



**Public Submission to the Public Utilities Office –
Regulatory Reform in the North West
Interconnected System**



Executive Summary

BHP welcomes the opportunity to provide comment on the issues paper *“Improving access to, and operation of, the Pilbara electricity network – the North West Interconnected System”*.

BHP provides in principle support to moving to a light-handed regulatory access regime (including the establishment of an independent system operator and the introduction of a regulated price floor and ceiling for only network access costs). We believe this will support ongoing system security and reliability of supply, provide a common governance framework, and assist in reducing the high cost of power whilst protecting existing customers.

We would encourage the State Government that in the first instance any reforms only apply to network assets owned by Alinta DEWAP (**Alinta**) and Horizon Power. Subject to both a successful outcome being achieved for Alinta DEWAP and Horizon Power infrastructure and with further consultation the reforms could potentially extend to the other inland components of the NWIS (as defined in the Issues Paper) in the future.

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.

Response to 'questions for stakeholders'

BHP's comments in this submission are in respect to Alinta and Horizon Power infrastructure in the NWIS network unless otherwise specified. We believe that given the State Government's objective is to ensure that the implementation of adopting a new light-handed regulatory access regime is achieved quickly, the most effective way to achieve this outcome will likely be to focus only on Alinta and Horizon Power infrastructure.

Any proposed changes to the NWIS should be based on a cost/benefit analysis and should result in greater competition and improved pricing of electricity prices in the NWIS. It is also critical that regulatory reform does not impact network reliability in the NWIS, particularly for

major electricity users such as the resource sector. Changes to network structures, network operators and any legislative changes should be designed with a view to minimising additional costs. These reasonable costs should be borne by all network participants.

BHP provides in principle support to moving to a light-handed regulatory access regime (including the establishment of an independent system operator and the introduction of a regulated price floor and ceiling for only network access costs). We believe this will support ongoing system security and reliability of supply, provide a common governance framework, and assist in reducing the high cost of power whilst protecting existing customers.

BHP has answered specific questions below which are of relevance to our operations or where the above statements are not sufficient.

Question 1: Would customers outside Horizon Power's network benefit from competition?

In BHP's view, yes. There are several aspects of the current coastal network configuration that limit parties (particularly consumers) from accessing the significant volume of installed generation available in the NWIS, and BHP believes there is an opportunity to utilise this latent capacity rather than companies investing capital in building additional generation.

While the ability to physically connect transmission and distribution networks in the NWIS currently exists (particularly infrastructure owned by Alinta and Horizon Power), practically it requires commercial solutions to be reached between competitors, which in BHP's experience is not always a simple process given the competing commercial interests that exist.

BHP's assessment is that the NWIS is currently in oversupply by ~200MW, which ordinarily in an open market would result in downward pressure on pricing as competition is encouraged.

Due to the isolation of the various components of the network being operated by multiple operators under the current regime, customers in many circumstances have access to only one of the generators which allows the operator of that network to be somewhat immune to competitive pressures. This market power has the potential to result in situations where suppliers have an ability to dictate terms which would ordinarily not be palatable to major consumers in open access networks.

For major consumers, electricity prices are approximately twice that of other open networks in Australia despite lower gas prices in WA, being approximately 50% cheaper than those seen on the East coast.

An open network regime should allow customers access to all covered generators in the network and should support competition. There would also be additional benefits for customers such as the ability to negotiate more favourable commercial and risk related contract terms. This should drive prices lower, supporting long term investment in the region.

Question 3: Is there economic benefit to a consolidated approach to coordinating development of electricity assets in the NWIS? Provide examples where possible.

A consolidated view of the existing transmission and generation assets within the NWIS would provide insight into the overall supply/demand profile of the market and a better understanding of the viability and competitiveness of additional or replacement generation compared to what could be met by latent capacity in existing infrastructure.

A coordinated approach would help inform decisions by generators on the future of sub-optimal or sub-economic assets as well as assets which are end of life, relative to other more efficient and cheaper existing assets.

However as stated above, the benefits must outweigh the cost of implementing a NWIS light-handed regulatory access regime, including any additional transmission line requirements. Mechanisms would need to be in place to ensure that the access pricing mechanisms (if any) which are designed for the NWIS do not incentivise overinvestment in unnecessary (and subsequently underutilised) infrastructure (i.e. transmission lines).

BHP believes that the Economic Regulation Authority (**ERA**) or another appropriate body would be required to monitor and regulate a ceiling and floor pricing mechanism for network costs only (not for the price of electricity).

Question 4: What process should be used to determine which networks and related assets should initially be subject to the arrangements?

BHP believes that any new arrangements should be limited in the first instance to the network access required to support retail contestability and new entrant connections (third party access regime) on the NWIS interconnected network assets owned by Alinta and Horizon Power.

Further consultation should be undertaken before the regime is expanded to cover other infrastructure, including consultation on the coverage criteria that would apply to any future coverage decisions.

One option that the State Government could consider if and when further expansion is contemplated is following the approach taken by the Electricity Networks Access Code (**ENAC**), National Gas Rules (**NGR**) and National Gas Law (**NGL**) where certain infrastructure is deemed to be covered from commencement of the regime, with any other infrastructure subject to coverage applications based on an agreed criteria. In the case of the NWIS, BHP's view is that only Horizon's and Alinta's infrastructure should be deemed to be covered from commencement of the NWIS regime. In our view BHP's transmission infrastructure is not critical to achieve the desired outcomes for the access regime, and therefore should not be covered at the commencement of the NWIS regime.

Question 5: Under what circumstances should other networks in the NWIS become subject to the regulatory arrangements at a later date? Should this be on a voluntary (i.e. 'opt-in') or mandated (i.e. 'deemed') basis?

Consistent with BHP's response to Question 4, one option that the State Government could consider is following the approach taken by the ENAC, NGR and NGL where any infrastructure which is not covered from commencement of the regime may only become covered if someone makes a coverage application for determination by the Minister. As noted above, there should be further consultation as to the coverage criteria to apply to such decisions (if this model is selected).

An independent system operator should be required to ensure new entrant connections do not impinge system security, reliability of supply or materially affect existing customers.

Question 7: Do stakeholders consider information asymmetry to be an issue in negotiating access? If yes, what additional information is required?

Currently there is a mixture of state owned and privately owned power generators. We understand that state owned generators have greater levels of reporting requirements, which creates a distinct advantage to privately owned power generators. In BHP's view, under a light-handed regulatory access regime all power generators should be subject to consistent and transparent information disclosure requirements in order to alleviate this asymmetry (and any such disclosure requirements should not compromise commercial or operational sensitivities).

Customers also do not currently have visibility of the terms of the existing access arrangements between infrastructure owners, which contributes to the cost of power for customers. This creates an information asymmetry for customers in circumstances where those access arrangements are disputed.

Question 8: What 'ring fencing' arrangements should be required of networks subject to the new regulatory framework to ensure access seekers are treated on an equitable basis? How should compliance with ring fencing arrangements be enforced?

BHP believes that network owner and retail functions should be segregated and network access be facilitated via a regulatory framework overseen by an independent system operator on items relating to system security, reliability of supply and existing customer impact. Any ring fencing arrangements should be supported by appropriate reporting and audit requirements by an appropriate body such as the ERA in order to ensure compliance.

Question 9: What implications arise from the Uniform Tariff Policy with respect to any new regulatory framework in the NWIS?

The introduction of the regulatory framework in the NWIS could result in an outcome where (through increased competition as a result of the new framework) retail prices in the NWIS decrease, thereby reducing the extent of the subsidy required under the Uniform Tariff Policy (UTP).

Question 11: What operational and financial inefficiencies result from the current NWIS system operation model and could be addressed by introducing an independent system operator?

BHP would be happy to share confidentially with the PUO a comparison between the prices for power in Port Hedland compared to other jurisdictions in Australia where BHP operates. Port Hedland is the most expensive jurisdiction in Australia for BHP in terms of power prices which, as mentioned above, is inconsistent with the lower gas prices in WA.

There are also operational inefficiencies which exist under the current regime such as threats to energy security for customers as a result of disputes between infrastructure owners and inconsistencies and inefficiencies associated with multiple versions of Technical Rules being applied by infrastructure owners.

Question 12: Are there significant foregone opportunities for providing more efficient dispatch of available generation resources in the NWIS, or for the integration of currently non-interconnected loads and generators in the region? What are the barriers?

BHP understands that the barriers to more efficient dispatch and integration of non-interconnected loads / generators is primarily the lack of access to the various transmission infrastructure. Increased access would presumably broaden the 'pool' of available generation for all customers by creating more transmission optionality.

Question 13: What aspects of technical rules currently applied in the NWIS cause significant issues to loads/generators?

BHP believes that the absence of an approach whereby automatic, negotiated and minimum requirements are specified for each of the technical requirements, as well as the lack of alignment in some key areas with the Network Electricity Rules (**NER**) (such as section 2.2.10 Temporary Over-Voltages) cause issues to loads/generators, from a connection, operational and compliance perspective.

There is also a lack of an established framework which requires the development of computer models and supporting information for existing, new and modified connections. Access reform of the NWIS needs to include a framework development of a consolidated model for the network (that is up to date, managed and shared with NWIS participants) that can be utilised for both for the management of the existing network and to support new/modified connections.

Question 14: What obligations to comply with a proposed new set of NWIS Technical Rules should be introduced?

An agreed set of Technical Rules are required for the NWIS which align, where possible, with the NER (taking into account any region-based nuances as required).

Grandfathering provisions will be required for existing owner/operators to ensure a staged transition occurs for compliance with the NWIS Technical Rules. This transition may include a variety of triggers such as upgrades, modifications or time based.

All new connections should be required to comply after the commencement date of a new set of NWIS Technical Rules.

BHP recommends that agreed Technical Rules (and any amendments to or exemptions from those rules) be administered by the independent system operator (**ISO**). BHP also believes that there is a need for working groups comprising of NWIS owner/operators to be established with terms of reference to support investigation of key issues in the NWIS and wider coordination.

Question 15: What barriers to cooperation and or the efficient provision of ancillary services are caused by the low number of large and diverse/competitive interests in the NWIS and under what circumstances?

Barriers include the absence of market for cost recovery and real time dispatch and internal rather than network wide focus.

BHP suggests that the ISO should be accountable for the assessment of the need for and procuring of ancillary services and other means required to ensure the security of the NWIS is in line with the Technical Rules.

Question 19: To what extent should access arrangements be based on negotiation between parties and to what extent should they be subject to imposed requirements on both parties?

BHP believes that other than the below points, access arrangements should be negotiated between parties:

- 1) There should be an agreed set of technical standards (including general operating standards) governing the NWIS, to avoid claims of safety concerns etc. being used as a way to hinder access.
- 2) BHP supports in principle a floor and ceiling network access price regime to avoid either exploitatively high pricing or aggressively low pricing which may have the purpose or effect of impacting the ability of other participants' ability to compete.

Question 21: If agreement on an access-related matter cannot be reached, how should disputes be resolved? What is the appropriate dispute resolution body?

BHP believes that the State Government should consider that any access related disputes should be referred to a dispute resolution body, with a preliminary alternative dispute resolution process such as conciliation/mediation (potentially to be facilitated by the ERA), followed by a binding arbitration process for unresolved disputes (with the WA Energy Disputes Arbitrator to act as arbitrator).

Question 22: Should guidance relating to the setting of electricity network access prices, such as the build-up of costs (e.g. asset valuation, cost of capital, operating costs) and tariff design (e.g. tariff structures, postage stamp pricing, etc.), be specified in the regulatory framework or should this be addressed solely via commercial negotiation?

This will need to be taken into account when considering the appropriateness of floor and ceiling prices (if that approach is adopted) for network access costs in the NWIS. The network access cost range should be reflective of how much network access is required, i.e. pay according to the required use of network not entire network.

Accordingly, the State Government should be mindful not to over regulate pricing decisions to a point of stifling competition, as the intent of an open network access arrangement is to improve competition in the NWIS and support consumers' ability to access a range of generators / retailers in the market.

Question 23: Should any regulatory oversight or monitoring of electricity network access prices on the NWIS be undertaken? If so, how and by whom?

As discussed above, BHP is supportive in principle of a price floor and ceiling for network access costs set by a body such as the ERA according to set principles and subject to periodic review.

We also believes that the UTP should continue to apply as it currently does in order to regulate prices for small use customers. Monitoring of prices by the ERA could assist in assessing effectiveness of regime.

The development of guidelines for new connections to the NWIS is recommended to ensure optimal development of the network and compliance with the Technical Rules. These guidelines should define acceptable connection arrangements that give due consideration to safety, maintainability, expandability, cost, system security and reliability of supply.

Question 24: What is the period that parties are likely to seek to have network access prices locked in? Does this period vary between a framework with negotiated outcomes or one with stronger regulatory oversight?

A price floor and ceiling for network access costs, if adopted, should be gazetted annually and reviewed and where relevant revised periodically (e.g. every three to five years). The regime could include other events which trigger a review of the access arrangements (such as the expenditure of significant additional capital by a network operator).

Question 25: How would capital expenditures and upgrades to the networks be addressed in the new regulatory arrangements, particularly with respect to price and service outcomes?

BHP believes that this should be managed in the same manner as other markets, with general recovery of capital being taken into account in modelling and setting a price floor and ceiling. The aim of the network operators should be to maintain security of supply while keeping network costs as low as possible for consumers to drive investment in the region.

The framework should also give consideration to incentivising the network owner to deliver service outcomes at the lowest costs.

Question 26: How should non-price considerations (such as security and reliability of supply and customer service standards) form part of a light-handed regulatory framework?

Technical Rules should be agreed by all market participants, including a single set of standards defining good operating procedures.

Question 27: How should capacity constraints be addressed in the new regulatory framework? Should the networks be required to only offer an unconstrained connection (e.g. N-1)? How constraints are managed post connection?

Significant investment on network infrastructure has been made by BHP to ensure the required risk-based level of reliability has been achieved for its operations. The existing level of reliability must be preserved for all parties who have made such investment (i.e. existing connected parties reliability is to be preserved).

BHP believes that all new connections can opt for a level of reliability acceptable to their risk profile (subject to any provisions of the Technical Rules). Network owners should only offer residual network capacity for load connections that remains after existing connected party supply obligations are satisfied.

Question 29: Should periodic reviews of a new regulatory framework be conducted to ensure the framework achieves the targeted objectives?

BHP believes that it would be a matter of good governance to review the operation and effectiveness of the framework periodically, such as every five years (but perhaps with an initial interim review to ensure the transition has been effectively implemented).

Question 30: What information requirements should be placed on participants to ensure any new regulatory framework for the NWIS is operating as intended?

BHP agrees to the intent of the proposed Information Disclosure regime set out in the Issues Paper and would welcome further consultation on the scope of the regime once the State Government endorses implementing of a new light-handed regulatory access regime.

Question 31: What should the guiding objectives for the independent system operator be? Are the National Electricity Objectives appropriate for the NWIS?

BHP believes that the National Electricity Objectives are appropriate for the NWIS (to the extent that the National Electricity Objectives are relevant to the scope of the regime adopted). Independence from the network participants will be a critical objective for the operator.

Question 32: Should the proposed independent system operator be granted statutory immunity that excludes, or caps, liability for damages claims from third parties? Should there be any exclusions from immunity?

Consistent with the position in the SWIS, it would be appropriate for the ISO to be granted statutory immunity from liability relating to its performance as ISO, subject to exclusions for bad faith or negligence (however a capped liability regime could apply to negligent conduct other than gross negligence).

Question 33: Is there a preference for the independent system operator functions to be held by a separate entity or ring-fenced within an existing network operator? Similarly, is there a preference for how the costs of an independent system operator should be recovered?

BHP supports in principle the introduction of an ISO across all NWIS infrastructure which has an appropriate degree of independence from the NWIS participants. BHP is of the view that it would not be appropriate for the system operator functions to be held by a ring-fenced division within a non-Government owned network operator.

BHP's preference would be for the functions to be held by an entirely independent body (such as the Australian Energy Market Operator (**AEMO**), which holds these functions in the SWIS), however that preference is subject to the provision of further information by the State as to the expected set-up and operational costs and efficacy of a wholly independent operator by comparison to a ring-fenced division within Horizon Power.

We encourage the State Government to undertake modelling on the cost of either option and in particular to consider the experience of the SWIS, where both alternatives have been utilised at different times.

Regardless of who the operator is, they should be required to manage the network in a manner which ensures that decisions relating to technical requirements and safety and security of the NWIS are consistently applied to all parties. Cost should be recovered through network charges and distributed across all participants in the NWIS.

Question 34: What level of governance should be applied to the proposed independent system operator? What should the key features of the governance framework be?

The governing rules should set out objectives which the ISO should be required to act in accordance with. The ERA could also be given authority to give directions to or impose requirements on the ISO.

Question 35: How much visibility of the NWIS power system will an independent system operator require? How far should the visibility (and real-time data requirements) extend into generation facilities and the distribution network?

Visibility should extend down to as many levels as required within network, load and generation facilities to ensure the ISO's objectives can be met.

Obviously, if the ISO is not a wholly independent body but rather a division within an existing operator, appropriate ring fencing arrangements will be required to ensure that all parties have equivalent access to information.

Question 36: Will a more formalised approach to managing outages (planned and unplanned) benefit electricity users on the NWIS?

A more formalised and coordinated approach managed by the ISO is recommended. However, there will always be a need for emergency business critical or system security outages and any approach must not prevent the timely execution of critical works.

Question 37: Should an independent system operator for the NWIS have powers to manage and investigate system critical events similar to that of SWIS system management? What dispute resolution mechanism is preferred?

The ISO should have powers to investigate system critical events, comparable to the process set out in the Wholesale Electricity Market (**WEM**) Rules.

Question 38: Is there a reason why a system of economic dispatch of generation and constrained network access should not be introduced to the NWIS?

This is possible and worth review in the longer term, however this requires wholesale system change as opposed to purely introducing a light-handed regulatory access regime.

There may be an opportunity to explore constrained access for new entrant generation connection (in particular renewable energy). However, this is not recommended for load connection.

Question 39: If introduced, should the independent system operator include oversight of longer term planning and forecasting requirements that inform development of the NWIS?

Depending on the nature and extent of the ISO's role in the NWIS, it would seem logical for that entity to be involved in forecasting and planning for the development of the NWIS. Long term forecasting based on information gathered from network participants should also assist with increasing transparency.

Question 40: Are there additional functions to be included in the independent system operator role and when?

BHP believes that the primary role of the ISO would be to monitor compliance with and administer technical requirements, operator standard setting and planning and development of the network as well as undertaking some information gathering and conducting forecasting to assist industry participants with investment decision making in the NWIS.

Question 41: What are the potential costs of introducing an independent system operator?

BHP is not in a position to advise on the likely costs of introducing an independent system operator. These should be identifiable by the State Government based on benchmarking with other regimes such as the SWIS.

We do not expect that there would be any material difference in costs between an independent system operator and a ring-fenced division within Horizon Power (however, as mentioned in Question 33, we would encourage the State Government to provide confirmation of this issue). We expect there could be potential benefits and synergies if AEMO were selected as the ISO given it already holds that role in the SWIS.

For further information please contact:

Meath Hammond
BHP - Head of Corporate Affairs WA
+61 8 6321 4336