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Attn: [redacted]
Chief Executive Officer
Pilbara ISOCo Limited
By Email

Dear [redacted]

PILBARA NETWORK RULE SUBCHAPTER 7.3 AND 7.4 DRAFT DECISION AND RECOMMENDATIONS

Woodside appreciates the opportunity to provide feedback on the outcomes and recommendations from the current Pilbara ISOCo review released 4 October 2024.

In principle, Woodside is supportive of the twenty (20) recommendations for changes to the notification, assessment, coordination and management of planned outages and other 'notifiable events' subject to the points in our detailed response to the proposed recommendations set out in **Attachment A**. These include the following key points:

- The proposed changes to the Pilbara Network Rules (PNR) do not presently contemplate the proposed regime for outage management at the Pluto LNG Facility;
- Woodside supports the updated State Electricity Objective and the Pilbara Energy Transition (PET) Plan;
- Regulatory certainty within the PNR will be crucial to achieve the significant investment required for transmission build-out to support new renewable energy, in support of achieving the State's net zero greenhouse gas emissions targets;
- A standardised risk assessment framework is essential for large-scale operations and the ISO should be empowered to approve or coordinate risk mitigations to manage system security and performance and
- Changes to the PNR should not affect the current regime for outage management for the Pluto LNG Facility.

Should you wish to discuss the matters raised in this submission, please do not hesitate to contact me.

Kind regards

[redacted]
Development Delivery Manager

1. EXECUTIVE SUMMARY

With resource industries in the Pilbara making up such a significant part of the economy in Western Australia (**WA or State**), decarbonising industries operating in the region will be fundamental to achieving the State's net zero greenhouse gas emission goal in 2050. Woodside is targeting net equity Scope 1 and 2 greenhouse gas emissions reductions of 15% by 2025 and 30% by 2030, with an aspiration of net zero by 2050 or earlier[1]. Woodside supports both the updated State Electricity Objective and the Pilbara Energy Transition (**PET**) Plan as key enablers to achieve these targets.

According to the Department of Energy, Mines, Industry Regulation and Safety (**DEMIRS**) as at September 2024, less than 2% of generation in the Pilbara comes from renewable resources. With DEMIRS modelling indicating AUD 8-12B required for the transmission build out to facilitate some AUD 35-65B in new renewable energy, a stable investment climate is required. Regulatory certainty within the Pilbara Network Rules (PNR's) is paramount and timely resolution of the extensive reform agenda should be prioritised.

Under the Pilbara Network Rules (**PNR**) the Independent System Operator (**ISO**) is required to take a whole of system approach in regular reviews of power system operations and other matters. This includes outage and contingency management, procurement of Essential System Services (**ESS**) and cost allocation and recovery. The current review released on 4 October 2024 has made some 20 recommendations for changes to the notification, assessment, coordination and management of planned and unplanned outages and other 'notifiable events'.

In principle, Woodside supports the recommendations subject to the points in this submission below. Based on experiences to date, there must be an ultimate decision-maker who can resolve disagreements over North West Interconnected System (**NWIS**) network risks and mitigation, determine what mitigations are appropriate, allocate responsibilities and make the final decision(s) as necessary. Throughout these activities, independence of the ISO and transparency of the process is paramount.

To deliver on the NWIS network system security objective, a standardised risk assessment framework is an essential requirement of any large-scale operation. The process followed by the Australian Energy Market Operator (**AEMO**) provides one example of how this may be achieved. The ISO should be sufficiently empowered to approve or otherwise coordinate risk mitigations to network or generation elements on the NWIS to manage the risk to system security and performance to as low as reasonably practicable.

Changes to the PNR do not presently contemplate the proposed regime for outage management for the Pluto LNG Facility (**Pluto**). Woodside is specifically concerned to ensure this does not change as part of the review. In other words, only the limited directions that can be given to Pluto under the current PNR rules should continue to apply. None of the rationale behind the rule change to facilitate the connection of Pluto to the NWIS (at the time of introduction of the CPC Process) has changed subsequent to the specific rule change being secured, and accordingly this remains the basis on which Pluto intends to make its investment decision to import renewable (solar) energy for power generation and emissions reduction.

[1] Targets and aspiration are for net equity Scope 1 and 2 greenhouse gas emissions relative to a starting base of 6.32 Mt CO_2-e which is representative of the gross annual average equity Scope 1 and 2 greenhouse gas emissions over 2016-2020 and which may be adjusted (up or down) for potential equity changes in producing or sanctioned assets with a final investment decision prior to 2021. Net equity emissions include the utilisation of carbon credits as offsets.

2. SUMMARY OF GENERAL COMMENTS REGARDING SUBCHAPTERS 7.3 AND 7.4

After years of work from many parties several key reforms were made to the *Electricity industry Act 2004 (WA)* (**Act**) through the *Electricity Industry Amendment Act 2020 (WA)* which was assented to on 6 April 2020. These reforms built on the Minister for Energy's decision in February 2018 to "cover" Horizon Power's section of the NWIS under existing Part 8 of the Act to open it up for third-party access. The primary purpose was to implement a light-handed regulatory access regime to enable third-party access to the NWIS and the creation of an independent system operator with certain limited functions.

The Pilbara's electricity system has evolved in a segmented and uncoordinated manner over several decades and is materially different from other electricity systems in Australia. The NWIS presently has a single system operator, ISO, that the WA Government appointed to maintain and improve the security of the power system and facilitate network coordination and planning but with limited legislated powers to undertake the full range of a system operator's typical functions and activities. For example, each of the three main network service providers (**NSPs**) are responsible for maintaining system security and reliability on their own network, with no one party totally responsible for security and reliability of the NWIS.

The NSPs collaborate informally and in a relatively ad hoc manner regarding the operation of the system as a whole (e.g. through the system coordination meeting). As a result of this regulatory structure, there is less potential for shared use of common electricity infrastructure, particularly where access is required to the networks of more than one NSP. Given its central geographic location, the composition of its customer base and through the agreement of the ISO, Horizon Power has been delegated certain system operator functions required to keep the electricity system operating reliably using both formal and informal agreements. However, it has no direct control over other generators or network operators. Formalising a role for an ISO as the party with overall administrative control over the interconnected Pilbara system, has enabled a whole-of-system approach to power system operations, and also to other matters such as outage and contingency management, procurement of ESS and cost allocation and recovery.

However, although the design of the ISO considers the circumstances of the last decade, it now needs to be reviewed in the context of recent experiences since the Pilbara reforms, the March 2024 updated State Electricity Objective and the future outlook as partly characterised in the PET Plan. Woodside notes that the Draft Decision considered four hypothetical case studies in Section 3 "inspired by real-world NWIS incidents in the last 12 months". It is anticipated that the future state will be one of more thermal generators, renewable energy, storage systems including batteries, and new loads on the NWIS. Consequently, as the NWIS grows and expands, the issues experienced today can be expected to multiply and the ability to rely on collaborative resolution to manage issues is likely to be increasingly difficult. This will be due to more network users of different types joining the Pilbara network (direct consumers, large users with behind the meter generation, large users with remote generation, transmission owners, and pure-play generators). Hence it will be imperative going forward that there is a clear process for management of multiple networks and vertically integrated companies, one which provides for a solution where consensus cannot be reached.

3. DESIGN PRINCIPLES FOR THE PILBARA ISO

The key decision principles on which the ISO was established can be summarised as:

1. the core function is to ensure the reliability and stability of the system;
2. it should act with impartiality and transparency;
3. it should act to maximise overall system efficiency;
4. the cost of establishing and operating the ISO should be kept to a practical minimum;
5. proposed arrangements should consider the commercial interests and priorities of privately-owned electricity network assets in the NWIS; and
6. technical standards should not present a physical constraint to potential future interconnection of the NWIS, or a barrier to any technology type.

These objectives are not inconsistent with those being used by the Evolution of the Pilbara Network Rules Working Group (**EPNRWG**). Woodside suggests that ISOCo also consider in respect to ISO's review of subchapters 7.3 and 7.4 of the PNR the below set of criteria (not prioritised) as used by the EPNRWG in its decision making:

- (PSSR) Focus on power security and reliability matters;
- (Emissions) - Focus on removing barriers and providing incentives for emission reduction and renewable investment;
- (Timing) Focus on issues that will manifest as soon as possible;
- (Value) Focus on items likely to have low costs and high benefits;
- (Size) Focus on matters which need more design activity (so as to get them underway); and
- (Other activity) Avoid issues currently under active consideration by ISO or others.

In line with the overarching principles and selected criteria outlined above it is worth acknowledging work underway in other forums which may delay the implementation of changes flowing from some of the 20 Draft Recommendations in the draft decision. This includes:

- Australian Competition and Consumer Commission (**ACCC**) ISO authorisation application;[2]
- Energy Policy WA (**EPWA**) Evolution of the PNR's (23 identified Initiatives);
- EPWA Pilbara Network Access Code revision; and
- PET Plan.

In order to interface effectively with the broader reform agenda identified herein (and to promote the stable investment climate that is needed to underpin network transformation), Woodside supports an integrated and consistent approach to addressing the Draft Recommendations. One way to achieve the recommendations could be to amend Draft Recommendation 20 (future broader review of matters in section 9 of the draft determination), to be that a single roadmap be developed and issued jointly by EPWA and Pilbara ISO which shows the sequence of how future reviews and reform will be delivered. Additionally, it is recommended that such a roadmap be made available ahead of expiry of the ACCC determination, currently expected in December 2027.

The remaining 19 Draft Recommendations, including changes suggested in this submission, could be addressed through a standard rule change. Woodside comments on the remaining 19 Draft Recommendations are set out below.

[2] https://www.accc.gov.au/public-registers/authorisations-and-notifications-registers/authorisations-register/pilbara-isoco-ltd

4. SPECIFIC COMMENTS ON DRAFT RECOMMENDATIONS

Draft Recommendation 3, 12 & 14

Pluto

The State electricity objective is intended to promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity in relation to — the quality, safety, security and reliability of supply of electricity; and the price of electricity; and the environment, including reducing greenhouse gas emissions.
The addition of "reduction in greenhouse gas emissions" is particularly important in the Pilbara where according to EPWA less than 2% of generation in the region currently comes from renewable sources.[3] To increase renewables it will be important to connect existing industry load.

The PNR do not presently contemplate the proposed regime for outage management applying to Pluto. When Pluto was explicitly identified in the PNR its unique circumstances were recognised and taken into account (for example in Rule 188 (System operations directions), Rule 77(3) and Rule 182(3)). While Pluto should be added to the Equipment list there should be no change to the current basis on which the PNR recognise and take Pluto's unique operating circumstances into account . In other words, only the 3 directions that can be given to Pluto should continue to apply. This is the basis on which Pluto intends to make its investment decision to import renewable (solar) energy. Woodside would of course like to be closely involved in the development of drafting of any such rule change and the treatment of Pluto.

Draft Recommendation 3 & 4

Dispatch and Scheduling

Under the current Administrative ISO model, it is not intended that the NWIS ISO will perform a real-time role in system operation. This means that the NWIS ISO will not issue instructions for dispatch to generators or dispatchable loads either directly, or indirectly via a network operator, under normal (and secure) system conditions.

The ISO needs to be sufficiently empowered to implement the necessary actions through network operators, generators, and interruptible loads to maintain or restore security of supply and to direct the switching and dispatch of all networks, generators (including black-start facilities) and interruptible loads connected to the NWIS. The stated aim is to ensure as much of the NWIS is kept as stable as possible, for as often as possible.

This should therefore enable the ISO to integrate decision making with respect to maintenance, outages, commissioning and testing, events in most networks and required CPC facilities to minimise any risk of any inconsistency between the notifiable events management under the PNR under subchapters 7.3 and 7.4, contingencies and precontingent threats under subchapter 7.5 and the procurement of ESS under chapter 8.

Draft Recommendation 6

This draft recommendation deals with the circumstances associated with 'islanding'. In the circumstances where a Facility such as Pluto is islanded, for whatever reason, there should not be a requirement for it to follow notifications, related to NWIS risk management past that point.

[3] https://www.wa.gov.au/organisation/energy-policy-wa/pilbara-energy-transition-plan

Draft Recommendation 8, 9 & 10

Objectives, functions and powers

Woodside accepts that a foundation to the establishment of a centralised approach to outage planning is consistent with and must be the objective of system security. Although Woodside supports a system security objective for subchapters 7.3 and 7.4 we note for clarity that the ISO can only be driven by system security objectives which chiefly focus on keeping the power system in and returning it to a secure and reliable state within the technical envelope.

There are two options for assigning responsibility for scheduling activities:

1. the ISO undertakes all the fine tuning of ancillary services provisions, outage management, and other proactive measures to keep the system in the Normal Operating State; or
2. NSPs have the responsibility for their own 'sub-systems', as per current circumstances.

Woodside accepts option1 was selected when the Pilbara regime commenced. It is also accepted that there is no halfway house – either the ISO is established with all the resources, including personnel, SCADA data, and systems that it requires to operate in near real-time, or it is not. The downside to Option 2 is there is no whole-of-system management by the ISO of the planning/scheduling a week in advance. While this appeared manageable when the Pilbara regime was established, the hypothetical case studies considered in the Draft Decision shows this may no longer be the case.

Woodside understands that based on EPWA modelling an estimated AUD 8-12B will be required for investment in transmission in the Pilbara. Supporting energy transition stability within the regulatory environment will be an important pre-cursor to investment. The magnitude of change across the regulatory environment is substantive and includes consideration of the following:

- The ACCC Draft Determination issued in October 2024 proposed a 3-year authorisation.
- Increasing number of NSP's or Transmission Investment Vehicles (**TIVs**) and thus numerous "interconnection agreements" to manage interconnection points;
- Increasing number of balancing points, thus number of points which must have nominators;
- PNAC will evolve; and
- Currently 2% of generation comes from renewables on the NWIS but this is expected to grow significantly.

Formalising a role for an independent system operator for the interconnected Pilbara system along with the significant anticipated evolution will enable a whole-of-system approach to power system operations, and also to other matters such as outage and contingency management, procurement of essential system services (formerly known as ancillary services), and cost allocation and recovery. This would be consistent with the ISO role of achieving the system security objective and management and approval of notifiable events. In these circumstances the ability to direct a Controller and not an NSP may need further consideration.

Draft Recommendation 11

Standardised Risk assessment

A standardised risk assessment framework is an essential requirement of any large-scale infrastructure operation such as an electricity network. Woodside supports the development of a single, common risk-assessment framework and further supports the use of the AEMO risk assessment framework. This should in turn be used by all participants. Woodside supports communication of outages in an open and transparent manner. The network outage process followed by AEMO provides one example of how this may be achieved.[4]

Draft Recommendation 12 – 16

Operational planning and outage co-ordination

The NWIS independent system operator should be sufficiently empowered to approve or otherwise coordinate planned outages to network or generation elements on an interconnected network to manage the risk to system security and performance to as low as reasonably practicable.

In the Wholesale Electricity Market (**WEM**)/South West Interconnected System (**SWIS**), market participants notify AEMO (as the system operator) of their outage plans up to three years ahead, providing justification for the outage and detail regarding outage timing and duration. Any changes must also be submitted to AEMO. The outage plan must outline any risks associated with the proposed outage and a contingency plan that would apply if the equipment needs to be brought back into service at an earlier time.

AEMO assesses outage plans in accordance with the Medium-Term Projected Assessment of System Adequacy (**MT PASA**) operational planning processes, which are geared towards ensuring that AEMO can meet its function to ensure that the SWIS operates in a secure and reliable manner. The assessment includes assessing compliance against specified obligations in respect of reserve capacity and the general availability of capacity.

Outages that are initially accepted by AEMO must be approved by AEMO before they proceed. AEMO undertakes final approval of outage plans within its Short-Term PASA operational planning processes. Where an outage plan is rejected, AEMO and the market participant must work together to determine an alternative time for the outage. A participant who submitted an outage plan approved by AEMO at least one year prior to commencement can apply for compensation where the outage is delayed or cancelled by AEMO within 48 hours of commencement. The justification is because operational planning in the WEM/SWIS is performed in timeframes appropriate to facilitate power system and market operation on a real-time basis, and with the support of a 24/7 security desk. Currently, a planned outage of a network element or generating unit will proceed unless the NWIS ISO determines there is an unreasonable risk to system security.

As in other markets the ISO should have the necessary powers to give directions in connection with the scheduling and management of notifiable events including the power to disapprove or approve a notifiable event apart from those facilities such as the Pluto Facility who operate under a clearly stated rule reflecting its unique circumstances. The NWIS consists primarily of three vertically integrated NSPs, Rio, Horizon Power and APA. Woodside agrees with ISO's comments in paragraph 4.2.2 of the Draft Decision that (a) there is a risk or perception that an NSP's operational decisions and risks assessments may be framed to favour its own upstream and downstream business and customers and potentially disadvantage a competitor; and (b)

[4] https://aemo.com.au/en/energy-systems/electricity/national-electricity-market-nem/nem-events-and-reports/network-outages

there is a concern that confidential information exchanged for outage planning purposes might be exploited to gain an advantage in the upstream or downstream markets.

Consideration of the principles for the establishment of the ISO indicate that there are matters to consider. In particular, one of the principles was the ISO should act with impartiality and transparency. Woodside does not want to comment extensively as our position on these matters can be read in our submissions to the ACCC regarding authorisation of the Pilbara ISOCo Limited in respect of certain coordination and system operation activities under the 'Pilbara Regime'.

If a centralised decision-making framework is to be adopted, then a prerequisite to doing this needs to be that the issues which impact participant perceptions of the current arrangements need to be resolved prior to the ISO making decisions that are currently made by the three vertically integrated NSPs. The ISO must be able to act impartially and transparently if the additional responsibilities outlined in the Draft Decision are to be transferred to an organisation where concerns have been raised by multiple organisations to undertake its current responsibilities.

Transparency

The current PNR provide limited transparency with respect to outage planning for market participants with the consequence that market participants have little or no ability to assess any risks to their own business and to take whatever mitigation measures they deem necessary. Woodside agrees that some market participants consider outage information to be commercially sensitive and the PNR are designed to achieve this objective. Woodside supports the ISO position in trying to release more information with respect to outage planning.

Outage and "notifiable event"

Woodside acknowledges that if a centralised decision-making model is adopted with the ISO responsible for the functions under Sub-chapters 7.3 and 7.4 rather than the NSPs collectively performing these functions then there will be consequential impacts. In particular, the ambiguity between outage and notifiable event will need to be resolved.

For integrated outage planning to occur it is sensible for there to be a requirement in Subchapters 7.3 and 7.4 for a process to be developed for notification, assessment, approval, scheduling and management of notifiable events. In addition, this will need to ensure that notifiable events managed under subchapters 7.3 and 7.4, contingencies and pre-contingent threats managed under subchapter 7.5 and the procurement and activation of ESS under Chapter 8 are consistent and minimise network risk to an acceptable level.

Adequate powers to intervene

Based on experiences to date it is also clear that there must be an ultimate decision-maker who can resolve disagreements over NWIS network risks and mitigation, determine what mitigations are appropriate, allocate responsibilities and make the final decision if an outage should proceed or not.

The process of outage management should be part of a new Procedure to be developed through consultation with all interested parties.

Whether there should be some form of appeals process may need to be considered as part of the next stage of rule development.

The outage planning and assessment process

The current process under subchapters 7.3 and 7.4 is a process which is controlled by the NSPs. As discussed, the PNR do not specify any role for the ISO in the determination of whether a scheduling conflict exists. As indicated herein Woodside supports that if the ISO will have the ultimate accountability for system security, then this will need to include a directions power to support their responsibilities.

The proposed process includes a an 'Equipment list' which is to include (at least) all significant energy producing facilities, all facilities which provide ESS, and all transmission network elements that serve them. If the ISO is to undertake its responsibilities then an Equipment list along the lines proposed will be required. On this basis the outage regime in Section 7.3 is a sensible outworking.

Mitigation of Outages

With responsibility for the management of outages it logically follows that the ISO will need the power to implement any risk management measures required that are identified as part of the risk assessment. On this basis it is supported in principle. There are clearly contracts in place that may be impacted by the ISO's ability to direct proponents to undertake certain actions to mitigate the implications of a notifiable event. The question of how mitigation measures costs are recovered will need considerable consideration and agreement as part of any rule change in respect to the management of outages.

Woodside does not support that urgent rule and procedure changes are required. However, it is acknowledged that problems continue to exist as a result of current arrangements, The NWIS has been able to operate regardless of the parties not being able to resolve issues amicably. The complexity and breadth of issues, the magnitude of co-incident regulatory and NWIS network change plus the number of parties who are and could be NWIS owners/users in the future suggests a standard consultation should take place.

Draft Recommendation 17, 18 and 19

ESS

Woodside believes the provision of ESS services is essential to achieving the System Security Objective and notes that the final decision on the provision of ESS was announced by Pilbara ISOCo in June 2024[5], presumably with a 12 month duration although this was not confirmed in the announcement. Draft Recommendations 17, 18 & 19 have the potential to materially alter the cost structure for ESS providers and clear potential to delay the award of ESS services beyond mid-2025. Woodside supports resolution of the costs associated with ESS as part of Draft Recommendations 17,18 &19.

[5] https://pilbaraisoco.com.au/wp-content/uploads/2024/06/Notice-Final-Decision-2024-25-Essential-System-Services.pdf