



**Public Submission to the Department of Treasury
and Public Utilities Office – Regulatory framework
for the Pilbara electricity networks**



09/03/2018

About BHP

BHP is a leading global resources company. Our principal iron ore operations are based in the Pilbara region of Western Australia and comprise of an integrated system of seven mines, two main railways and two port facilities located at Port Hedland.

BHP manages and operates Western Australia Iron Ore (**WAIO**) as a single integrated business on behalf of separate underlying joint ventures, which ultimately own WAIO and its operations. These joint ventures include Mt Newman Joint Venture, Mt Goldsworthy Joint Venture, Yandi Joint Venture, and BHP Iron Ore Jimblebar Joint Venture. BHP Billiton Minerals holds an 85% interest in each of these joint ventures, with Itochu and Mitsui owning the remaining 15%.

BHP's involvement in the electricity network in the NWIS

WAIO's operations in Port Hedland (Finucane Island & Nelson Point) are provided with electrical power from Alinta Energy and are interconnected to the NWIS via 66 kV delivery points at Nelson Point, Wedgefield, Boodarie and Goldsworthy.

BHP has a number of smaller operations around Port Hedland which are connected to the NWIS and are provided with power from Horizon Power. BHP's infrastructure in Newman and servicing its mines are not part of the NWIS.

Previous submission

BHP made a public submission to the *Issues Paper* issued by the Public Utilities Office in November 2017. BHP's submission can be found here:
https://www.treasury.wa.gov.au/uploadedFiles/Site-content/Public_Utility_Office/Open_consultations_reviews/nwis-regulatory-reform-issues-paper-submission-BHP.pdf

Response to the 35 design elements

Design Element 1

The following interconnected networks in the Coastal Region of the NWIS will be covered at commencement of the light handed third-party access regime in the NWIS:

- *the Horizon Power interconnected network; and*
- *the Alinta DEWAP interconnected network.*
- BHP supports this design element.

Design Element 2

Uncovered NWIS Interconnected Networks can 'opt-in' to the light handed regulatory regime at any time.

- BHP supports this design element.

Design Element 3

Coverage will be extended in the future to networks not covered at commencement by application of the existing Access Code coverage test.

An assessment for coverage is triggered by a coverage application that must be assessed by the Minister for Energy in accordance with current coverage criteria.

If a network is found to meet the coverage criteria, then the Minister will be required to make an additional decision as to whether the network should be subject to the light handed or full regulation, using principles similar to those in the National Gas Law.

- BHP supports this design element on the basis that only the light-handed regime will apply. BHP do not support the Minister for Energy having the ability to impose heavy handed regulation once coverage is granted, as it would seem unwieldy having two layers of regulation in the network, and the State has already admitted that full regulation is not fit for purpose in the NWIS.
- BHP notes that the design consultation paper references potential future coverage test of BHP owned networks if triggered by future application
- As the BHP owned Port Hedland network and inland network infrastructure are single-user purpose built and technically designed for internal operational requirements with specific investment made on this basis to cater for demand with future growth provision, we see significant risk in third party access to BHP networks. Our networks have finite capacity constraints that are required to supply BHP operations and third party access to such capacity would restrict this needed capacity.

Design Element 4

Pricing principles will be developed to guide price setting and dispute arbitration.

- BHP supports this design element that provides NSP's with pricing principles to be adhered to. Without such a guide BHP is concerned that there could be potential disproportionate cost recovery by NSPs from large customers if the negotiation of network access prices are left to private negotiations. Access prices need to be reasonable and fairly scaled and apportioned amongst all users of the applicable covered network. To achieve this, BHP is aligned with proposed pricing principle 9, which recommends relative transparency on pricing as a requirement.
- BHP would like to be provided with more detail about what will happen when additional customers and or generators access the covered network(s), what will be the process to adjust prices to existing participants? Is the intent for this to be done via an annual review, reference tariff variation mechanism, or another mechanism?
- BHP is concerned with price principle 4 and 5 as it should be based on reasonable forecast of future investment/usage required to meet demand and should be consistent with the ISO Statement of Opportunity. Participants should be reasonably protected from mismanagement of investment (under or over) and consideration should be made in relation to how investments are recovered if they are for specific participant(s). A governance process managed by the ISO to determine suitability of an investment in new/existing transmission lines will ensure it is appropriate and required.

Design Element 5

The onus will be on networks to develop, negotiate and defend their pricing methodologies in accordance with the Pricing Principles.

- BHP supports this design element based on the ability for participants to challenge and negotiate, however BHP questions whether greater certainty of consistent pricing can be achieved through pricing guidelines which require NSPs to adhere to a more prescriptive methodology to calculate Allowable Revenue.
- BHP agrees with the PUO on disclosure of Reference Tariff information regarding the methodology and assumptions on network access price setting to facilitate negotiation.

Design Element 6

In setting Reference Tariffs, the covered network businesses will be required to demonstrate that (a) they meet the Pricing Principles, and (as the case may be) to attest that they have applied the pricing guidelines or (b) to otherwise describe the methodology and key assumptions they have used in developing their Reference Tariffs.

- BHP believes that the NSP should provide both a) and b).

Design Element 7

By mutual agreement, an access applicant and the relevant network could agree on a Non-Reference Tariff.

- BHP supports this design element, such as the ability to negotiate long-term 'firm capacity' contracts with a non-reference tariff.

Design Element 8

Network access in the NWIS will be designed as a 'market carriage' regime.

- BHP supports this design element as network access under the "market carriage" model is consistent with other Australian power systems.

Design Element 9

Generators connected to the NWIS networks at the commencement of the new regime will continue to receive access that is unconstrained, or not constrained to a greater extent than at regime commencement. These grandfathered requirements will be codified in a set of 'NWIS Rules' relating to scheduling and dispatch and relating to any new connections and expansions of existing generators and loads.

- Grandfathering provisions captured in the NWIS Rules is essential for all existing customers (generators and loads) connected to the NWIS at the commencement of the new regulatory regime. This grandfathering is to ensure existing access terms and conditions (including all technical requirements and obligations, security and reliability levels) are maintained in their entirety. Existing customers must be no worse off.
- New connections or modifications to existing customer connections are to comply with the NWIS Rules. What constitutes a modification to an existing customer connection and relevant portions of the NWIS Rules that need to be assessed for compliance in response to this modification must be defined in the NWIS Rules. The process for generating system alterations that is stipulated in the NER Clause 5.3.9 for generators and a comparable process for loads is recommended.

Design Element 10

New generators or expanded capacity of existing generators will be allowed network access on a constrained basis, with such generators being appraised (without guarantee) of the likely extent of constraints and the options for relieving those constraints. Generators would be liable for the cost of any options they choose to relieve constraints.

- Constrained access is an appropriate pathway for new or modified connections. However, transparent mechanisms to advise the level of constraint experienced by existing generators and expected for new generators is to be considered to ensure investment decisions can be made on a risk-based level of reliability/access.
- Network or other options to relieve constraints should be made available to generators with the option to fund to relieve constraints if required.

Design Element 11

Loads will be provided with access at default security levels to be defined, but with provision for specific loads to request bespoke access and connection point security criteria to apply to them.

- As noted in the response to Design Element 9, the level of reliability and security levels for existing customers must be preserved at NWIS Rules commencement. It is envisaged that existing customers such as BHP who have made significant investment in network infrastructure are likely to have bespoke access and connection point security arrangements.
- The principle to define security levels and have provision for bespoke access is appropriate. Retaining this security level or having options to improve security levels are critical.

Design Element 12

The networks will be responsible for managing the connection process, including specifying connection asset requirements and commercial terms for the provision of such assets.

- A transparent connection process administered by Network Service Providers with time based obligations for the provision of defined information packages and responses to customers are critical to ensure connections progress in a timely manner.
- Adoption of the NEM process governance is recommended with the Western Power Applications and Queuing Policy deemed not appropriate for the NWIS.

Design Element 13

The ISO will be responsible for dealing with the 'electricity transfer and access' aspects of new connections and applications for expanded capacity, including the matters described in Design Element 10. The ISO will also design any changes to scheduling and dispatch resulting from constraints to new or expanded generators, in accordance with the NWIS Rules, and will accordingly manage constrained dispatch where required.

- With the exception of power quality requirements, the ISO should be responsible for advising on matters of compliance and application of the NWIS Technical Rules.
- Additionally, ISO accountability for constraint determination and management and generation scheduling is appropriate.

Design Element 14

Information disclosure requirements will be developed as part of the NWIS access framework. These will be developed in consultation with stakeholders and will specify the information that must be published by covered networks and the timetable for publication.

- BHP supports this design element, subject to confirmation of the final information disclosure requirements. The information disclosure requirements should be sufficient to allow access seekers to make an informed decision about whether or not to seek access and to assess the reasonableness of any offer made having regard to the pricing principles, whilst balancing the need to minimise compliance costs and protect commercial sensitivities. All network service providers should be subject to consistent and transparent disclosure requirements, regardless of whether they are state-owned or privately-owned.

Design Element 15

A negotiation framework will be developed as part of the NWIS Regime, setting out requirements for each covered network to produce and publish:

- *a user access guideline;*
 - *the process for making an access request;*
 - *the process for making access offers, and*
 - *the process for negotiating access, pricing, and access terms and conditions.*
- BHP supports this design element. BHP believes that access arrangements should, so far as possible, be negotiated between the parties and that the negotiating framework should facilitate this outcome.

Design Element 16

A dispute resolution framework will be developed, that is clear and binding, based on the non-scheme pipeline arbitration mechanism in the National Gas Rules modified as outlined in this Design Consultation Paper for the specific circumstances of the NWIS. It will be administered by the ERA.

- BHP generally supports this design element. However, BHP considers that there is merit in considering an obligation to undertake a preliminary alternative dispute resolution process (such as conciliation/mediation) prior to binding arbitration for unresolved disputes. Where a dispute is referred to arbitration, BHP's preference is for the WA Energy Disputes Arbitrator to act as arbitrator.

Design Element 17

Covered networks' regulated activities and functions will be required to be structurally or functionally separated from their non-regulated activities and functions. Business-specific requirements will be defined, following competition analysis.

- BHP supports this design element. As noted in its previous submission, BHP considers that any ring-fencing arrangements should be supported by appropriate reporting and audit requirements by an appropriate body (such as the ERA) to ensure compliance.

Design Element 18

A transition plan for the new NWIS light handed access regime will allow timelines that permit service providers to efficiently meet new obligations, and also to ensure that existing contractual positions and operating positions are suitably protected.

- Any transition plan for Network Service Providers must have regard to existing customer grandfathering provisions to ensure no impact.

Design Element 19

The interim objective of the NWIS ISO should be consistent with the National Electricity Objective, namely:

'To promote efficient investment in, and efficient operation and use of, electricity services for the long-term interests of consumers of electricity with respect to price, quality, safety, reliability, and security of supply of electricity; and the reliability, safety and security of the NWIS.'

- BHP believes that the National Electricity Objectives are appropriate for the NWIS ISO.
- Independence from the Network Service Providers is critical for the ISO.

Design Element 20

The design principles for the ISO are:

1. *the ISO's core function is to ensure the reliability and stability of the system;*
 2. *the ISO should act with impartiality and transparency;*
 3. *the ISO should act to maximise overall system efficiency;*
 4. *the cost of establishing and operating the ISO should be kept to a practical minimum;*
 5. *proposed arrangements should consider the commercial interests and priorities of privately-owned electricity network assets in the NWIS;*
 6. *technical standards should not present a physical constraint to potential future interconnection of the NWIS, or a barrier to any technology type; and*
 7. *the effectiveness of the ISO should be reviewed periodically.*
- Technical standards while not presenting a physical constraint or barrier for expansion, new connections or technology limiting, they must be cognisant of any impacts to reliability and system security and are to evolve such that reliability and security of the NWIS at a minimum is not degraded.

Design Element 21

The ISO will undertake planning, scheduling and dispatch services for the NWIS interconnected network and will:

- *develop and manage a full NWIS simulation model.*
 - *have lead accountability for managing emergency response and post-incident investigations.*
- A framework for the NWIS model is required to ensure the model is developed, updated, managed and utilised to a consistent level of detail and manner in line with other jurisdictions (namely the NEM). The model is to be made available to Network Service Providers and existing and intending NWIS customers under appropriate confidentiality provisions.

Design Element 22

The ISO will take over the role of procuring and allocating the costs associated with the following Ancillary Services: frequency control, spinning reserve, balancing & settlements, reserve capacity, and black start capability.

- BHP recommends that the ISO also identify and assess the need for ancillary services to ensure performance of the NWIS is in line with Technical Rules.

Design Element 23

The ISO will provide the following Network Services for the NWIS in conjunction with Network Owners, Generators, and End Customers: network coordination, technical oversight of connections and access, and publication of statements of transmission development and generation opportunities (whilst protecting commercially sensitive information)

The Horizon Power ISO+ model, including the proposed system operator's role in providing network transport services will be reviewed once the proposed ISO functions have been implemented and tested in practice.

- BHP supports this design element.

Design Element 24

The ISO will at initiation provide limited Market Services, with economic dispatch of generation unlikely to be justified in the NWIS for the foreseeable future. The ISO needs to

be provided with an ability to cover its NWIS-related administrative costs and the costs of any Market Services that it provides.

- BHP supports this design element.

Design Element 25

With the recommended functions of the ISO in this document, the ISO will need to be regarded in the Electricity Industry (Metering) Code 2012 as the equivalent of the Independent Market Operator/AEMO for the NWIS with similar rights, obligations and responsibilities. The ISO is not initially positioned as a Metering Services provider.

- BHP supports this design element.

Design Element 26

The ISO will have sufficient powers to effectively enact its obligations and undertake its functions. The powers of the ISO will not extend to daily operational control of interconnected networks in NWIS unless such control is transferred to the ISO by agreement.

- BHP supports this design element.

Design Element 27

The ISO will be a stand-alone entity, with the proposed functions undertaken by AEMO as an extension of its current Western Australian operations, noting that it may choose to contract with other network service providers for provision of some services.

- BHP supports this design element.

Design Element 28

The ISO's annual revenue and capital expenditure forecast will be independently approved by the ERA.

- BHP supports this design element but also believes that the NSP or a participant should have ability to dispute the budget of the ISO if it is considered unreasonable.

Design Element 29

The ISO capital and operating costs will be recovered from market participants.

- BHP believes that the set up costs should be borne by the State rather than by the network participants. It is reasonable that some of the recurrent costs be recovered from market participants however BHP as an existing customer is concerned (under section 3.6.3) of exposure to potential disproportionate cost allocation for ISO cost recovery and also express concern over introduction of additional fees in addition to the current network access costs under existing agreements. BHP assume that at a minimum a centralised ISO approach will not increase costs for participants but rather decrease cost through leveraging efficiency and synergies technically and operationally under a central ISO.
- Additionally, more work needs to be undertaken on a fair cost allocation model based on utilisation requirement and scaling from participants connected to the network. For example:
 - A participant might only require access to a small distance of HV network.
 - BHP recommends a scaling or banding system is applied in order to not overly penalise high load customers by fixing a standardised cost per MWh.

The incentive to utilise the covered network needs to make economic sense as opposed to incentivising on site generation installation to minimise network access costs.

Design Element 30

The ISO will be governed by the AEMO Board on the basis that AEMO undertakes the ISO role for the NWIS. Its charter will be established with the involvement of key stakeholders.

- BHP supports this design element.

Design Element 31

The ISO surveillance functions will be provided to the ISO governing body by the ERA.

- BHP supports this design element.

Design Element 32

Changes to the NWIS Rules will be a service provided to the ISO governing body by the ERA.

- BHP recommends that the NWIS Rules are developed and owned by the ISO and any changes must be supported by a NWIS Technical Advisory Group comprising suitable participant representatives. BHP would request representation.

Design Element 33

The ISO will have coverage of the entire NWIS Interconnected System, with powers limited to those necessary to undertake its assigned functions consistent with the design objective.

For the avoidance of doubt, the ISO will not have powers to interfere with the efficient operations of networks, other than to protect the security and reliability of the NWIS and these powers do not necessarily require direct control of all network elements.

Any changes to the powers of the ISO will be subject to rigorous analysis with stakeholder input to ensure that there is a material net benefit of any proposed changes.

- BHP notes that “entire NWIS Interconnected System” is considered to include only the NWIS Interconnected Network as defined in the Design consultation Paper.

Design Element 34

The ISO will have the same immunity from damages claims as AEMO has for its operations in the SWIS.

- BHP supports this design element.

Design Element 35

Transitioning to the new ISO will allow timelines that permit the ISO and participants to efficiently meet new obligations and functions and for stakeholder participation in the development of the various design elements.

- The proposed timeline should be provided to stakeholders for comment as a matter of priority to ascertain feasibility.

For further information please contact:

Meath Hammond

BHP - Head of Corporate Affairs WA

+61 8 6321 4336