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

# **Issues Paper**

5 December 2014



#### **Disclaimer**

#### © State of Western Australia

The information, representations and statements contained in this publication have been prepared by the Department of Finance, Public Utilities Office at the request of the Minister for Energy (the Minister). It is provided to assist in obtaining public comment on, and contains only a general discussion of issues relating to, an application made under the *Electricity Networks Access Code 2004* of Western Australia for coverage of a network owned by the Regional Power Corporation ("coverage application"). The issues discussed in this document are under consideration by the Minister and may be modified, discarded or supplemented by other issues during the course of the Minister's determination of the coverage application.

Any views expressed in this publication are not necessarily the views of the State of Western Australia, the Western Australian Government (including the Minister), nor do they reflect any interim, firm or final position adopted by the Minister in connection with the issues relevant to his determination of the coverage application. The State of Western Australia, the Minister, the Department of Finance, and their respective officers, employees and agents:

- (a) make no representation or warranty as to the accuracy, reliability, completeness or currency of the information, representations or statements in this publication (including, but not limited to, information which has been provided by third parties); and
- (b) shall not be liable, in negligence or otherwise, to any person for any loss, liability or damage arising out of any act or failure to act by any person in using or relying on any information, representation or statement contained in this publication.

# **Table of contents**

DISCLAIMERII				
1. IN	TRODUCTION	1		
1.1.	COVERAGE APPLICATION	1		
1.2.	COVERAGE DECISION PROCESS AND TIMETABLE	1		
1.3.	This Issues Paper	3		
1.4.	MAKING A SUBMISSION	3		
2. BA	ACKGROUND	5		
2.1.	THE NORTH WEST INTERCONNECTED SYSTEM	5		
2.2.	INDUSTRY STRUCTURE	5		
2.3.	THE NETWORK THAT IS SUBJECT TO THE COVERAGE APPLICATION	8		
3. ISS	SUES FOR COMMENT	10		
3.1.	THE COVERAGE CRITERIA	10		
3.2.	PRECEDENT ON INTERPRETATION OF THE COVERAGE CRITERIA	11		
3.3.	CRITERION ON MATERIAL INCREASE IN COMPETITION IN A DEPENDANT MARKET	11		
3.4.	CRITERION ON UNECONOMIC DUPLICATION OF THE NETWORK			
3.5.	CRITERION ON PUBLIC INTEREST	16		
APPENI	DIX 1 – LIST OF QUESTIONS FOR STAKEHOLDERS	20		
Inde	ex of tables			
Table 1	1: Coverage determination timetable	2		
Table 3	2: Harizon Power NWIS customer profile 2014-15	7		

#### 1. Introduction

#### 1.1. Coverage application

The *Electricity Networks Access Code 2004* (the Code) allows a "coverage" application to be made to the Minister for Energy (the Minister) requesting that the whole or any part of an electricity network be covered. If a network is covered it is regulated and must have an approved access arrangement in place that sets out the undertakings made by the network service provider, including terms, conditions and prices that apply to the covered services of the network.

Currently the only network in Western Australia covered under the Code is the network assets belonging to Western Power within the South West Interconnected System.

On 24 October 2014, the Minister received an application from Alinta Energy for coverage under the Code of the electricity transmission and distribution assets owned and operated by Horizon Power in the Port Hedland and Karratha region. These network assets form part of the North West Interconnected System (NWIS) in the Pilbara region.

This Issues Paper relates to this coverage application and is published by the Department of Finance – Public Utilities Office for and on behalf of the Minister for Energy.

#### 1.2. Coverage decision process and timetable

#### 1.2.1. Criteria for coverage

Section 3.5 of the Code requires the Minister to approve a coverage application if the "coverage criteria" are satisfied. The coverage criteria are satisfied if:

- access to covered services on the electricity network would 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 the network; and
- it would be uneconomic for anyone to develop another network to provide the covered services provided by means of the network to which the coverage application pertains; 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 process

Sections 3.8 to 3.29 of the Code set out the process the Minister must follow in making a coverage decision. The Code also establishes stages for public consultation and timeframes for decision-making by the Minister.

Alinta Energy's coverage application was published on 30 October 2014 on the Department of Finance website.

The Minister informed the following parties that the coverage application has been received:

- Horizon Power;
- ATCO Power Australia;
- BHP Billiton:
- · Economic Regulation Authority;
- Pilbara Infrastructure;
- · Rio Tinto; and
- TransAlta.

A notice in The West Australian newspaper was published on 7 November 2014 advertising the coverage application and inviting "first round" submissions. Persons have 10 business days to make submissions on the coverage application from the date of this Issues Paper, with a closing date for submissions on 19 December 2014.

Following closure of first round submissions, the Code requires the Minister to publish a draft coverage decision within 15 business days.

After the draft coverage decision is published, stakeholders then have 15 business days to make a "second round" submission on the draft coverage decision.

From close of second round submissions, a final coverage decision is required within 15 business days. In making the final coverage decision, the Minister must specify a date that the decision becomes effective. Under section 3.23 of the Code, this date cannot be earlier than 10 business days after that of the final coverage decision. The timetable for all stages of the coverage process is shown in Table 1.

Under section 3.28 of the Code the Minister has a limited ability to alter some or all of the deadlines and stages of the coverage process.

Table 1: Coverage determination timetable

TASK	DATE
Publish and advertise coverage application and invite submissions	7 November 2014
Publish issues paper	5 December 2014
First round submissions on coverage application and Issues Paper due	19 December 2014
Publish and advertise draft coverage decision and invite submissions	By 14 January 2015
Second round submissions on draft coverage decision due	By 5 February 2015
Publish and advertise final coverage decision	By 26 February 2015

#### 1.3. This Issues Paper

This Issues Paper:

- is published under the optional first round consultation stage in section 3.14 of the Code;
- is intended to provide guidance on matters relevant in assessing the coverage application against the coverage criteria; and
- has been prepared to assist the understanding of the requirements of the coverage criteria
  and to seek comment on how the criteria apply to the network and the network services that
  are the subject of the 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, written submissions are invited on the coverage application. Submissions will be considered before a draft coverage decision is made by the Minister on or before 14 January 2015.

Submissions must be provided to the Department of Finance, Public Utilities Office, by 5.00 pm (WST) on 19 December 2014.

Electronic copies of submissions are preferred and should be emailed to <a href="mailto:PUOsubmissions@finance.wa.gov.au">PUOsubmissions@finance.wa.gov.au</a>.

Alternatively, submissions can be sent to:

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

In the interests of transparency and to promote informed discussion, submissions will be made publicly available. If a person making a submission does not want that submission to be public, that person must make a claim for confidentiality in respect of the document (or a clearly designated part of the document). Claims for confidentiality should be clearly noted on the front page of the submission and the relevant sections of the submission should be marked as confidential, so that the remainder of the document can be made publicly available. In that circumstance it would also be appreciated if two copies of the submissions could be provided: one complete version and a version in which the confidential information is excised. Persons making any claim for confidentiality should familiarise themselves with the provisions of the *Freedom of Information Act* 1992 (WA), which imposes a range of obligations on the Department of Finance in relation to the production of documents.

Submissions will be available for public review at <a href="www.finance.wa.gov.au/publicutilitiesoffice">www.finance.wa.gov.au/publicutilitiesoffice</a>. Contact information, other than your name and organisation (where applicable) will not be published.

All enquiries may be directed to:

Zaeen Khan Specialist Regulation Public Utilities Office Ph: (08) 6551 4661

Ph: (08) 6551 4661 Email: Zaeen.Khan@finance.wa.gov.au

### 2. Background

#### 2.1. The North West Interconnected System

The NWIS includes 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 includes assets owned by many different parties, under both private and public ownership.

The NWIS is not centrally planned and operated and has developed on an ad-hoc basis with each industry participant developing 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.

#### 2.2. Industry structure

#### 2.2.1. The generation sector

Electricity generators in the NWIS include the following.

- Alinta Energy's generators consisting of 210MW (5 x 42MW) gas turbines spread across two locations in Port Hedland.<sup>1</sup> Alinta Energy currently supplies BHP Billiton via Horizon Power's network, as well as offering non firm capacity to Horizon Power.<sup>2</sup>
- ATCO Power Australia's 86MW Karratha power station supplies all output to Horizon Power under a long term power purchase agreement.<sup>3</sup>
- Rio Tinto's 108MW Yurralyi Maya (7 Mile) power station is designed to supply the company's mining operations.<sup>4</sup> The power station is connected to the Horizon Power electricity network and is able to supply limited power supplies and support services.
- Horizon Power has 20MW of temporary generation plant at Karratha<sup>5</sup> and 60MW of temporary generation plant at Port Hedland.<sup>6</sup>

Two further generation plants are planned to be connected in the NWIS.

 TransAlta's future 150MW expandable combined cycle gas turbine power station, currently under construction and expected to be fully online by 2017.<sup>7</sup> Horizon Power has a power

<sup>1</sup> https://alintaenergy.com.au/wa/about-us/power-generation/port-hedland

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> <a href="http://www.atco.com.au/Our-Business/Power-Generation/ATCO-Power-Australia">http://www.atco.com.au/Our-Business/Power-Generation/ATCO-Power-Australia</a>

<sup>4</sup> http://www.riotinto.com/media/media-releases-237\_6022.aspx

<sup>&</sup>lt;sup>5</sup> http://www.horizonpower.com.au/news\_more\_power\_pilbara.html

<sup>&</sup>lt;sup>6</sup> <u>http://www.horizonpower.com.au/2129.html</u>

<sup>&</sup>lt;sup>7</sup> http://www.transalta.com/facilities/facilities-development/south-hedland-power-station

purchase agreement with TransAlta for 110MW of capacity, with Fortescue Metals Group expected to take up to 35MW capacity to meet its port electricity supply requirements.<sup>8</sup>

• New Energy Corporation's planned 15MW waste to energy plant in the Boodarie industrial Estate in Port Hedland in 2015 to supply commercial users.<sup>9</sup>

There are several other generators in the region that are not connected into the NWIS. Notable generation facilities are described below.

- Woodside's Burrup Peninsula 240MW and Pluto 160MW gas-fired power plants servicing North West Shelf operations.<sup>10</sup>
- CITIC Pacific's/Mineralogy's 450MW combined cycle gas turbine plant servicing iron ore processing and port operations in Cape Preston.<sup>11</sup>
- BHP Billiton's 190MW Yarmina combined cycle gas turbine plant in Newman servicing BHP Yandi and Area C mining operations and supplying the town of Newman.<sup>12</sup>
- Alinta Energy's 178MW open-cycle gas-fired power station supplying the town of Newman,<sup>13</sup> and soon to provide the long-term power supply requirements of the Roy Hill Mine.
- TransAlta's Solomon Mine 125MW gas/diesel power plant supplying Fortescue Mining Group's Solomon region operations.<sup>14</sup>

Horizon Power either owns electricity generation facilities or purchases energy from contract generators for several small towns in the Pilbara region that are not connected to the NWIS.

#### 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 able to offer electricity supply services to all electricity customers in the NWIS.<sup>15</sup>

 $^{12} \ \underline{\text{http://www.bhpbilliton.com/home/investors/news/Pages/Articles/New-Power-Station-for-Western-Australia-Iron-Ore.aspx}$ 

Integrated Regional Licence application by TEC Hedland Pty Ltd (wholly owned subsidiary of Transalta Energy Australia Pty Ltd), p. 27:
<a href="http://www.erawa.com.au/cproot/12852/2/Public%20Version%20of%20application%20for%20Integrated%20Regional%20Licence%20-%20TEC%20Hedland%20Pty%20Ltd.PDF">http://www.erawa.com.au/cproot/12852/2/Public%20Version%20of%20application%20for%20Integrated%20Regional%20Licence%20-%20TEC%20Hedland%20Pty%20Ltd.PDF</a>

<sup>9</sup> New Energy Corporation, The Pilbara Waste to Energy Project. <a href="http://www.newenergycorp.com.au/projects/pilbara-wa/">http://www.newenergycorp.com.au/projects/pilbara-wa/</a>

<sup>&</sup>lt;sup>10</sup> Evans & Peck, Assessment of the potential for renewable energy projects and systems in the Pilbara, Report to the Australian Centre for Renewable Energy, October 2011, Table 2, pp. 31-32.

<sup>11</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> https://alintaenergy.com.au/wa/about-us/power-generation/newman

<sup>&</sup>lt;sup>14</sup> Integrated Regional Licence application by TEC Hedland Pty Ltd (wholly owned subsidiary of Transalta Energy Australia Pty Ltd), p. 8: <a href="http://www.erawa.com.au/cproot/10758/2/20120913%20-%20D95239%20-%20Licence%20Application%20-%20EIRL005%20-%20TEC%20Pipe%20Pty%20Ltd%20-%20FOR%20PUBLICATION.pdf">http://www.erawa.com.au/cproot/10758/2/20120913%20-%20D95239%20-%20Licence%20Application%20-%20EIRL005%20-%20TEC%20Pipe%20Pty%20Ltd%20-%20FOR%20PUBLICATION.pdf</a>

The State Government has a uniform tariff policy that provides for small-use residential and business customers<sup>16</sup> across Western Australia to pay the same retail electricity tariffs regardless of location. As a result of higher electricity supply costs in many regional areas of Western Australia, these costs exceed the revenue from regulated retail electricity tariffs and the supply of electricity in these areas is subsidised. Within the areas serviced by Horizon Power, the overall shortfall between the uniform retail tariff revenue and the actual cost of supplying electricity is funded through:

- an additional component of electricity network charges (the "tariff equalisation contribution")
  in the South West Interconnected System charged to fund the difference between the
  Horizon Power cost of supply and the efficient cost of supply within the South West
  Interconnected System; and
- a direct subsidy from the State Government (the "tariff adjustment payment") to fund the difference between regulated retail tariffs and the efficient cost of supply within the South West Interconnected System.

Horizon Power is a vertically integrated business providing electricity to about 46,000 customers in regional areas of Western Australia, including residential, commercial and major industry loads. About 16,400 of these retail accounts are within the NWIS (Table 2).

Table 2: Horizon Power NWIS customer profile 2014-15

Market segment	Number of accounts	Annual sales volume (GWh)
Residential customers (Tariff A2 and K2)	14,505	184
Small business customers (Tariff L2)	1,307	45
Medium business customers (Tariff L4)	379	143
Large customers	27	137
Government - medium business customers (Tariff P2)	172	34
Other tariff classes	77	5
Tota	16,467	549

Source: Horizon Power Discussion Paper on the coverage of networks in the Pilbara, 26 November 2014, p. 4.

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

<sup>&</sup>lt;sup>15</sup> In contrast, in the South West Interconnected System retailers other than Synergy are not permitted to supply electricity services to customers consuming less than 50 MWh per year.

<sup>&</sup>lt;sup>16</sup> Small-use customers are defined as those who consume no more than 160 MWh of electricity per annum.

Alinta Energy has recently obtained a retail licence to sell electricity within the NWIS,<sup>17</sup> but currently does not have access to Horizon Power's network to retail electricity to any other customers.<sup>18</sup>

Alinta Energy also supplies a small number of large-use customers on its transmission network in the NWIS.<sup>19</sup> It is currently constructing a transmission line from its Newman power station to the Roy Hill Mine.<sup>20</sup> This project includes construction of a 123km 220kV transmission line, as well as a 33kV distribution system and 6MW of diesel fuelled generators located at the Roy Hill Mine.<sup>21</sup> The project is scheduled to be operational in early 2015.

#### 2.3. The network that is subject to the coverage application

There are multiple owners of electricity network infrastructure within the NWIS.

Alinta Energy has made an application to have the portion of the network in the NWIS that is owned by Horizon Power covered under the Code.

The Horizon Power owned proportion of the NWIS extends from Dampier to Goldsworthy. 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, Mount Newman Mining Substation, Murdoch Drive Substation and the Goldsworthy supply point.

The Horizon Power network is interconnected with:

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

Electricity Integrated Regional Licence Alinta DEWAP Pty Ltd, EIRL7, Version 2, 9 September 2014, available at: http://www.erawa.com.au/cproot/12884/2/20140908%20Electricity%20Integrated%20Regional%20Licence%207%20-%20EIRL7,%20Version%202%20-%209%20September%202014%20-%20Alinta%20DEWAP%20Pty%20Ltd.pdf

<sup>&</sup>lt;sup>18</sup> Alinta Energy Coverage Application, 24 October 2013, p. 3.

Horizon Power Coverage Application, 12 November 2014, p2, available at: <a href="http://www.finance.wa.gov.au/cms/uploadedFiles/Public\_Utilities\_Office/Energy\_Initiatives/horizon-power-coverage-application.pdf">http://www.finance.wa.gov.au/cms/uploadedFiles/Public\_Utilities\_Office/Energy\_Initiatives/horizon-power-coverage-application.pdf</a>

Alinta Energy Transmission (Roy Hill) Pty Ltd was granted Electricity Integrated Regional Licence EIRL 6 on 1 October 2013 to construct its transmission line to Roy Hill. Construction began in March 2014.
<a href="http://www.erawa.com.au/cproot/11621/2/Licence%20EIRL6%20%20Alinta%20Energy%20Transmission%20(Roy%20Hill)%20Pty%20Ltd.pdf">http://www.erawa.com.au/cproot/11621/2/Licence%20EIRL6%20%20Alinta%20Energy%20Transmission%20(Roy%20Hill)%20Pty%20Ltd.pdf</a>

<sup>&</sup>lt;sup>21</sup> https://alintaenergy.com.au/about-us/news/pilbara-transmission-line-update

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 overhead distribution lines and related infrastructure that supplies these residential customers is currently being transitioned to an underground network under the Pilbara Underground Power Project.<sup>22</sup>

# 2.3.1. Current arrangements for access to the Horizon Power electricity network within the NWIS

Horizon Power has indicated to the Public Utilities Office that it currently 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. For connection to the distribution network, Horizon Power states that it has an obligation to supply and will connect any customer seeking connection.

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 all prospective and existing network customers of Horizon Power's network must comply with (unless an exemption is agreed to by Horizon Power<sup>23</sup>).

According to Horizon Power, its open access arrangement for network customers seeking access is "consistent with the Code to the fullest extent possible given the particular physical and geographic limits of its network." Horizon Power states that it adopts 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;
- a pricing policy that requires Horizon Power to negotiate pricing that, "is equal to, or is less than, the stand-alone cost of service provision" if an applicant for network services can demonstrate that the Network Pricing Model is not achieving this outcome;
- Technical Rules;<sup>25</sup>
- a capital contribution policy; and
- an application and queuing policy of first in, first processed.<sup>26</sup>

http://www.horizonpower.com.au/2049.html

 $<sup>^{23}</sup>$  The process for determining exemptions is also outlined in the Technical Rules.

 $<sup>^{\</sup>rm 24}$  Horizon Power Discussion Paper on coverage of networks in the Pilbara, 26 November 2014, p. 1.

<sup>&</sup>lt;sup>25</sup> Horizon Power has developed its own Technical Rules which it applies to itself and any other network user (loads and generators who have access or seek access to spare capacity on the network).

<sup>&</sup>lt;sup>26</sup> Horizon Power Discussion Paper on coverage of networks in the Pilbara, 26 November 2014, p. 1.

#### 3. Issues for comment

#### 3.1. The coverage criteria

Under section 3.5 of the Code, a coverage decision must be that a network is covered if the Minister determines that each of the coverage criteria is satisfied.

If a decision is that a network is covered, the coverage decision may cover the network to a greater or lesser extent than that requested by the applicant, so long as doing so is consistent with the Code objective.<sup>27</sup>

The criteria in section 3.5 of the Code are:

- a) that 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) that it be uneconomic for anyone to develop another network to provide the covered services provided by means of the network; and
- c) that access (or increased access) to the 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.<sup>28</sup>

For the purposes of the coverage criteria, the "covered services" are defined as:

"covered service" means 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 service 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.

-

<sup>&</sup>lt;sup>27</sup> Electricity Networks Access Code 2004, section 3.4. The Code objective is set out in section 2.1 of the Code.

<sup>&</sup>lt;sup>28</sup> Electricity Networks Access Code 2004, section 3.6.

#### 3.2. Precedent on interpretation of the coverage criteria

The coverage criteria in the Code are similar to the regulation criteria in other infrastructure access regimes including:

- criteria for declaration under Part IIIA of the Competition and Consumer Act 2010 (Cth), formerly the Trade Practices Act 1974;<sup>29</sup> and
- coverage criteria under the National Gas Law.<sup>30</sup>

The National Competition Council has made numerous decisions under both legislations in the gas, rail and airport sectors.

The High Court has provided judicial guidance on the interpretation of the criteria in *Pilbara Infrastructure v Australian Competition Tribunal*<sup> $\beta$ 1</sup> (Pilbara Rail Infrastructure case).

These decisions, together with various appeals, have created a significant body of decisions and case law that provides guidance in applying the coverage criteria to the coverage application.

# 3.3. Criterion on material increase in competition in a dependant market

#### 3.3.1. Assessment approach

The first criterion in section 3.5(a) of the Code requires that access (or increased access) to the covered services provided by means of the network would 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 allows for the decision not to declare coverage where access would not materially enhance the conditions or environment for competition in any market. The rationale for this criterion is that 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 benefits such as lower prices or better quality goods or services in any relevant market. For an electricity network, providing access to covered services may promote competition in the upstream electricity generation market and/or downstream electricity retail markets.

This criterion requires an assessment of whether access to covered services would actually promote more competitive outcomes, such as lower prices, in another market. This might be unlikely, for example, where the other market is a monopoly and hence there is unlikely to be any increase in competition, or where the other market is already highly competitive.

\_

<sup>&</sup>lt;sup>29</sup> Competition and Consumer Act 2010 (Cth), section 44G.

National Gas Law Act 2008 (SA), Schedule, Part 1, section 15, and National Gas Access (WA) Act 2009 (WA), Western Australian National Gas Access Law Text, Part 1, section 15.

<sup>&</sup>lt;sup>31</sup> (2012) 246 CLR 379; [2012] HCA 36.

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 (including reduced prices and better service provision).

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 electricity network within the NWIS may increase competition;
- confirm that the dependent market(s) are separate from the market for the covered services (in order to meet the requirement in the last clause of criterion (b)); and
- assesses the effect of access (or increased access) to the Horizon Power electricity network within the NWIS on competition in each dependent market in order to determine whether such access would materially promote competition in that market.

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 view

In the coverage application Alinta Energy submits that access to covered services provided by the Horizon Power electricity network within the NWIS would promote a material increase in competition in the retail electricity market.<sup>32</sup>

Alinta Energy states that without network access, it would not be able to provide retail electricity services to customers connected to the network. Alinta Energy further states that the network access will create further opportunities for other retailers to compete, as additional electricity generation facilities are commissioned.<sup>33</sup>

Alinta Energy estimates that retailers could compete for 30 per cent of retail market share of large-use customers on the L4, P2 and M2 retail tariffs with Horizon Power over a 15 year period.<sup>34</sup> In terms of energy volume, Alinta Energy estimates that new entrant retailers could supply between 80 to 110 GWh over this period, which Alinta Energy submits, would represent a material increase

-

<sup>&</sup>lt;sup>32</sup> Alinta Energy coverage application, p. 8.

<sup>&</sup>lt;sup>33</sup> Ibid, p. 9.

<sup>34</sup> Ibid.

in competition compared to Horizon Power remaining as the default retailer without providing access to covered services on its electricity network within the NWIS.<sup>35</sup>

Based on the evolution of retail market competition in the network under consideration, Alinta Energy foresees that customers could see an overall reduction in retail electricity prices, including those offered by Horizon Power as a retailer in response to new competitive forces.

Alinta Energy's application has not addressed 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 transmission networks.

Alinta Energy has not addressed implications for competition in the electricity generation market if the Horizon Power electricity network within the NWIS is covered.

#### Questions for stakeholders

- 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?
- Is there is already significant competition in those 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 electricity network within the NWIS 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 electricity network within the NWIS? How would this occur?

#### 3.4. Criterion on uneconomic duplication of the network

#### 3.4.1. Assessment approach

The criterion in section 3.5(b) of the Code requires consideration of whether it would be uneconomic for anyone to develop another network to provide the covered services.

This criterion closely mirrors criterion (b) in sections 44G(2)(b) and 44H(4)(b) of the *Competition* and *Consumer Act 2010* (Cth), which the High Court recently considered in the Pilbara Rail Infrastructure case. In that decision, the High Court overturned previous approaches by the National Competition Council and other appeal bodies that interpreted this criterion in a way that was concerned with the waste of Australian society's resources associated with duplication of facilities that exhibit natural monopoly characteristics; that is where a single facility could meet all

-

<sup>&</sup>lt;sup>35</sup> Ibid, p. 10.

likely demand for a service at lesser cost than two or more facilities.<sup>36</sup> The High Court established that the test required by this criterion is one of a "private profitability", not a natural monopoly test, and that the term "uneconomic" should be interpreted as "unprofitable".

The High Court determined that the profitability of developing another facility will depend on whether a "person could reasonably expect to obtain a sufficient return on capital that would be employed in developing the facility". The High Court also observed that if someone could develop an alternative facility as part of a larger project, "it would be necessary to consider the whole project in deciding whether the development of the alternative facility, as part of the larger project, would provide a sufficient rate of return".

This authority is of relevance when considering the application of the criteria in section 3.5(b) of the Code to the present coverage application. The application of criterion 3.5(b) based on the approach taken by the High Court hinges on whether it would be privately profitable for anyone to develop another distribution and/or transmission network to provide the same covered services on a stand-alone basis, or as part of a larger project. This stand-alone cost would set a ceiling on the costs able to be charged by Horizon Power for the covered network services on its NWIS network.

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 electricity network within the NWIS. The National Competition Council's *Declaration of Services* guide provides some useful information on what type of information would 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.<sup>37</sup>

In addition, the National Competition Council states that 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.<sup>38</sup>

<sup>38</sup> Ibid, p. 39.

See National Competition Council, Declaration of Services: A guide to declaration of services under Part IIIA of the Competition and Consumer Act 2010 (Cth), 2013, p. 37.

<sup>&</sup>lt;sup>37</sup> Ibid, p. 38.

Furthermore, the National Competition Council also indicates that where development of a new facility is unprofitable on a stand-alone basis, but thought 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.<sup>39</sup>

#### 3.4.2. Applicant's view

Alinta Energy's application points to the High Court's decision on the Pilbara Rail Infrastructure case to establish how this criterion should be interpreted.<sup>40</sup> Alinta Energy also considers that the National Competition Council's guidance on section 44G(2)(b) of the *Competition and Consumer Act 2010* (Cth) adopting the High Court's decision in the Pilbara Infrastructure case as being relevant.<sup>41</sup>

Based on the private profitability test, Alinta Energy states that it would be infeasible to duplicate the Horizon Power electricity network within the NWIS due to existing physical barriers such as access rights and tenure in congested urban areas.<sup>42</sup> Alinta Energy provides some modelling data to support its contention that it would be unprofitable for anyone to duplicate the network under consideration to supply customers in the Port Hedland and Karratha areas.

Under the scenario developed by Alinta Energy, at a 10 per cent cost of capital rate of return over a 15 year time period, the investment incurred by a third party in the first two years to duplicate the network would not be economically recoverable through the expected energy sales revenues. Alinta Energy indicates that there would be a negative net present value if the network is duplicated, indicating that duplicating the Horizon Power electricity network would not be profitable for any party.<sup>43</sup>

The Alinta Energy scenario modelling does not provide explanation for some of the assumptions made, including:

- an assumption of no load growth over the modelling period;
- how the cost of capital rate of 10 per cent is derived and whether this is commensurate
  with expected market returns for an efficient network business there is no discussion of
  the required rates of return on debt and equity to develop the network;
- the estimated \$1,695 million network development cost; and
- 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.

\_

<sup>39</sup> Ibid.

<sup>&</sup>lt;sup>40</sup> Alinta Energy coverage application, pp. 10-11.

Ibid, p. 11, referring to National Competition Council, Declaration of Services: A guide to declaration of services under Part IIIA of the Competition and Consumer Act 2010 (Cth), 2013, pp. 37-40.

<sup>&</sup>lt;sup>42</sup> Alinta Energy coverage application, p. 11.

<sup>&</sup>lt;sup>43</sup> Ibid, pp. 12-13.

Alinta Energy's analysis has also assumed that the dependent retail market will include customers from both the transmission and distribution network. That is, its modelling analysis does not treat the transmission or the distribution networks on a stand-alone basis.

The distinction between the transmission and the distribution network 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 Horizon Power through the electricity network within the NWIS, on a stand-alone basis?
- Should duplication of the transmission and distribution networks be separated for the purposes of the private profitability test?
- What assumptions should be made in assessing the cost and profitability of duplicating the relevant network?
- 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 on public interest

#### 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 "public interest" is not defined in the Code or the *Electricity Industry Act 2004* (WA). Until recently this criterion has been viewed 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 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.<sup>44</sup>

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

National Competition Council, Declaration of Services: A guide to declaration of services under Part IIIA of the Competition and Consumer Act 2010 (Cth), 2013, p. 46.

Following the High Court's decision in the Pilbara Rail Infrastructure case, it is clear that the application of the public interest criterion does not consist of a detailed technical examination of the economic costs and benefits of access. At Rather, the task under this criterion is more akin to identifying any matters that could mean access (or increased access) might be contrary to the public interest and then assess 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 High Court decision also indicated that the public interest assessment can encompass a very wide range of matters.

The National Competition Council's *Declaration of Services* guide indicates that factors forming part of the public interest assessment could include:<sup>46</sup>

- economic efficiency arising from promotion of competition;
- regulatory costs of an access arrangement, including the cost of negotiating access and arbitrating access 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 with or without access rights.

While consideration of these factors are primary to the National Competition Council's assessment, the Council also notes that the *Competition Principles Agreement*, which established the access regimes at the State and Commonwealth level, provides some guidance of the matters potentially relevant for the purposes of the public interest assessment, including:

- 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;
- economic and regional development, including employment and investment growth;
- the interests of consumers generally or of a class of consumers;
- the competitiveness of Australian businesses; and
- efficient allocation of resources.<sup>47</sup>

\_

National Competition Council, *Declaration of Services: A guide to declaration of services under Part IIIA of the Competition and Consumer Act 2010 (Cth)*, 2013, pp. 37-40.

<sup>&</sup>lt;sup>46</sup> Ibid, pp. 46-52.

In the context of the present coverage application customers in Horizon Power's NWIS network, relevant factors may be:

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

As described in Chapter 2 of this Issues Paper, small-use customers in Western Australia are currently subject to a uniform tariff policy. Under this policy, residential and small business customers in regional areas are being subsidised in part through network tariffs applied to customers in the South West Interconnected System.

As Horizon Power is the retailer that receives the subsidy to supply its customers in the NWIS on a uniform tariff policy, an increase in its cost of supply resulting from providing network access may flow through to customers in the South West Interconnected System (through an increase in the tariff equalisation contribution) and to the State Government. This possibility emerges as 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 view

Alinta Energy states in the coverage application that access to covered services would not be contrary to the public interest, as the promotion of competition in the retail electricity market would provide substantial benefits to consumers in choice and lower prices.<sup>48</sup>

Alinta Energy also states that increased competition would incentivise efficiency improvements and result in tariff charges that more accurately reflect the cost of supply.<sup>49</sup>

Alinta Energy's application only appears to address the public interest criterion from an economic efficiency perspective. However, as noted by the National Competition Council, the public interest assessment includes numerous factors.

Alinta Energy has not identified the relative regulatory cost of Horizon Power having an approved access arrangement in place, or whether (or how) residential and small use customers on the Horizon Power electricity network within the NWIS could be supplied by new entrant retailers at subsidised retail tariffs to meet the uniform tariff policy requirements, without being able to access the subsidy that is provided to Horizon Power for this purpose.

In addition, the Alinta Energy's application does not address the potential impact on electricity customers within the South West Interconnected System, who may be required to contribute towards any increased cost for Horizon Power to supply regional customers.

<sup>&</sup>lt;sup>47</sup> Ibid, p. 46.

<sup>&</sup>lt;sup>48</sup> Alinta Energy coverage application, p. 14.

<sup>49</sup> Ibid.

#### **Questions for stakeholders**

- What factors are relevant to the public interest assessment of determining coverage of the Horizon Power electricity network within the NWIS?
- What weight should be given to the equity considerations and government policies relating to the uniform tariff policy that impact on electricity customers located within the South West Interconnected System?
- What other matters may be of relevance to the public interest assessment in considering whether coverage should be granted to the Horizon Power electricity network within the NWIS?

## Appendix 1 – List of questions for stakeholders

- 1. 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?
- 2. Is there is already significant competition in those markets?
- 3. Do other sources of energy, such as natural gas or self-supply options, provide effective competition in supply of electricity in the NWIS?
- 4. If you are a generator or electricity retailer, would you be interested in seeking access to the services of the Horizon Power electricity network within the NWIS now or in the foreseeable future?
- 5. 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?
- 6. 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?
- 7. Should duplication of the transmission and distribution networks be separated for the purposes of the private profitability test?
- 8. What assumptions should be made in assessing the cost and profitability of duplicating the relevant network?
- 9. Are there any factors likely to emerge in the foreseeable future that will affect the cost and profitability of duplicating the network?
- 10. What factors are relevant to the public interest assessment of determining coverage of the Horizon Power electricity network within the NWIS?
- 11. What weight should be given to the equity considerations and government policies relating to the uniform tariff policy that impact on electricity customers located within the South West Interconnected System?
- 12. What other matters may be of relevance to the public interest assessment in considering whether coverage should be granted to the Horizon Power electricity network within the NWIS?