



Minutes

Meeting Title:	Pilbara Advisory Committee (PAC)
Date:	18 April 2024
Time:	9:30 AM – 11:00 AM
Location:	Online, via TEAMS

Attendees	Class	Comment
Sally McMahon	Chair	
Summa McMahon	Independent System Operator (ISO)	Proxy for James Campbell-Everden
Anthony Ravi	Registered Network Service Provider (NSP)	
Momcilo Andric	Registered NSP	
Sandy Morgan	Registered NSP	
Neil Midolo	Excluded NSP	
Rebecca White	Excluded NSP	
Gabby Pracilio	Contestable Customer	
Sandra McInnes	Contestable Customer	
Analena Gilhome	Small-Use Consumer	
Rory Burn	Discretionary Rule Participant	
Bethwyn Cowcher	Discretionary Rule Participant	
Kristian Myhre	Discretionary Rule Participant	
Frances Hobday	ERA's Observer	
Noel Ryan	Minister Appointed Observer	

Also in Attendance	From	Comment
Dora Guzeleva	PAC Secretariat	
Thomas Marcinkowski	PAC Secretariat	
Tom Coates	PAC Secretariat	
Tim Robinson	RBP	

Apologies	From	Comment
James Campbell- Everden	ISO	Proxy attended

Item	Subject	Action
1	Welcome	
	<p>The Chair opened the meeting at 9:36am with an Acknowledgement of Country.</p> <p>The Chair noted her regular disclosure on her other roles held, including her recent appointment as a part-time Councillor at the National Competition Council.</p> <p>The Chair noted that the views or advice provided by the PAC to the Coordinator of Energy (Coordinator) do not necessarily represent the views of the independent Chair.</p> <p>The Chair advised that the PAC meeting was being recorded for the purpose of developing the minutes.</p>	
2	Meeting Apologies/Attendance	
	The Chair noted the attendance and apologies as listed above.	
3	Competition Law Statement	
	The Chair noted the Competition Law Statement, reminded members of their obligations and encouraged them to bring any Competition Law issues to her attention as they may arise.	
4	Minutes	
	<p>(a) Minutes of Meeting 2024_02_29</p> <p>The PAC noted the minutes of the 29 February 2024 PAC meeting which were reviewed and approved out-of-session by the PAC.</p>	
5	Action Items	
	<p><u>Item 1/2024:</u></p> <p>Ms Guzeleva confirmed that an updated Terms of Reference document was circulated to PAC members immediately before this meeting.</p> <p>The Chair requested that this Item be left open to provide members an opportunity to provide feedback on the revised Terms of Reference.</p>	
6	Evolution of the Pilbara Networks Rules (EPNR) Project Update	
	The Chair introduced this agenda item, noting that the Evolution of the Pilbara Networks Rules Working Group (EPNRWG) had met twice since the previous PAC meeting. The Chair invited Ms Guzeleva to lead discussion on this item.	

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	<p>Ms Guzeleva outlined an intention to establish a practice in which a debrief is provided to the PAC on each of the EPNRWG meetings in the intervening period. Additionally, she noted that there is opportunity for PAC members to provide additional views.</p> <p>Ms Guzeleva noted that the 28 March 2024 EPNRWG meeting focused on the project's Scope of Work, and discussions largely reflected those in the February PAC meeting.</p> <p>Ms Guzeleva noted that the 15 April 2024 EPNRWG meeting focused on Stage 2 of the Project (the modelling exercise) with a particular focus on the modelling approach to scenarios.</p> <p>Ms Guzeleva invited PAC members who attended the EPNRWG meetings to provide any reflections to the PAC.</p> <ul style="list-style-type: none"> Ms White expressed her view that the EPNRWG meetings were going well. She advised that, in line with EPWA's request to the working group, BHP were developing feedback to provide in the following week. <p>Ms Guzeleva invited Mr Robinson to provide a summary of the 28 March 2024 Working Group meeting.</p> <p>Mr Robinson provided an overview of the EPNR modelling approach, with reference to slides 4 and 5. He emphasised that the 2023 modelling used a least cost expansion model to provide infrastructure planning insights, while the EPNR modelling exercise will apply a dispatch model with hourly resolution to provide operational insights.</p> <p>Mr Robinson outlined key assumptions underlying the modelling approach, and key insights expected from modelling outputs, with reference to slide 6.</p> <p>Mr Robinson summarised working group discussions, with reference to slide 7. He reflected that discussions were focused on clarifications, and the working group members were generally comfortable with the modelling approach.</p> <p>Mr Robinson invited comments or questions from members on the modelling approach.</p> <ul style="list-style-type: none"> Ms Cowcher asked if the Government, through the roundtable process, had already formed a view that there were benefits from integration (through avoided build costs). She queried whether different regulatory settings may be required for legacy assets, compared with new builds. Further, Ms Cowcher noted that the unconstrained transmission assumption appears bold given known constraints (i.e. land access), and queried how accurate the modelling insights would be for generation profiles. <p>Mr Robinson reiterated that the focus of the modelling exercise was not to determine a generation or transmission build plan, but to examine the compatibility of the current PNR under different scenarios with various levels of demand and renewable generation penetration.</p> <p>Mr Robinson acknowledged that the roundtable were supportive of an integrated approach to transmission development and build, and noted that the 'integration dimension' in the EPNR modelling exercise was</p>	

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	<p>focused on the operation of transmission and generation projects once they are built.</p> <p>Ms Guzeleva noted that there is a separate work program within EPWA that will refresh the 2023 modelling, focusing on transmission staging.</p> <p>Ms Guzeleva re-iterated that the PAC is being asked to provide guidance on the evolution of PNR and whether it needs to be changed to accommodate the scenarios modelled.</p> <p>Addressing the second aspect of the question posed, Ms Guzeleva noted it is unclear whether the current PNR regime is sustainable, and the various transitional arrangements under the PNR will also need to be revisited as part of the EPNR project.</p> <p>Mr Robinson added that insights into the operation of legacy and new assets will be derived during the modelling of different levels of operational integration across scenarios.</p> <p>Mr Robinson acknowledged the view expressed around the unconstrained transmission investment assumption. He noted that to explore potential benefits, the modelling needs to include all available load, and assume that all load will be served.</p> <ul style="list-style-type: none"> Mr Ravi noted that the modeling is expected to identify efficiency gains that may flow from increasing levels of integration. Mr Ravi discussed the importance of developing an accurate base case (status quo), which ensures that the model measures the benefits of the existing regime appropriately and identifies whether decarbonisation objectives can be achieved. Mr Ravi further noted that the PNR is broader than energy flow considerations, and queried how the model would incorporate broader issues in the PNR. He asked if it would be worthwhile to clarify potential issues with the PNR in advance of the modelling exercise. <p>Ms Guzeleva answered that, in order to identify potential issues with the PNR, the hypothesis that the PNR is sustainable needs to be tested through the scenarios modelling.</p> <p>Mr Robinson agreed that energy flow and essential system services, both of which are contemplated by the PNR, were built into the modelling. He asked Mr Ravi which other areas of the PNR should be specifically factored into the modelling exercise.</p> <ul style="list-style-type: none"> Mr Ravi queried if the modelling would consider the access and connection processes, and whether energy balancing and settlement (EBAS) is working well. <p>Mr Robinson clarified that the modelling exercise is one aspect informing the detailed review of the PNR (Stage 3), not the only aspect.</p> <p>Mr Robinson pointed to the list of issues that was prepared for the HTR workstream, which will consider some access and connection issues. He added that potential developments identified during the 2023 Pilbara Industry Roundtable discussions would be considered in Stage 3.</p>	

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	<p>Ms Guzeleva added that the current Pilbara regime is based on the self-balancing of loads and supply, which is being tested by the modelling with increasing levels of renewable penetration. She noted that the objective is to test whether there are aspects of the PNR that need to be evolved.</p> <ul style="list-style-type: none"> Mr Ravi noted that the modelling was an optimisation model around cost and questioned whether considerations of cost are the main driver for development of the NWIS. <p>Mr Robinson agreed that security and reliability were also paramount considerations, and noted that they need to be met in every scenario.</p> <p>Ms Guzeleva noted that there may be future users of the Pilbara electricity system for whom costs are important and who might not connect to the system if costs are too high. She reiterated that the modelling will also test whether a scenario without integration is sustainable, irrespective of cost.</p> <ul style="list-style-type: none"> Mr Andric emphasised the potential for significant economic loss associated with a loss of mining operations load in contrast to a residential load. He stated that the modelling will need to reflect different reliability requirements for different parts of the network, accordingly. He further noted that the location of generation and load is relevant to reliability. <p>Mr Robinson clarified that location of generation is treated as less important than quantity in the context of new generation. He, however, reiterated that the model will take into account the location of the load, which is very important.</p> <p>Mr Robinson agreed that the reliability standard, used as an input for the modelling exercise, will be important. He reflected on the discussion held with the working group that the modelling could define a single blanket approach for the whole network, or it could set different reliability standards for different parts of the network.</p> <p>Ms Guzeleva noted that this project has a decarbonisation focus and that it may not be possible for new, largely renewable generation to be co-located with loads.</p> <ul style="list-style-type: none"> Ms Morgan noted that generation location can impact reliability, particularly to the extent that it may form the largest credible contingency. Ms Morgan stated that the evolution of the PNR, is broader than potential 'market' changes. She noted that other aspects of the PNR that require changes will become apparent as the project continues (i.e. Stage 3 - detailed review of the PNR). Ms Morgan noted that the modelling forecasts should consider when sufficient load is connected to support the viability of any market mechanisms. <p>Mr Robinson summarised the discussion as follows:</p> <ul style="list-style-type: none"> The evolution of the PNR is broader than the market and integration. 	

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- Security, reliability and environmental considerations are important, not just overall cost to serve.
- Consideration of generation and load locations are relevant to maintenance of power system security and reliability.
- The possible integration assumed by the model should take into account both new and legacy assets.
- Unconstrained transmission investment comes at a cost which needs to be accounted for.

Members took the slides for the 15 April Meeting working group meeting as read.

Mr Robinson provided a brief summary of the meeting outcomes, with reference to slide 11, and invited feedback from members.

- Ms Morgan asked why demand projections in the 2023 Current Trajectories (CT) with Barriers scenario, which considers land access and availability, were not preferred for this exercise.

Mr Robinson noted that the CT demand projections used in the EPNR Project are similar to the CT with Barriers scenario. He added that the CT with Barriers scenario reflected a delay in electrification and building generation in the near term but quickly converged with the CT scenario afterwards. In that sense, the proposed demand projections reflect underlying demand.

- Ms Morgan noted that transmission build staging is likely to impact the timing of new loads, and that cost is important in this context.
- Ms White asked whether there was merit in modelling a mid-point level of integration noting that, while there is a benefit to a market-based framework, some market mechanisms have a high cost.

Ms Guzeleva noted that the focus of the modelling is to test the existing PNR and identify if there are any efficiencies in exploring and moving towards a higher level of integration.

Mr Robinson agreed that there may be benefit in modelling a mid-point level of integration to investigate if there are cost benefits of partial integration.

- Ms White asked if the modelling would capture the benefits more competition would have on pricing.

Mr Robinson clarified that the modelling tool is focused on cost to serve rather than competition.

- Mr Andric noted that the vertical axis on the slide 10 chart should refer to consumption in terawatts rather than demand.
- Mr Andric asked if minimum requirements for synchronous generation to coexist with renewables would be considered.

Mr Robinson agreed that system strength and inertia, in the context of adding renewables, is an important consideration for system security and reliability. He noted that this a current gap in the existing PNR, as

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	<p>there is no mechanism to establish minimum synchronous generation requirements.</p> <p>Ms Guzeleva cautioned regarding the use of language around 'synchronous generation' as system strength and inertia requirements may be met differently in the future.</p> <p>Mr Robinson noted that the final item for discussion was what reliability standards should be reflected in the modelling exercise. He added that the PNR and HTR do not currently define a reliability standard in a quantitative way.</p> <p>Mr Robinson invited PAC feedback on the reliability standard outside of the PAC meeting to assist the modelling assumptions.</p> <p>The Chair noted that the upcoming NEM reliability panel report, referenced on slide 13 was now available on the AEMC website, and the finding of that panel is that a change in the reliability standard for the NEM is not supported.</p>	
	<p>ACTION: Members to provide feedback on the reliability standard that should be reflected in the modelling, and whether there are parts of the network which require a higher standard than other parts, to EPWA (energymarkets@dmirs.wa.gov.au) by 23 May 2024.</p>	<p>All</p>
<p>7</p>	<p>Harmonised Technical Rules Issues and Gaps List</p> <p>Ms Guzeleva noted that the agenda paper included a comprehensive list of potential issues and gaps in the HTR, compiled from working group member submissions. She thanked the ISO for its assistance with collating this list.</p> <p>Ms Guzeleva explained that this list would be used at the next working group meeting (on 9 May 2024) to agree a scope of work for the HTR workstream and to start working on these issues.</p> <p>Ms Guzeleva invited members to provide feedback on the list.</p> <ul style="list-style-type: none"> Ms Morgan noted that two items on the list related to the PNR rather than the HTR and asked if those two issues would instead be addressed in Workstream 1. <p>Ms Guzeleva clarified that the list included all issues raised by participants for completeness. She agreed that some issues on this list will be transferred to the PNR Workstream.</p> <p>Ms Guzeleva indicated that members may provide feedback through their members at the EPNRWG (if applicable) or directly to EPWA.</p>	
	<p>ACTION: Members to provide any feedback on the HTR Long List to EPWA (energymarkets@dmirs.wa.gov.au) by 25 April 2024.</p>	<p>All</p>
<p>8</p>	<p>General Business</p> <p>The Chair asked Members if there was any general business.</p> <ul style="list-style-type: none"> Ms Summa McMahon advertised that nominations for the ISO's ESS Cost Allocation Review Workshops are now open. She invited PAC 	

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	<p>members to nominate by close of business 19 April 2024, by emailing submissions@pilbaraisoco.com.au</p> <ul style="list-style-type: none"> Mr Burns asked whether there was any link between the ESS Cost Allocation Workshop and the ISO's Draft Determination: Flexible Approach to Spinning Reserve ESS, which is currently open for public consultation. <p>Ms McMahon outlined that the Draft Determination open for consultation is intended to inform the 2024-25 procurement process. The Cost Allocation Workshops have been initiated in recognition that the existing PNR is silent on how ESS costs are allocated to inverter-based generation. She noted that this is an imminent issue with near-term s entry of renewables into the system.</p> <p>The Chair suggested adding 30 minutes to future PAC meeting times so there could be more discussion of the issues by a greater number of people.</p> <p>The Chair noted that the next meeting will be held at 9:30am on 20 June 2024.</p>	
	<p>Action: Extend future PAC meetings by 30 minutes.</p>	<p>EPWA</p>

The Chair closed the meeting.

The meeting closed at 11:09am.