with new investment and considered that the government’s grid augmentation commitments, Electricity Statement of Opportunities and SWIS Demand Assessment have provided stronger investment signals. He noted that it is unclear how investors can account for risk and that the offer construction guideline could include this. <p>The Chair responded that the offer construction guideline applies to entities which have market power.</p> <ul style="list-style-type: none"> Dr Shahnazari did not agree that the cost of managing risk is unaccounted for in the ERA’s calculations and noted that risk-adjusted rate of return is included in the BRCP. Ms Aitken noted that the return on investment is in the Weighted Average Cost of Capital of the BRCP. She raised the issue that this does not apply to wind as the Relevant Level Method dilutes the volume of capacity for those investments. <p>Mr Robinson presented the proposal to set the Peak RCP to 100% of the BRCP at the Peak Reserve Capacity Target (RCT).</p> <ul style="list-style-type: none"> Mr Arias noted that members previously expressed concern regarding the weakening of the investment signal and that gross Cost of New Entry (CONE) was chosen due to the uncertainty of net CONE. <p>The Chair clarified that there were views both for and against the proposal from members.</p> <p>Mr Robinson presented the proposal to retain the absolute zero point at 130% of the RCT, noting the importance to protect consumers from oversupply.</p>		

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	<ul style="list-style-type: none"> Mr Flynn questioned whether low energy prices would be a natural protection to consumers and noted the material risk of a zero-price floor to investors. <p>Mr Robinson acknowledged the risk to investors and noted that risk needs to be balanced between investors and consumers.</p> <p>The Chair noted that the BRCP is likely to increase and, along with the proposed deadband, will increase certainty.</p> <ul style="list-style-type: none"> Mrs Bedola did not agree that new generation will primarily be renewables noting the requirement for flexible and firm capacity to respond to the peak. She considered that this should be 'storage and renewables'. She also noted that, if there is a surplus and the price is zero, existing capacity is still providing a value which is not zero. <p>The Chair asked whether zero-price at 130% of the target is too low.</p> <p>Mr Robinson noted that most other markets go to zero at 5-10% surplus.</p> <ul style="list-style-type: none"> Mr Skinner considered that because the RCT is recalculated every year, the 130% point should not present a real problem for investors. Mr Carlberg considered that zero at 130% is an excessive signal which would prohibit investment. He also considered the price drop outside of the deadband poses risk to investors. He considered that there should be another mechanism to hedge against these risks. <p>The Chair noted that the zero-price signal is for a year and is consistent with international comparison. She also noted that investors can lock in a price for 5 years if they foresee a risk.</p> <p>Mr Schubert noted the current capacity shortfall and considered that we keep the zero-point at 130%, and as we get closer to having excess capacity we can revisit, if necessary, whether 130% is appropriate.</p> <ul style="list-style-type: none"> The Chair did not consider year-on-year adjustments to be a good approach to incentivise investment. Mr Carlberg, Mrs Bedola and Ms Aitken agreed that we should refrain from year-on-year adjustments. <p>Dr Shahnazari considered that absolute zero at 130% is too generous and that other jurisdictions typically use a steeper curve.</p> <p>Ms Aitken considered that there are more effective ways to address issues with battery revenue shortfalls than in the capacity market.</p> <ul style="list-style-type: none"> Mr Skinner agreed. <p>Mr Peake considered that customers can be protected by having a cap on total cost for all capacity and spreading this across investors.</p> <ul style="list-style-type: none"> The Chair responded that this is one of the RCP curve options. <p>Mr Robinson presented the following proposals:</p> <ul style="list-style-type: none"> The Peak RCP is to have a deadband between 95% and 105% of the RCT and a price cap at 150% of the RCT; The Flexible RCP curve to have a deadband between 100% and 105% of the Flexible RCT and a price cap at 160% of the RCT; and 	

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	<p>He noted that:</p> <ul style="list-style-type: none"> ○ these proposals have been amended to reflect the discussion in the previous working group meeting; and ○ the Flexible Capacity price curve is slightly steeper than the Peak Capacity curve in a shortfall to provide a stronger signal for flexible capacity. ● Mr Carlberg considered the curves to be too steep on both sides and thinks a shorter-term lock-in would be beneficial, noting the potential for price swings with changes in capacity or the target. ● Mrs Bedola asked what the size of the deadband is for the Flexible Capacity and considered the deadband should be bigger, given the volume of flexible capacity is smaller than the volume peak capacity. <p>Mr Robinson responded the deadband range would be smaller than that for peak capacity and that EPWA will give this more consideration.</p> <ul style="list-style-type: none"> ● Mr Schubert asked whether multipliers were appropriate when sudden increases to the RCT may be policy related (e.g. increases in forecast and change to the reserve margin from the single largest unit to the largest three). <p>The Chair noted that this will be consulted on and should be considered in the context of several things, including the reserve margin and the gross CONE.</p> <p>Mr Robinson presented the forecast RCP curve and noted that at the target the RCP curve will result in a lower price than the current curve, while at the low and high end this will be a higher price.</p> <ul style="list-style-type: none"> ● Mr Carlberg asked the graph to include the estimated decrease in the price of lithium for the capacity price over time. <p>Mr Robinson noted that the following proposals were previously generally agreed on by the WICRWG:</p> <ul style="list-style-type: none"> ● regularly reviewing the price curve during the BRCP capacity provider review; ● not including special transitional provisions for Facilities commissioned since 2019; and ● amending the cap and floor inflation provisions for existing Transitional Facilities. 	
<p>5-7</p>	<p>Support for renewable investment – introduction, options and recap</p> <p>Mr Robinson presented the scope for initiative 3 and noted that as renewable energy build increases and conventional generation retires, the average Real-Time Market (RTM) price will decrease.</p> <ul style="list-style-type: none"> ● Dr Shahnazari considered that if renewables will be the price setter/marginal entrant, renewables would receive sufficient revenue through the RCM. <p>Mr Robinson responded that, if capacity is required only at the peak and the capacity credits a renewable facility receives are discounted, batteries will</p>	

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	<p>likely be less expensive than wind and would be the price setter/marginal entrant.</p> <ul style="list-style-type: none"> • Dr Shahnazari considered that in this situation, batteries would not be the reference technology because they are unable to charge, resulting in renewables being the BRCP reference technology. He noted that in this case, renewables would receive sufficient revenue. <p>The Chair noted this point but acknowledged that the analysis undertaken during the RCM review highlighted the renewables revenue shortfall issue.</p> <ul style="list-style-type: none"> • Mr Carlberg asked whether this assumed no new thermal generation, like flexible gas, and therefore more renewable overbuild. <p>The Chair responded that the model assumes some new gas, and that this modelling was undertaken prior to the SWISDA. She noted that this was done in line with the existing plants retirement schedule at the time of modelling.</p> <ul style="list-style-type: none"> • Mr Schubert considered that renewable proponents would firm up their capacity to ensure they get capacity credits if they anticipate the price decreasing. <p>Mr Robinson responded that the forecast assumes storage is required to meet the target, regardless of who is building the storage.</p> <ul style="list-style-type: none"> • In response to earlier discussion, Mr Frood noted that some investors have to assume they will be 100% merchant during some of their life. • Mrs Bedola supported this view and noted that any off-taker will also want to be able to recover costs and these would be passed on through the Power Purchase Agreement (PPA). • Mr Peake noted that renewables only receive Capacity Credits equal to a portion of their nameplate rating. If renewables set the RCP, they will only recover a portion of their capital cost. • Dr Shahnazari disagreed, as the BRCP sets the cost per Capacity Credit. • Mr Frood noted that the forecast requirement for capacity would result in a 15% capacity factor which undercuts ongoing revenue and affects the Relevant Level. He considered that there is an underlying problem to be addressed. <p>The Chair considered that the purpose of this initiative is to identify potential gaps and potential solutions to fill these.</p> <p>Mr Robinson presented the design criteria for initiative 3 noting that the approach should address the three limbs of the review objective including maintaining market signals, avoiding double dipping and not increasing end-user prices compared to current levels.</p> <ul style="list-style-type: none"> • Mr Carlberg asked what the outcome of this overbuild would be on the RCM. <p>The Chair responded that this is an overbuild in nameplate capacity only, not certified capacity.</p> <ul style="list-style-type: none"> • Mrs Bedola did not consider that a PPA should be part of the assessment. <p>The Chair considered it is important to prevent double-dipping.</p>	

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	<ul style="list-style-type: none"> Mrs Bedola considered that renewables may need additional revenue from the market. For example, in the event of differences between forecast and actual generation. She was also concerned that facilities may not be able to enter into PPAs because there was not enough money. <p>The Chair was concerned that topping up costs locked in a PPA may create the wrong incentive when developing PPAs.</p> <ul style="list-style-type: none"> Mr Carlberg noted that the market is net settlement which avoids double-dips. Dr Shahnazari considered that PPAs do not need to be considered as they are written based on expected energy prices. <p>Mr Robinson noted that the fundamental approach to initiative 3 is to add a revenue stream rather than amending an existing stream.</p> <ul style="list-style-type: none"> Mr Peake asked EPWA to consider when the risk should be shared. He considered that project development cost risks should be worn by the developer, and risk posed by weather and ensuring sufficient capacity should be worn by customers. Ms Aitken disagreed and considered that customers already carry some of this risk through Synergy. She also questioned why customers should wear weather risk without being placed to manage it. <p>The Chair clarified that it is inappropriate for all risk to be on customers.</p> <ul style="list-style-type: none"> Mr Schubert considered that whoever is best placed to manage the risk should bear it. Mr Flood considered that one cannot manage weather risk, only forecast it. <p>Mr Robinson discussed the interaction of initiative 3 with other schemes. He noted that this new scheme would be needed only if these other schemes do not provide sufficient revenue to support new firm renewable investment.</p> <ul style="list-style-type: none"> Ms Aitken noted that the Renewable Electricity Guarantee of Origin (Cth) should help with battery revenue shortfalls. <p>Mr Robinson presented three broad options for discussion:</p> <ul style="list-style-type: none"> ○ Approach A: an energy purchaser obligation; ○ Approach B: a capacity-based revenue top-up; ○ Approach C: a price guarantee linked to pricing in a trigger year with a cap and a floor; and ○ Approach D (not on slide): amending the BRCP definition to provide the top up. <ul style="list-style-type: none"> Dr Shahnazari noted the potential problems with administering the scheme and the overlap with the several other revenue streams. He noted his support to manage this issue within the RCM or through an auction. Ms Aitken disagreed and considered this to be an energy revenue problem not an installed capacity problem. She considered that energy-based options would appropriately incentivise renewable energy and supported linking this to the proposed emissions thresholds through a contract for 	

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	<p>differences which would discontinue if a facility is above a given emissions threshold.</p> <ul style="list-style-type: none"> • Dr Shahnazari considered that if renewable energy becomes abundant and the incremental cost of energy is almost zero, the market should move away from revenue streams for products without value, and instead provide compensation where the cost/value lies. • Ms Gilchrist considered that if existing revenue streams are amended, we need to be careful not to undermine the integrity of those schemes. She noted, as a general principle, she prefers a separate revenue stream. • Mr Peake disagreed with Ms Aitken because, if a windfarm is needed for years when wind is low, it may not run in a year when wind is high but still needs to meet its fixed costs. • Mrs Bedola considered that Essential System Services (ESS) costs need to be considered as these can be significant. • Ms Aitken responded that the facility will still receive capacity revenue, not just the top up. • Mr Flood considered that the reserve capacity drops, because the relevant level drops, together with the lower generation revenue. • Dr Shahnazari disagreed because, if renewables become marginal and set the BRCP, they would not receive less revenue because the BRCP increases. <p>The Chair noted the need to discuss when renewables might become the marginal new entrant.</p> <ul style="list-style-type: none"> • Mr Skinner noted that what we are trying to achieve is to design the period between now and when we have the abundance of renewables. <p>The Chair agreed and noted that we are likely looking to plan for a period of the next 10 years rather than the next 50 years.</p> <ul style="list-style-type: none"> • Mrs Bedola asked whether the expectation is that the BRCP is updated each year for variances in the RLM which would add more volatility. <p>The Chair did not think renewables will set the BRCP in the next 10 years as the firming technologies would remain the most efficient new entrant.</p> <ul style="list-style-type: none"> • Dr Shahnazari considered that the RCM can manage any set of technologies and noted that there are other mechanisms to meet a renewable target, including requirement for renewables to firm, leave it open to the market or design another capacity product. • Mr Carlberg noted that another option could be an upfront capital contribution. <p>The Chair responded that this is out of scope as government/consumers would need to pay this upfront capital.</p> <ul style="list-style-type: none"> • Mr Flood considered that another option could be to pay facilities at a floored price if technical or economic constraints exceed a certain amount. <p>Mr Robinson presented approach A noting that:</p> <ul style="list-style-type: none"> ○ energy purchases would be obliged to purchase certificates; 	

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	<ul style="list-style-type: none"> ○ a central body would certify and operate the scheme; and ○ this approach would not guarantee revenues as revenue is only received if generating, however there is potential to adopt aspects of the RET. <ul style="list-style-type: none"> ● Ms Aitken considered that approach A is a lot of admin work for a small market like the WEM and may lead to perverse outcomes. ● Mr Peake considered that ‘firmed renewables’ would need to be properly defined to ensure a balance between storage and renewables. ● Mr Schubert suggested another option - the offer construction guideline could be modified to allow some recovery of capital cost for firmed renewables that do not receive adequate revenue from energy only. <p>The Chair responded that this guideline applies to those with market power.</p> <ul style="list-style-type: none"> ● Mrs Bedola considered that the requirement for firming may add complexity and barriers. ● Mr Shahnazari agreed with Mr Frood noting that even energy only markets would have a problem when energy service is abundant, and price is negligible. He noted that eventually we will end up with procurement of services other than energy. <p>Mr Robinson presented approach B and the Capacity Investment Scheme: The Chair clarified that the CIS proposal has been extended to include renewables and firmed renewables.</p> <ul style="list-style-type: none"> ● Mr Schubert wished to avoid paying for things they would have already done (“free riders”), for example facilities which have already paid off their capital. <p>The Chair noted that the CIS is only available for new facilities. She noted the importance of ensuring new facilities outside the CIS are on equal footing.</p> <ul style="list-style-type: none"> ● Dr Shahnazari considered that, if the revenue requirement is compared with the actual revenue and the difference is compensated, this looks like a riskless investment. <p>Mr Robinson responded that the CIS deals with this by providing a net revenue floor and allowing some exposure to upside.</p> <ul style="list-style-type: none"> ● Mr Carlberg noted that approach B is preferable to approach A. ● Mr Peake noted that the advantage of approach B is bringing Federal money into the market. ● Ms Aitken asked who will pay for the top-up. <p>The Chair clarified that this is available for those who miss out on the Federal scheme and would be paid for by customers. However, if sufficient incentive for investment remains, this scheme would not be applied.</p> <p>Mr Robinson noted the importance of encouraging facilities to apply for the CIS funding.</p> <ul style="list-style-type: none"> ● Mr Skinner agreed with making the approach less complex, but noted the possibility for the Commonwealth to change the CIS and that then the top-up scheme would need to change as well. 	

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	<p>Mr Robinson presented approach C:</p> <ul style="list-style-type: none"> ○ facilities would be provided with a top-up payment based on their actual output and capture price compared to a reference price; ○ the reference price could be regularly updated, or updated on a trigger; ○ the trigger could be linked to conventional generation retirement or CIS margin, noting the key is to set it before investment collapses; and ○ this approach would not require detailed revenue information and would deal with price risk but not with volume risk. <ul style="list-style-type: none"> ● Mrs Bedola asked about WEM CIS timeframes. <p>The Chair responded that EPWA is in ongoing discussions with the Commonwealth and is seeking to get clarity in the next month. She also noted that EPWA is investigating how transparency in the CIS is ensured.</p> <ul style="list-style-type: none"> ● Mr Carlberg considered that only approach B covers volume risk. <p>Mr Robinson clarified that this is the only option where the top-up would increase with lower output, while it would decrease in A and C if output decreases.</p> <ul style="list-style-type: none"> ● Mr Carlberg considered that some volume risk should be borne by the facility, for example, if the windfarm is falling apart. He also questioned if the signal from the RCM is sufficient to stop facilities building on top of each other. <p>The Chair agreed that the incentive to generate should not be removed.</p> <ul style="list-style-type: none"> ● Ms Aitken asked whether volume risk should be covered by the developer. ● Mr Peake disagreed, as this would place significant reliability risk onto customers as developers would not build enough. ● Ms Aitken considered that this is why approaches A and C have more appropriate risks for the market to bear. ● Mr Peake suggested that when funding capital for a solar or wind farm, whether or not the electricity is used does not change the cost. He noted that in the context of abundant renewables, we do not actually need all the energy. He noted that these facilities would be running at their marginal cost and the revenue would be swallowed up by the operating cost. <p>The Chair noted that competition is required in the market.</p> <ul style="list-style-type: none"> ● Ms Aitken considered that incentivising location diversity should remove the concept of 'low wind years and high wind' years. She considered that giving developers fixed payments without taking risk is not appropriate. ● Mr Carlberg suggested that the revenue top up could be qualified for shortfalls produced by certain types of disruptions. ● Mrs Bedola considered that network augmentation must be considered. ● Mr Schubert noted that the market price 'curtails' renewables almost every day in the middle of the day. <p>The Chair asked members whether approach A should be considered.</p>	

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	<ul style="list-style-type: none"> Ms Aitken, Dr Shahnazari, Mr Skinner and Mr Kurz agreed to discard approach A. Mr Peake noted the difficulty with transferring customers between retailers and the potential to end up with insufficient capacity if retailers decide to sell less electricity to decrease their obligation. Mrs Bedola did not think approach A can be excluded without an understand of how the CIS will work in the WEM. Mr Huxtable, Mr Ip and Mr Carlberg agreed to consider approach A later. <p>The Chair asked members whether approach B should be considered noting it is important to ensure the incentive to generate is not removed.</p> <ul style="list-style-type: none"> Mr Carlberg agreed to consider this noting that it covers volumetric risk and that we do not want to protect generators from all risk otherwise they may not locate the facility in the correct places. Mr Skinner agreed to consider option B and to look at risks associated with it. <p>The Chair asked members whether approach C should be considered.</p> <ul style="list-style-type: none"> Ms Aitken, Mr Ip and Mr Kurz agreed to consider option C. Mr Carlberg considered that option C is the simplest. Mrs Bedola agreed to consider options B and C. <p>The Chair summarised that EPWA will continue to define options B and C and option A will be considered at a later date.</p> <p>Mr Robinson sought to capture any other options not already suggested, which included Dr Shahnazari's option of looking at the BRCP and Mr Peake's option of adjustments that deal with constraint risk.</p> <ul style="list-style-type: none"> Mr Peake considered that Dr Shahnazari's idea is worth pursuing and considered that developers will not take on much weather risk as they cannot control this. <p>The Chair noted that developers could firm their capacity.</p> <ul style="list-style-type: none"> Ms Aitken considered that they can buy a wind derivative to manage risk. Mr Carlberg considered Dr Shahnazari's option could manage constraint risk. 	
8	General business	
	No general business was discussed.	
9	Next steps	
	<p>Mr Robinson noted the next session on 28 February 2024 will benefit from members reading through appendix slides. He noted the goal of the meeting is to determine a final proposal for support for renewable technologies.</p> <p>The Chair encouraged members to provide any further suggestions.</p>	

The meeting closed at 12:20 pm