



Minutes

Meeting Title:	Pilbara Advisory Committee (PAC)
Date:	21 September 2023
Time:	10:00am – 11:00am
Location:	Videoconference (Microsoft Teams)

Attendees	Class	Comment
Sally McMahon	Chair	
Jacinda Papps	Registered Network Service Provider (NSP)	
Sandy Morgan	Registered NSP	
Momcilo Andric	Registered NSP	
Rebecca White	Excluded NSP Representative	
Neil Midolo	Excluded NSP	
Analena Gilhome	Small-Use Consumer	
James Campbell- Everden	Independent System Operator (ISO)	
Noel Ryan	Observer appointed by the Minister	
Frances Hobday	ERA (Observer)	

Also in Attendance	From	Comment
Dora Guzeleva	PAC Secretariat	Observer
Thomas Marcinkowski	PAC Secretariat	Observer
Tonia Curby	PAC Secretariat	Observer
Tim Bray	PAC Secretariat	Presenter for Agenda Item 6

Apologies	From	Comment
Anne Taylor	Excluded NSP Representative	No apologies provided

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1	Welcome	

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	<p>The Chair opened the meeting with an Acknowledgement of Country and welcomed the PAC members.</p> <p>The Chair noted that the views or advice provided by the PAC to the 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 purposes of developing the minutes.</p>	
2	<p>Meeting Apologies/Attendance</p> <p>The Chair noted the attendance and apologies as listed above.</p>	
3	<p>Competition Law Statement</p> <p>The Chair noted the Competition Law Statement and reminded members of their obligations under that statement and encouraged them to bring any Competition Law issues to her attention as they may arise.</p>	
4	<p>Minutes</p> <p>(a) Minutes of Meeting 2023_05_25</p> <p>The PAC noted the minutes of the 25 May 2023 PAC meeting. The PAC had approved those minutes previously.</p>	
5	<p>Action Items</p> <p>The closed action items were taken as read.</p>	
6	<p>Pilbara Industry Roundtable – Update to the PAC</p> <p>The Chair introduced the Pilbara Industry Roundtable (“Roundtable”) before inviting Mr Bray to open discussion on this item.</p> <p>Mr Bray briefly introduced himself and his involvement in the Pilbara Roundtable.</p> <p><u>Pilbara Industry Roundtable</u></p> <p>Mr Bray outlined that:</p> <ul style="list-style-type: none"> • The Roundtable was established in August 2022 and led by the Minister for Energy, who asked EPWA to facilitate a roundtable bringing relevant industry representatives and agencies together. • The Roundtable was set up in compliance with competition law requirements and with extensive consultation with a competition lawyer. • EPWA established a working group – the Pilbara Industry Liaison Committee - to support the Roundtable work. • The Minister highlighted that decarbonisation is a tremendous challenge on an unforeseen scale and addressing it would require a model different to what Pilbara now operates under. • Currently the Pilbara system is comprised of individual entities developing their own bespoke infrastructure. • In future, large amounts of capital and land, and unprecedented stakeholder engagement will be required in the Pilbara system. • It will be difficult to meet targets if stakeholders do not collaborate and coordinate. 	

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- There are already stakeholders who are keen to participate in developing a process to introduce a new, more coordinated system.
- At the first Roundtable meeting, participants agreed to focus on four workstreams to reach their first milestone. Those workstreams are:
 1. Pilbara electricity sector modelling,
 2. Regulatory Framework Review,
 3. Land Tenure and Access Review, and
 4. Social License.
- The Roundtable developed a series of Work Programs for each of its four workstreams.

Modelling Insights

Mr Bray outlined that:

- The Roundtable considered a demand modelling exercise under five scenarios.
- That process was based on the AEMO Integrated System Plan approach because consistency on demand scenarios would be very important in the future system.
- 2030 is a key date because it is a milestone in the decarbonisation targets industry had pledged for itself and made public.
- The model looked at solar proximity to loads. Existing parties can do this quickly and easily (and early) because it is within their own 'footprint'.
- That would allow the time to develop a plan in detail regarding transmission infrastructure with an aim to bringing that infrastructure online in the late 2020s.
- The model then drives connection to the very strong renewable resources to the south and east of the Pilbara.
- Wind is a key component to complement solar because of its overall capacity factors, as well as geographic diversity and its sheer quantity in the Pilbara in the relevant regions.
- With more variable renewable energy, more storage is needed to firm up capacity as renewable energy develops.
- Gas still plays a role in the modelling.
- Over the longer term a return to solar power is anticipated (which is really just an ongoing investment in solar rather than 'flipping a switch' to more solar).
- In AEMO's assumptions, in the late 2030s and 2040s solar becomes incredibly cheap, and that is why the modelling chooses it.
- All participants in the Roundtable fundamentally agreed about the mix of renewables.

Modelling the geospatial context

Mr Bray outlined that:

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- The Pilbara has pockets of stronger solar, but solar is quite ubiquitous across the Pilbara generally.
- There is little wind in the Pilbara but there are a few incredibly strong wind areas, which are very prospective as renewable generation hubs as they are relatively close to loads.
- The model encourages accessing wind to support the decarbonisation of existing loads but also, under central scenarios, load growth along the coast.
- The industrial areas in Onslow, Karratha and Port Hedland have a strong growth in demand for some modest renewable hydrogen projects and ultimately, in the more optimistic scenarios, industries such as green iron.
- Even under conservative scenarios, renewable energy from south and east of the Pilbara will be brought to the coast.
- The model does not seek to build any wind on the coast in cyclone zones because of the extra associated cost.

Grid configuration overview

Mr Bray outlined that:

- There are three scenarios of the transmission build-outs the model deems necessary.
- There is a large build-out of transmission in an increasingly interconnected system that includes looping in order to provide security, redundancy and free flow from source to use.
- The model favours building the same infrastructure under different scenarios.
- The three demand scenarios are quite conservative.
- There are questions around demand scenarios and assumptions, and how quickly infrastructure can be built.
- Significant investment is required to decarbonise existing and future growth in the Pilbara.
- Each scenario is likely to involve significant investment in transmission at a very large cost.
- The scale of development modelled is huge – for example, Scenario 2 ('Current Trajectories +') involves over \$100 billion of investment across generation, transmission and storage.

Regulatory framework review – background and purpose

Mr Bray outlined that:

- Mr Campbell-Everden played a key role in establishing the regulatory framework review guiding principles with the Minister.
- This follows the fairly recent development of a light-handed access regime in the Pilbara designed to facilitate third party access to designated network assets (codified under the PNAC).
- There is also the Pilbara ISOC which operates under the PNR.

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- Roundtable members recognised a light-handed access regime, while suitable for its original design purposes, is most likely not suitable for the Pilbara's future needs.
- The new system needs to be 'evolved' from the old system instead of 'flipping a switch' immediately, and just a few years after the first system started.

Regulatory framework review – principles

Mr Bray outlined that:

- The developed principles focus on rules supporting interconnected and common use future transmission infrastructure in future.
- While participants wanted common use infrastructure and interconnection, they wanted to see if the current rules would support that.
- An evolution approach would keep costs proportionate.
- Trying to undertake too many new projects too early could undermine the desired outcomes of common use and interconnection.

Reform Features

Mr Bray stated that the reform features can be divided into three parts, and described each of them:

1. Security and Reliability –
 - If existing and new participants are to agree to a common user infrastructure approach, they need to be satisfied that security and reliability objectives will be met.
 - Mining companies invest heavily in their own infrastructure because supply security is critical. They are unlikely to embrace a new system if it is not at least as effective as their current system.
2. Commercial –
 - Users should bear their own costs and minimise subsidisation.
 - the scope and timeframes of any subsidisation to secure a more free-flowing system must be clear.
 - No participant should receive an advantage in what is a fairly competitive industry.
3. Multi-user asset investment certainty –
 - Multiple parties will be investing and building infrastructure, not just Horizon Power.
 - Users/investors must be able to recover a reasonable rate of return without compromising other reform features, particularly security and reliability.

Security and Reliability

Mr Bray outlined that:

- There was good exploration in the Roundtable of what were legitimate reform options deserving further investigation, and their relative pros and cons.

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- There was discussion that Harmonized Technical Rules (HTR) Evolution was a proponent-led process and should remain so.
- There should be a steering committee to provide efficiency regarding the manner and order things are moved through the process.
- The ultimate decision maker is still the Coordinator, but the process is streamlined and is still funded by industry as the ultimate beneficiaries of changes to HTR.

The Chair asked how the standing committee would interact with the PAC, as the PAC was responsible for the PNR and also HTR.

Mr Bray said that, rather than having multiple individual proponents, the steering committee would gather proposals that feed into the normal process. This does not fetter the role the PAC would otherwise play.

Mr Bray stated that in this reform there are opportunities and efficiencies gained from a committee helping to reach conclusions on items that would come to the PAC and the order they should come in.

Ms Morgan suggested that EPWA should lead with the next phase of the transition by proposing rule changes to come to the PAC, rather than organising a separate standing committee.

Ms Morgan stated that there are multiple standing committees and working groups talking about the Pilbara, which need to be controlled in a good manner so they do not become unwieldy.

Mr Bray responded that it is not the role of EPWA to lead the identification of issues.

Mr Bray stated that the role of the Coordinator is in making decisions based on a process that ultimately supports the Coordinator in doing that. He added that:

- Rather than the Coordinator deciding what to look at, the steering committee would gather stakeholders' priority areas.
- Unlike the normal process of an individual entity pursuing an outcome (eg through a rule change proposal), in this reform multiple entities share an interest in a change.
- Stakeholders must come together to share the costs and workload and come up with a proposal.
- The separate, higher order reform would be led by EPWA.

Commercial (Energy/Settlement)

Mr Bray outlined that:

- The options developed for this part of the reform are a good example of the evolutionary approach as opposed to 'flicking a switch' (as represented by, for example, a full net pool market).
- The Roundtable explored desirable outcomes in each stage of the energy transition, recognising the likely continued dominance of bilateral trading but with a market-based element to support that approach.
- The Roundtable considered a structured approach of when the market evolves, as and when that is justified; a trigger rather than an immediate consideration.

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Multiuser Network Assets

Mr Bray outlined that:

- There is a combination of options the Roundtable sees as desirable outcomes in terms of optimal transmission investment and clarity for potential investors in transmission.
- The Roundtable has completed some modelling, but that needs to be improved to keep giving an overall view of what the optimal transmission system is over time.
- The aim is to support that kind of modelling on an annual basis, at least, to begin with.

Mr Bray stated, regarding clarity for the new transmission investment, providing guidance on the use of NFIT, and introducing a mechanism to provide reasonable return to investors in transmission infrastructure:

- There is a degree of complexity here and a lot that is still unknown.
- The Roundtable will move into a testing phase including more involved conversations with stakeholders and developing commercial models.

The Chair asked Mr Bray to move the discussion on to Next Steps given the limited remaining time.

Next steps

Mr Bray outlined that:

- There was an announcement of the Roundtable outcomes made by the Minister.
- That announcement created momentum for closing discussions with the Commonwealth and securing the \$3 billion for decarbonisation projects announced by the Prime Minister in late August.
- What is now needed is government approval and funding for the next pieces of work.
- There is more to do, particularly regarding:
 - improved land tenure and guidance (approval is being sought for that through Cabinet and ERC),
 - establishing renewable generation hubs, and
 - capacity building for First Nations people.
- Those projects expand on the outcomes of the Roundtable.
- They indicate government understands it has role to play in facilitating good outcomes in supporting planning, not just waiting for participants to self-organise.
- Government has shown it is willing to contribute financially to:
 - the activation of renewable generation hubs, and
 - the way in which it supports environmental assessments and heritage assessments, and engagement across those two areas with stakeholders.

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- Hopefully such initiatives will streamline a pathway towards investment in renewable generation and transmission.

The Chair invited questions or comments from members.

Mr Andric commented on the immense cost and scale of this development:

- It involves 3000km to 4000km of transmission lines, 500KV at approximately \$7 million per kilometer, which is almost \$30 billion.
- Terminal substations will cost at least another \$50 million.
- New storage, solar and wind will need to be built and it is an extraordinary effort.

Mr Campbell-Everden stated that the ISO:

- has been involved throughout this process.
- Is very supportive of the high-level issues and features.
- Is looking forward to working through the options in more detail and understanding the trigger events.

Mr Campbell-Everden said that there are obligations on the ISO from a resourcing and capability point of view in delivering these outcomes.

Mr Campbell-Everden said that undertaking this work now with a good amount of lead-time is important to being able to implement these reforms.

7 **Schedule of 2024 meetings**

The Chair introduced the 2024 PAC meeting schedule, stating that:

- meetings are every 8-10 weeks from February and avoid public and school holidays, and
- PAC meetings are scheduled to take account of when MAC and GAB meetings are scheduled.

Ms Morgan said that she could not attend on the June date but would email the Coordinator to reschedule.

Ms Guzeleva said she would discuss the matter further with Ms Morgan.

The Chair suggested that if Ms Morgan was unable to attend a meeting and the date could not be changed, Ms Morgan could send a proxy.

8 **General Business**

Chair noted that there was no other business.

The Chair noted that the next meeting will be held at 9:30am on Thursday 16 November 2023.

The Chair encouraged participants to contact Ms Guzeleva or the Chair if they wanted to add items to the agenda for the next meeting.

The Chair closed the meeting.

The meeting closed at 11:00am.