Government of Western Australia
Energy Policy WA

Pilbara Networks Rules Rule Change Proposal Submission

PRC_2022_01
Integrated LNG Systems

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1. Please provide your views on the proposal, including any support, objections, or suggested revisions.

EXECUTIVE SUMMARY

1 The ISO appreciates the special characteristics of the Pluto Facility, driven as they are by operational necessity. The ISO also acknowledges that there are a range of benefits that may accrue in association with the electrical connection of the Pluto Facility and the Maitland Project.

2 The ISO supports the expansion of the NWIS where the effect of such can be undertaken consistently with existing provisions of the Pilbara Networks Rules (**PNR**) or, where that is not applicable in a manner that is:

(a) consistent with GEIP; and

(b) without adversely impacting on the functions of the ISO.

3 Woodside's PRC_2022_01 (the **Proposal**) may represent the groundwork to such an expansion and the ISO considers that a range of technical work and related consideration is required to establish whether this is the case and whether improvements and alternatives may, in all the circumstances, be necessary or desirable. In the absence of any such technical work and assessment, the ISO does not consider that the Coordinator could be satisfied that the Proposal meets the Pilbara electricity objective.

4 In suggesting a course of further assessment, the ISO:

(a) agrees with PAC's decision of 29 August 2022 to establish a technical working group (**TWG**) under Rule A2.3.17A to undertake further technical assessment of the likely impact of the Proposal in order to ascertain whether the Proposal can be implemented in accordance with PNR, the Harmonised Technical Rules (**HTR**) and/ or GEIP, as applicable;

(b) proposes, given the lack of integrated LNG facilities that are connected to grids in Australia and likely adaptable standards of prudent conduct, appropriate technical leadership and broadly relevant exemption frameworks in the PNR (such as Rule 57 and Rule 64) should be adapted as benchmarks for assessment;

(c) proposes a range of conceptual and drafting suggestions for further examination and consideration including a detailed consideration of the impact of proposed Rule 5A, which may inject a reasonable degree of uncertainty into the PNR despite it being materially identical from a drafting perspective to Rule 5, which applies a formally similar arrangement for integrated mining systems.

BACKGROUND

The Proposal

5 The Proposal was preceded by Woodside providing a draft version of the proposal to the ISO and stakeholders, including members of the PAC.

6 In response to the draft proposal, the ISO provided written feedback to Woodside for the purposes of preliminary consultation and in order to provide Woodside with a sense of the ISO's preliminary questions and concerns.

7 This preliminary feedback was the subject of discussion between the ISO and Woodside. The ISO notes that a key aspect of its preliminary feedback was consistent with that of the PAC, being that there is a need for further technical consideration of the draft proposal.

8 Consultation between the ISO and Woodside will, no doubt, continue including via the TWG, which it is intended that the ISO will chair.

9 Separately but relatedly, Woodside is currently progressing the electrical connection of:

(a) the Pluto project, including a 4.9 million tonnes per annum LNG processing train, condensate production facilities, a domestic LNG facility, four 35MW nominal (140MW total) gas turbines and an electricity distribution network (the **Pluto Facility**); and

(b) a renewable energy development located at Maitland (the **Maitland Project**),

to Horizon Power's network in the NWIS.

10 To allow Woodside to progress the proposed electrical connection of the Pluto Facility in the preferred manner, Woodside submitted the Proposal under the standard rule change process under Rule A2.5.7 of the PNR on 19 July 2022.

11 If adopted, the Proposal will amend the PNR to, among other things:

(a) create a new class of participant under the PNR, being an integrated LNG network, which is intended to apply to the Pluto Facility, alone; and

(b) limit the application of the PNR and HTR in respect of integrated LNG networks.

The Coordinator's role

12 The Coordinator is responsible for administering the rule change process under Appendix 2 of the PNR and approving rule change proposals, except where a protected provision is concerned in which case Ministerial approval is required from the Minister for Energy.

13 The Coordinator must not approve a rule change proposal if the Coordinator is not satisfied that the rule change proposal is not consistent with the Pilbara electricity objective, defined in Rule 119(2), being the promotion of efficient investment in, and efficient operation and use of, services of Pilbara networks for the long-term interests of consumers of electricity in the Pilbara region in relation to:

(a) price, quality, safety, reliability and security of supply of electricity; and

(b) the reliability, safety and security of any interconnected Pilbara System.

14 The Coordinator is also required to have regard to certain matters in making such a decision, including:

(a) the contribution of the Pilbara resources industry to the State's economy;

(b) the nature and scale of investment in the Pilbara resources industry; and

(c) the importance to the Pilbara resources industry of a secure and reliable electricity supply;

(d) the nature of electricity supply in the Pilbara region, including whether or not regulatory approaches used outside the Pilbara region are appropriate for the region, Pilbara network users and Pilbara networks; and

(e) any other matter that the Coordinator considers relevant.

ISO's functions in respect of the Proposal

15 The ISO has a range of functions conferred under Part 8A of the EI Act, the Regulations, PNR and PNAC, including a function to maintain and improve power system security in any Pilbara network, along with a function to facilitate overall network coordination and planning for interconnected Pilbara systems.

16 The ISO takes its independence seriously with appropriate internal protocols having been adopted to ensure that it is able to do this notwithstanding the fact that its members and directors include Horizon Power, Alinta Energy and Rio Tinto.

17 Rule A2.3.5(g) provides for the ISO's role as a member of the PAC, which does not provide for any specific function in relation to Rule Change Proposals beyond its role as a member of the PAC.

18 However, given the ISO's independence, its system security function and the criticality of system security to the operation of the Pilbara networks, more generally, the ISO takes the view that the Coordinator should have regard to the ISO's views as a "relevant matter" when applying the Pilbara Electricity Objective, consistently with clause 4 of the Regulations.

SUBSTANTIVE RESPONSE

Conclusions from preliminary functional review

19 ISO has undertaken a high-level review of the Proposal in the context of the PNR with a focus on the likely impact of the Proposal on the ISO's ability to perform its functions.

20 The upshot of that review is set out in Schedule One. In summary, the ISO anticipates that the following functions of the ISO may be adversely impacted by the Proposal or carry some degree of uncertainty:

(a) to maintain and improve system security across the Pilbara interconnected system in accordance with Rule 32(1);

(b) to administer the protocol framework in accordance with Rule 33(1)(c);

(c) given the absence of a representative power system model to date, the ISO's ability to create, maintain, manage and operate the power system model in accordance with Rules 33(1)(f) and Subchapter 4.4 of the PNR;

(d) to oversee the generation adequacy regime in accordance with Rule 33(1)(i) and Chapter 6 of the PNR.

i. While Chapter 6 does not apply to a non-covered network, considering the amount of generation installed at the Pluto Facility, the ISO will require visibility and power system model validity in order to perform its generation adequacy function.

(e) to procure essential system services, energy balancing and settlement in accordance with Rules 33(1)(m) and 33(1)(n), and Subchapters 8.1 and 8.2; and

(f) to undertake rule compliance monitoring and enforcement in accordance with Rule 33(1)(s) and Subchapter 12.1.

21 With respect to the ISO's functions that could foreseeably be adversely impacted by the Proposal, ISO believes that many of these impacts may be unintended and can be adequately mitigated through further consultation through the TWG.

Technical work and related considerations

22 In the ISO's view, certain power system modelling, steady state and dynamic studies may need to be undertaken in respect of the Pluto Facility in order for the TWG to adequately assess the impact that the proposed new connection will have on the system. The studies outlined below and to be discussed by the TWG are intended to be indicative only and should be undertaken in accordance with the PNR, which includes the HTR, and to a GEIP standard.

Power system modelling

23 The ISO recommends that the following power system modelling activities should be undertaken at the Pluto Facility to adequately represent and simulate the impact to the NWIS post the new connection.

(a) The Pluto Facility shall be modelled in 'PowerFactory' representing the 'as built' network.

(b) Large loads shall be individually modelled, with small loads being aggregated if required at the HV busbars.

(c) **Generator models**: Site validated dynamic models to be prepared for each generator representing its control philosophy.

(d) **Loads:** A dynamic model load model to be prepared for large loads in order to represent motor starting characteristics for these large loads.

(e) **Reactive power facilities:** Modelled in the PowerFactory model. Dynamic models shall be provided for dynamic reactive power facilities.

(f) **Underfrequency load shedding:** Modelled in the PowerFactory to assess the network impact.

(g) **Plant loading scenarios:** Modelled or stated in a report which covers minimum and maximum loads with corresponding in service generation.

Steady state assessment

24 The ISO recommends that the following steady state assessments should be undertaken.

(a) Load flow assessment identifying any thermal constraints.

(b) Short circuit analysis capable of identifying short circuit contribution at the point of connection. This assessment should ensure appropriate motor contributions are accounted from both large and aggregated motor loads.

(c) Voltage assessment across nodes for various operating conditions.

(d) **Network performance and planning criteria**: Identify any other steady state studies required to assess network performance and planning criteria in line with the HTR, PNR and GEIP.

Dynamic assessment

25 The ISO recommends that the following dynamic assessments should be undertaken as a minimum requirement.

(a) **Generator response**: Assess generator response against the performance criteria specified in Chapter 3 of the HTR. While the intent of this study is not to assess compliance of Pluto generators against the HTR, ISO would like to review performance gaps if any which could impact network performance.

(b) **Loss of generation**: Assess the plant operational cases and simulate the loss of generation under all credible network load conditions.

(c) **Load loss:** Assess the plant operational cases and simulate the loss of load under all credible network load conditions.

(d) **Network faults**: Over and above the generation and load loss, provide a list of credible contingencies within the Pluto Facility and undertake dynamic contingency assessment considering protection clearance times where applicable. In the event that the credible contingency list is unavailable or it is not possible to simulate, key network element losses and three phase bus faults shall be assessed at the main generation busbar and at each load centre.

(e) **Network impact assessment**: Undertake the system dynamic studies with generation dispatch and load level adjustments for a range of NWIS system wide credible contingency scenarios, including the most onerous operating conditions, which shall be discussed with the registered NSP. The impact assessment study shall include credible contingencies consisting of fault scenarios on the NWIS system primary elements, generation trip and load rejections to assess system wide performance.

Conceptual issues with adapting the integrated mining systems framework – the GEIP Standard

Summary of position

Proposed Rule 5A provides that the PNR applies to 'integrated LNG systems' to the extent necessary to achieve or promote certain ***specified purposes*** to a ***GEIP standard***.

This establishes an interpretive lens of sorts when applied to integrated LNG systems, having the practical effect of requiring that each element of the PNR be assessed for application in the context of proposed Rule 5A.

While this approach is consistent with the drafting in respect of an integrated mining system, the ISO queries that the provision, when adopting a 'market' GEIP definition of the kind contained in the PNR, may introduce uncertainty, including in respect of required standard of prudent and appropriate conduct and benchmarks, not least of all because LNG facilities are otherwise universally operated on a stand-alone basis.

In addition to the ISO undertaking its own further consideration of the matter, the ISO considers that the TWG should be asked to identify technical issues that arise from this aspect of proposed Rule 5A, and whether improvements and/or greater specificity may be required in respect of integrated LNG systems.

26 In its Proposal, Woodside submitted that the PNR historically catered for exceptions to aspects of the PNR that do not comfortably align with the unique circumstances that apply to certain resources industry operators. An example that Woodside noted was the particular carve outs in the PNR for 'integrated mining networks' which limit the reach of the PNR in respect of operators in the mining industry.

27 Proposed Rule 5A, which is canvassed in broad terms, serves to limit the reach of the PNR in respect of the proposed new category of network, the 'integrated LNG network', borrowing from drafting contained in Rule 5 of the PNR.

28 The ISO appreciates the conceptual elegance of adapting the 'integrated mining system' definition but notes that the unique characteristics of an LNG facility introduces an element of uncertainty in relation to the project, which is not present in the context of an integrated mining system, particularly one that was electrically connected prior to the commencement of the PNR.

29 Proposed Rule 5A(2) provides that the PNR only applies to an integrated LNG network to the extent reasonably necessary to achieve or promote the following purposes to a "GEIP standard":

(a) managing the interconnector between the integrated LNG network and another NWIS network, including managing energy and power flows, and power quality, across the interconnector; and

(b) facilitating the maintenance, improvement and restoration of security and reliability in a covered network by the ISO, the ISO control desk, the ISO's delegates and the covered NSP's; and

(c) to the extent an outage, islanding event, contingency or pre-contingent threat in the integrated LNG network may have a credible and material adverse impact on the system security objective in a covered network - managing the outage, event, contingency or threat; and

(d) to the extent an outage, islanding event, contingency, or pre-contingent threat in a covered network may have a credible and material adverse impact on the system security objective in the integrated LNG network - managing the outage, event, contingency or threat; and

(e) the provision of information for, and undertaking, system modelling under Subchapter 4.4 to the extent reasonably required to a GEIP standard for the purposes set out paragraphs (a) to (d) above; and

(f) the objectives in Chapter 10, subject to the limitations set out in that chapter; and

(g) ensuring that all facilities, networks, storage works and equipment forming part of an integrated LNG system comply between the integrated LNG system and a covered network forming part of the NWIS.

30 GEIP is defined in the PNR as meaning:

> *the exercise of that degree of skill, diligence, prudence and foresight that a skilled and experienced person would reasonably exercise under comparable conditions and circumstances consistent with applicable written laws and statutory instruments and applicable recognised codes, standards (including relevant Australian Standards) and guidelines.*

Potential conceptual limitations of adopting GEIP in this context

31 The GEIP concept (inclusive of comparable derivations of the concept) is customarily used in energy sector 'written laws', regulatory instruments, long-term contracts and similar arrangements where an administrative decision maker or parties to a commercial transaction seek a standard of conduct, which may need to be responsive and dynamic but nevertheless is required to comply with proper standards of conduct, laws and principles customary to the energy sector.

32 The question of whether GEIP is being observed in particular factual circumstances, therefore, will likely turn on a part-legal and a part-technical assessment of a person's performance as against laws, regulations, standards, guidelines and general principles of prudence. Whether GEIP is being observed in particular circumstances may be the subject of reasonable disagreement

between parties but the ISO considers that one of the key contributions of using GEIP in most circumstances should be the clarity that it brings to relevant parties and participants.

33 Proposed Rule 5A is adapted from Rule 5, which provides for materially similar drafting for application to integrated mining systems.

34 The substantive difference between Proposed Rule 5A and Rule 5, which relates to 'integrated mining systems' is not principally a question of drafting or the fact that GEIP is deployed.

35 Rather, the core difference is whether GEIP provides a comparable level of clarity and certainty to relevant parties when deployed in Rule 5A when compared to the manner in which the term is used in Rule 5. The ISO is concerned that the unique characteristics of the Pluto Facility may render GEIP as less efficacious a performance standard when deployed in Rule 5A.

36 This is because:

(a) The concept of GEIP builds on recognised practices in comparable circumstances. Given that the Pluto Facility will be the first of its kind, and management of it will similarly be the first of its kind, arriving at agreement or industry-wide consensus on recognised practices and comparable circumstances is likely to be complex.

(b) The character of laws, instruments, codes and guidelines is similarly uncertain in contexts where the Pluto Facility is the first of its kind, and so arriving at agreement or industry-wide consensus on what is applicable is difficult when these have not yet been developed over time and may not yet be recognisable.

(c) Application of the PNR is limited to the extent that it is reasonably necessary to promote or achieve a GEIP standard the specified purposes in Rule 5A(2)(a) to Rule 5A(2)(g) which are canvassed in very broad terms.

(d) The unique character of the NWIS which requires the ISO's real-time functions to be delegated and shared amongst delegates and network service providers (NSPs). ISO's primary delegation is to Horizon Power, which operates the ISO Control Desk, is the Incident Coordinator and performs Real-time Functions. In ISO's view, the importance of all parties understanding which rules and functions apply in respect of the Pluto Facility from time to time cannot be understated.

37 If the recognised practices and comparable circumstances associated with an integrated LNG network are not readily ascertainable and/or there is a paucity of legal, regulatory and standard-based material to provide guidance, then the ISO, Horizon Power and other market participants may be unable to determine with a reasonable degree of certainty or consensus:

(a) what is 'reasonably necessary' to promote or achieve an uncertain GEIP standard;

(b) the extent to which the PNR applies to an 'integrated LNG system'.

38 If the ISO or Horizon Power are unable to perform certain functions under the PNR with certainty in relation to the Pluto Facility, this may result in a different and potentially adverse treatment of third party facilities, particularly where decisions are being made in relation to real-time functions. Depending on the nature of this different treatment, the ISO notes this may be inconsistent with

the efficient operation and use of services of Pilbara networks for the long term interests of consumers and, ultimately, with the Pilbara Electricity Objective.

Recommendation

39 Given the matters discussed above, the ISO considers that:

(a) the proposed TWG be requested to consider the application of GEIP in the context of the Pluto Facility in order to ascertain whether the term provides sufficient clarity and certainty to participants in the context of the PNR;

(b) to the extent that the proposed TWG identifies shortcomings in the application of GEIP, it should identify these and propose solutions for broader consideration by the ISO and others, including the potential for particular inclusions, carve-outs or discreet changes to aspects of the PNR.

Access and Connection

Summary position

ISO's formal role in respect to access and connection matters is limited to a certain extent. Accordingly, the ISO relies on working with registered NSPs to address any gaps and to collectively ensure that its function is performed.

If the Proposal is accepted while Woodside is still engaged in the access and connection process, there is a risk that the ISO's function may be varied as a result of the proposed amendment to Rule 269(a), which is concerning where such a variation is highly dependent on a legal and technical assessment.

Therefore, in ISO's view, the Coordinator should only approve the Proposal if it is clear that such variation is consistent with the Pilbara Electricity Objective and such an assessment requires further input from Horizon Power, the ISO and TWG, which is proposed to be undertaken in the coming months.

Additionally, the ISO's concerns relating to the general interpretive lens established by the proposed Rule 5A (discussed in depth above) may also impact on the ability of the ISO to perform its function with respect to the access and connection matters.

40 There are two main respects in which the Proposal impacts on access and connection.

(a) First, the Proposal seeks to amend the operation of Rule 269(a) so that Horizon Power may allow a new connection to be energised despite not all facilities at the new connection being compliant with the HTR. In effect, this amendment would remove the requirement for Woodside to progress an exemption request under Rule 64.

(b) Second, the Proposal creates the general lens established in proposed Rule 5A, discussed above.

41 The amendments to Rule 269(a) provides that the Pluto Facility's obligation to comply with the HTR is 'subject to clause 5A(2)(g)', which provides that the PNR applies to an integrated LNG network only to the extent reasonably necessary to achieve or promote, to a GEIP standard, the

purpose of ensuring that all facilities, networks, storage works and equipment forming part of an integrated LNG system comply between the integrated LNG system and a covered network forming part of the NWIS.

Status of access and connection activities

42 Woodside and Horizon Power are currently engaged in the access and connection process under the current PNR and the PNAC.

43 The ISO is currently developing the access and connection procedure and has consulted with the three registered NSPs on the proposed process.

44 Woodside is an NSP under the EI Act but is not a registered NSP under the PNR. It is not relevant for the purposes of Subchapter 9.2 that the connection applicant is an NSP or will be required to become a registered NSP. The definition of "connection application" in Rule 267(1) is broad and captures any person seeking a registered NSP's approval regarding the creation of a new connection point.

45 In the ISO's view, Woodside is currently regarded as a 'Class 3 network' and as such the PNR (including HTR) does not apply to it unless expressly stated. Nevertheless, Horizon Power is the registered NSP for the purposes of managing the proposed new connection to the NWIS at the Pluto Facility and as such all the rules in the PNR apply to it.

46 The Proposal is intended to remove the obligation for the Pluto Facility to comply with the HTR ***behind*** the Pluto Facility interconnection point (i.e. at all its facilities on the Pluto Facility network) and Woodside suggests that its connection facilities will be designed in a way that:

(a) corrects for any technical non-compliance behind the interconnection point. Ultimately, Woodside's success in achieving this will be determined by Horizon Power; and

(b) ultimately complies with the HTR at the point of connection between the Pluto Facility network and the Horizon Power network.

ISO's function under the current PNR

47 Rule 33(1)(p) of the PNR, and more generally Subchapter 9.2, provide for the ISO's function in respect of access and connection matters. This function requires the ISO to supervise the application process for network access contracts, which may involve assisting with the preparation and processing of applications, providing modelling services or resolving access disputes.

48 The ISO's functions are limited during the transition period whilst the ISO is still developing its capabilities. If the ISO determines it is unable to perform a particular function, the ISO will work with the registered NSPs to address any gaps and to collectively ensure that the particular function is performed.

49 During the access and connection process, the PNR leaves most of the obligations to the registered NSP of the network to which the connection applicant seeks access. Rule 269 provides that a registered NSP, must not permit a new connection to be energised unless:

(a) all facilities connected, or to be connected, at the new connection comply with these rules including the harmonised technical rules; and

(b) the requirements in these rules and the harmonised technical rules regarding the approval and connection process for a new connection have been complied with; and

(c) if necessary, it has determined and updated its limit advice; and

(d) if necessary, it has consulted with the ISO regarding any new or revised constraint rules; and

(e) any requests by the connection applicant for one or more exemptions have been managed and assessed in accordance with these rules.

50 Before the connection point is energised, Rule 270 provides that the registered NSP must have regard to the Pilbara Electricity Objective, GEIP, and to the extent the ISO is made aware of them, the registered NSP's existing obligations under network access contracts, before it provides the ISO with a notice which certifies that the access seeker has complied with Rule 269 regarding the proposed new connection.

51 The ISO's formal role in the access and connection process is limited until the registered NSP provides it with a notice under Rule 270. Upon receipt of a notice under Rule 270, the ISO must assess the impact of the proposed new connection on security and reliability and elect to certify that the new connection may proceed or instead notify the access seeker that the new connection cannot proceed.

How access and connection interplays with the Proposal

52 In ISO's view, if the Proposal is to be accepted by the Coordinator during the access and connection process there is a risk that the functions of the ISO and Horizon Power may be varied because of the proposed amendment to Rule 269(a) and the general lens established by proposed Rule 5A, where such a variation is highly dependent on a legal and technical assessment.

53 Clearly the Coordinator should only approve the Proposal if it is clear that any such variation is consistent with the Pilbara Electricity Objective and such an assessment should be informed by further input from Horizon Power, the ISO and the TWG, which is proposed to be undertaken in the coming months. As a further consideration, the TWG should also consider whether the exemption framework as outlined in the PNR will need to be adapted following its legal and technical assessment.

54 In any event, a prudent course may also be for the Proposal (or relevant parts of the Proposal) to be commenced at the end of the access and connection process in order that the ISO's supervisory function can be maintained on the basis of the current PNR.

55 For completeness, the ISO notes that this issue did not arise in relation to Rule 5 because the Rio Tinto network was already connected to the Horizon Power network well prior to the commencement of the PNR.

Powers of direction

Power of direction: summary position

The Proposal calls for the inclusion of specific provisions that are designed to ensure that system operations direction cannot be given in a form that interferes with the operation of the Pluto Facility.

In ISO's view, the proposed limits on directions are problematic from a conceptual standpoint as they often require multiple decision-makers to make determinations in respect of whether certain thresholds have been satisfied. Often, these decision-makers needs to be dynamic and responsive with their actions and the ISO is concerned that their ability to achieve this is complicated by the proposed amendments as the question of whether these various thresholds are satisfied may lead to reasonable disagreement between parties.

In ISO's view, the proposed amendments are also problematic from a practical standpoint, and so Woodside's role in determining whether they can reduce injections of electricity to the Pluto Facility in respect to a systems operations direction should be understood by the proposed TWG and should be agreed to by ISO, prior to connection occurring.

56 Rule 33(1)(k) of the PNR, and Chapter 7 more generally, provide for ISO's function in respect of system operations.

57 More particularly, the ISO, through the ISO Control Desk, is required to maintain the power system at a secure state, and upon the occurrence of a contingency event, return the power system to a secure state as soon as practicable.

58 If an active protocol is in effect, the ISO Control Desk takes on the function of the Incident Coordinator, which includes managing incidents in accordance with the active protocol and issuing system operations directions to the extent the protocol permits, with a view to achieving the system security objective. Horizon Power, as the ISO's delegate, performs the functions of the Incident Coordinator.

59 The Proposal includes specific provisions designed to ensure that system operations directions cannot be given in a form that interferes with the operation of the Pluto Facility, such that the only directions that may be given are limited to:

(a) reduce withdrawals of electricity;

(b) reduce injections of electricity; or

(c) disconnect the Pluto Facility from the NWIS.

60 The Proposal also inserts new Rule 172(4), applicable to the NSP of an integrated LNG network, a controller of a facility forming part of an system, which expand the grounds on which a participant can refuse to comply with various things, including various notices, directions and procedures, except where those notices, directions and procedures require it to reduce its withdrawal, disconnect from the Horizon Power network or reduce its injection of electricity but only if the controller or network user believes in good faith it can do so in a way which does not affect the reliability, security and/or safety of the integrated LNG system or compliance with applicable laws.

61 In the ISO's view, there are two practical challenges with this formulation:

(a) first, given that each of the networks represent a distinct power system, it is not clear whether "withdrawal" and "injection" are intended to capture a withdrawal from and injection to the integrated LNG system or the Horizon Power network but the ISO considers this can be addressed through drafting; and

(b) second, we assume that the prioritisation of the integrated LNG network is likely to cause concerns, given that the impact on other parts of the network may be disproportionate and that this will be considered further by the TWG.

62 In the above scenario the following determinations are required:

(a) Horizon Power, as ISO's delegate, has to determine whether the issuing of its system operations direction is necessary to achieve or promote the purposes of Rule 5A(2) to a GEIP standard. If Horizon Power determines the above threshold is satisfied, it may issue a direction to reduce injections of electricity to the Pluto Facility.

(b) Upon receipt of the direction, the relevant entity has to determine whether it believes it can reduce injections of electricity at the Pluto Facility in a way which does not affect the reliability, security and/or safety of the Pluto Facility, or breaches any applicable laws. Further, the relevant entity will only comply with a direction once it has made its determination in good faith.

(c) If the relevant entity determines that it cannot comply with the system operations direction in good faith, it must instead disconnect the Pluto Facility from the NWIS.

63 As a further example, Woodside's proposed insertion of Rule 188A provides Horizon Power with the ability to, at any time and for any reason, disconnect the Pluto Facility from the NWIS. Again, the proposed amendment invites multiple determinations of whether certain thresholds are satisfied as Horizon Power must determine whether:

(a) disconnecting the Pluto Facility from the NWIS is reasonably necessary under GEIP; and

(b) whether it has provided the Pluto Facility with enough notice in the circumstances.

64 The above scenarios demonstrate how the proposed amendments require multiple parties to make determinations in respect of whether certain thresholds are satisfied.

65 In ISO's view, this is problematic as these functions require the relevant decision-makers to be dynamic and responsive. These decision-makers ability to achieve this is complicated by the proposed amendments as the question of whether these various thresholds are satisfied may lead to reasonable disagreement between parties.

66 In ISO's view, Woodside's role in determining whether they can reduce injections of electricity to the Pluto Facility in response to a system operations direction should be better understood by the proposed TWG and should be agreed to by the ISO, prior to connection occurring.

Other matters

PNR to override the provisions of access contracts

67 Woodside's Proposal will have the effect of limiting the content of a system operations direction, compared to the present provisions of the PNR. However, as it is currently drafted, the proposed insertion of new Rule 188(4)(c) may also have the effect of limiting:

(a) Horizon Power's powers of direction under an access contract ; and

(b) by extension, Horizon Power's statutory powers under the *Energy Operators (Powers) Act 1979* (WA) in respect of various matters.

68 At least to a certain degree, the ISO considers that the system security function relies on a baseline position of technical rule compliance and otherwise compliance with access contracts to function effectively.

69 Consequently, if the intention behind the proposed amendment is to allow for the PNR to override the provisions of access contracts under which an integrated LNG network obtains access to a covered network, then the ISO simply notes that this is unusual and the potential consequences should be considered by the TWG and Horizon Power in particular, when considering the baseline assumptions on which principles of system security are built.

Maitland Facility

70 In its Proposal, Woodside submitted that the renewable energy development that forms the Maitland Project will be fully compliant with the HTR and no exemption will be applied for in respect of it. However, the ISO is concerned that the definition of an integrated LNG system appears sufficiently broad to capture networks that are not directly electrically connected or contiguous, which carries the risk that the Maitland Project is captured in the definition of an integrated LNG system.

71 The ISO proposes that the Proposal should be revised to clarify this position.

Coordinating planned outages etc.

72 Rule 33(1)(j) of the PNR, and Subchapter 7.3 and 7.4 more generally, provides for ISO's system coordination function, which requires the ISO to be responsible for liaising with registered NSPs and essential system service providers to coordinate planned outages, commissioning, testing and any scheduling conflicts that may arise.

73 Rule 182(3) provides the ISO with the ability to resolve scheduling conflicts by giving a direction to one or more affected parties. However, Woodside's proposed amendments to this rule expressly prohibits such a direction being made in respect of the Pluto Facility. This prohibition extends to circumstances where the Pluto Facility is involved in, is effected by, or is the cause of, the scheduling conflict.

74 In the ISO's view, this is a matter that may need to be explored further by the proposed TWG, and should be understood and agreed to by the ISO prior to progressing the proposed rule change.

Impact of coverage

75 In the event that an integrated LNG facility is covered, the note under the application table at Rule 4 provides that the network will convert to Class 1A, being a facility where all rules will apply.

76 However, the Proposal does not otherwise appear to convert an integrated LNG facility to a "covered network" with that effect and a range of definitions that are inconsistent with the principles and effect of coverage will continue to apply, for example the facility would continue to be a "private power system".

77 The ISO acknowledges that that coverage of the Pluto Facility seems unlikely at this stage but considers that this anomaly may need to be addressed in the Proposal in order for the effect of the Rule 4 note to be achieved.

2. Please provide an assessment whether the change will better facilitate the achievement of the Pilbara electricity objective.

78 ISO acknowledges that Woodside's Proposal is intended to address the current barriers to LNG producers connecting to the NWIS, and to encourage existing LNG producers to connect to the NWIS, which will create a more coordinated, reliable network. Accordingly, ISO is generally supportive of any proposal that intends to develop the Pilbara resources industry.

79 However, for the above reasons, and until the issues raised in the first section of this submission are addressed, it is unclear whether the Proposal will better facilitate the achievement of the Objective in its current form.

3. Please indicate if the proposed change will have any implications for your organisation (for example changes to your IT or business systems) and any costs involved in implementing the changes.

80 If the Proposal is accepted, the ISO anticipates that it may be required to make the following changes in order to perform its functions:

(a) ISO will have to cater for additional data visibility points from the Pluto Facility which may require some changes to ISO, or its delegated control desk SCADA tags. Exact detail of these changes is hard to quantify at this stage and will be assessed moving forward by the TWG.

(b) Although dependent on the timing of the proposed change, ISO may have to undertake additional work to merge the Woodside and NWIS power system models. This exercise will likely include model testing and undertaking relevant power system studies. ISO may also have to issue an update to its power system model to NSPs outside of its regular release to cater for the new connection.

(c) The proposed change adds another NSP to ISO's list of key stakeholders and therefore adds a further NSP for ISO to consult with in respect of future network changes and/or impacts. In ISO's view it may require additional time to coordinate such stakeholder engagement with Woodside, and this additional time may be disproportioned to the time allocated to engage with other stakeholders.

(d) The proposed change will require the ISO to consider the Pluto Facility when undertaking any future power system analysis that is required for network operation and to maintain and/or improve network stability. This analysis or studies include, but are not limited to, loss factor assessment, generation adequacy, essential system services, critical fault clearance time calculations, balancing services, various access and connection studies.

81 Given the preliminary stage of the network impact assessment carried out by Woodside, it is difficult to anticipate the specific costs required to implement these changes at this stage. This should be assessed as an outcome of the TWG once relevant impact assessment and network operational analysis and studies have been concluded.

4. Please indicate the time required for your organisation to implement the change, should it be accepted as proposed.

82 Given the preliminary stage of the network impact assessment carried out by Woodside, it is difficult to anticipate the exact time required to implement these changes at this stage. This should be assessed as an outcome of the TWG once relevant impact assessment and network operational analysis and studies have been concluded.

Schedule One – Impact of the Proposal on the performance of the ISO's functions

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
Security Function - "to maintain and improve system security in any interconnected Pilbara system"	S 120W(4)(A) EI Act Rule 32 Rule 162	The ISO's primary function is to maintain the power system at a secure state, and upon the occurrence of a contingency event, return the power system to a secure state as soon as practicable.	It will apply to the Pluto Facility to the extent that the function is reasonably necessary to achieve or promote, to a good electricity industry practice standard, the purposes described in Rule 5A (**Rule 5A Threshold**).	The proposed rule change may have an impact on the ISO's performance of its function with respect to the Pluto Facility as it must: first, determine whether the relevant aspect of the PNR and the function is within the purposes described in Rule 5A; and - second, determine whether the function is reasonably necessary to achieve or promote those purposes to a good electricity industry practice standard. This may be complicated by: - the delegation of functions to the ISO control desk because to some extent a determination may not be able to be "hard coded" but will need to be dynamic and responsive; and - the extent to which a determination on Rule 5A is likely to be subject to reasonable disagreement between the ISO and

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
				market participants (along with their respective technical experts). Considering the quantum of generation at the Pluto Facility, the ISO will need the ability to assess the changes in generation during both normal operation and contingency scenarios to cater for balancing across the NWIS. Rule 5A requires further assessment of plausible contingencies so ISO can identify remedial measures as and when required to maintain and improve system security.
Exemption Function - "to administer or participate in the exemption regimes for these rules under Subchapter 3.1 and for the *Metering Code and Customer Transfer Code* under Subchapter 3.3, to participate in the exemption regime for the *harmonised technical rules* under Subchapter 3.2, and to maintain the register of exemptions under Subchapter 3.4"	Rule 33(1)(a) Subchapters 3.1 – 3.4	The ISO has an administrative function with respect to exemptions from the Rules (the *Pilbara Harmonised Technical Rules*), and exemptions from relevant codes (the *Electricity Industry (Metering) Code 2012* and the *Electricity Industry (Customer Transfer) Code 2016*).	It will apply to the Pluto Facility to the extent that the function is necessary to achieve or promote the Rule 5A Threshold. However, while it may seem self-evident, when compared to the position that would have applied were the Pluto Facility to be connected without the proposed rule change, there are fewer exemptions available (or likely to be required) in respect of the Pluto Facility. It may be the case that this function will not apply to the Pluto Facility at all, as it could be argued that this function is unnecessary to achieve or promote the Rule 5A Threshold.	The proposed rule change is unlikely to have an impact on the ISO's performance of its function.

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
Procedures Function - "to develop and administer *procedures* under Subchapter 3.6"	Rule 33(1)(b) Subchapter 3.6 Rule 53 Rule 103 Rule 141	The ISO develops procedures to assist with the performance of its other functions.	The proposed rule change hardcodes the requirement for the ISO to have regard to Rule 5A when developing procedures relating to: • governing the relationship between the ISO and registered NSPs under Rule 53; • notices, communications and system requirements under Rule 103; and • metering procedures under Rule 141. It will apply to the Pluto Facility to the extent that the function is necessary to achieve or promote the Rule 5A Threshold.	It is likely that proposed rule change will require the ISO to meet the Rule 5A Threshold where making a procedure that applies to the Pluto Facility. Further, for the procedure to apply to the Pluto Facility from time to time, it will also need to meet the Rule 5A Threshold. This may impact on the ISO's performance of its development of procedures.
Protocol Framework Function - "to administer the *protocol framework* under Subchapter 3.7"	Rule 33(1)(c) Subchapter 3.7 Rule 77(2)	The ISO creates framework that governs the collective response of various participants in the event of a system incident. This function is heavily tied in with the ISO's Security Function.	As amended, Rule 77(2) hardcodes the requirement for the ISO to have regard to Rule 5A when developing the protocol framework. It will apply to the Pluto Facility to the extent that the function is necessary to achieve or promote the Rule 5A Threshold.	The proposed rule change may have an impact on the ISO's performance of its function with respect to the Pluto Facility as it must: - first, determine whether the relevant aspect of the PNR and the function is within the purposes described in Rule 5A; and - second, determine whether the function is reasonably necessary to achieve or promote those purposes to

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
				a good electricity industry practice standard. Once again, this may be complicated by: - the delegation of functions to the ISO control desk because to some extent a determination may not be able to be "hard coded" but will need to be dynamic and responsive; and - the extent to which a determination on Rule 5A is likely to be subject to reasonable disagreement between the ISO and market participants (along with their respective technical experts).
Entities and Facilities Function - "to register *entities* and *facilities*, and receive, record and publish information and standing data under Subchapter 4.1 and manage communications under Subchapter 4.2"	Rule 33(1)(d) Subchapter 4.1 - 4.2 Rule 103	The ISO compiles, maintains and publishes the register of NWIS participants.	As amended, Rule 103(2) hardcodes the requirement for ISO to have regard to Rule 5A when developing procedures in respect of notices, communications and system requirements necessary to support the ISO and NWIS participants in performing their functions and activities under the PNR. It will apply to the Pluto Facility to the extent that the function is necessary to achieve or promote the Rule 5A Threshold.	The applicability of this function rests on two aspects of the drafting. First, for the relevant provisions to apply at all in respect of the Pluto Facility, the Rule 5A Threshold must be met. Second, if the provision does apply, then as amended the application must be subject to a specific consideration of the Rule 5A Threshold. This is likely to have an impact on the ISO's performance of the function. The inability of the ISO to perform this function poses many of

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
				the same risks as outlined for the Visibility Function below, as these are related functions.
Visibility Function - "to manage the *visibility* regime under Subchapter 4.3"	Rule 33(1)(e) Subchapter 4.3 Rule 105(3)(c)	The ISO must ensure that the ISO control desk has access to certain data and information on the 'visibility list', which it requires to achieve the system security objective. This function is tied in with the ISO's Security Function.	As amended, Rule 105(3)(c) hardcodes the requirement for the ISO to determine whether a proposed inclusion to the visibility list is necessary to achieve or promote the Rule 5A Threshold. It will apply to the Pluto Facility to the extent that the function is necessary to achieve or promote the Rule 5A Threshold.	The applicability of this function rests on two aspects of the drafting. First, for the relevant provisions to apply at all in respect of the Pluto Facility, the Rule 5A Threshold must be met. Second, if the provision does apply, then as amended the application must be subject to a specific consideration of the Rule 5A Threshold. This is likely to have an impact on the ISO's performance of the function. The inability to perform this function poses the following risks: - Maintaining system security for loss of generation and/ or large loads at Pluto. - Identifying voltage and primary frequency support required to maintain HTR compliance at the point of connection and throughout the NWIS. - ISO's control desk coordination for faults and other contingency events across the NWIS.

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
				- NWIS black start in the event of an unplanned cascading effect. - Determining power quality network allowances at the connection points. Operational philosophy of the interconnector, the ISO control desk managing and import only scenario during normal operation.
Power System Model Function - "to *maintain*, manage and operate the *power system model* under Subchapter 4.4"	Rule 33(1)(f) Subchapter 4.4 Rule 121(3)(c)	The ISO must develop and maintain an accurate software model of the power system in accordance with the power system modelling procedure. This function extends to assisting NSPs in developing and maintaining the power system model as well. The power system model must be sufficient to enable the ISO to perform certain functions outlined in Rule 108(2).	Rule 121 provides that any power system modelling procedure that is developed by the ISO must set out criteria for identifying which facilities must be included in the power system model to enable it to perform the functions set out in Rule 108(2), to a standard that meets good electricity industry practice, and in accordance with the Pilbara electricity objective ("**power system modelling threshold**"). As amended, Rule 121(3)(c) provides that the power system modelling procedure may authorise the ISO to require the Pluto Facility to be included in the power system model, if the ISO judges it necessary to satisfy the power system modelling threshold.	The proposed rule change will require the ISO to update the power system model to include the Pluto Facility. This may be complicated by the fact that the ISO must make a determination with respect to whether differing threshold are satisfied in the circumstances. Consequently, the ISO (as referred to in paragraphs 23 to 25 in the body of the submission) will need to undertake specific power system modelling activities at the Pluto Facility to adequately represent and simulate the impact to the NWIS post the new connection.

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
			As this function will apply to the Pluto Facility to the extent that the function is necessary to achieve or promote the Rule 5A Threshold, there may be inconsistency between which threshold the ISO is to consider for the purposes of this function.	
Budget and Cost Management Function - "to undertake the budgeting function and recover fees under Subchapter 4.5"	Rule 33(1)(g) Subchapter 4.5 Rule 129(7)	The ISO must develop a budget that achieves the lowest practicably sustainable costs of performing its functions, while effectively promoting the Pilbara electricity objective.	As amended, Rule 129(7) seeks to ensure that Woodside Group does not become liable to pay two fifths (twice as much as any other registered NSP) if different Woodside entities become registered NSPs at Pluto to Maitland. We anticipate that the intention here is that the Rule 5A Threshold does not apply to the broader payment obligation. However, as drafted, there is an argument that the intention is for this function to not apply in relation to the Pluto Facility. In this case, there would be no requirement for the Woodside Group to pay fees.	The proposed rule change is unlikely to affect ISO's ability to perform its function.
Loss Factors Function - "to determine *loss factors* under Subchapter 5.2"	Rule 33(1)(h) Subchapter 5.2	The ISO must determine loss factors.	It is expressly limited to covered networks. The Pluto Facility is not presently a covered network.	The proposed rule change will impact on the ISO's ability to perform its function of loss factor assessment as ISO will have to include the Pluto Facility in the power system model to assess future loss factor assessment. It is

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
				also possible that ISO may have to consider an additional reference node in the NWIS network as a result of the Pluto Facility being connected to the network.
Generation Adequacy Regime Function - "to oversee the generation adequacy regime"	Rule 33(1)(i) Chapter 6 Rule 152(1)(a)	The ISO is responsible for ensuring that the power system has enough installed generating capacity to remain secure and reliable during peak demand. The ISO is also required to achieve this objective as simply, and with as little compliance burden and cost, as practicable.	As amended, Rule 152(1) exempts the Pluto Facility from the provisions of Chapter 6. However, Rule 152(3) provides the ISO with the ability to publish a notice to exclude this exemption, the effect of which means that the provisions of Chapter 6 will apply to the Pluto Facility. If this occurs, it will apply to the extent that the function is necessary to achieve or promote the Rule 5A Threshold.	The proposed rule change will impact on the ISO's ability to perform its function of generation adequacy as ISO will have to include the Pluto Facility in the power system model to assess generation adequacy across the network. It is anticipated (subject to confirmation following power system analysis) that the addition of Pluto generation will likely require additional spinning reserve and balancing requirements across the network
System Coordination Function - "to undertake system coordination and outage scheduling under Subchapter 7.3 and Subchapter 7.4"	Rule 33(1)(j) Subchapter 7.3 – 7.4 Rule 182(3), (4)	The ISO is responsible for liaising with registered NSPs and essential system service providers to coordinate planned outages, commissioning, testing and any scheduling conflicts that may arise. This is to be undertaken as efficiently and informally as practicable, maximising communication while minimising the compliance burden. This function is tied in with the ISO's Security Function.	Rule 182(3) provides the ISO with the ability to resolve scheduling conflicts by giving a direction to one or more of the affected parties. However, the proposed rule change to Rule 182(3) expressly prohibits such a direction being made in respect of the Pluto Facility. It will apply to the Pluto Facility to the extent that the function is necessary to achieve or promote the Rule 5A Threshold.	Prior to any proposed rule change, a direction under Rule 182(3) may contain such scheduling, other information or instructions as the ISO considers reasonably necessary to resolve the scheduling conflict and achieve the system security objective in line with generation adequacy, balancing requirements and other network stability maintenance and/ or improvement requirements required as per PNR and HTR. The proposed rule change may prevent or hinder the ISO from

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
				undertaking its function as efficiently and informally as practicable, as a greater compliance burden may be borne by other affected parties.
Control Desk Function - "through the *ISO control desk*, to participate in, to participate in *system operations activities* under Subchapter 7.5"	Rule 33(1)(k) Subchapter 7.5 Rule 172(4) Rule 188(2)(vi) Rule 188(4) Rule 188A Rule 189 Rule 191(2) A4.28	The ISO, through the ISO control desk, must maintain the power system at a secure state, and upon the occurrence of a contingency event, return the power system to a secure state as soon as practicable. If permitted by an active protocol, Horizon Power, in its role as incident coordinator, may issue a direction. This function is tied in with the ISO's Security Function.	As amended, Rule 188(2)(vi) provides that the ISO may give a direction in respect of the Pluto Facility, but only to the extent and for the purposes set out in Rule 5A, and subject to the restrictions provided for in Rules 172(4) and 188(4). In relation to the Pluto Facility, Rule 172(4) and 188(4) provide that the relevant entity doesn't have to comply with a notice issued under Rule 191, procedure, protocol, pre-contingent director, or systems operations direction to the extent that it requires them to reduce its withdrawal of electricity at the relevant interconnection point, disconnect the relevant interconnection point, or reduce its injection of electricity at the relevant interconnection point but only if the entity believes in good faith it can do so without affecting the reliability, security and/or safety of the Pluto Facility or compliance with application laws. A drafting note provided within the Proposed Rule Change notes	In an emergency, the proposed rule change imposes an obligation on the ISO to make an assessment as to whether the direction or protection settings required to disconnect the Pluto Facility from the NWIS is reasonably necessary and also whether they have provided enough notice or protection delay to the relevant Woodside entity in the circumstances, in each case in accordance with good electricity industry practice. The requirement for ISO to make such assessments in an emergency situation may cause the ISO to rely more heavily on directing other facilities, which may lead to a disproportionate loss of autonomy and unfavourable impact on other facilities. In non-emergency situations, the proposed rule change may also inhibit the ability of the ISO control desk to perform its role due to the proposed constraints on its direction powers, particularly if it is unable to direct the Pluto Facility when it is contributing to the disturbance.

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
			that the above does not extend to constraint directions issued under Rule 258. As amended, Rule 188A provides that the ISO (in its role as incident coordinator), the ISO control desk, or the relevant entity may, at any time and for any reason, disconnect the Pluto Facility from the NWIS if it is reasonably necessary under GEIP to achieve the system security objective, provided that the relevant person gives Woodside or the relevant network user as much notice as practicable in the circumstances.	Once again, this may cause the ISO to rely more heavily on directing other facilities, which may lead to a disproportionate loss of autonomy and unfavourable impact on other facilities. The effect of the proposed rule change is that the ISO's ability to issue a direction in respect of the Pluto Facility is subject to significant carve outs. Notably, the insertion of Rule 172(4) provides that, if a direction is issued in respect of Pluto Facility to reduce its injection of electricity at the relevant interconnection point, the NSP, controller or network user (as the case may be), to make an assessment as to whether it can do so safely. If it cannot do so, then instead they must disconnect at the relevant interconnection point
Referral of Protocol Function - "to undertake post-incident discussion and investigations under Subchapter 7.6 including in relation to matters referred under rule 84"	Rule 33(1)(l) Subchapter 7.6 Rule 193	The ISO must discuss, investigate and subsequently report on unplanned outages or incidents that either jeopardised, or have the potential to jeopardise, the system security objective to a significant extent.	As amended, Rule 193(2)(b) arguably requires ISO to have regard to Rule 5A when carrying out its function. It will apply to the Pluto Facility to the extent that the function is necessary to achieve or promote the Rule 5A Threshold.	It is unlikely that the proposed rule change would prevent ISO from engaging with the relevant Woodside entity in relation to its investigations under Subchapter 7.6.
Essential System Services Function -	Rule 33(1)(m)	The ISO must procure primary (and potentially secondary)	Woodside has represented in its submissions that it will procure	The proposed rule change is unlikely to impact on the ISO's

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
"to procure *essential system services* under Subchapter 8.1"	Subchapter 8.1	essential system service providers to regulate frequency control and ensure there is sufficient spinning reserve.	an "exit service" only in relation to the Pluto Facility and, as such, the Pluto Facility would not export electricity into the NWIS except in a contingency scenario. This means that the Pluto Facility would not be suitable for the provision of Essential System Services.	ability to perform this function. However, the assessment of essential system services will require detailed modelling of the Pluto Facility.
Energy Balancing Function - "to undertake energy balancing under Subchapter 8.2 and settlement under Subchapter 8.3"	Rule 33(1)(n) Subchapter 8.2 – 8.3	The ISO must develop and maintain a procedure for energy balancing and for settlement of balancing and essential system service payments (**EBAS procedure**). The ISO must also ensure compliance with EBAS procedure.	The ISO's Energy Balancing Function is limited to covered networks. Interconnection points between covered networks are not balancing points under the PNR. However, the EBAS engine will make calculations at those points to determine net network loads, and legacy rights can exist.	The proposed rule change is unlikely to impact on the ISO's ability to perform its function. However, the assessment of essential system services will require detailed modelling of the Pluto Facility.
Constraint Rules Function - "to develop and administer *constraint rules* under Subchapter 9.1"	Rule 33(1)(o) Subchapter 9.1 Rule 248(2)(b)(iii) and (c)(iii)	The ISO must develop, publish, issue directions in respect of, and monitor compliance with, the rules in respect of constrained access in the network.	The ISO's constraint rules function will only apply to the extent it meets the Rule 5A Threshold. As amended, Rule 248 provides that the Coordinator is to conduct a review of how constrained access should be implemented for the integrated LNG network, including the legitimate business interests of the relevant Woodside entity and its associates, including whether	Yet to be determined.

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
			any legacy priority rights are needed.	
Access and Connection Function - "to provide *access* and connection services under Subchapter 9.2"	Rule 33(1)(p) Subchapter 9.2 Rule 269(a)	The ISO must supervise the application process for network access contracts. This may involve supervision, assisting with the preparation and processing of applications, providing modelling services or resolving access disputes.	The ISO's access and connection function will only apply to the extent it meets the Rule 5A Threshold.	The implications of the proposed rule change on this function are not entirely clear and the lack of clarity leaves it open to reasonable disagreement between the ISO and market participants (along with their respective technical experts).
Network Coordination and Planning Function - "to undertake network coordination and planning under Subchapter 10.1 and Subchapter 10.2"	Rule 33(1)(q) Subchapter 10.1 – 10.2 Rule 277(2)(c)	ISO must prepare and publish network coordination and planning reports every 2 years, which must include a transmission development plan and a generation statement of opportunity for the Pilbara.	As amended, Rule 277(2)(c) requires the ISO to consider the purposes outlined in Rule 5A when preparing such reports, but only for the period until the reporting process 'evolves'. More generally, this function and the associated aspects of the PNR would only apply where it meets the Rule 5A Threshold.	It is unlikely that the proposed rule change will have a severe impact on ISO's ability to perform its function.
Information Publishing Function - "to *publish* information under Subchapter 11.1 and request information under Subchapter 11.3"	Rule 33(1)(r) Subchapter 11.1 and Subchapter 11.3.	The ISO must ensure that it publishes all required information on its website, subject to restricting any necessary confidential information.	It will apply to the Pluto Facility to the extent the threshold described in Rule 5A applies.	The proposed rule change is unlikely to impact on the ISO's ability to perform its function.
Compliance Function - "to undertake rule compliance monitoring and	Rule 33(1)(s) Subchapter 12.1 Rule 172(4) – (6)	The ISO must monitor compliance with the Rules and take enforcement action in response to non-compliance with the Rules.	It will apply to the Pluto Facility to the extent the Rule 5A Threshold applies.	The proposed rule change is unlikely to impact on the ISO's ability to perform its function. However, the assessment of compliance will require detailed

Function	Reference	Explanation	Does this function apply to the Pluto Facility	Impact on ISO's performance
enforcement under Subchapter 12.1"				modelling of the Pluto Facility. The compliance of the Pluto Facility will have to be assessed at the outset of this connection confirming the benchmark. This benchmark will be further used to assess ongoing compliance
Rule Change Function - "to develop *rule change* and *procedure change proposals*, and participate in the *rule change* and *procedure change process*, under Appendix 2"	Rule 33(1)(t) Appendix 2	The ISO has a role as a Pilbara advisory committee (PAC) member to develop rule change and procedure change proposals and participate in the rule change and procedure change process. However, the ISO has no separate function here, merely in its capacity as a PAC member.	It will apply to the Pluto Facility to the extent the Rule 5A Threshold applies. As a general observation, Rule 5A may increase confusion about the scope of future rule changes that may be permitted. That is, the adoption of Rule 5A may indirectly restrict the content of future rule changes.	The proposed rule change is unlikely to impact on the ISO's ability to perform its function.