

Coverage of the Horizon Power electricity network in the North West Interconnected System

Issues Paper

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1. Introduction

1.1 Coverage application

In Western Australia, third party access to electricity networks is regulated under Part 8 of the *Electricity Industry Act 2004* (the Act) and the Electricity Networks Access Code 2004 (the Code). Under these arrangements, an electricity network is not subject to direct access regulation unless the Minister for Energy (the Minister) has made a determination that the network be covered under the Code. The only network currently covered under the Code is the network owned by Western Power within the South West Interconnected System (SWIS).

Owners of covered networks are required to have an access arrangement approved by the Economic Regulation Authority, which sets out the prices and other conditions for access to the network. The access arrangement also establishes procedures by which prospective network users can seek access to the network in a facilitated manner. Disputes between persons seeking access to a covered network and the network operator can be referred to the Western Australian Energy Disputes Arbitrator, who is empowered to make a determination as to terms and conditions of access.

The Code provides for a prospective network user to make a 'coverage application' to the Minister requesting that the whole or part of an electricity network be covered. On 4 August 2017, the Minister received an application from Alinta Energy for coverage under the Code of the electricity transmission and distribution assets currently owned and operated by Horizon Power that form part of the North West Interconnected System (NWIS),¹ which in the application is referred to as the Horizon NWIS Network. This includes Horizon Power's transmission and distribution assets in the Port Hedland and Karratha regions, which form part of the Horizon NWIS Network, and which appear to be a particular focus of Alinta Energy's coverage application.

This Issues Paper relates to Alinta Energy's coverage application and is published by the Department of Treasury, Public Utilities Office for and on behalf of the Minister.

1.2 Minister to make a coverage determination

1.2.1 Coverage criteria

Following receipt of a coverage application, the Minister is required to make a coverage determination pursuant to the process set out in Chapter 3 of the Code. Section 3.5 of the Code requires the Minister to decide that a network be covered if the 'coverage criteria' are satisfied. The coverage criteria are satisfied if:

 access (or increased access) to covered services provided by means of the network would promote a material increase in competition in at least one market (whether or not

In its coverage application Alinta Energy refers to the following definition of the NWIS which is set out in section 2 of the Electricity Transmission and Distribution Systems (Access) Act 1994 (WA):

North West Interconnected System means the interconnected transmission and distribution systems, generating works and associated works –

⁽a) located in the Pilbara region of the State; and

⁽b) into which electricity is supplied by one or more of the electricity generation plants at Dampier, Port Hedland and Cape Lambert.

as expanded or altered from time to time.

in Western Australia) other than the market for the covered services provided by means of the network; and

- it would be uneconomic for anyone to develop another network to provide the covered services provided by means of the network; and
- access (or increased access) to the covered services provided by means of the network would not be contrary to the public interest.

The Code also requires the Minister to have regard to the geographical location of the network and the extent (if any) to which the network is interconnected with other networks.

1.2.2 Coverage determination process

Sections 3.8 to 3.29 of the Code set out the process the Minister must follow in making a coverage decision, including stages for public consultation and timeframes for decision making.

As required by the Code, Alinta Energy's coverage application was published on the Department Treasury website on 17 August 2017. The Minister also informed the following stakeholders of receipt of the coverage application:

- Horizon Power;
- ATCO Australia;
- BHP Billiton Limited;
- Economic Regulation Authority;
- Fortescue Metals Group;
- Rio Tinto Iron Ore; and
- TransAlta Energy (Australia) Pty Ltd.

A notice in the West Australian newspaper was published on 18 August 2017 advertising the coverage application and inviting the first of two rounds of public submissions that will be sought as part of the coverage process. Persons have until 2 October 2017 to make a submission to the first round of public submissions.

Following closure of the first round of public submissions, the Minister is required to publish a draft coverage decision within 15 business days, and invite public submissions on it. After the draft coverage decision is published, stakeholders have 15 business days to make a submission to the second round of public submissions.

Following the closure of the second round of public submissions, the Minister is required to make a final coverage decision within 15 business days. In making the final coverage decision the Minister must specify a date that the decision becomes effective, which must not be earlier than 10 business days after the date the final coverage decision is published.

A timetable for the coverage process is set out in Table 1. These dates are subject to change, as the Code empowers the Minister to extend the deadlines for individual stages where certain criteria are met.

Table 1. Coverage determination timetable

| Milestone | Timing |
|--|---------------------|
| Coverage application received | 4 August 2017 |
| Advertise the coverage application and invite submissions | 18 August 2017 |
| Publish Issues Paper | 15 September 2017 |
| Deadline for first round of submissions | 2 October 2017 |
| Publish and advertise draft coverage decision and invite submissions | By 23 October 2017 |
| Deadline for second round of submissions | By 13 November 2017 |
| Publish and advertise final coverage decision | By 4 December 2017 |

1.3 Issues Paper

This Issues Paper is published under the optional first round consultation stage contemplated by section 3.14 of the Code. It is intended to:

- provide guidance on matters relevant in assessing the coverage application against the coverage criteria; and
- assist stakeholders in understanding the requirements of the coverage criteria and seek comments on how the criteria apply to the network and the network services that are the subject of the coverage application.

All interested persons are encouraged to respond to the questions raised in this Issues Paper as well as raising any other matters they consider relevant to the application of the coverage criteria.

1.4 Making a submission

In accordance with section 3.16(b) of the Code, the Minister invites written submissions on the coverage application. Submissions will be considered before a draft coverage decision is made by the Minister on or before 23 October 2017.

Submissions must be provided to the Department of Treasury, Public Utilities Office, by 5:00pm (WST) on 2 October 2017.

Electronic copies of submissions are preferred and should be emailed to <u>PUOsubmissions@treasury.wa.gov.au</u>.

Alternatively, submissions can be sent to:

Attn: Zaeen Khan
Public Utilities Office
Department of Treasury
Locked Bag 11
Cloisters Square WA 6850

In the interests of transparency and to promote informed discussion, submissions will be made publicly available, unless the submitter requests otherwise. Accordingly stakeholders should clearly specify if information they provide is confidential, and, where possible should separate confidential information from non-confidential information.

Any claim for confidentiality should be clearly noted on the front page of the submission and the relevant section(s) of the submission should be marked as confidential, so the remainder of the document can be made publicly available. Where a submitter claims confidentiality over only part of a submission, it would be appreciated if a complete version and redacted version of the submission could be provided.

Persons making any claim for confidentiality should familiarise themselves with the provisions of the *Freedom of Information Act 1992* (WA), which imposes obligations on the Department of Treasury in respect to the release of documents.

Submissions will be available for public review at http://www.treasury.wa.gov.au/Public-Utilities-Office/Open-consultations-reviews/Electricity-Networks-Access-Code-Coverage-Application/.

Contact information, other than the submitter's name and organisation (where applicable) will not be published.

All enquiries may be directed to:

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2. Background

2.1 The North West Interconnected System

The NWIS comprises of interconnected electricity generation, transmission and distribution assets in the Pilbara region of Western Australia, including the major towns of Port Hedland and Karratha. The NWIS is made up of assets owned by many different parties, under both private and public ownership.

The NWIS is not centrally planned and operated and has developed in an ad hoc manner over several decades, as resources and energy companies made individual investments in generation capacity and network infrastructure to meet their own needs.

While the transmission infrastructure is somewhat interconnected, the interconnections are electrically weak, with a range of different voltages, multiple points of transformation and constrained capacity at many points of the system. Figure 1 below provides a high level overview of the infrastructure in the NWIS.



Figure 1. North West Interconnected System

Source: Compiled from publicly available information by Department of Treasury, Public Utilities Office

2.2 Industry structure

2.2.1 The generation sector

There are currently four companies operating eight generation facilities within the NWIS, as shown in Table 2.

Table 2. Generation connected to the NWIS²

| Owner/Operator | Location | Size |
|----------------|---|----------------------|
| Alinta Energy | Port Hedland ³ | 210MW (126MW + 84MW) |
| ATCO Australia | Karratha Power Station | 86MW |
| Rio Tinto | Dampier Power Station | 120MW |
| | Yarralyi Maya (Karratha Seven Mile) Power Station | 180MW |
| | Paraburdoo Power Station | 20MW |
| | West Angelas Mine Power Station | 89MW |
| TransAlta | South Hedland Power Station ⁴ | 150MW |

There is also one generation facility under development which is intended to be connected to the NWIS by 2019 – New Energy Corporation's 15MW waste to energy plant in the Boodarie Industrial Estate, Port Hedland.⁵ In addition to the generators connected to the NWIS, there are five large stand-alone generation facilities in the Pilbara region within close proximity as shown in Table 3.

Table 3. Large Stand-alone Generators

| Owner/Operator | Location | Size |
|---------------------------|-------------------------------------|-------|
| Alinta Energy | Newman Power Station | 178MW |
| ВНР | Yarmina Power Station (Newman) | 190MW |
| Fortescue Metals Group | Solomon Iron Ore Mine Power Station | 125MW |
| Woodside Energy | Karratha Gas Plant | 240MW |
| | Pluto Gas Plant | 160MW |

² Source: www.data.gov.au

³ Generator split amongst two localities in Port Hedland.

http://www.transalta.com/facilities/plants-operation/south-hedland-power-station/

http://www.newenergycorp.com.au/projects/pilbara-wa/

Horizon Power also supplies electricity to several small towns in the Pilbara region, through a combination of own-generation and purchasing electricity from other generators.

2.2.2 The retail sector

The retail electricity market of the NWIS is technically open to full retail contestability. This means that electricity retailers are permitted to offer electricity services to all electricity customers in the NWIS. This contrasts with the SWIS, where retailers other than Synergy are not permitted to supply electricity services to customers who consume less than 50MWh per year.

The State Government has a Uniform Tariff Policy that applies to small-use customers (residential and business) who consume less than 160MWh per year. Under the Uniform Tariff Policy, all small-use customers in Western Australia have access to regulated retail tariffs, which results in these customers paying the same prices for electricity regardless of geographical location.

The costs of supplying electricity to small-use customers in the regional and remote areas Horizon Power operates in are typically high and as a result, regulated retail tariffs are set at a level below the costs Horizon Power incurs in supplying electricity to its small-use customers. The overall shortfall between revenue Horizon Power earns from its small-use customers and the costs of supplying these customers is funded through the following two mechanisms.

- The Tariff Equalisation Contribution: An amount added to electricity network charges for customers in the SWIS. The Tariff Equalisation Contribution funds the difference between the efficient cost of supply of electricity to persons located outside the SWIS, and Horizon Power's actual revenues for supplying those persons.
- 2. The Tariff Adjustment Payment: A direct subsidy from the State Government to fund the difference between regulated retail tariffs and the efficient cost of supply within the SWIS.

Horizon Power is a vertically integrated business providing electricity to about 48,000 customers in regional and remote areas of Western Australia, including residential, commercial and major industry loads. Approximately 15,800 of these retail accounts are within the NWIS (see Table 4).

Table 4. Horizon Power NWIS Customer Profile

| Market segment | Number of accounts | Annual sales volume (GWh) |
|--|--------------------|------------------------------|
| Residential customers (Tariff A2 and K2) | 14,031 | 159 |
| Small business customers (Tariff L2) | 1,132 | 25 |
| Medium business customers (Tariff L4) | 389 | 99 |
| Large customers | 11 | 136 ⁶ |
| Government – medium business customers | 158 | 41 |
| Other tariff classes | 58 | 8 |
| Total | 15,779 | 468 |

Source: Information provided by Horizon Power on 31 August 2017.

Horizon Power is the electricity retailer for almost all of the customers connected to its network within the NWIS (Horizon Power NWIS network). Alinta Energy currently has access to limited services on a specific section of the Horizon Power NWIS network in the Port Hedland region of the NWIS under an existing agreement for the sole purpose of supplying a single large user (BHP Billiton).

Alinta Energy holds retail licences to sell electricity within the NWIS⁷ but does not have access to Horizon Power's NWIS network to sell electricity to any customers other than BHP Billiton.⁸ Alinta Energy supplies a small number of large-use customers on its transmission network in the NWIS, including the Roy Hill Mine.⁹

2.3 The network that is subject to the coverage application

As discussed above, there are multiple owners of electricity network infrastructure within the NWIS. Alinta Energy has made an application to the Minister to have the Horizon Power NWIS network covered under the Code.

The Horizon Power NWIS network extends from Dampier to Goldsworthy, via Karratha and Port Hedland. A lattice tower 220KV transmission line interconnects Cape Lambert Terminal, South Hedland Terminal and Hedland Terminal. A 132KV network interconnects Cape Lambert Terminal, Karratha Terminal, Bulgarra Substation, Pegs Creek Substation and Dampier Substation. A 66KV network interconnects Hedland Terminal, Wedgefield Substation, Anderson Street Substation, Murdoch Drive Substation and the Goldsworthy supply point.

Horizon Power's largest customer in this market segment, Fortescue Metals Group, has contracted with TransAlta Energy Australia Pty Ltd to receive supply from the recently constructed South Hedland Power Station. When this arrangement commences Horizon Power's annual sales volumes for this market segment will reduce by approximately 82GWh per annum.

See Electricity Integrated Regional Licences EIRL7 and EIRL8, held by Alinta DEWAP Pty Ltd and Alinta Sales Pty Ltd respectively, available at: https://www.erawa.com.au/electricity/electricity-licensing/licence-holders

Alinta Energy, Network Coverage Application for Horizon Power NWIS Network, 4 August 2017 ("Alinta Energy Coverage Application"), 3.

⁹ Alinta Energy Coverage Application, 3.

The Horizon Power NWIS network is interconnected with:

- the networks owned by Alinta Energy at Wedgefield Substation and Murdoch Drive Substation at 66kV;
- the networks owned by BHP Billiton at Wedgefield Substation, and Goldsworthy supply point at 66kV; and
- the networks owned by Rio Tinto at Cape Lambert Terminal and Dampier Substation at 33kV

Horizon Power supplies residential customers via Pegs Creek, Bulgarra, Dampier, Anderson Street, Wedgefield and Murdoch Drive Substations and Cape Lambert Terminal in three load areas: Karratha, Cape Lambert and Port Hedland. The undergrounding of Horizon Power's distribution network in these areas is expected to be completed by early 2018.

Questions for stakeholders

• Does Alinta Energy's coverage application define the network for which coverage is sought with sufficient clarity?

2.3.1 Current arrangements for access to the Horizon Power electricity networks within the NWIS

Horizon Power has previously indicated to the Public Utilities Office that it offers connection at 66kV and above in the Pilbara to all generators, retailers and users on an open access basis, with contracts determined by commercial negotiation. In respect to the distribution network, Horizon Power has a regulatory obligation to connect premises where the customer consumes 160MWh of electricity per annum or less, and the connection would not require the distribution network to be extended by more than 100 metres.

Prospective network users and existing users that wish to connect facilities to the transmission network at 66kV and above must submit an application to Horizon Power. Technical Rules published by Horizon Power specify the requirements that users and prospective users of Horizon Power's network must comply with, unless an exemption is granted.¹²

Horizon Power has previously expressed the view that its existing open access arrangement for persons seeking access to its transmission infrastructure is "consistent with the Code to the fullest extent possible given the particular physical and geographic limits of its network". Horizon Power has previously claimed that it applies the following mechanisms in providing open access to customers:

- an Electricity Transfer Access Contract that addresses both the provision of network services and the management of ancillary services in the absence of any electricity market mechanisms;
- a Network Pricing Model that can demonstrate minimal cross subsidy between the various users of the network;

Horizon Power, Application for Coverage of Alinta's East Pilbara Network (12 November 2014) [6] – [9]; Horizon Power, Discussion Paper on coverage of networks in the Pilbara (26 November 2014) ("Horizon Power Discussion Paper) 1.

Electricity Industry (Obligation to Connect) Regulations 2005 r 4 and 5.

Horizon Power, *Technical Rules for the Pilbara Grid and Microgrids* (March 2017) section 1.9.

¹³ Horizon Power Discussion Paper, 1.

- a pricing policy that requires Horizon Power to negotiate pricing that is "equal to, or less than, the stand-alone cost of service provision" if an applicant can demonstrate that the Network Pricing Model is not achieving this outcome;
- a capital contribution policy; and
- an application and queueing policy of first in, first processed.¹⁴

¹⁴ Horizon Power Discussion Paper, 1.

3. Issues for comment

3.1 The coverage criteria

Under section 3.5 of the Code, the Minister must decide that a network be covered if the Minister determines that each of the coverage criteria is satisfied. If a decision is made for a network to become covered, the network may be covered to a greater or lesser extent than that requested by the coverage applicant, provided such an outcome is consistent with the Code objective.¹⁵

The coverage criteria are set out in section 3.5 of the Code and are as follows:

- (a) Would access (or increased access) to covered services provided by means of the network promote a material increase in competition in at least one market (whether or not in Western Australia) other than the market for the covered services provided by means of the network?
- (b) Would it be uneconomic for anyone to develop another network to provide the covered services provided by means of the network?
- (c) Would access (on increased access) to covered services provided by means of the network not be contrary to the public interest?

In making a coverage decision the Minister must have regard to the geographical location of the network and the extent (if any) to which the network is interconnected with other networks.¹⁶

For the purpose of the coverage criteria, the phrase 'covered services' is defined as "a service in relation to the transportation of electricity provided by means of a covered network, including:

- (a) a connection service; or
- (b) an entry or exit service; or
- (c) a network use of system service; or
- (d) a common service; or
- (e) a service ancillary to a service listed in paragraphs (a) to (d) above,

but does not include an excluded service."

In the specific circumstances of the Horizon Power NWIS network, it may be important to give consideration as to whether the covered services may differ as and between transmission and distribution network services. In addition, consideration might need to be given to whether the Horizon Power NWIS network is effectively a set of interlinked networks given physical constraints, and so the services differ between those markets.

¹⁵ Electricity Networks Access Code 2004 section 3.4.

¹⁶ Electricity Networks Access Code 2004 section 3.6.

Questions for stakeholders

- Are there effectively different networks within the Horizon Power NWIS network for which access is being sought?
- Should covered services be split into a transmission network use of system service and a distribution network use of system service?

3.2 Interpretation of the coverage criteria

The coverage criteria of the Code bear similarities to the criteria for triggering regulation under other Australian third-party access regimes, for example:

- the criteria for declaration of a service under Part IIIA of the *Competition and Consumer Act 2010* (Cth) (National Access Regime); and
- the pipeline coverage criteria under the National Gas Law.¹⁷

Relevantly, these two national schemes require decision makers to consider similar criteria in respect to the promotion of a material increase in competition, duplication of the relevant facility being uneconomic, and the public interest, as those contained in section 3.5 of the Code.

The National Competition Council is the decision maker at first instance with respect to declaration and coverage issues under the National Access Regime and National Gas Law respectively. The National Competition Council has made numerous decisions under both regimes in respect to gas, ports, rail and airport infrastructure. The National Competition Tribunal and Federal Court of Australia have also decided a number of associated appeals.

Further, the High Court has provided judicial guidance on the interpretation of the National Access Regime declaration criteria, most recently in the case of *The Pilbara Infrastructure Pty Ltd v Australian Competition Tribunal*¹⁸ (Pilbara Rail Decision).

These decisions have established a body of precedent that can provide guidance in applying the Code's coverage criteria to the Horizon Power NWIS network.

3.3 Criterion (a): Promotion of a material increase in competition

3.3.1 Assessment approach

Section 3.5(a) sets out the first criterion that must be satisfied in order for a network to become covered. To satisfy the criterion set out in section 3.5(a), access (or increased access) to the covered services provided by means of the network must promote a material increase in competition in at least one market (whether or not in Australia), other than the market for covered services provided by means of the network.

This criterion enables the Minister to decide that a network not be covered if access would not materially enhance the conditions or environment for competition in any market. The rationale for this criterion is that the imposition of costs associated with an access arrangement for covered services is only warranted where there are, or will be greater competition in at least one market (apart from the market for the particular network service) that leads to consumer

¹⁸ [2012] HCA 36.

¹⁷ See National Gas Access (WA) Act 2009, Note - Western Australian National Gas Access Law Text, section 15.

benefits.¹⁹ For an electricity network, providing access to covered services may promote competition in the upstream electricity generation market and/or downstream electricity retail markets.

The comparable criterion in the National Access Regime was recently considered by the Full Court of the Federal Court in the case of *Port of Newcastle Operations Pty Ltd v Australian Competition Tribunal.*²⁰ That case involved an application by Port of Newcastle Operations Pty Ltd for review of a decision of the Australian Competition Tribunal to declare the Port of Newcastle for a period of 15 years. The Court, in upholding the decision of the Australian Competition Tribunal, made clear that the "material increase in competition" criterion requires a consideration of whether competition would be promoted by having access (or increased access) to the service for which access is sought, as compared to the circumstance where there is no access (or less access).²¹

It follows that this criterion requires an assessment to be undertaken of whether access to covered services would promote more competitive outcomes, such as lower prices, in another market.

Whether competition will be materially increased in a dependent market or markets is reliant on the extent to which a network service provider can and is likely to, in the absence of coverage, use market power to limit competition in the dependent market or markets. If the network service provider has market power, as well as the ability and incentive to use that power to adversely affect competition in a dependent market, then coverage may improve the environment for competition, offering the prospect of tangible benefits to consumers. In assessing whether this criterion is satisfied, it will be necessary to:

- identify the relevant dependent market or markets where access (or increased access) to the Horizon Power NWIS network may increase competition;
- confirm that the dependent market(s) are separate from the market(s) for the covered services provided by means of the Horizon Power NWIS network; and
- determine if access (or increased access) to the Horizon Power NWIS network would promote a more competitive environment in each dependent market in order to determine whether such access would materially promote competition in those markets.

A related consideration is whether effective competition in dependent markets is already provided by another means. For example, it could be relevant to consider the extent of competition in the broader energy market that includes electricity services provided by means of the network as well as other significant energy sources such as gas and electricity supply from self-generation.

3.3.2 Applicant's position

In its coverage application Alinta Energy submits that access to covered services provided by means of the Horizon Power NWIS network would promote a material increase in competition in the market for the retail supply of electricity to customers supplied using the Horizon Power NWIS network ("the Horizon Power NWIS retail market").

²¹ Ibid, [138] – [140].

¹⁹ For example, lower prices or better quality goods and services in any relevant market.

²⁰ [2017] FCAFC 124.

Alinta Energy submits that full retail contestability exists in the NWIS because there is no regulatory prohibition on retailers entering the market to supply retail loads of any size, and there are a range of regulatory instruments in place to facilitate the retail sale of electricity. Alinta Energy points to its electricity retail licence and access to electricity from its Port Hedland Power Station as indicators of its capacity to supply customers in the Horizon Power NWIS retail market. Alinta Energy claims that the inability to obtain access to the Horizon Power NWIS network is the only factor preventing it from entering the Horizon Power NWIS retail market.

Alinta Energy states that electricity consumers currently supplied through the Horizon Power NWIS network have expressed interest in the opportunity to choose between retailers, and that Alinta Energy has pre-signed electricity contracts with four customers since 2016.

Alinta Energy estimates that coverage of the Horizon Power NWIS network could result in new entrants acquiring a 30 per cent market share in Horizon Power's large-use tariff customers²² over a 15 year period. In terms of electricity volume, Alinta estimates that new entrants could supply at least 80GWh per annum in the first 10 years of competition, growing to 110GWh per annum after 15 years of competition.

Alinta Energy submits that the estimated load acquisition by new entrants of 80GWh to 110GWh per annum would comprise a significant portion of the electricity customers supplied through the Horizon Power NWIS network, representing a material increase in competition as compared with the alternative where Horizon Power remains the monopoly retailer.

Alinta Energy's coverage application did not consider the extent of alternative sources of energy supplies affecting the level of competition for network services, including customers pursuing self-supply options, such as building their own generators and network assets.

Alinta Energy's coverage application also did not consider implications for competition in the electricity generation market if the Horizon Power NWIS network becomes covered under the Code.

Questions for stakeholders

- Will access to the Horizon Power NWIS network promote competition in another market or markets? What is the nature of those markets?
- Is there already significant competition in those markets?
- Are there different related markets for transmission as compared to distribution services, and what is the nature of these different markets?
- Do other sources of energy, such as natural gas or self-supply options, provide effective competition in supply of electricity in the NWIS?
- If you are a generator or electricity retailer, would you be interested in seeking access to the services of the Horizon Power NWIS network now or in the foreseeable future?
- Would the service quality and/or prices in another market be improved as a result of access to the Horizon Power NWIS network? How would this occur?

More specifically, customers supplied on the L4 and P2 tariffs, and customers who were previously supplied on the M2 tariff.

3.4 Criterion (b): Uneconomic to duplicate

3.4.1 Assessment approach

The criterion in section 3.6(b) of the Code requires consideration of whether it would be uneconomic for anyone to develop another network to provide the covered services necessary to compete in a related market.

This criterion closely mirrors criterion (b) in sections 44G(2)(b) and 44H(4)(b) of the *Competition and Consumer Act 2010* (Cth) (CCA), which the High Court recently considered in the Pilbara Rail Decision. In that decision the High Court overturned previous approaches adopted by the National Competition Council and appeal bodies that interpreted this criterion in a way that focused on the waste of Australian society's resources associated with duplication of facilities exhibiting natural monopoly characteristics. That is, where a single facility could meet all likely demand for a service at lesser cost than two or more facilities.²³

In the Pilbara Rail Decision the High Court determined that the test required by this criterion is one of "private profitability", rather than a natural monopoly test in the economic sense. The Court was of the view that the criterion uses the term "uneconomic" to mean "unprofitable", and is to be read as requiring the decision maker to be satisfied that there is not anyone for whom it would be profitable to develop another facility.²⁴

Given close similarity between the "uneconomic to duplicate" criterion of the national access regime and section 3.5(b) of the Code, the Pilbara Rail Decision is of relevance when considering the application of section 3.5(b) to the Horizon Power NWIS network. Pursuant to the approach taken in the Pilbara Rail Decision, the issue that lies to be determined in applying section 3.5(b) of the Code to the Horizon Power NWIS network is whether it would be privately profitable for anyone to develop another distribution and transmission network to provide the covered services needed to compete in a related market, and which are currently available from the Horizon Power NWIS network, on a stand-alone basis or as part of a larger project.

In order to effectively consider this criterion in this way, it will be necessary to obtain information about the cost of duplicating all or parts of the Horizon Power NWIS network. The National Competition Council's *Guide to Declaration of Services* provides some information on what type of information may be necessary to assess whether the private profitability test is satisfied. The National Competition Council suggests that information will be required about:

- the expected capital and operating costs of developing and operating a new facility;
- the projected use of the facility and revenues;
- the required rates of return on the debt and equity necessary to finance the development of the facility; and
- the basis for such estimates and the assumptions underlying them.²⁵

National Competition Council, A Guide to Declaration of Services Under Part IIIA of the Competition and Consumer Act 2010 (Cth) (February 2013) ("Guide to Declaration of Services") 37.

²⁴ Pilbara Rail Decision at [77].

Guide to Declaration of Services, 38.

According to the National Competition Council, the assessment of profitability should relate at least to the period for which coverage is sought but may be referrable to another time period, for example the timeframe an investor or financier utilises in making their investment decision or the likely operating life of a new facility.²⁶

The National Competition Council is also of the view that where development of a new facility is unprofitable on a stand-alone basis, but considered to be profitable as an integrated part of a larger project, the assessment of profitability should include consideration of the impact of the cost of developing the new facility on overall project profitability.²⁷

3.4.2 Applicant's position

Alinta Energy submits that criterion (b) of the Code should be interpreted in accordance with the private profitability test articulated in the Pilbara Rail Decision, because criterion (b) is expressed in virtually identical terms to section 44G(2)(b) of the CCA, and the Code is a certified effective access regime under Part IIIA of the CCA. Alinta Energy also considers the NCC's guidance on section 44G(2)(b) of the CCA to be relevant to the application of the private profitability test in the context of criterion (b) of the Code.²⁸

Applying the private profitability test, Alinta Energy considers that development of a separate new facility (by anyone) is infeasible due to existing physical barriers, such as access rights, tenure, and the physical availability of land in congested urban areas.²⁹ Alinta Energy also undertook a modelling exercise which purports to demonstrate that, even if these physical barriers could be overcome, the costs incurred by anyone in duplicating the Horizon Power NWIS network would be so high as to render the venture uneconomic.

Alinta Energy's modelling exercise considers a scenario where network duplication costs of \$1.194 billion are sought to be recovered over a 15 year period, assuming acquisition by the new provider of a 30 per cent retail market share over that period and a six percent cost of capital discount rate. Under the scenario, the projected revenues received over the 15 year period are insufficient to recover the investment incurred to duplicate the network, resulting in a negative net present value of \$1.062 billion at the 15 year mark. Alinta Energy submits that this shows that duplication of the Horizon Power NWIS network (by anyone) is in no way close to being profitable or economic.

The results of the modelling scenario are dependent on a number of key assumptions made by Alinta Energy, including:

- an assumption of no load growth over the modelling period;
- how the six percent cost of capital rate is derived and whether this is reflective of the expected market returns for an efficient network business;
- the estimated \$1.194 billion network development cost;
- various other assumptions of transmission and distribution network line lengths, number
 of substations and switch yards required to support the network and the variable operating
 costs.

²⁶ Guide to Declaration of Services, 39.

²⁷ Guide to Declaration of Services, 39.

²⁸ Alinta Energy Coverage Application, 12.

²⁹ Alinta Energy Coverage Application, 12.

It is appropriate for these assumptions to be tested in considering the application of criterion (b) to the Horizon Power NWIS network.

Alinta Energy's analysis also appears to assume that the dependent retail market will include customers from both the transmission and distribution network. That is, its modelling exercise does not treat the transmission and distribution networks on a stand-alone basis. The distinction between the transmission and distribution network assets may have consequences for determining the profitability of duplicating the network to provide services for different types of customers that are connected, or may connect, to either of the networks.

Questions for stakeholders

- What evidence is there that it would, or would not, be privately profitable for any party to develop another network to provide the same network services as provided by the Horizon Power NWIS network, as needed to compete in a related market, on a standalone basis?
- Is it appropriate to consider the duplication of the transmission and distribution networks separately for the purpose of the private profitability test?
- Are the assumptions Alinta Energy has used to support its conclusion that duplication of the network is profitable, reasonable?
- Would it be privately profitable to duplicate transmission assets used to service large customers in the Karratha and Port Hedland regions?
- Are there any factors likely to emerge in the foreseeable future that will affect the cost and profitability of duplicating the network?

3.5 Criterion (c): Public interest test

3.5.1 Assessment approach

The criterion in section 3.5(c) of the Code requires consideration to be given to whether access (or increased access) to the covered services provided by means of the network would not be contrary to the public interest.

The phrase "public interest" is not defined in the Code or the *Electricity Industry Act 2004* (WA). In the context of the national access regime, which features a similarly constructed (and undefined) public interest criterion, the concept of the public interest has been viewed until recently as essentially consisting of an economic analysis that requires an assessment of whether the benefits of access (or increased access) outweigh the costs, where:

- the benefits of access include any identified benefits under the other declaration criteria and other benefits not captured by these criteria that are in the public interest; and
- the costs of access include: the direct costs of regulation; disruption costs; and losses in allocative, productive or dynamic efficiency.³⁰

However, following the Pilbara Rail Decision it is clear the application of the public interest criterion does not consist of a detailed technical examination of the economic costs and benefits of access. Rather, the task under this criterion is more akin to identifying any matters

³⁰ Guide to Declaration of Services, 46.

that could mean access (or increased access) might be contrary to the public interest and then assessing whether the likelihood and consequences of those matters lead to a conclusion that access is contrary to the public interest. While an examination of the economic benefits and costs of access may be a relevant matter in making that assessment, the Pilbara Rail Decision indicates that the concept of the public interest can encompass a very wide range of matters.³¹

More specifically the Pilbara Rail Decision suggests that the scope of matters relevant in applying the public interest criterion is unconfined, except for matters that are definitively extraneous given the subject matter, scope and purpose of the applicable legislation.³² Considering the breadth of the concept of the public interest, it is not practical to exhaustively list all the matters that may be relevant to an assessment of whether coverage of the Horizon Power NWIS network would be contrary to the public interest.

In its *Guide to Declaration of Services*, the National Competition Council suggests the principal factors relevant to the public interest test include:

- economic efficiency arising from promotion of competition;
- regulatory costs associated with establishing an access arrangement, negotiating access and arbitrating disputes;
- disruption costs where access may involve some disruption to the operations of the network service provider and potentially other parties; and
- investment effects to ensure that the risk of investments in infrastructure are not distorted without access rights.

The National Competition Council also notes the following matters, expressed in the *Competition Principles Agreement*, which may be relevant to the concept of the public interest:

- ecologically sustainable development;
- social welfare and equity considerations, including community service obligations;
- government legislation and policies relating to matters such as occupational health and safety, industrial relations and access and equity;
- the interest of consumers generally or of a class of consumers;
- the competitiveness of Australian businesses; and
- the efficient allocation of resources.³³

In the context of the coverage application for the Horizon Power NWIS network, factors relevant to the public interest may include:

- social welfare and equity considerations; and
- government policies relating to access and equity.

³¹ Pilbara Rail Decision, [42].

³² Pilbara Rail Decision, [42].

Declaration of Services Guide, 46.

As discussed in Chapter 2 of this Issues Paper, a Uniform Tariff Policy applies to all small-use customers in Western Australia. Under the Uniform Tariff Policy, residential and small business customers located in regional areas are subsidised in part through increased network tariffs charged to customers located in the SWIS (the Tariff Equalisation Contribution).

If the Horizon Power NWIS network becomes covered under the Code, additional costs will be imposed on Horizon Power, for example the costs of preparing an access arrangement proposal and complying with an access arrangement following approval by the Economic Regulation Authority. Pursuant to the Uniform Tariff Policy, any additional Horizon Power costs arising from coverage are likely to be passed on to customers in the SWIS, via an increase in the Tariff Equalisation Contribution, in order to maintain equal pricing for small-use customers in the SWIS and NWIS. This possibility emerges as a factor relatively unique to the circumstances of the present application that may be of relevance in considering the public interest.

3.5.2 Applicant's position

Alinta Energy submits that access to covered services provided by means of the Horizon NWIS network would not be contrary to the public interest, because the promotion of competition in the Horizon NWIS retail market would have substantial benefits for consumers, including the ability to choose their retailer and reduced prices.

Alinta Energy commissioned an economic study which purports to quantify the benefits that Alinta Energy's competitive entry in the Horizon Power NWIS retail market would bring to the Pilbara. The study considers a scenario where Alinta Energy competes with Horizon Power in not only the large commercial customer market segment, but also the small commercial customer and residential customer market segments. The study found that such competition would result in the following economic benefits for the Pilbara region:

- \$240 million of direct energy cost savings to electricity customers over 10 years;
- a \$140 million contribution to economic growth over 10 years; and
- the creation of 22 new (indirect) jobs.

Alinta Energy also submits that in addition to these direct benefits, increased competition will result in:

- improved customer service for energy consumers;
- more innovative and responsive retail products as retailers compete to acquire and retain customers:
- efficiency improvements in the wholesale acquisition of energy by retailers; and
- tariffs that more accurately reflect the cost to supply customers.

Alinta Energy's modelling results are based on a number of key assumptions, including an assumption that electricity prices in the Horizon NWIS retail market will reduce by 10% following Alinta Energy's entry into that market.

Alinta Energy acknowledges that the introduction of competition is likely to impose some regulatory costs on Horizon Power and the State, however it argues that these costs should be weighed against the economic benefits associated with competition. Alinta Energy also believes the introduction of competition would be beneficial because it would result in the State

no longer being responsible for underwriting the costs of new generation capacity to meet demand for customers connected to the Horizon Power NWIS network.

Questions for stakeholders

- What factors are relevant to the public interest assessment of determining coverage of the Horizon Power NWIS network?
- What weight should be given to equity considerations and government policies relating to the Uniform Tariff Policy that impact on electricity customers located within the SWIS?
- Are the assumptions made by Alinta in assessing the likely effects from competitive entry reasonable?
- What are the likely effects of competitive entry in the Horizon Power NWIS retail market for residential, commercial and industrial customers?

3.6 Geographical location of the network and extent of interconnectedness

Section 3.6 of the Code requires the Minister, when exercising functions under Chapter 3 of the Code, to have regard to the geographical location of the network and the extent (if any) to which the network is interconnected with other networks.

As discussed above, the Horizon Power NWIS network is located in the north coastal area of the Pilbara, extending from Dampier to Goldsworthy, via Karratha and Port Hedland.

The Horizon Power NWIS network is interconnected with:

- the networks owned by Alinta Energy at Wedgefield Substation and Murdoch Drive Substation at 66kV;
- the networks owned by BHP Billiton at Wedgefield Substation, and Goldsworthy supply point at 66kV; and
- the networks owned by Rio Tinto at Cape Lambert Terminal and Dampier Substation at 33kV.

Questions for stakeholders

- Are any factors associated with the geographical location of the Horizon Power NWIS
 network relevant to the Minister's decision as to whether that network should be covered
 under the Code?
- Are any factors associated with the extent of interconnection of the Horizon Power NWIS
 network with other networks relevant to the Minister's decision as to whether that network
 should be covered under the Code?

Appendix – List of questions for stakeholders

- 1. Does Alinta Energy's coverage application define the network for which coverage is sought with sufficient clarity?
- 2. Are there effectively different networks within the Horizon Power NWIS network for which access is being sought?
- 3. Should covered services be split into a transmission network use of system service and a distribution network use of system service?
- 4. Will access to the Horizon Power electricity network within the NWIS promote competition in another market or markets? What is the nature of those markets?
- 5. Is there already significant competition in those markets?
- 6. Are there different related markets for transmission as compared to distribution services, and what is the nature of these different markets?
- 7. Do other sources of energy, such as natural gas or self-supply options, provide effective competition in supply of electricity in the NWIS?
- 8. If you are a generator or electricity retailer, would you be interested in seeking access to the services of the Horizon Power NWIS network now or in the foreseeable future?
- 9. Would the service quality and/or prices in another market be improved as a result of access to the Horizon Power electricity network within the NWIS? How would this occur?
- 10. What evidence is there that it would, or would not, be privately profitable for any party to develop another network to provide the same network services as provided by Horizon Power through the electricity network within the NWIS, on a stand-alone basis?
- 11. Is it appropriate to consider the duplication of the transmission and distribution networks separately for the purpose of the private profitability test?
- 12. Are the assumptions Alinta Energy has used to support its conclusion that duplication of the network is profitable, reasonable?
- 13. Would it be privately profitable to duplicate transmission assets used to service large customers in the Karratha and Port Hedland regions?
- 14. Are there any factors likely to emerge in the foreseeable future that will affect the cost and profitability of duplicating the network?
- 15. What factors are relevant to the public interest assessment of determining coverage of the Horizon Power NWIS network?
- 16. What weight should be given to equity considerations and government policies relating to the Uniform Tariff Policy that impact on electricity customers located within the SWIS?

- 17. Are the assumptions made by Alinta in assessing the likely effects from competitive entry reasonable?
- 18. What are the likely effects of competitive entry in the Horizon Power NWIS retail market for residential, commercial and industrial customers?
- 19. Are any factors associated with the geographical location of the Horizon Power NWIS network relevant to the Minister's decision as to whether that network should be covered under the Code?
- 20. Are any factors associated with the extent of interconnection of the Horizon Power NWIS network with other networks relevant to the Minister's decision as to whether that network should be covered under the Code?