

Submission from Yindjibarndi Energy Corporation Evolution to Energy Policy WA's 'Evolution of the Pilbara Network Rules' consultation paper dated 4 February 2025

17th April 2025

Executive Summary

YEC fully supports the Energy Policy WA (EPWA) review of the Pilbara Networks Rules (PNR). We recognise the importance of a fit-for-purpose regulatory regime to accommodate the ongoing energy transition from a power system predominantly reliant on dispatchable, gas-fired generation to one increasingly driven by variable renewable energy sources.

The proposed reforms reflect an important step in modernising the regulatory framework to address the evolving dynamics of power system security, the integration of storage technologies, and the growing complexity of network operations. YEC is committed to assisting EPWA in developing modern rules that ensure a stable, predictable environment that facilitates private sector investment while also supporting the broader objectives of energy reliability and sustainability in the Pilbara region.

We set out below our key observations on the proposed PNR reforms. The body of this submission is structured to address the EPWA's key areas of focus and consultation questions.

Design of PNR should continue to reflect the unique features of the North-West Interconnected System (NWIS)

The Consultation Paper recognises that the NWIS is unique in many respects. The NWIS is relatively small (compared to other systems in Australia and internationally), with a small number of connected customers and no regulated wholesale market.

As system needs change in the NWIS, there will be a need for the technical and market rules to evolve. In some areas it may be appropriate to align the PNR more closely with other regulatory frameworks, including the SWIS and NEM frameworks, where common issues are being faced. However any changes to the NWIS should recognise and reflect the important differences between the NWIS and other systems.

This may mean that certain regulatory mechanisms applying in other systems are either not necessary for the NWIS or need to be substantially modified. For example, moving to a more structured framework for procurement of essential system services (ESS) is likely to require a mature market for these services. In this regard, the NWIS differs materially from the SWIS or the NEM, meaning that a modified mechanism and/or appropriate transitional arrangements are likely to be required.

Clear delineation between systems operation / monitoring and enforcement functions

YEC supports robust compliance monitoring of network operations but believes that a clear separation must exist between monitoring and operation of the system and enforcement functions. While the ISO is likely to be well placed monitor performance and identify issues, enforcement should be managed by an independent body, such as the ERA. This delineation will help avoid conflicts of interest, foster transparency, and maintain market confidence, ensuring that any enforcement actions are both fair and reflective of the severity and impact of non-compliance.

Civil penalties only appropriate in clearly defined and serious circumstances

YEC believes that civil penalties should be imposed only for clearly defined breaches that are both serious and within the control of the market participant. Penalties should target conduct where there is clear evidence of deliberate non-compliance or gross negligence that adversely impacts system reliability or market fairness. Civil penalties should not apply to minor or ambiguous infractions. This approach ensures that enforcement is proportionate and focused on serious misconduct, safeguarding participants from undue penalisation for issues beyond their reasonable control.

Equitable cost recovery

YEC believes that cost recovery for system functions should be fair and transparent, ensuring that all participants contribute to network operations in proportion to their actual usage of the NWIS. We support a model based on clear metrics (such as gross injection and withdrawal volumes) which reflects system

use, while also accommodating variations in connectivity. It is vital that participants with minimal reliance on the grid, for instance those managing self-contained operations, are not unduly burdened. Equitable cost recovery is critical not only for maintaining market confidence but also for safeguarding commercial investments as the system evolves.

Ensure 'behind the fence' operations are excluded from regulatory intervention

YEC supports the principle that operations and facilities confined to a private boundary (where all generation, storage, and load are managed internally without reliance on the NWIS) should be exempt from regulatory intervention under the PNR framework. This distinction recognises that self-managed, 'behind the fence' activities do not influence the broader grid's reliability or operational integrity, and imposing the same regulatory requirements on them as on interconnected network services would be unnecessarily burdensome. Excluding such operations from the regulatory framework will protect commercial investments and allow market participants to innovate and operate efficiently, while ensuring that regulatory efforts are focused on areas where they can meaningfully enhance overall system security and performance.

YEC is keen to participate in further consultation around any changes to technical rules

In a number of areas, the proposed changes to the PNR will require further detailed consultation and technical analysis. YEC recognises that the Consultation Paper represents an early step in the PNR process, and that considerable further work will be needed to design and implement a fit-for-purpose reform package.

YEC looks forward to engaging constructively with EPWA and other stakeholders throughout the reform process.

1 Long term planning

(1)(a) Do stakeholders support the proposed approach to long term planning?

(1)(b) Do stakeholders agree that the ISO is best placed to deliver the PSP?

YEC supports the proposed approach to long-term planning.

In particular, we note that effective monitoring of all networks in the Pilbara is important to maintaining network reliability. Partially connected (or non-connected) networks still have the potential to impact system-wide reliability, capacity planning, and infrastructure investment decisions. Including these networks as part of system planning will allow for better identification of opportunities for new generation or transmission investment and/or more efficient use of existing capacity.

YEC agrees that the ISO is best placed to deliver the Pilbara System Plan (**PSP**).

2 Network reliability standard

(2)(a) Do stakeholders support the proposed network reliability standard?

YEC considers that further consultation is required in relation to the design and implementation of the proposed network reliability standard.

YEC is in principle supportive of the proposed network reliability standard, subject to the exceptions noted in response to the following question. However, YEC seeks clarification on the cost implications and staged implementation of the proposed N-1 standard, particularly how it will apply to foundation users versus established networks over time. While YEC supports the principle of ensuring a reliable network, the proposal does not outline how N-1 compliance costs will be allocated or whether phased implementation will be permitted to reduce financial burdens on early adopters.

Additionally, YEC seeks clarification on how the N-1 standard would apply to private transmission infrastructure within a facility. The proposal does not explicitly distinguish between shared transmission assets and private networks that do not form part of the NWIS but may be partially connected.

With respect to reliability impacts, YEC sees conditions on the size of a single connection, generator or load from a system contingency withstand capability as a more appropriate planning criteria to provide guidance to users on their proposed developments. We note that the WEM has criteria enforced on the SWIS by Western Power/AEMO on the maximum size of a generator (400MW) & load (250MW) that can be tolerated as a single contingency.

(2)(b) Are there important exceptions to the reliability standard that should be included in the PNR?

YEC considers it important that there should be clear exceptions to the N-1 reliability standard to avoid imposing disproportionate costs on single-connection users. Many facilities already operate at N-0 without unduly affecting overall system stability and requiring them to upgrade to N-1 would offer limited additional security while significantly increasing their connection expenses. This is particularly relevant where connected parties can manage their own risks through onsite measures or flexible consumption arrangements.

Additionally, if the PNR allows some users to adopt a lower reliability standard, it must ensure that any associated costs or risks do not fall unfairly on other users or Network Service Providers (**NSPs**). Curtailment agreements and demand-side response can reduce the need for expensive infrastructure, but the rules should maintain equitable cost-recovery provisions so one NSP or participant does not bear a disproportionate burden. Defining a clear process for opting into lower reliability, together with

transparent mechanisms for apportioning costs, will help safeguard both affordability and fairness across the network.

3 Capacity forecasting

(3)(a) Do stakeholders support the proposed method to determine the NWIS capacity requirement?

We support the principle of determining the NWIS capacity requirement as proposed, but we believe the forecasting methodology must be fully transparent to give all participants confidence in the results. In particular, stakeholders should be able to understand and interrogate key modelling parameters, including:

- **Network constraints.** It is essential that the model clearly explains how network limitations are integrated. Stakeholders need to understand the extent to which transmission bottlenecks, congestion, and other network-related restrictions have been considered in determining or limiting the capacity requirement, ensuring that the forecasts are realistic and reflective of actual system and environmental conditions.
- **Individual generation and loads scenarios.** The methodology should detail the various scenarios used to simulate individual generation and load profiles across the NWIS. This includes clarifying the different cases examined – for example, variations in generation output, demand fluctuations, and peak load conditions – so that participants can assess how each scenario influences overall capacity planning.
- **Assumptions on individual generation and loads capacity and performance.** It is crucial that the assumptions regarding the capacity allocation and performance of individual generation units and loads are clearly stated. This includes the assumed reliability, performance characteristics, and capacity margins for both traditional and variable renewable resources, as these factors directly impact the estimated capacity requirement for the NWIS.

4 Individual capacity requirements

(4)(a) Do stakeholders support the proposed exclusions from individual capacity targets?

YEC generally supports EPWA's proposed approach of excluding loads that have self-supply options. However, it will be important to clarify the scope of this exemption. All stakeholders should have clarity around the scope of "self-supply" for the purposes of this exclusion.

Where consumption follows available generation, rather than the other way around, this has the potential to significantly offset the volatility of wind and solar output even when the energy between the two is wheeled through the interconnected system. Such arrangements should be excluded from the capacity targets if robust controls exist.

(4)(b) Do stakeholders have any other comments on determining individual capacity targets?

YEC has no other comments on this issue at this stage.

5 Capacity certification

(5)(a) Do stakeholders support the proposed conditions for self-certification?

YEC in principle is supportive of a capacity certification mechanism that acknowledges self-supply arrangements and grants participants flexibility when they use their own generation to meet their power needs.

However the scope and requirements for self-certification should be clear and align with the above principle. For example, it is stated that users must demonstrate adequate contracted capacity to prevent grid-wide shortfalls, which is at variance with the self-certification principle as it requires detailed revelations of the arrangements a generator and user have in place. YEC considers that if the generator/load relationship does not impact the NWIS it should be excluded. Instances of in-use violation therefore must be part of the PNR enforcement regime.

The scope and details of the self-certification mechanism will require further consultation. YEC would welcome further engagement with EPWA on technical details of this mechanism.

(5)(b) Do stakeholders support the proposed methods for assessing capacity contribution of different types of facility?

YEC supports using a probabilistic method to assess capacity contributions, as it recognises that weather patterns and resource availability can vary widely across the Pilbara. However, further detail is required on how the data underpinning these calculations will be sourced and applied consistently. A uniform benchmark could underrepresent or overrepresent specific locations if the underlying data does not account for regional differences in resource quality and timing.

Accordingly, there should be further detail on both who will gather the necessary renewable resource data and how that data will be substantiated and validated. Providing a transparent methodology for the entire data-collection and application process will help ensure that probabilistic assessments accurately reflect real-world conditions across different parts of the network and do not unfairly disadvantage or advantage particular projects.

6 Backup capacity procurement

(6)(a) Do stakeholders support central capacity procurement as a backstop in case of shortfall?

YEC supports the principle of central capacity procurement as a backstop where it is necessary to maintain system reliability, but it is important that the mechanism remains targeted and does not impose unnecessary costs on participants who have already secured their own firming arrangements. The proposed approach appears to allow for this distinction by only charging those who require additional backup from the ISO, while allowing participants that have made their own firming arrangements (whether through generator contracts or internal backup solutions) to avoid unnecessary charges. However, further clarity is needed on how this will be applied in practice, particularly in defining the threshold at which a participant is deemed to have 'sufficient' firming capacity and ensuring that procurement costs are fairly allocated across those who rely on the service.

Additionally, while a central backstop provides a necessary safety net for users without firm capacity, the framework should not discourage efficient bilateral arrangements between generators and customers. Some participants may prefer to manage their own backup through direct commercial agreements, rather than defaulting to an ISO-managed procurement process. The rules should ensure that this flexibility is maintained, while still preventing free-riding by parties that rely on the network without contributing to system reliability. A well-designed backstop should strike a balance between providing security for the overall network and preserving the ability of participants to plan their operations in a way that best suits their commercial and technical needs.

(6)(b) Do stakeholders support the proposed approach to capacity procurement?

Please see our response to (6)(a) above.

7 ESS Framework and consultation

(7)(a) Do stakeholders support the proposed approach to essential system services?

YEC recognises the importance of having frameworks in place to ensure the availability of essential system services (ESS) as the NWIS fuel and generation mix changes. However any new or amended rules for ESS procurement need to reflect the unique characteristics of the current system.

The current Pilbara system has a limited number of facilities capable of providing ESS. As a result, ESS is currently procured via direct contracts.

The proposed new mechanism requires a mature market system in place to effect a workable system operation with a known capability of participants. Further consultation and technical analysis is likely to be needed to ensure that any new ESS procurement framework will be workable and effective in the Pilbara system. At a minimum, a transition arrangement from the existing will be required.

(7)(b) Do stakeholders support the proposed approach to ESS procurement?

Similar to the above, YEC is in principle supporting the proposed approach to ESS procurement, however more detail and consideration of implementation issues is needed.

YEC supports the proposal that, in the transitional period, ESS continue to be procured under contracts until the depth of this capability increases.

8 ESS cost recovery

(8)(a) Do stakeholders support the proposed cost recovery methods?

YEC supports the principle that ESS costs should be allocated per a 'causer-pays' approach where practical but seeks clarification on how cost recovery will account for the natural response characteristics of certain generation types, particularly wind and solar. These generators can automatically adjust their output in response to system events such as load rejection, which may cause them to deviate from their balancing position through no deliberate action of their own. Given that this response can assist system stability rather than cause additional regulation costs, YEC considers that renewables should not be unfairly penalised under the proposed cost allocation framework.

We request further detail on whether the exemptions proposed at 8.5 (where facilities will be exempt from Contingency Reserve Raise costs if they provide evidence that a facility trip would be automatically offset by load curtailment by the same participant) would apply to wind and solar generators whose output naturally adjusts in response to load rejection events, even where this adjustment does not constitute a formal trip event. If this exemption is intended to cover such cases, we request that this be made explicit in the final rules to provide certainty for participants and ensure that the cost allocation framework remains equitable.

9 System strength

(9)(a) Do stakeholders support the proposed approach to system strength and fault level settings?

YEC acknowledges the complexity of system strength and fault level management and supports the intent of the proposed approach to provide clearer guidance on setting limits. However, further detail is

needed on how these requirements will be applied in practice. System strength issues, particularly fault level stability, are becoming increasingly difficult to manage as the transition from traditional thermal generation to inverter-based resources progresses. Unlike synchronous generators, wind, solar, and even battery systems contribute little to no fault current, which can create operational challenges in certain conditions. Without clear and predictable criteria, generators risk being required to retrofit costly system-strength solutions late in the development process, leading to investment uncertainty.

The proposed approach suggests that the ISO will approve system strength requirements while NSPs will support this process, but it is unclear how responsibilities for maintaining system strength will be allocated. In other jurisdictions, such as the NEM, there has been a shift from generators bearing these obligations (under a 'do no harm' approach) to NSPs taking a more proactive role in maintaining system strength. YEC supports a model where system strength obligations are not unduly imposed on connecting generators in ways that discourage investment. However at the same time, NSPs need to be able to manage and recover the costs associated with any system strength management obligations. The planning criteria must be transparent, and where solutions such as synchronous condensers are required to maintain system strength, there must be a clear framework for determining who is responsible for these upgrades and how costs will be allocated. YEC requests further clarity on how these principles will be applied in the Pilbara to ensure that the rules create a stable investment environment while maintaining a reliable power system.

10 Outage planning

(10)(a) Do stakeholders support the proposed outage process?

YEC supports the proposed centralised outage planning process and agrees that the ISO is the appropriate party to coordinate outages across the interconnected network. A structured and transparent approach to outage management is necessary to ensure system reliability while allowing participants to plan effectively. However, further clarification is needed on how the process will account for future developments, particularly where new facilities connect to the system over time. Outage planning must be forward-looking to incorporate new infrastructure that may impact network stability as the system evolves.

Additionally, YEC seeks confirmation that the ISO's role will be limited to the interconnected network and will not extend to facilities operating entirely behind a connection point. The requirement to submit outage plans and seek approvals should only apply where an outage has a material impact on the broader system. For facilities that do not affect the interconnected network, the ISO should have no role in their internal outage planning beyond notification. Maintaining this distinction will ensure that the outage process remains effective without imposing unnecessary administrative burdens on participants.

(10)(b) Are there other circumstances in which self-scheduling outages could be allowed?

YEC considers that a self-scheduling generation that is not part of the dispatch regime and provides its own backup should not be required to notify of any proposed outage.

11 Outage plan timing

(11)(a) Do stakeholders support the proposed outage timeframes?

YEC supports the need for structured outage planning but seeks clarification on how the proposed timeframes will accommodate long-term network upgrades and future renewable energy connections. Given the requirement to submit outage plans up to a year in advance, there is concern that this could introduce delays or administrative hurdles for major infrastructure projects such as network restringing or upgrades, particularly where unforeseen changes extend project timelines. It is unclear whether the framework allows for flexibility in cases where unexpected delays arise in long-duration network projects and how such situations will be managed without causing disruptions to scheduled outages or other network users.

Additionally, YEC seeks further detail on how renewable generation projects will be affected if they are unable to connect or commission their plants during an approved network outage. While NSPs are expected to provide updates to the ISO on new Grid Connection applications, it is essential that the outage scheduling process remains coordinated and transparent to ensure that new projects are not unduly delayed. Given the increasing number of renewable connections expected in the Pilbara, YEC recommends that the framework explicitly account for the interaction between outage planning and connection approvals, ensuring that commissioning activities are effectively incorporated into the outage schedule. Additionally, ISO and NSPs may need to develop contingency planning measures to ensure that network reliability is maintained while also allowing for critical upgrades and new connections to proceed without unnecessary delays.

(11)(b) Are there other aspects of outage costs that the PNR should cover?

Any compensation arrangements for outage cancellations will require further consideration and consultation.

In particular, it should be considered how outage-related costs will be managed, particularly whether the PNR will establish tiers of compensation to reflect different financial impacts on generators. Renewable projects are particularly vulnerable to curtailment losses during outages, as they may have limited flexibility to recover lost generation, whereas traditional generators may have greater ability to reschedule or operate under different conditions. Clarification is needed on whether compensation will differentiate between these impacts and how financial risks will be distributed among affected parties.

Additionally, YEC requests further information on how the impact of outages on system strength and network reliability will be considered within the cost framework. System strength changes during outages could affect the stability of generators, potentially increasing operational risks or requiring additional system support. YEC recommends that the PNR address how generators will be notified and compensated where outages materially affect system strength and create additional costs or constraints on their operations.

12 Balancing mechanism

(12)(a) How close to real-time could trading market outcomes be finalised and still allow participants to manage their portfolios?

YEC notes that, in a mature market, trading positions are generally submitted a day ahead, with dispatch instructions for balancing issued on a 30-minute basis. On this basis, YEC considers that portfolio trading outcomes could be finalised approximately 30 minutes prior to real time for system-wide balancing purposes, provided that the processes (especially any automated dispatch in shorter intervals) are fully in place. Furthermore, for participants that submit a portfolio of plant, the model envisions that they would be able to manage individual generator dispatch internally without needing to re-notify the ISO, as long as their internal management does not adversely impact the NWIS. This

approach, therefore, provides a flexible mechanism that balances near-real-time responsiveness with effective portfolio management.

(12)(b) Do stakeholders have any other comments on the proposed trading and balancing mechanisms and arrangements?

Where a generator and load are directly connected, their internal balancing arrangements should remain outside the scope of these market processes. YEC requests confirmation that direct connections will not be required to participate in the day-ahead market where they do not impact system-wide balancing needs.

13 Metering

(13)(a) Do stakeholders have any comments on the proposed changes to metering data management?

YEC has no comments on the proposed changes.

14 Manual load shedding plan

(14)(a) Do stakeholders agree with the proposed arrangements for planning for manual load shedding?

YEC supports the development of a structured and transparent manual load shedding plan but seeks further detail on how the priority list will be determined and applied in practice. It is critical that the methodology for ranking load shedding priorities is clear, equitable, and accounts for the commercial and contractual arrangements of participants. In particular, YEC requests confirmation of where it would be positioned on the priority list and how participants can engage with the process to ensure their priority ranking reflects their system importance and contracted arrangements.

Additionally, YEC is interested in how the proposed arrangements will accommodate participants that have their own balancing mechanisms with customers. Given that past models have allowed generators and loads to coordinate directly (even when operating through an interconnected system) it is important to understand whether similar flexibility can be maintained under the new framework. YEC seeks clarification on whether participants can structure their own load management agreements to minimise their exposure to involuntary load shedding. This would provide greater certainty for participants while supporting overall system stability.

15 ISO functions

(15)(a) Do stakeholders support the move away from an administrative ISO?
(15)(b) Do stakeholders support the ISO taking the control desk function in-house?
(15)(c) Do stakeholders agree with the proposed time frame for shifting control desk functions?

YEC is supportive of moving away from an administrative ISO, given that an expanded role will likely be needed to manage more complex real-time operations in a transitioning power system. In principle, YEC also supports bringing control desk functions in house, as this can provide the ISO with greater independence and transparency for system operation. However, YEC would like to see more detail on the transitional roadmap between now and January 2027 to ensure a smooth migration of these functions.

16 ISO board

- (16)(a) Do stakeholders support the ISO board being independent of participants?**
(16)(b) Do stakeholders support the proposed board arrangements?
(16)(c) Do stakeholders agree that board composition and ISO cost recovery should be amended at the same time?

YEC recognises the importance of a truly independent ISO board, particularly for maintaining competitive neutrality and attracting third-party investment in the Pilbara. At the same time, we note the need for directors who have sufficient insight into local operational challenges and the broader Pilbara power sector. The proposed approach appears reasonable as long as the selection criteria for directors balance independence with practical energy sector experience and knowledge of regional issues. The Board's composition should comprise a set number of experienced industry representatives plus a set number of experienced commercial representatives

We have no objection to aligning the changes to ISO board composition with an updated cost-recovery framework, given that funding and governance are closely linked. Ensuring the board's independence at the same time the cost model is modernised will help maintain credibility in the ISO's decision-making. Provided these changes are implemented transparently and with consideration for industry-specific expertise, YEC is generally supportive of the proposals.

17 ISO budget

- (17)(a) Do stakeholders support the proposed budget arrangements?**

YEC has no objection to the ISO budget being independently reviewed and approved by the ERA.

18 ISO fees

- (18)(a) Do stakeholders support the proposed approach to ISO cost recovery?**

YEC acknowledges that a gross-volume approach to ISO fee recovery is used in other electricity markets and can provide a transparent, straightforward method for allocating costs among participants. However, YEC seeks clarification on how this will apply in cases where generation and load are only partially interconnected or largely self-supplied, as well as whether there will be any exceptions for facilities that do not rely on system services for normal operations. Ensuring that the fee structure fairly reflects each participant's actual use of the network (particularly where behind-the-meter or partial connections exist) will be key to supporting ongoing private investment and operational decisions.

Provided these clarifications are addressed, YEC is open to the proposed gross-volume fee model, especially if it ensures cost recovery in a stable, predictable way and appropriately reflects each participant's overall impact on system operations.

- (18)(b) Do stakeholders support the proposed timing for changes to ISO cost recovery?**

YEC is generally comfortable with aligning the timing of ISO cost-recovery changes with the proposed board composition changes. Doing both simultaneously offers clarity for all participants, ensuring the new governance model and cost-allocation framework can be implemented as a coherent package. Provided there is a reasonable transition period and transparent communication about when and how the new arrangements will take effect, YEC has no objection to the proposed timing.

19 Confidential information

(19)(a) Do stakeholders support the principle of transparency of information?

YEC supports the principle of transparency in principle, as it promotes a more competitive and efficient market. At the same time, it is vital that commercially sensitive information remains protected and that clear processes exist for designating data as confidential. Ensuring that relevant operational details become publicly available while maintaining confidentiality for contract terms and other proprietary information strikes the right balance between open access to essential market data and safeguarding participants' legitimate commercial interests.

(19)(b) Do stakeholders agree with the proposed criteria for designating confidential information?

YEC supports the principle of having clear criteria for determining confidential information but notes that the details provided are relatively high level. It is unclear which specific criteria is being referred to, how these criteria will be applied in practice or what standards the ISO will use to decide whether information meets each condition. YEC requests additional guidance on how confidentiality determinations will be made before it can provide more detailed feedback.

(19)(c) Do stakeholders support the provision of real-time operational data with the ISO?

YEC recognises that the ISO needs real-time operational data to maintain system reliability in a more complex and renewable-focused Pilbara network. In principle, we have no objection to providing such data, provided there are appropriate safeguards to ensure commercial information remains protected. Clarifying the scope and purpose of data collection (so participants can be confident it will be used only for legitimate power system operations) would give YEC greater confidence in supporting this proposal.

Further, YEC considers there needs to be a distinction drawn between operational data used for ISO operations and that available via the ISO to participants. Similarly, that data to be made available to individual participants on their own operations will need be different to that data available to all.

20 Compliance monitoring

(20)(a) Do stakeholders support the ISO having a more explicit compliance monitoring function?

YEC appreciates the benefit of having the ISO proactively monitor key areas such as dispatch compliance, ESS performance, and portfolio balancing. However, we seek further clarity on how this compliance function will align with the ERA's oversight role. Clearly defining how the ISO's monitoring responsibilities interface with the ERA's investigatory and enforcement powers will help ensure transparency and avoid conflicts of interest if the ISO is ever implicated in a compliance matter.

(20)(b) Do stakeholders agree with the proposed activities for the ISO's initial monitoring?

YEC agrees that portfolio balancing, dispatch compliance, and ESS performance are sensible priority areas for the ISO's initial monitoring focus. However, we see "naming and shaming" as an enforcement tool rather than a purely monitoring activity, and believe it would be more appropriately undertaken by the ERA. A clear separation between the ISO's monitoring responsibilities and the ERA's enforcement functions ensures transparency, avoids conflicts of interest, and maintains confidence in the overall compliance regime.

Separation between the ISO role and any enforcement activities would be consistent with the approach in other jurisdictions. For example in the NEM, AER enforcement activities are separate from AEMO's system operation and monitoring functions.

(20)(c) Do stakeholders see any issues with the proposed monitoring arrangements, and if so, what?

YEC has no immediate concerns with the ISO's proposed monitoring arrangements but emphasises the importance of a robust dispute resolution process if a participant's complaint or compliance issue directly involves the ISO. Ensuring an impartial channel for raising and resolving conflicts (separate from the ISO's own monitoring function) would give stakeholders confidence that their concerns will be addressed fairly, even where the ISO itself might have played a role in the underlying issue.

21 Compliance and enforcement

(21)(a) Do stakeholders support the proposed enforcement measures?

YEC supports having a broader and more graduated set of enforcement measures to ensure compliance with the PNR, including monetary penalties from the ERA and the ability to restrict persistently non-compliant participants from the trading mechanism. This approach provides a meaningful suite of consequences short of disconnection, which should help maintain a reliable, fair market. However, YEC would welcome more detail on how repeated non-compliance is escalated and how an appeals process would function, to ensure transparency and confidence in the overall framework. It is also essential that enforcement outcomes reflect the severity of the breach, the degree of grid impact, and the extent to which the relevant party could control the non-compliant conduct. In addition, obligations such as compliance with dispatch instructions should be carefully caveated to avoid clashing with existing contractual commitments, and civil penalties should be reserved for clearly defined breaches rather than broad principle based obligations.

Furthermore, YEC believes that all enforcement powers, including the ability to issue formal warnings or remediation notices, should reside with a single, independent authority, being the ERA. Centralising the entire enforcement toolkit within one body would streamline the process, promote consistent standards, and prevent potential conflicts of interest arising for the ISO. This ensures that while the ISO plays a key role in monitoring compliance, ultimate enforcement decisions remain in the hands of a neutral regulator.

(21)(b) Are there any other enforcement options stakeholders consider would be useful in the PNR?

YEC does not see the need for additional enforcement measures beyond those proposed.

22 NSP to NSP connection arrangements

(22)(a) Do stakeholders agree with the proposed approach to network interconnections?

YEC broadly supports the proposal for connecting new networks to the NWIS, as it provides a clear framework for ensuring system reliability and transparency. However, YEC submit that the requirement for every generator, storage, or load on a connecting network to demonstrate compliance with Chapter 3 of the HTR could be burdensome if those facilities do not materially affect the broader system. In our view, compliance obligations should focus on the interconnection point and any direct impact on system security. Allowing the NSP to manage compliance for behind-the-connection assets avoids imposing unnecessary requirements where there is minimal or no influence on the wider NWIS.

23 Preferential supply for transmission foundation customers

(23)(a) Do stakeholders agree that foundation customers should be treated differently from customers who have not funded transmission expansion?

(23)(b) Do stakeholders agree with the proposed approach to providing certainty of access to foundation customers?

YEC agrees that foundation customers who have funded transmission expansions may be treated differently from other customers, as their upfront investment often underwrites the viability of new or upgraded infrastructure. Foundation customers often bear greater risk than later customers, including the risk that they may ultimately bear an outsized share of the cost recovery burden if demand growth does not materialise.

Providing these customers with a degree of assured access and prioritised supply acknowledges both their financial contribution and the broader benefits their investments bring to the system. It is therefore important that the market design, along with the ISO's role in network planning and operations, fully contemplates and accommodates these foundation customer arrangements to foster ongoing private sector investment in the Pilbara. YEC suggests some of the following measures to help achieve this:

- **Option A: Unconditional Preferential Treatment** - Foundation customers are granted explicit priority rights in dispatch and an exemption from imbalance penalties on a fully unconditional basis. Under this option, their investments are fully recognised by ensuring that their supply is never curtailed in favour of other market participants, regardless of network conditions. This approach would provide maximum certainty but may require clear boundaries to ensure system reliability isn't compromised.
- **Option B: Tiered Preferential Treatment** - Preferential treatment is calibrated based on the level of financial contribution and the extent of reliance on the NWIS. Under this model, foundation customers would receive varying degrees of benefits—such as priority dispatch and reduced penalty exposure—based on predetermined thresholds. This tiered approach ensures that preferential benefits are proportional to investment while still encouraging efficient use of the network.

- **Option C: Hybrid Model with Conditional Waivers** - A hybrid framework could combine guaranteed access rights with a conditional waiver of imbalance penalties. For example, foundation customers would receive fixed priority rights in dispatch and fee benefits, but any waiver of penalties would be subject to periodic review against performance benchmarks and operational impact. This model allows flexibility and ongoing assessment, ensuring that preferential treatment is maintained only when it does not distort market operations.

Each of these alternatives should be supported by transparent contractual frameworks and robust dispute resolution processes, ensuring that any preferential treatment is clearly defined and consistently applied. YEC welcomes further discussion on these options to identify a solution that supports ongoing private investment while preserving overall market fairness and reliability.

Further, YEC considers that where foundation customers have a mode of operation that suits their predicted financial return this should not be compromised without financial compensation by later participants.

24 Self-contained networks

(24)(a) Do stakeholders agree with the proposed approach to self-contained networks?

YEC supports the principle that networks serving only their own load and generation should be able to operate with minimal ISO oversight, provided they do not impact the broader system's reliability. However, we seek clarity on what exactly constitutes a 'self-contained' network (e.g. whether it refers to an electrical or physical boundary) and how the ISO will determine whether such a network can influence overall power quality and security. Having a precise definition will help avoid ambiguity about which requirements apply and prevent unnecessary compliance obligations for networks that have no material effect on the interconnected system.

(24)(b) Are there other aspects of the existing PNR that provide barriers to connection of self-contained networks?

The following are potential barriers to connection of self-contained networks:

- System strength requirements for adjacent networks;
- Compliance with the PNR inside the self-contained network; and
- Outage planning for generation/loads behind the point of connection and where generator to load management is separate to the NWIS operation.

25 Storage participation

(25)(a) Do stakeholders agree with the proposed changes to accommodate storage facilities?

YEC agrees that the PNR should recognise storage as a distinct technology capable of providing both supply and demand services; however, we see a need to clarify the requirements for behind-the-fence batteries used primarily for a user's own operations. If a battery does not materially affect system stability or rely on network services, it may be unnecessarily burdensome to impose full registration and technical compliance obligations. Subject to that clarification, YEC supports introducing a new "Energy Producing System" definition and allowing larger storage facilities to participate more fully in the market.

(25)(b) Are there other matters that Energy Policy WA should consider in relation to the treatment of storage facilities in the PNR?

YEC supports the principle of recognising storage facilities on an equal footing with generation, including the ability to register and participate in essential system services where appropriate. However, we seek clarity on how the proposed rules would apply to battery systems used purely for a user's internal operations (e.g. co-located behind the meter), which do not materially affect the broader system. Such facilities should be exempt from registration and ongoing compliance requirements if they have no appreciable impact on PSSR or rely minimally on NWIS services. By distinguishing stand-alone storage from user-focused installations, the PNR can both encourage wider adoption of storage and avoid imposing unnecessary obligations on participants with purely internal energy needs.

26 Demand side participation

(26)(a) Do stakeholders agree with the proposed approach to demand side participation in the Pilbara?

YEC has no issues with the proposed approach.

(26)(b) Are there other services that demand participation could provide in the NWIS?

YEC does not presently propose other services that demand participation could provide in the NWIS.

27 HTR standards

(27)(a) Do stakeholders agree that the HTR should be the only technical standards for the NWIS?

YEC supports the principle that the HTR should be the sole technical standard for the NWIS. However, it is essential that the application of these standards is clearly bounded to the interconnection point, ensuring that only equipment and facilities directly affecting the NWIS are subject to the HTR. This clear demarcation will help prevent unnecessary compliance burdens on internal operations while providing certainty to prospective connection applicants.

(27)(b) Do stakeholders agree that the HTR should include both default and minimum standards?

YEC supports the inclusion of both a default standard for automatic qualification and a defined minimum standard within the HTR. This dual approach provides clarity on the technical requirements for connections, ensuring that all equipment at the interconnection meets a consistent baseline for safety and reliability, while still allowing for flexibility where appropriate. However, YEC seeks further detail on how the minimum standard will be defined and on the process for granting departures from the default standard to ensure that any deviations do not compromise overall system security.

(28)(a) Do stakeholders support the proposed negotiation framework?

YEC supports the principle of a structured negotiation framework to manage departures from the default HTR. We believe that having a clear process (where NSPs negotiate with access seekers under the oversight of the ISO, with final approval and published timeframes) will enhance transparency and predictability in connection processes. However, YEC requests further clarification on the specific criteria and evidence required to justify departures, the acceptable bounds of negotiation, and the dispute resolution mechanism if parties cannot reach an agreement. This additional detail is essential to ensure that the framework operates fairly and maintains system security while accommodating necessary flexibility.