



Meeting Agenda

Meeting Title:	Pilbara Advisory Committee (PAC)
Date:	Wednesday 28 September 2022
Time:	10:00 AM – 11:00 AM
Location:	Online, via TEAMS.

Item	Item	Responsibility	Type	Duration
1	Welcome and Agenda	Chair	Noting	2 min
2	PRC_2022_01 – Technical Working Group (Stage 1 Outcomes)	Chair	Decision	58 min
	Next meeting: 10:00 AM, 9 November 2022 The PAC is asked to consider moving the next meeting to 10 November 2022			

Please note, this meeting will be recorded.



Agenda Item 2: PRC_2022_01 – Technical Working Group (Stage 1 Outcomes)

Meeting 2022_09_28

1. Purpose

- To provide an update to the *Pilbara advisory committee (PAC)* on the outcomes from Stage 1 of the work of the technical working group (**Working Group**) established by the PAC to assess the impact of *rule change proposal PRC_2022_01: Integrated LNG Systems*.
- To inform the PAC on the assessment of the risks associated with the rule change proposal in relation to the ‘reliability, safety and security of any interconnected system’ to aid guidance to the Coordinator of Energy (**Coordinator**) and decide next steps, including whether the Working Group should continue with Stage 1 of its work program or progress to Stage 2, as outlined in its Terms of Reference (**Attachment 1**).
- To get advice from the PAC on the timeframes for progressing PRC_2022_01.

2. Recommendation

That the PAC:

- (1) review the attached cover letter from the ISO (**Attachment 2**) and the Working Group’s Risk Assessment Table (**Attachment 3**), which outline the system security and operational elements that were considered by the Working Group, including associated risks and any further assessment required;
- (2) provide views on the residual risks identified in the table, particularly those where the Working Group did not reach consensus, and the impact that these risks may have on assessment of PRC_2022_01;
- (3) determine any additional work that might be required of the Working Group under Stage 1 or 2 of its work program, and what further work needs to be concluded before PRC_2022_01 can be assessed and progressed, if any;
- (4) agree on the guidance that may be provided to the Coordinator, including on:
 - (a) whether the Coordinator is reasonably able to:
 - analyse PRC_2022_01, in light of the work done by the Working Group to date and the work still to be done by the Working Group; and
 - prepare and publish the *draft rule change report* in accordance with clause A2.7.7 of the Pilbara Networks Rules (**PNR**);
 - (b) any specific concerns that the PAC would have with the Coordinator extending the timeframe for publication of the *draft rule change report* under clause A2.5.10 of the PNR, including any practical or implementation concerns; and

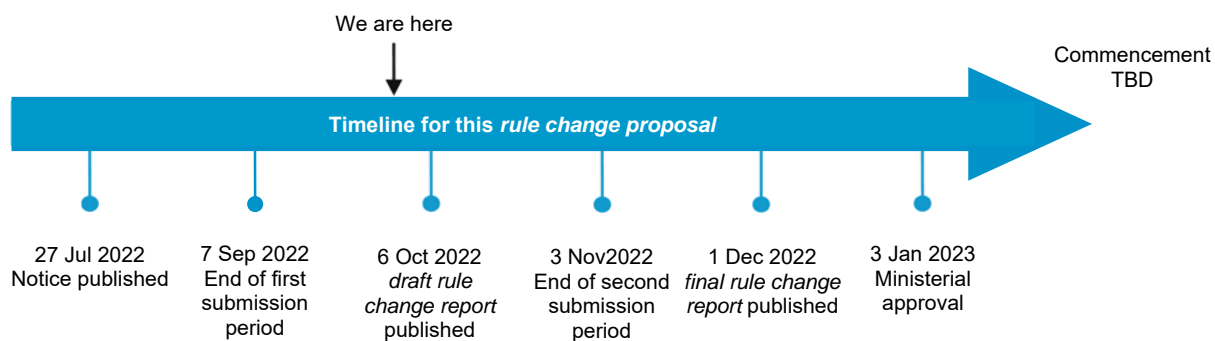
- (c) any views regarding the length of any proposed extension by the Coordinator to the timeframe for publication of the *draft rule change report*.

3. Background

- The PAC considered PRC_2022_01 at its meeting on 3 August 2022 and, in its advice to the Coordinator, noted that support could be provided for PRC_2022_01 if:
 - it does not create a precedent for future connections to pursue bespoke arrangements;
 - it can be demonstrated to not compromise the reliability, safety and security of the NWIS and any interconnected Pilbara system; and
 - it does not hinder the ISO in its effective operation of the NWIS.
- The PAC supported the establishment of the Working Group, with the objective of assisting the PAC form an informed view on the technical and complex issues associated with exemptions from the Harmonised Technical Rules (**HTR**), and the ability of the ISO to perform its role.
- The Terms of Reference identified the Working Group's scope of works as a two-stage process:
 - Stage 1 is to:
 - identify what aspects of the *rule change proposal* in relation to HTR and PNR could have adverse system security and reliability implications from a technical perspective; and
 - advise the PAC whether the issues and risks identified are acceptable, unacceptable, or require further assessment (and if so, how, when and by who).
 - Stage 2 is dependent on Stage 1 but would likely include the results of any detailed studies and mitigation measures.
- The Working Group is being chaired by the ISO and held two extended workshops under Stage 1, on 15 September and 19 September 2022. The Working Group developed the Risk Assessment Table at these workshops.
- The Chair of the Working Group will provide additional background on Risk Assessment Table to the PAC at its meeting on 28 September 2022, including:
 - what technical issues were assessed;
 - where consensus was achieved on each issue and where it was not; and
 - which issues require further assessment.

4. Rule Change Process Timeline

- Woodside submitted PRC_2022_01 to the Coordinator on 19 July 2022 and the PAC discussed the proposal at its meeting on 3 August 2022.
- The current dates for the key steps in the rule change process for PRC_2022_01 are:



- Under the current timeframes, the Coordinator must prepare and publish a *draft rule change report* on the proposal by 6 October 2022,¹ or must publish an extension notice before that date.

5. Attachments

- (1) PAC Working Group – Terms of Reference
- (2) Covering Letter – Working Group Submission to PAC on Integrated LNG Systems
- (3) Risk Assessment Table

¹ Under clause A2.7.7 of the PNR, the *draft rule change report* must contain (amongst other requirements):

- a summary of views expressed by members of the PAC and, if it has delegated its role to consider the rule change proposal to a working group, the views expressed by that working group;
- the Coordinator's assessment of the *rule change proposal*, after taking into the views of *rules participants* and other persons expressed in submissions or during consultation, and in light of clauses A2.4.2 and A2.4.3; whether any advice from the PAC regarding the *rule change proposal* reflects a consensus view or a majority view, and, if the latter, any dissenting views included in or accompanying the advice and how these views have been taken into account by the Coordinator;
- a proposal as to whether the *rule change proposal* should be accepted in the form proposed, accepted in a modified form, or rejected; and
- the wording of the proposed *amending* rules.

Clause A2.4.3 of the PNR requires the Coordinator to be satisfied that the rules, as proposed to be amended or replaced, are consistent with the *Pilbara electricity objective*, which under section 119(2) of the *Electricity Industry Act 2004* is:

The objective in this Part (the Pilbara electricity objective) is to promote efficient investment in, and efficient operation and use of, services of the Pilbara networks for the long-term interest of consumers 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 an interconnected Pilbara system.

TERMS OF REFERENCE

Technical Working Group (Pilbara Advisory Committee)

1. Context

Woodside Energy submitted a rule change proposal (Integrated LNG Systems) on 19 July 2022 seeking to amend several existing provisions and insert several new provisions in the Pilbara Networks Rules (PNR).

The Pilbara Advisory Committee (PAC) considered the proposal on 3 August 2022.

The Chairperson of the PAC wrote to the Coordinator of Energy on 29 August 2022 and provided an overview of the Woodside Energy proposal as well as advice from the PAC. The advice included amongst other things:

- Establish a technical working group (**Working Group**) with the objective of assisting the PAC form an informed view regarding the technical and complex issues associated with the exemptions from both the Pilbara Networks Rules and Harmonised Technical Rules proposed in the rule change and the ability of the ISO to perform its role.
- The working group be chaired by the Pilbara Independent System Operator (**ISO**) and the ISO advise on the composition and terms of reference of the working group for approval by the PAC.
- The working group to report back to the PAC.

The access and connection process between the access applicant and the registered NSP is currently underway.

The ISO is required to engage comprehensively and constructively on rule change proposals that are relevant to and may impact on the ISO's functions to:

- Maintain and improve system security in; and
- to facilitate overall network coordination and planning for

any interconnected Pilbara system.

The ISO is able to Chair the Working Group and will do so in a manner which:

- preserves confidential information;
- maintains the independence of the ISO particularly with regard to access and connection; and
- minimises competition law risks.

2. Scope

The Working Group will assist the ISO to assess Woodside Energy's proposed rule change against the Pilbara Electricity Objective, specifically in relation to the "*reliability, safety and security of any interconnected system*" and inform the PAC on the assessment.

Process

A two-stage process is proposed as it will provide greater certainty to the Coordinator and rule change proponent around timing and direction.

Stage 1

- Working Group to identify what aspects of Woodside’s rule changes in relation to the HTRs and PNRs could have adverse system security/reliability implications from a technical perspective.
- The Working Group to form a view and advise PAC from a technical perspective whether the issues/risks identified are either:
 - a) acceptable risks;
 - b) unacceptable risks; or
 - c) risks that need to be further assessed and if so – how, when and by who.
- PAC to review outcomes of the Working Group and decide next steps and provide advice to the Coordinator.

Stage 2

- Dependent on the outcome of Stage 1 but would likely include the results of any detailed studies and mitigation measures.

Note: to minimise competition law risk and preserve confidential information the ISO will generally form an opinion prior to consulting with the Working Group.

3. Governance

The Working Group will be Chaired by the ISO and will report to the PAC.

The ISO will be responsible for the administration, secretariat and meeting arrangements for the working group. The PAC secretariat will assist the ISO with reporting arrangements to the PAC.

Membership

Membership of the Working Group will consist of the following:

- ISO and its consultants (Chair)
- Horizon Power (up to two nominees)
- Alinta Energy (up to two nominees)
- Rio Tinto (up to two nominees)
- Woodside (SME, up to two nominees)
- Energy Policy WA (observer, one nominee)

4. Deliverables

Stage 1

1. Working Group terms of reference and membership endorsed by the PAC (by 7 September 2022)
2. Working Group’s risk analysis provided to the PAC (by 21 September 2022)

Stage 2

To be confirmed

Pilbara ISOC_o Limited

21 September 2022

Sally McMahon
Independent Chair
Pilbara Advisory Committee

Dear Sally

Integrated LNG Systems Rule Change – PAC Technical Working Group

As you are aware, on 29 August 2022 the Pilbara Advisory Committee (**PAC**) established a technical working group (**TWG**) under the Pilbara Network Rules (**PNR**) for the purposes of:

- identifying common themes of the proposed electrical connection of Woodside Energy Limited (Woodside) proposed connection of its “Pluto facility” to the Pilbara system, using the Rule Change PRC_2022_01 (Integrated LNG Systems) (**Rule Change**), submitted by Woodside as a base; and
- thereby, informing advice that may be provided by the PAC to the Coordinator of Energy.

TWG meetings

The TWG was convened to meet on 15 September 2022 and 19 September 2022, each of which was chaired by me and facilitated by Deepak Sambhi of KPMG, the ISO’s technical adviser, and attended by representatives from Horizon Power, Alinta Energy, Rio Tinto, Woodside, Energy Policy WA and the ISO.

The meetings were conducted subject to a competition law protocol, a copy of which is set out at schedule one for your reference.

The non-binding character of the TWG meetings, the importance of remaining solely focused on technical implications of the Rule Change and observing the competition law protocol was emphasised at the start of each of the TWG meetings by Luke O’Callaghan of Lavan, the ISO’s legal adviser on this matter, who also attended meetings of the TWG on the dates described above.

Attendees who were network service providers employees were also reminded that, although they attended by virtue of them being selected by their respective employers, their views should be based on their technical expertise and not representative of the “corporate” view of their respective organisations (if any).

Methodology

Technical deliberations undertaken by the TWG did not involve a detailed assessment of particular elements of the Rule Change amendments proposed by Woodside because this in turn would have required comprehensive discussion and agreement about the meaning of partly legal and commercial arrangements and this is beyond the scope of the TWG’s deliberations.

The methodology of the TWG, more particularly detailed in the risk assessment table set out at schedule two, was to undertake technical risk assessment, calling out areas of potential risk that may be reasonably associated with the electrical connection of the Pluto facility, seeking to identify mitigation measures and undertaking a subsequent “residual risk” assessment.

Consensus or differing views were mapped in the risk assessment table with references to the participant organisations only being included for the purposes of shorthand, noting that the table maps the technical view of individual participants, rather than the corporate view of their respective employers.

I trust that the information provided under cover of this letter will be useful to the PAC.

Yours sincerely

James Campbell-Everden
Executive Officer Pilbara ISOCo

COMPETITION LAW OBLIGATIONS

If a meeting participant has a concern regarding the competition law implications of any issue being discussed at any meeting, please bring the matter to the immediate attention of the Chairperson.

The CCA prohibits anti-competitive conduct, including:

- (a) Cartel conduct: arrangements between competitors to fix prices; restrict the supply or acquisition of goods or services by parties to the arrangement; allocate customers or territories; or rig bids.
- (b) Concerted practices: other cooperation between competitors which has the purpose, effect or likely effect of substantially lessening competition, in particular, sharing Competitively Sensitive Information with competitors such as future pricing intentions.
- (c) Any contract, arrangement or understanding which has the purpose, effect or likely effect of substantially lessening competition.
- (d) Any conduct by a company with market power which has the purpose, effect or likely effect of substantially lessening competition.
- (e) Collective boycotts: where a group of competitors agree not to acquire goods or services from, or not to supply goods or services to, a business with whom the group is negotiating, unless the business accepts the terms and conditions offered by the group.

A contravention of the CCA could result in significant penalties for Pilbara ISOC Co, its Members and their respective employees. Cartel conduct may also result in criminal sanctions, including gaol terms for individuals.

Competitively Sensitive Information means information that is not otherwise in the public domain (ie. information that is confidential or has not been published) relating to commercially sensitive matters, such as information about rates and prices, customer/supplier lists, unit costs, market share, pricing projections, commercial strategy, contract negotiations.

Competitors / In Competition

A person/company is a competitor of or is in competition with another person/company if it supplies (or is likely to supply) the same or similar products as that other person/company. A person/company could also be a competitor or be in competition with another person/company if they purchase the same or similar goods or services as that other person/company.

Guiding Principles – what must not be discussed

In any circumstances in which a meeting participant are or are likely to be in competition with one another or one or more of them are or are likely to be in competition the meeting participant must not discuss or exchange with any of the other participants any Competitively Sensitive Information¹ including without limitation the following:

- (a) the rates or prices (including any discounts or rebates) for the goods produced or the services produced by the Members that are paid by or offered to third parties;
- (a) the confidential details regarding a customer or supplier;
- (b) any strategies employed to further any business which is or is likely to be in competition with others;

¹ Note: Meeting participants should note that although information in the public domain will not in itself be commercially sensitive, the context in which it is provided, any view expressed or analysis in relation to it may be separately commercially or competitively sensitive and should not be discussed with others.

- (c) the prices paid or offered to be paid (including any aspects of a transaction) to acquire goods or services from third parties; and
- (d) the confidential particulars of a third party supplier of goods or services, including any circumstances in which a meeting participant has refused to or would refuse to acquire goods or services from a third party supplier or class of third party supplier.

Compliance Procedures for Meetings

- Discussions at meetings should be limited to those topics identified in the agenda.
- Depending on the nature of the topics that will be discussed at a meeting, a lawyer may attend as an observer.
- If any of the matters listed above is raised for discussion, or information is sought to be exchanged in relation to the matter, the relevant meeting participant must object to the matter being discussed. If, despite the objection, discussion of the relevant matter continues, then participation in the meeting/discussion should cease and a file note made of the relevant events, including the time at which they ceased to participate in the relevant meeting/discussion.

PAC – Technical Working Group Risk Assessment

System security and operational elements for consideration, associated risks and assessment required

EVENTS		ISSUES & RISKS			CONTROL MEASURES		RESPONSIBILITY	RESIDUAL RISK	
Project Phase (Project phases)	Project Description (Project description corresponding to the connection phase)	Issues Identified (Issues emanating for various project phases & operational scenarios)	NWIS Risks (Risks posed by these issues on network security and stability)	Risk Category (Connection process/ Compliance criterion/ Network operations)	Assessment Required (Assessment required to assess network impact and expected timing)	Assessment Progress (Status of present state assessment)	Responsible for assessment (Party responsible for undertaking relevant impact assessment)	Risk post assessment/ mitigation (Present state of risk with controls in place)	Attendee Position (Attendee position on residual risk)
Pre Connection	<p>Stage 1</p> <p>33 kV Temporary construction connection supply from NWIS:</p> <ul style="list-style-type: none"> Exit only service Connection expected date Q3 2023 Contracted Maximum Demand 7.5 MW Pluto generation will be connected to NWIS <p>Stage 2</p> <p>132 kV Connection supply from NWIS:</p> <ul style="list-style-type: none"> Connection of Pluto LNG facility to NWIS 	<p>Availability of validated power system models for the Pluto facility.</p>	<p>The lack of a validated power system model risks the power system security assessment of the NWIS system. Progressing with the connection, without a validated power system model poses the following risks:</p> <ul style="list-style-type: none"> Given the size (MWs) of the connecting facility, NWIS system security could be severely compromised Network elements could trip in NWIS because of a fault in the Pluto system leading to eventual NWIS system cascading Maloperation of generation controls and coordination amongst generators leading to system instability etc. 	Connection Process	<p>Provision of a site validated Pluto and BESS PowerFactory model with OEM representative models.</p> <p>Prepare a mutually agreed (between HP, WEL and ISO) model validation test plan for each generator applicable at the generator/ equipment terminal.</p> <p>Timing – A validated power system model shall be provided prior to undertaking the connection studies.</p>	<p>In Progress - A validated power system model is being developed by WEL. HP and ISO have provided input to the model validation scope</p>	<ul style="list-style-type: none"> WEL prepares a validated model test plan in discussion with HP. WEL, HP and ISO to agree a test plan for model performance validation HP reviews and shares the validated model with ISO ISO undertakes due diligence of this model 	Acceptable	<ul style="list-style-type: none"> Captured as part of the connection process WEL’s position is that a validated power system model is required prior to completing the connection studies not prior to undertaking the connection studies. Noting connection studies have already commenced. RTIO’s position: The risk post assessment can only be considered “acceptable” based on the assumption that the stated controls/measures exist and are actually assessed to be effective. To RTIO’s knowledge, the proposed controls are not yet in existence and accordingly its effectiveness to protect power system safety, security and reliability is not able to be properly assessed. RTIO notes that a fully validated model is essential to the accuracy of any modelling activities.
			<p>Compliance criteria to assess HTR compliance at the point of interconnection</p>	<p>The risk to network security cannot be assessed due to the lack of a “point of interconnection compliance assessment criteria” reflective of HTR</p>	Compliance Criterion	<ul style="list-style-type: none"> Point of connection compliance criteria to be developed. The criteria to include studies/ 	<p>Not Started – TWG discussed the need to develop a criteria.</p>	<ul style="list-style-type: none"> HP (connecting registered NSP) responsible to prepare this compliance criteria 	Compliance criteria to be developed

<p>with 140 MW generation and 50 MW of load. This connection only includes the existing load and generation at the Pluto facility.</p> <ul style="list-style-type: none"> • Connection of Pluto LNG Train 2, 35 MW generation and 50 MW of load. • Connection of the Burrup Battery at 35 MW/ 35 MWh. • Connection of the Maitland Solar farm at 50 MW and Maitland BESS at 10 MW/ 10 MWh • Connection expected date TBC but expected 2025/26 			<p>requirements, given HTR is designed to assess compliance at the equipment terminal, especially for generators & loads. A lack of such criteria risks the assessment of compliance at the point of interconnection.</p>		<p>assessments to assess network risk and demonstrate the outcome</p>		<ul style="list-style-type: none"> • ISO undertakes review of this criteria 		<ul style="list-style-type: none"> • Alinta, RTIO and ISO believes there is insufficient information to assess the risk prior to the rule change • RTIO's position: The control measure proposed to mitigate the identified risk has not been developed yet, accordingly, its effectiveness to mitigate this risk is not able to be properly assessed. • As this is a core premise of the rule change proposal, the assessment of how technical compliance could be achieved at the point of connection (and not behind it) is an issue that needs to be determined prior to, and as a precondition to, rule change proposal being progressed. It is not appropriate to accept the rule change and deal with this risk (which could have major implication on power system safety, security and reliability) as part of the connection process. • HP agrees with either timing – ISO to approve the criteria
<ul style="list-style-type: none"> • An exit only connection where Pluto will only import electricity during normal operation. However, primary frequency 		<p>Generator compliance at the point of interconnection</p>	<p>The lack of a “point of interconnection compliance assessment criteria” in particular for the Pluto generators reflective of HTR requirements creates uncertainty and risk around the assessment of compliance at the point of interconnection.</p>	<p>Compliance Criterion & Connection Process</p>	<ul style="list-style-type: none"> • Identification of GEIP/ industry benchmark/ criteria on assessing similar generators at the point of interconnection. • The criteria to include studies/ assessments to assess network risk and demonstrate the outcome 	<p>Not Started – TWG discussed the need to develop a criteria.</p>	<ul style="list-style-type: none"> • HP (connecting registered NSP) prepares a compliance criteria • ISO undertakes review of this criteria 	<p>Compliance criteria to be developed</p>	<ul style="list-style-type: none"> • WEL maintains this assessment needs to take into account the total Pluto Integrated LNG Facility and the facilities at the interconnection point rather than just the Generators at the Pluto Integrated LNG Facility. • WEL maintains this risk will be assessed prior to energisation consistent with Pilbara Network Rule(s) 269/70 and powers of disconnection described in Rule 191. • Alinta, RTIO and ISO believes there is insufficient information to assess the risk prior to the rule change

		<ul style="list-style-type: none"> Voltage imbalance due to lack of coordination between various generation sources interacting with Pluto generation <p>System Frequency Control Risks:</p> <ul style="list-style-type: none"> System frequency excursion caused due to due to lack of generation adequacy Generators hunting due to lack of response coordination System frequency excursion due to lack of adequate load shedding <p>Network Visibility Risks:</p> <ul style="list-style-type: none"> System frequency excursion caused due to due to lack of generation adequacy Generators hunting due to lack of response coordination 		<p>Reactive power control requirements considering Pluto generation, Solar farm, BESS and NWIS coordination</p> <p>System Frequency Control: Assess System frequency control for normal and contingency events, calculate primary frequency and interconnector flow controls, UFLS, Islanding scenarios and scheme operation.</p> <p>Visibility: Prepare a visibility list with tags enabling ISO's functions as per PNR</p>	yet to be designed and assessed			that it is recommended that ISO approve the outcome.
	FCAS & ESS requirements	<p>Frequency support and ESS requirements will need assessing for an exit only service and should be treated as critical path for assessing the risks posed by the Rule change proposal. The magnitude of system response services will require assessing to avoid the following NWIS wide risks:</p> <ul style="list-style-type: none"> Coordination of various generation operation, especially uncontrolled IBRs which can lead to unwanted frequency excursion System frequency excursion caused due to lack/ excess of generation 	Network Operations & Connection Process	<ul style="list-style-type: none"> Finalise ESS assessment procedure Finalise ESS procurement, pricing and cost recovery mechanism Undertake generation adequacy and contingency studies using the validated models to assess ESS requirements 	Not Started – ESS requirements for the NWIS have not been assessed yet by ISO	<ul style="list-style-type: none"> HP to undertake relevant studies and provide a power system model to ISO ISO to review and undertake ESS and generation adequacy studies where required 	Acceptable	<ul style="list-style-type: none"> Captured through ESS and FCAS procedures

			<ul style="list-style-type: none"> Commercial certainty/ accuracy of service procurement 						
		<p>Power system studies to assess network impact</p>	<p>Over and above the assessment/ studies mentioned in the above points, undertake network wide system studies with credible generation dispatch and load levels for a range of NWIS system wide credible contingency scenarios in line with ISO's Access and Connection procedure.</p> <p>The power system studies are not completed yet and progressing with the Rule change proposal, without this could lead to the following risks</p> <p>These studies assess a broad category of risks including/ not limited to:</p> <ul style="list-style-type: none"> System stability and security Power Quality risks Thermal overloading risks Fault current exceedance risks Load shedding and system black out risks Network congestion/ curtailment risks Network operation risks Inability of system restart (system black) risks 	<p>Network Operations & Connection Process</p>	<p>The scope of assessment should align with the requirements specified in the Appendix B of ISO's Access and Connection procedure. A subset of these studies is listed below:</p> <ul style="list-style-type: none"> System stability assessment Steady state Power quality assessment Model to be used for power system assessment 	<p>In Progress:</p> <p>HP has provided the following information to ISO:</p> <ul style="list-style-type: none"> List of contingencies considered for NWIS impact assessment Description of network load and generation scenarios for the NWIS impact assessment studies A copy of the Pluto model report demonstrating the Pluto dynamic models <p>ISO has provided the following information to HP:</p> <ul style="list-style-type: none"> An overall review of the information provided by HP outlining A description of power system studies proposed to assess network impact <p>Model validation requirements</p>	<p>The process adopted by HP seems logical, however, these assessments are not completed yet. HP should follow the Access and Procedure moving forward where:</p> <ul style="list-style-type: none"> WEL is responsible for providing the necessary information to enable impact assessment and connection studies HP to review the information, undertake analysis and share its findings with ISO ISO responsible to undertake due diligence 	<p>Acceptable</p>	<ul style="list-style-type: none"> Alinta believes there is lack of visibility of power system study results and Alinta is relying on HP and ISO's processes The TWG recognises this control to be acceptable on the condition that network impact studies are undertaken in line with the HTR WEL maintains that compliance will be assessed at the point of interconnection consistent with WEL's submitted rule change. WEL does not have access to the referenced Appendix B ISO access and connection procedure and as such will not be able to comment on whether or not it can accept any obligation to comply with this procedure until it has an opportunity to review this procedure. WEL can confirm that it will comply with the published HP Access and Connection Procedure.

EVENTS		ISSUES & RISKS			CONTROL MEASURES		RESPONSIBILITY	RESIDUAL RISK	
Project Phase (Project phases)	Project Description (Project description corresponding to the connection phase)	Issues Identified (Issues emanating for various project phases & operational scenarios)	NWIS Risks (Risks posed by these issues on network security and stability)	Risk Category (Connection process/ Compliance criterion/ Network operations)	Assessment Required (Assessment required to assess network impact and expected timing)	Assessment Progress (Status of present state assessment)	Responsible for assessment (Party responsible for undertaking relevant impact assessment)	Risk post assessment/ mitigation (Present state of risk with controls in place)	Attendee Position (Attendee position on residual risk)
Post Connection	<p>The following post connection activities were covered by the TWG. These activities were considered being affected by the Rule change proposal.</p> <ul style="list-style-type: none"> • System operation direction where ISO sees a system security risk. • Change/ upgrade of network elements at Pluto LNG facility. • Additional generation within Pluto facility • Interconnecting another LNG facility to the Pluto network • Future Rule Changes and how these apply to Pluto facility considering the 	<p>System operation direction where ISO sees a system security risk.</p>	<p>The rule change proposal restricts ISO control desk directions to:</p> <ul style="list-style-type: none"> • Reduce withdrawals of electricity • Reduce injections of electricity (noting that this will only occur if there is a serious equipment failure) • Disconnect the integrated LNG system from the NWIS. <p>Sole reliance on the direction to disconnect is a missed opportunity as it lacks the ability to for ISO to manage contingency and emergency activities.</p> <p>Additionally, sole reliance on the direction to disconnect poses further risk to network security.</p>	Network Operations	Rule change lacks the ability for ISO control desk to direct and coordinate contingency and emergency coordination activities	Not Started	PAC to consider further	PAC to consider further	<ul style="list-style-type: none"> • WEL, HP, Alinta and ISO is supportive of a non-binding coordination/ operational protocol with the objective of maintaining network security • Alinta, RTIO believes this is a missed opportunity and seeks advice from PAC on further steps enabling ISO's coordination and operational controls in the absence of the ability to issue operational directions • RTIO's position: The PNR governs how the system is operated, including the development of protocols to address contingency/emergency events for the purpose of maintaining power system safety, security and reliability. It is unclear how the proposed rule change will impact the development and operation of protocols and procedures to deal with contingencies/emergencies. Will the responsibility of managing a contingency in accordance with protocols then fall disproportionately on some NSPs and controllers but not others, as a result of the proposed rule change? • WEL believes that the system security is enhanced by the addition of the Pluto LNG connection, BESS and solar farm and the risks to the NWIS can

<p>present rule change proposal is approved</p> <p>It shall be noted that the list of activities noted above are not comprehensive and have been listed discussion only.</p>									<p>be managed by the controls described under the submitted rules change and the non binding protocols to be developed.</p>
	<p>Change/ upgrade of network elements at Pluto LNG facility.</p>	<p>The Pluto LNG facility will be a registered NSP post connection.</p> <p>TWG has enquired the access and connection procedure for future change and/ or upgrades within the Pluto facility network to assess the following for future changes/ upgrades:</p> <ul style="list-style-type: none"> • Compliance at the point of interconnection in the absence of a criteria. • Network planning and network security assessment by ISO in the absence of a criteria 	<p>Compliance Criterion</p>	<ul style="list-style-type: none"> • Point of connection compliance criteria to be developed. • The criteria to include studies/ assessments to assess network risk and demonstrate the outcome 	<p>Not Started – TWG discussed the need to develop a criteria.</p>	<ul style="list-style-type: none"> • WEL to follow compliance criteria developed during phase 1 • ISO undertakes review and approval of this criteria 	<p>Compliance criteria prepared in stage 1 to be adopted</p>	<ul style="list-style-type: none"> • WEL, HP, Alinta and ISO believes this risk will be dealt with by compliance criteria prepared in stage 1. • RTIO's position: The control measure proposed to mitigate the identified risk has not been developed yet, accordingly, its effectiveness to mitigate this risk is not able to be properly assessed. • WEL maintains this risk will be assessed prior to energisation consistent with Pilbara Network Rule(s) 269/70 and powers of disconnection described in Rule 191. 	
	<p>Future Rule Changes and how these apply to Pluto facility considering the present rule change proposal is approved</p>	<p>PNR and HTR could undergo changes in future in the form of rule change (PNR) and/ or change to network/ generator performance requirements. It is not clear how WEL will apply future PNR and HTR rule change requirements in light of the current Pluto LNG facility rule change</p>	<p>Network Operations & Connection Process & Compliance Criterion</p>	<p>Technical rule changes assessed by WEL and ISO at the point of interconnection in line with the compliance criteria developed in Stage 1 and the PNR</p>	<p>N/A</p>	<ul style="list-style-type: none"> • WEL to address any changes in line with PNR as the registered NSP • ISO to review WEL's proposal of future rule change and approve in line with PNR 	<p>Acceptable</p>	<ul style="list-style-type: none"> • WEL, HP, Alinta and ISO believes this risk will be addressed in line with PNR rule change requirements. • RTIO position: The control measure proposed to mitigate the identified risk has not been developed yet, accordingly, its effectiveness to mitigate this risk is not able to be properly assessed. 	