



Evolution of the Pilbara Networks Rules (EPNR) Working Group (PNR Workstream) - Minutes

Date:	7 May 2026
Time:	9:30am – 11:30am
Location:	Microsoft Teams online

Attendees	Representing in Working Group	Comment
Dora Guzeleva	Chair, Energy Policy WA (EPWA)	
Tim Robinson	Robinson Bowmaker Paul (RBP)	Presenter Item 5
Liz Gharghori	APA	
Shane Potter	APA	
Nathan Kirby	BHP	Arrived 10:45am
Glen Carruthers	Fortescue	
Ken Chong	Fortescue	
Herman Prinsloo	Horizon Power (Generation and Other Business)	
Guy Tan	Horizon Power (Pilbara Network)	
Jaden Williamson	Horizon Power (Pilbara Network)	
James Campbell-Everden	Pilbara ISOCO	
Neil Gibbney	Pilbara ISOCO	
Summa McMahon	Pilbara ISOCO	
Lewis Peaty	Pilbara ISOCO	
Noel Michelson	Rio Tinto	
Reece Tonkin	Yindjibarndi Energy Corporation (YEC)	Arrived 10:00am
Other attendees	From	Comment
Colin Watson	APA	
Sandy Morgan	Horizon Power (Generation and Other Business)	
Peter Van Den Dolder	Pilbara ISOCO	
Alistair Duffy	RBP	
Nenad Ninkov	Woodside	
Luke Commins	EPWA	
Samantha Jasmin	EPWA	



Apologies	From	Comment
Anthony Ravi	APA	
Anthony Marcos Guevarra	CITIC Pacific Mining	
Melinda Anderson	ERA	
Timothy Edwards	Metro Power Company	
Nick Bardsley	Woodside	

1. WELCOME AND AGENDA

The Chair opened the meeting with an Acknowledgement of Country.

The Chair noted the Competition and Consumer Law obligations of the Working Group members and invited them to bring any issues to her attention.

2. MEETING APOLOGIES AND ATTENDANCE

The Chair noted the attendance as listed above.

3. MINUTES OF MEETING 2026_04_16

The draft Minutes of the 16 April 2026 Working Group Meeting are with members for review, with comments due by Tuesday, 11 May 2026.

4. DESIGN OF NSP-TO-NSP CONNECTION FRAMEWORK

The Chair explained that the purpose of the meeting was to address outstanding issues relating to a proposed NSP-to-NSP connection framework in the Pilbara Networks Rules (the Rules). The Chair noted that any outcomes would be discussed at the 21 May 2026 PAC Meeting.

Mr Robinson presented Slides 2 – 7.

- Mr Tan noted that the connection applicants would need to engage with host NSPs regarding physical connection arrangements and any required network augmentations before undertaking connection studies.
- Mr Carruthers highlighted the importance of the ISO acting as a mediator of negotiations.
- Mr Peaty suggested that the ISO should determine whether a connecting party qualifies as an NSP to ensure consistency across host NSPs.
- Ms Morgan, supported by the Chair, emphasized the importance of clear definitions to minimise ambiguity regarding commerciality and cost recovery under the Pilbara Networks Access Code.

Mr Robinson presented Slide 8.

- Mr Ninkov sought clarification regarding the interaction of the proposed framework and existing CPC arrangements.

The Chair noted that there was no intention to amend the existing CPC framework for user facilities. Under the current Rules, user facilities negotiate CPC Measures with the host NSP, which are subject to ISO approval.



- Mr Watson noted that a new connecting NSP must submit a model to the ISO for assessment of its impact on the system. Without access to the existing network model, it cannot model its impact on the network.
- Members discussed access to the Northwest Interconnected System (NWIS) model by prospective NSP connection applicants.
- Several members considered access to the NWIS model necessary to assess network constraints, connection impacts, costs and alternative connection options, and to demonstrate capability to operate as an NSP.
- Members noted that access to the full NWIS model would assist connection applicants in understanding how existing and future users of their network may interact with the broader power system.
- Ms Morgan and Mr Campbell-Everden noted that access to the NWIS model remains subject to confidentiality obligations, disclosure processes under the Rules and relevant authorisations.
- Ms Morgan advised that the existing framework is intended to manage commercially sensitive information rather than prevent parties from modelling the impacts of proposed connections.
- Members discussed the practicalities and timeframes associated with obtaining access to the NWIS model.
- Mr Carruthers and Mr Watson considered that the current process may introduce unnecessary complexity and delay for connection applicants.
- Ms Morgan advised that Horizon Power's experience with the disclosure process had generally been straightforward and timely.
- Mr Peaty and Mr Campbell-Everden outlined the existing authorisation and pre-disclosure arrangements that apply when the ISO provides access to confidential information contained within the NWIS model.

The Chair noted the importance of clear and efficient timeframes for model access requests and considered that, where confidentiality concerns do not arise, the ISO should provide access without unnecessary delay.

- Mr Campbell-Everden advised that the ISO would support amendments to streamline access to the NWIS model for connection applicants and noted that existing registered NSPs should not be able to frustrate that process.

The Chair noted that any amendments supporting the proposed NSP-to-NSP framework should consider improving arrangements for connection applicants seeking access to the NWIS model.

- Mr Williamson considered that prospective NSPs should be capable of undertaking ongoing network modelling and should be able to demonstrate that capability as part of the connection process and engagement with the ISO.

Mr Robinson presented Slide 9 on process timeframes.

- Members discussed process timeframes for NSP-to-NSP connections.
- Members agreed that transparent assessment timeframes and cost information would assist connection applicants in understanding and pricing connection services.



- Mr Carruthers considered that detailed process design should be settled before establishing timeframes, as timing requirements will depend on the complexity of individual connection proposals.
- Members generally agreed that further consideration of process design would assist in determining appropriate assessment timeframes.

Mr Robinson presented Slides 10 – 13.

- Members discussed the distinction between NSPs, network users and facilities under the proposed NSP-to-NSP connection framework.
- Mr Gibbney stated that a key factor in determining whether an applicant is an NSP or a network user is whether the applicant owns the network and therefore assumes compliance responsibilities, or whether the facility is owned by a controller. Under the current Rules, CPC applicants must register as controllers and are treated as facilities. He noted that this proposal was different, as it involved interconnecting a network with multiple loads and generating systems.

The Chair agreed that the current framework was designed for someone who supplies themselves but doesn't export energy except in unavoidable circumstances.

- Mr Gibbney and Mr Williamson considered that technical standards are primarily driven by the characteristics of the underlying network or facility rather than participant classification.
- Mr Watson noted that NSPs perform a distinct role by managing interactions between multiple users connected to a network.

The Chair noted that an NSP must ensure compliance with technical standards at the interconnection point with another network, whereas a connecting facility is likely subject to the full set of requirements at its terminal or connection point.

- Mr Watson agreed but noted that an NSP-to-NSP connection is closer to a steady state arrangement, whereas the network user would be more dynamic.

Mr Robinson clarified that the technical standards remain the same. What differs between registration types is how an applicant demonstrates compliance with those standards. The NSP is responsible for the technical compliance of its network. The network user is responsible for meeting those standards and reporting to the host NSP.

- Mr Watson asked how an NSP controls frequency, explaining that network users must comply when connected to the network, but the NSP does not physically control frequency.
- Mr Van Den Dolder stated that multiple parties, including the network user, the NSP and the ISO, have roles in managing frequency. In this case, those roles overlap, but most other technical standards are within the NSP's and network users' capabilities.

The Chair responded that an NSP connecting to another network is responsible at the interconnection point for complying with all fundamental standards.

- Mr Watson disagreed on this issue.

The Chair asked who is responsible for the frequency if a user connected to a new NSP network does not comply with the frequency operating standards.

- Mr Van Den Dolder answered that the network user is responsible for ensuring its facility meets the frequency ride-through standards. The NSP is responsible for ensuring its networks meets the frequency operating standards.



- Members discussed whether entities with third-party connections to their network should be required to register as NSPs.
- Mr Carruthers considered that applicants should continue to be able to utilise existing pathways under the Rules and should not be compelled into NSP registration unnecessarily.
- Mr Williamson suggested that registration requirements should focus on the functions being performed rather than the physical characteristics of assets and noted that a range of network configurations may emerge in the Pilbara.
- Mr Watson suggested that an NSP is an entity responsible for a transmission system. Under the Electricity Industry Act 2004, the threshold for transmission versus distribution system is 66 kV and above. He considered that this approach may better align registration requirements with the intended use of those assets.

The Chair noted that responsibility for third-party access and management of connected third-party assets may justify NSP registration.

- Members discussed whether CPC-style arrangements could be extended to networks with third-party connections.
- Mr Williamson, Mr Carruthers and Ms Gharghori considered that existing CPC concepts may remain relevant where a single entity accepts responsibility for compliance at the connection point.
- Mr Williamson considered that an entity connecting under a CPC-style arrangement could assume responsibility for connected parties through appropriate commercial and contractual arrangements.
- Mr Williamson pointed to Integrated Mining Networks that operate without third-party access and are responsible for the associated NSP requirements. In the future, there could be networks connecting other networks, with no customers directly connected to them, functioning solely as transmission networks. Mr Williamson noted that a feature of these networks is the existence of a centralised control system that manages activities at the connection point.
- Mr Williamson suggested that the terminology used on slide 12 would be improved by referring to 'network' and 'facility' rather than 'network user' and 'NSP'.

The Chair noted that participants either generate electricity, operate a network that provides access to others, or control a load, whereas facilities or equipment may include networks, generators, loads or storage resources. She noted that the discussion was conflating participants with the physical equipment or facilities for which they are responsible.

- Mr Williamson noted that the definition of networks focuses on voltage and infrastructure rather than the use of the assets. He suggested that the discussion should focus on defining the roles or functions performed under the Rules, such as providing third-party access. Given the diversity of circumstances in the Pilbara, he considered it important for the Working Group to determine which standards apply in each case.

The Chair agreed, noting that determining whether a party is an NSP or a network user should focus on the person's roles, responsibilities and functions, which determine the participant category under which they must register. She noted that it is confusing to mix physical equipment and facilities with the person responsible for them.



- Mr Watson agreed with Mr Williamson, adding that the Working Group should consider exemptions from NSP registration, using Westfield as an example of an internal network that would otherwise be considered a network by default, despite not being its core business.

Mr Robinson asked under what circumstances a person should be required to register as an NSP rather than as a facility controller.

The Chair stated that, if a person wants to be responsible for assets connected to its network and for injections or withdrawals on that network by facilities that are not its own, then it must be an NSP.

- Mr Carruthers stated that if the intent is to encourage others to connect and grow the network, parties should not be compelled to participate and should instead be able to choose whether to do so.

Mr Robinson agreed with Mr Carruthers, provided that PSSR is maintained. He asked whether there are circumstances in which registering as a facility, rather than as an NSP, would have PSSR implications significant enough to prevent the facility from connecting to the NWIS.

- Mr Carruthers noted that the current CPC pathway under the Rules preserves PSSR. He clarified that this discussion should focus on NSPs, or parties that wish to be an NSP, connecting to another network.
- Mr Williamson noted that the process for these parties to become a facility is the CPC exempt network pathway and highlighted the role of CPC Measures in that framework.
- Ms Gharghori agreed with Mr Carruthers and Mr Williamson.
- Mr Williamson considered that an entity connecting under a CPC-style arrangement could assume responsibility for connected parties through appropriate commercial and contractual arrangements.

The Chair noted that where a connecting entity assumes responsibility for third parties and network operations, NSP-like responsibilities may also arise.

- Ms Morgan observed that the practical application of existing CPC provisions in these circumstances has not been tested and may require further consideration.
- Members discussed the allocation of responsibility if compliance obligations are managed through contractual arrangements.
- Mr Van Den Dolder noted that activities occurring behind a connection point can affect system security and reliability and therefore require appropriate governance, visibility and coordination.
- Mr Carruthers considered that the primary focus should remain on compliance at the connection point and that detailed operation of facilities behind that point should not necessarily be subject to ISO oversight.
- Mr Gibbney acknowledged that a generator connecting to a network behind a CPC connection is the responsibility of the NSP. He noted, however, that in different regimes and jurisdictions, all generators must comply with a uniform code or standard.

The Chair noted that the discussion highlighted the need for greater clarity regarding participant categories, registration requirements and responsibility for compliance under the proposed NSP-to-NSP framework.



- Members generally agreed that future policy development should focus on the roles, responsibilities and functions undertaken by participants, including the provision of third-party access, rather than solely on the physical characteristics of connected assets.

Mr Robinson presented Slides 14 – 17.

- Mr Carruthers stated that, regarding matters such as frequency control, the Harmonised Technical Rules (HTR) are complex. He noted that the HTR does not define planning standards or distinguish between credible and non-credible contingencies. He considered that, because different networks have different risk appetites, applying a single standard would not be effective. When connecting large networks, there are either requirements that must be met to remain connected or mitigation measures that may include disconnection.

Mr Robinson noted that the implementation plan included methods for identifying minimum technical standards, with negotiation or mitigation measures available where those requirements cannot be fully satisfied.

- Ms Morgan confirmed that the HTR workstream is progressing towards a single framework applicable across participants.
- Mr Watson suggests that additional technical standards that may need to be met at NSP-to-NSP connection points include power factor, fault level and power transfer capacity or capability.
- Mr Peaty supported greater clarity regarding minimum requirements and cautioned against reliance on bespoke arrangements that may be difficult to assess consistently.

The Chair sought members' views on whether a minimum set of technical requirements should be identified, codified and assessed at the connection point.

- Members generally supported codifying minimum technical requirements to improve consistency, transparency and assessment certainty.

The Chair summarised that minimum requirements should be codified so that the ISO clearly understands what must be demonstrated, and can undertake an assessment and make a final determination.

- Mr Peaty agreed that identifying minimum requirements would assist the assessment process and reduce reliance on ad hoc arrangements.
- Ms McMahon advised that the ISO would be willing to assist in developing such a list, subject to appropriate resourcing.
- Mr Van Den Dolder asked if a "CPC network" of the type discussed were connected and was not required to comply with the HTR, how would ISO assess impacts on that CPC network if another party sought to connect to the NWIS.

The Chair observed that either compliance must be measured at the connection point or the ISO must have visibility into that network. If it's the former, the ISO must know what to assess at the connection point when the network connects and whenever modifications are made to that network.

Action Item: ISO to provide its proposed list of minimum technical requirements to be measured at the connection point as part of the assessment of an NSP-to-NSP connection.



- Mr Kirby sought clarification regarding the purpose of power transfer limits and the capability required to manage compliance at the connection point.

The Chair noted that compliance would be assessed at the connection point.

- Mr Kirby asked whether the intent was for facilities to demonstrate their capability to manage and assess the performance of a facility or piece of equipment, and whether this should mirror what the host NSP observes on the other side of the connection point.

Mr Robinson explained that there should be a centralised control function responsible for monitoring and operating equipment on a network. NSPs must understand what is occurring across the entire network, not just at the connection point.

- Members suggested that the Working Group document its views to inform future discussions and avoid misunderstandings.

5. GENERAL BUSINESS

The meeting closed at 11:30am.