HORIZON POWER

Submission to the ERA Issues Paper

July 2010

PART A - Context, Role and Evolution of Horizon Power

Section A1 - Introduction

"The third and last duty of the sovereign or commonwealth is that of erecting and maintaining those public institutions and those public works, which, though they may be in the highest degree advantageous to a great society, are, however, of such a nature, that the profit could never repay the expense to any individual or small number of individuals, and which it therefore cannot be expected that any individual or small number of individuals should erect or maintain".

Adam Smith, The Wealth of Nations, Book V, Chapter 1, Part 3.

The provision of essential infrastructure in sparsely populated regions, and the acknowledgement that it is not appropriate to recover the costs solely from those individuals, poses a challenge for Government. Further, in the face of ever improving living standards and expectations, Governments are confronted with the challenge of meeting the increasing demand for new and upgraded essential services.

The issues in meeting these challenges are highly significant for the State of Western Australia. It is increasingly clear that the economic vitality of the State is strongly influenced by the quality and availability of key infrastructure services in remote and regional areas. In addition to its significance as an economic activity in its own right, as an input to businesses and the provider of essential services to the community, investment in energy infrastructure significantly improves the productivity of the economy. This in turn delivers higher growth in output and employment for the State.

This is the context within which Horizon Power views the Economic Regulation Authority's (the Authority's) inquiry into its funding arrangements (the Inquiry). The outcomes of the Inquiry are therefore critical not just from the perspective of Horizon Power's ongoing financial sustainability, but also to the future wellbeing of all Western Australians.

Section A2 - Background to the Inquiry

Horizon Power welcomes the opportunity to engage with the Authority and stakeholders more generally on the Inquiry.

The Terms of Reference for the Inquiry are focussed on the determination of the efficient expenditures for the supply of Horizon Power's regulated services. From these efficient expenditures a set of cost reflective retail tariffs will be developed that would, in the absence of the current Uniform Tariff Policy, apply to Horizon Power's service area. This analysis will inform the setting of the amount of the subsidy, which will subsequently be determined by Government.

In undertaking the Inquiry, the Authority will review the efficiency of Horizon Power's operating and capital expenditure programmes, and its procurement processes. This will necessitate consideration of Horizon Power's service delivery mandate, model and standards. The Authority has also been asked to identify opportunities for alternative arrangements for service delivery in remote regions and how incentives for Horizon Power to develop and implement efficiency measures (such as gain sharing between Horizon Power and customers) could be incorporated, if these would minimise costs of supply.

As a commercially focussed Government owned business engaged in the delivery of essential energy services and broader Government policy objectives, Horizon Power is acutely aware of the requirement to deliver its services in a manner which balances a range of competing needs.

Such needs include:

- Compliance with legislative, regulatory and

Government policy obligations;

- Safe delivery of reliable energy supply for customers;
- Cost efficient energy solutions for Government;
- Effective stewardship of the business's assets over their lifecycle, ensuring that they are fit to meet current and future operating needs and that investment is economically efficient over the long term;
- Ensuring an adequate and consistent return to the Shareholder from current and sunk investments;
- Continuing to meet commercial obligations and to maximise Horizon Power's long run financial position (consistent with legislative obligations) within funding constraints; and
- Critically, the Horizon Power Board's obligation to meet its fiduciary obligations.

Horizon Power's service area is characterised by its large geographic area, its small customer base and its relative isolation. Consistent with the current regulatory framework, Horizon Power, supported by Government, has been very successful at harnessing innovation, developing commercial strategies and managing compromise to deliver solutions when these needs are in conflict. Horizon Power therefore views the Inquiry as an opportunity for stakeholders to present their views as to the appropriate balance.

Horizon Power notes the concurrent activities of the Office of Energy to develop energy policy for the State, via the State Energy Initiative, and of broader Government policy makers to set the direction for State growth and development through initiatives such as Pilbara Cities. The business sees the Inquiry as providing one of a sequence of valuable inputs which will provide the content for setting Horizon Power's overall direction. Horizon Power identifies at the outset the need for each of these to complement each other.

Horizon Power looks forward to engaging with the Authority as it assesses performance through the lens of economic efficiency.

Section A3 - Role of Horizon Power

A3.1 Legislative Imperative

The Electricity Corporations Act 2005 (WA) compels Horizon Power to efficiently supply electricity and services to customers, at a standard comparable to that provided by the Electricity Retail Corporation (Synergy). The functions of Horizon Power include generation and procurement of generation; and to manage, plan, develop, enhance, improve and reinforce electricity supply systems and services outside the SWIS[1].

Section 61 of this Act requires Horizon Power to perform its functions in accordance with prudent commercial principles and endeavour to make a profit consistent with maximising long term value. To this end Section 51 expressly requires the business to use its assets, expertise, resources, skills, knowledge, technologies and products to develop profitable business opportunities.

A3.2 Service Area

Horizon Power was formed as a product of the Electricity Industry Reform Programme that occurred in the middle of the last decade. Legally established on 1 April 2006, Horizon Power is a fully integrated energy supplier and is, in this respect, unusual in Australia today. Horizon Power is unique in terms of the diversity of the customer base it serves:

- The Pilbara, with its immense reserves of natural resources and rapid economic development, and
- Remote and regional communities; including isolated aboriginal communities across Western Australia.

Horizon Power has in excess of 42,474 customer connections, located in a service area of around 2.3 million square kilometres[2].

[1] Section 50, *Electricity Corporations Act 2005 (WA).*

[2] Extracted from Horizon Power's 2008/9 Annual Accounts.

This equates to a customer density factor of 54.2[3], as compared to 0.42[4] in the National Electricity Market (the NEM) and 0.4[5] in the SWIS. No other electricity business in Australia supplies a similar (small) number of customers dispersed across such a vast service area.

A3.3 Functions

Within each of the communities Horizon Power serves, it is responsible for managing the vertically integrated supply chain, including:

- Energy forecasting;
- Fuel procurement and transport;
- Generation and wholesale electricity purchases;
- System planning and operation;
- Transmission, distribution and metering activities;
- Management of vendors to meet its service delivery standards;
- Regulatory Compliance and Stakeholder Management; and
- Retail services to residential, commercial and industrial customers.

Operating at all points along the supply chain ensures Horizon Power, and in turn the Shareholder, is able to derive substantial economies of scale and scope that would not be otherwise available if these points were serviced by separate providers. In evaluating the options available the complete system is considered, including localised demand management, generation and transmission options; optimisation opportunities not available in a disaggregated model. This is no accident. The value of vertical integration within Horizon Power's service areas were well understood and supported by energy reform policy makers: *"While vertical disaggregation of the components of the electricity industry is desirable for the SWIS, the differing scale of operations and financial environment in the NWIS and [the] non-interconnected systems mean that vertical disaggregation is not an appropriate strategy in these systems"*[6].

Horizon Power is an instrument for State and Commonwealth Government Policy, including:

- The Uniform Tariff Policy – supplying electricity to a majority of its customer base at tariffs significantly below the cost of supply;
- The Aboriginal and Remote Communities Power Supply Project (ARCPSP) and the Towns Reserves Regularisation Project (TRRP) - upgrading power supplies serving indigenous communities; and
- Air conditioning subsidies, caravan park rebates, and supply charge rebates.

Horizon Power delivers these policy initiatives on a commercial basis and recovers specific Community Service Obligations (CSOs). Horizon Power also devotes resources to securing Commonwealth Grants where these specifically relate to projects or services within Horizon Power's mandate. These grants provide a substantial value-add to the State by reducing the impost of service provision on Consolidated Revenues, customers and taxpayers in general. Recent examples include the construction of the new Marble Bar and Nullagine Power Stations.

A3.4 Governance and Regulatory Structure

Horizon Power's governing legislation is the *Electricity Corporations Act 2005 (WA)*. It is wholly owned by the State Government of Western Australia, by statute operating as an independent, commercially focussed corporation.

The Board of Directors is Horizon Power's governing body with authority to determine policy and control the Corporation's affairs, consistent with prudent commercial principles. The Board reports to the Minister for Energy.

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[3] 1 customer for every 54.2 km2 of terrain.

[4] ESAA Electricity and Gas Australia 2010.

[5] Economic Regulation Authority: Inquiry into the Funding Arrangements of Horizon Power, Issues Paper, 3 June 2010.

[6] Western Australia: Electricity Reform Task Force, "Electricity Reform in Western Australia, A Framework for the Future: Perth, Western Australia, 2002, p12.

The regulatory framework under which Horizon Power currently operates is significantly more onerous than that under which the former Western Power Corporation operated.

As required by the *Electricity Industry Act 2004 (WA)*, Horizon Power operates under an Integrated Regional Licence. It manages the infrastructure, systems and processes to deliver integrated services, and comply with the regulatory obligations currently imposed on each of the other three Western Power Corporation successor organisations (Synergy, Verve Energy and Western Power).

By way of example, these regulatory obligations include:

- The *Electricity (Licensing) Regulations 1991 (WA)* and supporting conditions and fees regulations prescribe the overarching licensing framework for the industry. They require Horizon Power to comply with all other regulatory obligations and to report regularly against a suite of performance indicators;
- The *Electricity Industry Metering Code 2005 (WA)* mandates the manner in which Horizon Power reads customer and generation meters, maintains and transfers customer data. It further prescribes the type of, overall level of performance and ongoing testing and maintenance for meters connected within Horizon Power's service area;
- The *Electricity Industry (Obligation to Connect) Regulations 2005 (WA)* impose the obligation on Horizon Power to connect any customer who applies for connection whose meter point is within 100 meters of the existing Horizon Power network and whose forecast demand is less than 160 MWh;
- The *Energy Safety Act 2006 (WA), Energy Coordination Act 1994 (WA)* and supporting regulations require Horizon Power to have systems and processes in place to monitor the activity of electrical contractors within its service area[7]. The ambit of this Act also covers Horizon Power's network. Programmes to address issues raised by Energy Safety include the ENRUP in the Esperance Region. In addition Horizon Power is adopting the recommendation of Energy Safety's Wood Pole Audit into Western Power, requiring significant review and replacement of network infrastructure and modified inspection and testing processes that have been incorporated into Horizon Power's Asset Management Plan[8];
- The *Electricity Industry (Network Quality and Reliability of Supply) Code 2005* establishes the parameters for the number and duration of customer outages;
- The *National Greenhouse and Energy Reporting Act 2007 (Cth)* requires Horizon Power to monitor and report its carbon emissions;
- The *Renewable Energy (Electricity) Act 2000 (Cth)* requires Horizon Power to comply with the Commonwealth Government's 20% Mandatory Renewable Energy Target;
- The *Contaminated Sites Act 2003 (WA)* requires Horizon Power to monitor and remediate (as required) any contamination on its sites. Horizon Power is actively managing 29 contaminated sites and holds provisions of approximately $16M for remediation costs. These are legacy matters inherited by Horizon Power at disaggregation;
- The *Code of Conduct for the Supply of Electricity to Small Use Customers 2008 (WA)* regulates and controls the conduct of retailers, distributors and electricity marketing agents who supply electricity to residential and small business customers. The code requires Horizon Power to ensure it has systems and processes in place to comply with the code's requirements. It affects the manner in which Horizon Power manages its billing processes; connections processes; metering and meter reading processes; marketing and the management of hardship and complaints;
- The *Electricity Corporations Act 2005 (WA)* specifies Horizon Power's specific obligations, powers and the relationship with the Minister. This applies similar obligations to Horizon Power and its officers as are ascribed under Corporations Law and consistent with accounting standards and regulations; and

[7] For example, Horizon Power's compliance inspection requires a minimum of 8 staff located across the State.

[8] Horizon Power is prepared to provide supplementary information to the Authority relating to the scope and cost of these programmes.

- Horizon Power must also ensure compliance with the *Trade Practices Act 1974 (Cth) and the Fair Trading Act 1987 (WA)*, this includes ensuring all staff have an understanding of their obligations, products are developed and marketed consistent with these obligations and that suitable legal resources are available to assist with compliance and resolution.

While Horizon Power is firmly of the view that the vertically integrated Decentralised Operating Model is economically more efficient than alternative service provision models, the sheer breadth of services provided (and their associated regulatory requirements) creates a substantial impost on Horizon Power's business model and resourcing. This is reflected in Horizon Power's efficient operating expenditures.

Horizon Power operates within a Performance Bargain which loosely links its mandate and service delivery standards to funding. The business operates in accordance with its Strategic Development Plan (SDP), agreed and approved with the Minister for Energy and concurred with the Treasurer through the State Budget process. The SDP process endorses the mandate and strategic direction for the business and performance targets which underpin Horizon Power's Business Plan. Horizon Power identifies the concern that the business does not have an absolute guarantee of access to adequate funding arrangements, over the long term, to provide certainty to its customers or Government more generally, that the business can meet its mandate and service delivery standards. Horizon Power identifies considerable value in engaging with Government and stakeholders to progress these arrangements.

A3.5 Strategic Context

Operating within this framework, Horizon Power has engaged with Government to set its purpose ***to create lasting value from its activities by maximising the social, environmental and economic benefit for the company and the communities in which it lives***. This ensures that the business has a holistic and long term view of its actions. In delivering against its objectives and mandate, Horizon Power allocates resources to achieve the best long term (life cycle) outcomes. Horizon Power's purpose, as agreed by Government, goes well beyond the narrow role of providing efficient energy services to remote and regional Western Australia.

Horizon Power directs its business's internal strategies through a set of social, environmental and economic benefits.

Provision of Social Benefits

Horizon Power's primary social objective is to provide safe, reliable and efficient generation, transmission and distribution systems and effective high quality customer service. Horizon Power also seeks to conduct its business in ways that benefit local communities and ultimately the State by enhancing local capacity, capability or opportunity. In this regard Horizon Power uses its role and expertise as an energy provider to work with Government agencies, communities and other local stakeholders to ensure reliable and commercially viable energy solutions are developed to underpin regional development opportunities.

Horizon Power is committed to making a significant and positive impact on indigenous employment opportunities. As a guiding principle Horizon Power seeks to develop a workforce demographic that is reflective of the demographic mix of its customer base.

Provision of Environmental Benefits

Horizon Power's major impact on the environment comes from Greenhouse Gas (GHG) and other pollutants created in the electricity generation process. Here the objective is to significantly reduce the environmental footprint, both in GHG emissions and in the management and remediation of other pollutants. Horizon Power also works hard to change the energy consumption behaviours of its customers through innovative product offerings and education campaigns. Horizon Power proactively adds value to environmental benefits by preserving and enriching the ecological areas and heritage in the communities in which it operates.

Provision of Economic Benefits

Clearly this inquiry is focussed on an assessment of Horizon Power's performance through the lens of economic efficiency. While this is only one of several competing drivers for Horizon Power, this has been a strong focus for the business since its establishment in 2006.

A3.6 Formation

In 2006 Horizon Power was established with staff from the Western Power Pilbara and Regional business units, a small allocation from the various Western Power corporate support groups and a blend of external recruits at senior executive and Board level. It was understood that Horizon Power, like the other successor entities, would require additional resources and functionality. Further, it was expected that while the successor entities were to receive services (via Service Level Agreements) from one another in the short term, they were to contract on a commercial basis either with one another or with third parties as their understanding of their individual business requirements evolved. These shared services included the provision of such critical infrastructure as Information Technology (metering, billing and customer services systems, financial systems); network system support; asset design and construction standards; logistics and fleet.

Since 2006, Horizon Power has worked through the tasks associated with the systematic and planned development of a new, standalone business. This has included the development of a tailored service delivery model designed to efficiently meet the needs of its diverse and regionally dispersed customer base.

Significant tasks within this process have included:

- Establishing the strategy and underpinning values for a regionally focussed integrated energy provider;
- Developing and Implementing the Decentralised Operational Model, designed to encourage regional engagement;
- Resourcing the business to prosecute the mandate and operate as a standalone commercial business;
- Developing a comprehensive Asset Management Plan, establishing the condition of each community supplied, raising assets to a level where they are "fit for purpose" and ongoing management of assets on a life cycle basis;
- Reviewing service provision arrangements for all Western Power; Verve Energy and Synergy Service Level Agreement services with implementation of appropriate in-house or contracting strategies;
- Developing standalone information technology platforms;
- Developing forecasting methodologies;
- Restructuring the fundamental business model and chart of accounts to heighten understanding of cost and revenue structures; and
- Evaluating the business's Cost to Serve model to provide greater transparency of the costs of service provision.

The adoption of the Decentralised Operating Model, focussing solely on service provision in remote and regional areas, has enabled Horizon Power to deliver higher standards of service and obtain efficiencies that were not achievable under the previous Western Power service delivery model. In managing its operations, the business evaluates decisions on a case by case basis to extract maximum efficiency benefits while continuing to deliver against its performance obligations. The application of this approach can be seen in the mix of Horizon Power's own generation, contracts with Independent Power Producers, in-sourced and out-sourced service provision[9].

In its current phase of operations, and as required by the business's legislated mandate, Horizon Power is directing its efforts to consolidate system and process improvements and grow profitable revenue.

This will provide the Shareholder, with future flexibility and choice in regard to funding levels, dividend yields and business reinvestment. Opportunities are pursued on the basis that they will improve profitability, complement Horizon Power's existing service offerings and provide customer value on a sustainable basis.

[9] For Example, Horizon Power was previously contracted with Synergy under a non-binding Service Level Agreement at disaggregation. The business recently assessed its options and outsourced customer care, billing and Customer Information System service to Servicesworks Management Pty Ltd. This is as compared to the business's requirements for ENMAC which were assessed and recontracted to Western Power.

A3.7 Horizon Power's Strategic Themes

To deliver the benefits identified above, Horizon Power has identified three broad strategic areas of focus for the current planning cycle:

- **Performance Excellence in Existing Business**. Define, pursue and deliver performance excellence in the management of our existing business through the safe, efficient and effective supply of electricity and related services within the communities served;
- **Pilbara Energy Plan**. Lead, support and profit from the development of the strategically vital NWIS into a robust, efficient and well managed system capable of supporting the significant market growth that is expected in the Pilbara. This has recently been extended to include other regional 'hubs' which are the subject of major resource projects and great focus; and
- **Remote Service Extension**. Develop, implement and leverage market-leading skills and competitive advantage in the design, implementation and management of fully integrated islanded/renewable power supplies and associated services.

A3.8 Key Focus Areas

Horizon Power's structure comprises eight divisions as described below:

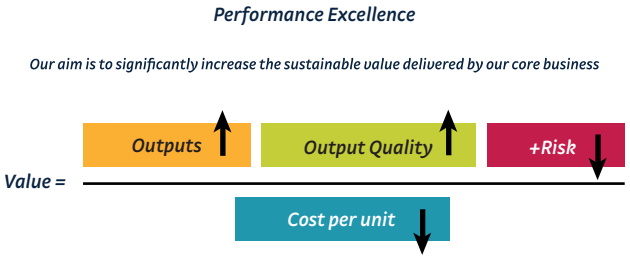
- **Operations**: Delivers balanced, consistent and sustainable operational performance in each district;
- **Islanded Systems Development**: Develops, sells and implements small scale system opportunities;
- **Strategy and Business Development**: Leads strategy development, pursues new opportunities to grow, manages commodity trading activities, and commercially manages Horizon Power assets on the NWIS;
- **Governance and Company Secretariat**: Develops and implements effective systems of governance, monitors and reports on compliance and legislative obligations, and manages risk and maintains the company's policies and procedures. The Division also provides support to the Board;
- **People and Corporate Services**: Develops and ensures effective deployment of key corporate services such as Public Affairs, People Services, Marketing and Product Development and Occupational Safety and Health management;
- **Shared Services**: Develops and maintains a range of internal consulting services and support solutions;
- **Knowledge and Technology**: Creates, deploys and manages a strategy to position the business as an innovative user of technology; and
- **Finance Services**: Leads and secures appropriate funding and ensures sound financial management and reporting.

A3.9 The Decentralised Operating Model

Horizon Power has achieved a successful balance between the application of appropriate management oversight, information systems, processes and governance frameworks and the support for the diversity of its systems and customer base. This is achieved through the business's Decentralised Operating Model. The adoption of this model was a clear acknowledgment that the previous centralised management model, employed by Western Power, failed to deliver services to remote and regional areas to the satisfaction of the communities and Government. The Horizon Power approach devolves operational accountabilities to those who live in, and best understand, the communities in which Horizon Power operates. It acknowledges that there are differentiated asset issues to be overcome and that the economic drivers in each community are different. As a reflection of this, the business's head office is in Karratha, with regional offices located in Kununurra, Broome, Port Hedland, Carnarvon and Esperance. This ensures that the business can respond to customer queries and investigate local issues promptly. The Decentralised Operating Model leverages efficiencies by clustering systems for District level service provision, ensuring that there is a critical mass of services to which Horizon Power can defray its costs (economies of scale). Key corporate services, including People and Corporate Services; Shared Services; Knowledge and Technology Financial Services; Islanded Systems Development; Governance and Company Secretariat and elements of Strategy and Business Development are operated as centralised services. This enables Horizon Power to manage these support services with the minimum staffing necessary (not requiring backup and support in each regional location) while being able to efficiently recover its costs across the entire customer base. The business provides these services from its offices in Karratha and Bentley.

A3.10 Value for Money Outcomes

The implementation of the business's Decentralised Operating Model has led to a real increase in productivity and overall business performance.



Horizon Power is justifiably proud of the efforts of its staff to deliver excellence in regional service delivery. Since establishment in 2006, Key Performance Indicators have shown a substantial improvement.

Horizon Power is Growing

	Performance 2006	Performance 2010
Number of customers	36,106	39,435
Units of electricity sold	717 GWh	911 GWh

Quality Comparison

	Performance 2006	Performance 2010
Performing Feeders	78/156	144/161
Complying towns	22/29	31/36
SAIDI	396	292
SAIFI	6.14	2.77
Fault Incidents	6,267	4,602

Safety Comparison

	Performance 2006	Performance 2010
Twisties	18,595	2,006
Single S/lights	5,277	13
Electric shocks	32	25
Esperance long bays	695	0
Unserviceable poles 3 phase	300	0

Cost Comparison

	Performance 2006	Performance 2010
COGs	$117,736,000	$173,740,000
COGS per kWh	16.4c	19.1c
Operating Costs	$209,623,000	$284,590,000
Opex costs per kWh	12.8c	12.1c
Average unit cost	29.2c	31.2c

Financing Costs

	Performance 2006	Performance 2010
Interest on Debts[11]	$2,405,000[12]	$17,215,000
Depreciation	$4,104,000	$14,812,000

This has been achieved within a minimal increase in real unit costs to either the State or electricity consumers[10]. This is a notable achievement, particularly having occurred in an environment where Horizon Power has concurrently addressed:

- Significant input cost pressures as a result of the commodities boom;
- Substantial upward movement in fuel costs;
- Transition costs associated with outsourcing to Independent Power Producers;
- Significant remediation of aging infrastructure; and
- The establishment of a new commercial business.

Further, such an increase in reliability of electricity services in remote and regional Western Australia now provides a stable base on which the State can continue to grow its resource and industrial projects.

[10] This represents a 3.5% nominal increase in costs and an 1% real reduction in costs when calculated on 3% compounding CPI.

[11] Extracted from Horizon Power 2006 Annual Accounts and 2010 Trial Balance; includes Other Borrowing Costs.

[12] This is only for one quarter of the financial year.

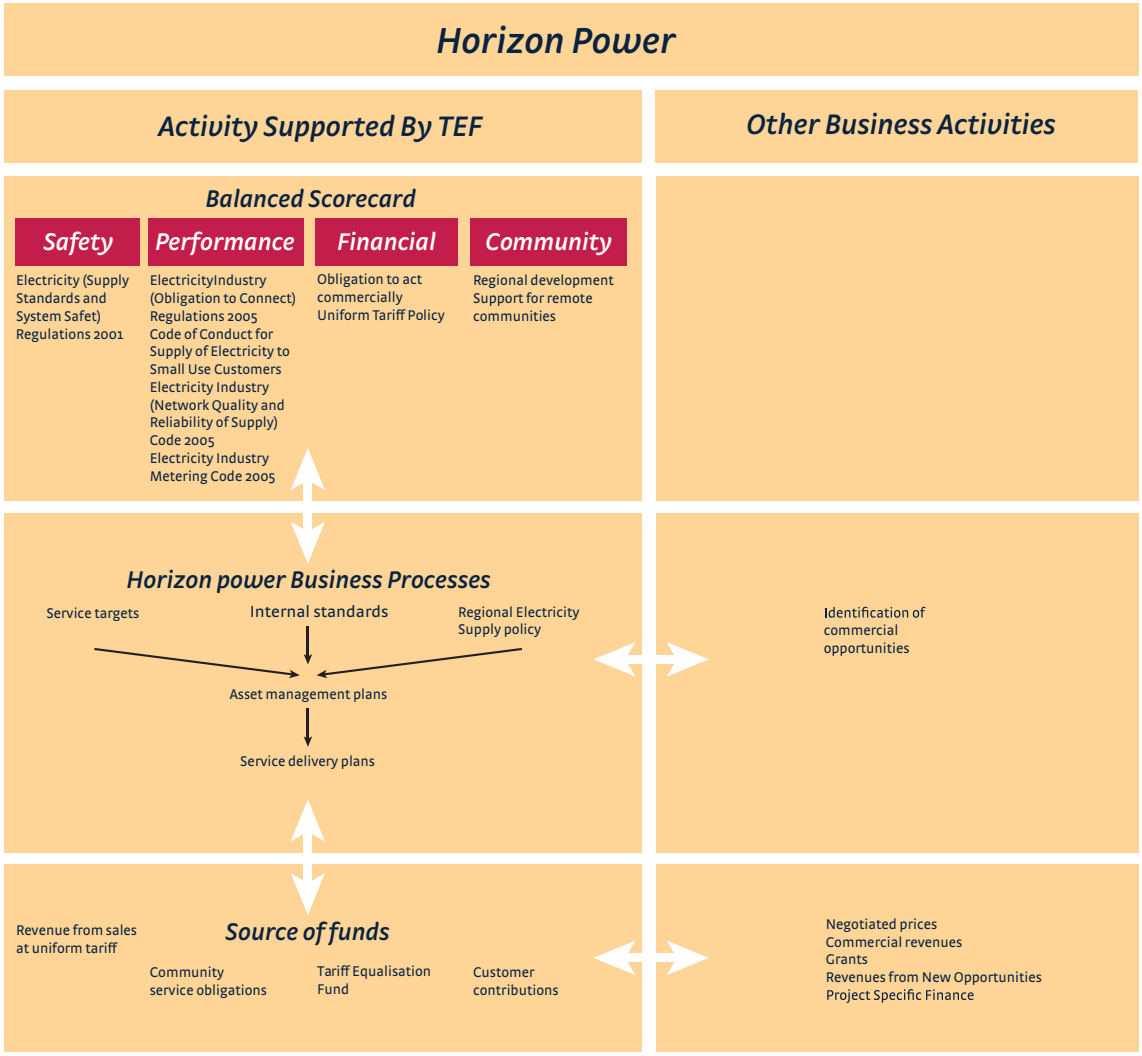
Section A4 - Funding Regional Service Delivey

As a result of the need to balance a range of stakeholder objectives, Horizon Power's commercial position is complex. To undertake its operations Horizon Power must determine an appropriate balance between the broad range of Stakeholder needs as well as those of the assets to which it must effectively steward. With this in mind, and in the absence of this balance being prescribed, the business has previously engaged with Government to negotiate the balance on behalf of its stakeholders. Horizon Power views the Inquiry as a significant opportunity for Government and stakeholders to communicate their views as to this balance.

In establishing Horizon Power's Performance Bargain, Government has access to a set of levers which collectively will direct Horizon Power's operations:

- The Horizon Power Mandate;
- Key Performance Indicators (service standards);
- Revenues = Contestable + Non Contestable + Other;
- Ongoing Funding (a subsidy); and
- Funding for Investment (Capital Works) either directly through the State Budget Forecast or indirectly through the approval of independent borrowing and Public Private Partnerships.

Horizon Power highlights that a shift in any one of these levers, without a compensating shift in another lever will result in a change to Horizon Power's overall level of performance.



The operation of this funding model has derived the following revenues for Horizon Power since its establishment in 2006.

Horizon Power's Revenue Sources 2006/7 to 2009/10 ($)

Revenue Source	2006/7 $000	2007/8 $000	2008/9 $000	2009/10 $000
Customer Sales	109,520	122,608	141,201	170,763
TEF Receipts	69,706	71,600	72,000	122,100
CSO Payments	12,716	20,063	23,943	35,684
Miscellaneous Revenue	31,198	29,975	23,804	35,480
Total Revenues	223,140	244,246	260,948	364,028

Horizon Power's business activities are not limited solely to the supply of electricity at the tariffs of the Uniform Tariff Policy. Section 51 of the Electricity Corporations Act requires Horizon Power to:

- Use its expertise and resources to provide consultative, advisory or other services for profit;
- Commercialise any technology, software or other intellectual property developed to perform its functions as an electricity supplier; and
- Use or exploit for profit the fixed assets it has for the supply of electricity.

Consistent with its mandate, the business uses its strong technical, commercial and innovation competencies to actively pursue profitable opportunities in:

- The provision of small scale power systems;
- Commodity supply and trading (including gas and RECs);
- The provision of elements of larger scale power systems; and
- Regional services provision.

The additional profits derived from these opportunities, while currently small when compared with annual revenue from the sale of electricity, enable Horizon Power to reduce the total pool of costs recovered by Government through the Tariff Equalisation Fund and provide the basis to develop future opportunities to further reduce the impost.

While there is currently a loose linkage between funding and performance, Horizon Power views it as essential that a greater level of certainty is brought to bear on these arrangements. Horizon Power's rationale for this reflects:

- In the absence of any supplementary funding (afforded through the Tariff Equalisation Fund, CSOs and Horizon Power's own commercial activities), Horizon Power would be unable to operate physically or in compliance with its obligations under s. 61(1) of the Electricity Corporations Act 2005. Further, without sufficient and certain revenue streams Horizon Power's assets would not be deemed to pass the asset impairment test, required under the Accounting Standards[13]. Impairment of assets can result in a need to devalue a business's assets. Such matters are also considered when setting credit ratings. Insufficient funding for the business will also have a counter impact on efficiencies by increasing the implied financing costs when contracting with counterparties;
- The determination of an appropriate subsidy, including the determination of the underlying efficient expenditures, is critical to Horizon Power's financial sustainability and to the business's ability to contract effectively with counterparties for energy purchases, new infrastructure projects and large sales contracts. Critically for the State, without adequate external financial support, Horizon Power's infrastructure would be at risk of deterioration, with the prospect of reductions in the quality and reliability of supplies, and ultimately an inability to meet current demand and growth needs;
- Clearly, given the role that Horizon Power plays in providing energy supplies to the power-house regions of the State, securing adequate external financial support also has a flow on effect in underwriting continued economic development in remote and regional Western Australia;

[13] AASB 136 Impairment of Assets, para 9.

- The central requirement in developing an appropriate funding model is to mobilise sufficient funds for investment in infrastructure, and to do so in a timely manner;
- Horizon Power has limited scope flexibility in its revenues, either through its marketing activities or retail pricing policies. If changes in circumstances, including changes in State and Commonwealth Government policy initiatives, impose additional costs on the business, Horizon Power has limited capacity to absorb these costs or to obtain additional funding. Such a funding model is at odds with the needs of an innovative, commercial business;
- Greater certainty is required in respect of the funding the business should expect to achieve over the medium term. Horizon Power views that this can be achieved by defining, in light-handed regulatory arrangements, the term "efficient costs" and by setting out in those regulations the way in which efficient asset-related costs (return on assets and depreciation) and efficient operating costs are to be determined. Such certainty will go some way to providing certainty to the business's contractual counterparties as to the business's long term viability and to the Board in giving its commitment that the business is financially sustainable over the long term;
- Changes in the cost base and/or the volume of loss making customers are not adjusted for within the sources of funds;
- Horizon Power does not have specific funding sources identified to accommodate unforeseen events (such as cyclones), as and when they occur. This gives rise to financial exposures for Horizon Power;
- The Tariff Equalisation Fund requirements are set concurrently with the Western Power Access Arrangement, occurring once in every three year period, and potentially in the future, once in every five year period. Horizon Power's funding from the Tariff Equalisation Fund is therefore not dynamic in nature. This process is not undertaken concurrently with either Western Power or Horizon Power's State Budget process. As such, the funding allocated to each business may be misaligned and insufficient to meet the efficient expenditures determined as part of the Access Arrangement and Tariff Equalisation Fund processes; and
- In determining the business's economic profit the disparity between the efficient cost of supply and the revenues from the sale of electricity at regulated retail tariffs should be offset by the profits from Horizon Power's other business activities. This use of profits from other business activities to fund the losses arising from application of the Uniform Tariff Policy ensures that the total quantum of the Tariff Equalisation Fund is constrained. Further, Horizon Power should be able to derive a modest economic profit to enable the business to sustain itself between Tariff Equalisation Fund resets.

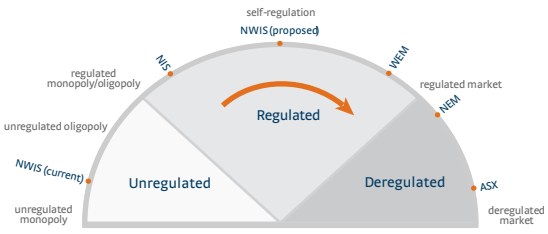
Horizon Power is keen to engage with Government to further develop its Performance Bargain. Within the scope of such a bargain, Horizon Power seeks to address the current form and valuation of the Tariff Equalisation Fund; and specific arrangements to more closely link service standards to funding (including Revenues, Ongoing Funding and Funding for Investment).

Section A5 - The Future View

While Horizon Power has done much already to enhance the efficiency, reliability and security of Horizon Power's systems and there are a range of other initiatives in train that Horizon Power is progressing, such economies will be limited in the future. Opportunities for further efficiencies will, in the absence of technological improvements and further economies of scale and scope, become increasingly expensive and only provide incremental benefits. With the perpetuation of the current Uniform Tariff Policy, the value of the Tariff Equalisation Fund will continue to rise with growth in customer numbers and escalation of the cost base in remote and regional Western Australia.

The scheme of the Tariff Equalisation Fund and the efficient expenditures must sustain remote and regional service provision in the future. In this context, Horizon Power sees merit in the Authority considering the potential evolution of the industry and its implications to Horizon Power's structural requirements.

Horizon Power acknowledges that Government corporations, like private sector corporations, are required to return value to their shareholder. They are however differentiated in the manner by which value is ascribed by their respective shareholders. With Government as its shareholder, a Government corporation must attribute value to non-economic factors such as environmental and social good. As such, they can act as agents for Government policy. Reflecting the introductory quotation to this submission, Horizon Power identifies a clear role for itself in providing public good through the provision of the infrastructure necessary to facilitate State and Regional development. Horizon Power also identifies the relative infancy of many of its systems from a competition perspective. In the majority of cases this reflects the size and demographics of the systems. In those systems that are in their early stages of development, it is noted that the commercial self-interest of any single private industry participant will not necessarily provide incentives to deliver effective and efficient services to customers. However, as load centres develop, getting larger and with more participants, there is a natural evolution from a centralised and highly coordinated monopoly system towards coordination of multiple participants and market type structures. Such evolution requires coordination and support infrastructure. Horizon Power's perspective of the current and potential evolution of competition in its systems is shown pictorially below.



Horizon Power identifies a clear role for the business in assisting the State to develop the economic frameworks which will, in the long run, provide sustainable competitive outcomes. This role must be considered by the Authority when determining Horizon Power's efficient expenditures. Further details on Horizon Power's views of the role of Government corporations are provided in the business's submission to the State Energy Initiative Issues Paper[14].

Consistent with Horizon Power's submission to the State Energy Initiative, the business identifies differing evolutionary paths for both the NWIS and the NIS.

A5.1 The NWIS

In the NWIS, Horizon Power's operations are predominantly transmission, distribution and retail related, with generation plant being privately owned and operated. The NWIS transmission system also comprises a number of privately owned transmission lines. Historically the development of this system has not been well coordinated with major private transmission lines being established by private industrial and mining projects to serve their individual needs.

Horizon Power sees clear benefits in the adoption of an integrated approach by participants to the development of the NWIS[15]. Such an approach has the potential to reduce over-investment in generation plant, improve the reliability of the system, increase the viability of renewable generation and minimise carbon emissions through large scale aggregation to improve conversion efficiency. Moreover, integrated development would maximise the benefits for users and the State, and lead to more efficient solutions to the area's electricity needs.

There is also potential to increase generation competition in the NWIS in the future, however, this is dependent on the physical and operational integration of the interconnected system to the point where it encourages the transfer of energy across the system in a reliable manner.

This evolutionary path was well understood and supported by policy makers at the time of Horizon Power's establishment.

[14] Horizon Power submission to the State Energy Initiative at http://www.energywa.gov.au/cproot/1836/Horizon%20Power3.pdf.

[15] Ibid.

"Integrated development [of the NWIS] would best be served by a single body dedicated to managing the NWIS to achieve desirable outcomes for both the State and private sector participants. The coupling of asset ownership and system management within a single entity is desirable to ensure that a coordinated approach to development occurs. The continued integration of Western Power's [Horizon Power's] current retail function would also be advantageous, ensuring a focused approach to servicing customers in the NWIS"[16].

A5.2 The NIS

Limited (no) headroom in tariffs under the Uniform Tariff Policy; the high costs of supply arising from the geographic dispersion and low customer density; and the limited scope for market development means that increased levels of competition are unlikely to be experienced in the NIS. Horizon Power is likely to continue to operate in all segments of the electricity supply value chain.

While each system is physically unique, they all share common characteristics in terms of operations management and planning. This does provide some efficiency savings through aggregation. Horizon Power cautions against opening up individual systems to competition (cherry picking) as this will reduce the current efficiencies available to the State due to losses of economies of scale and scope and introduce the potential for stranding of assets and contracts.

Horizon Power notes that by Asset Management Planning and managing assets over their life cycle, the business extracts the maximum return for the State's current and sunk investments. Such an approach can only be achieved through long term life cycle contracting strategies or by maintaining a combined asset ownership and management model.

Generation costs dominate the costs of supply in the NIS. In order to constrain these costs, Horizon Power has in the past, in a number of systems, competitively outsourced the provision of electricity generation to the private sector. The largest of such procurement processes was commenced, prior to the Electricity Reform Programme, by the State Government under the guise of the Regional Power Procurement Process. Horizon Power has developed some substantial learnings from the outcomes of these procurement processes and from directly managing its ongoing contractual relationships with procurement counterparties. While some of these matters are of a "commercial in confidence" nature there are some insights that the business can share with the Authority with regards to the current risk/return balances in the contracting marketplace, operational experience and whether further efficiencies are likely to be extracted from procurement processes in the future. Horizon Power continues to set as one of its balanced set of objectives, the prudent minimisation of the cost of supply and development and operating risk in its systems. Where appropriate competitive procurement will be utilised as one of a suite of mechanisms for achieving this, alongside build-own-operate.

Retail costs constitute only a small proportion of the total costs to serve in the NIS. Competition for retail supply is unlikely to develop in most of the NIS due to the combination of the Uniform Tariff Policy and the high cost of generation. It is therefore appropriate that a single, Government-owned, business retain an integrated approach to service delivery in these systems.

Horizon Power views that its activities in both the NWIS and the NIS are sufficiently similar to warrant continued aggregation within a single entity. As identified by the Electricity Reform Task Force, the principal similarities include:

- *"The provision, or procurement, of generation capacity from [and to] the private sector;*
- *Network management and retail supply skills in the context of the special circumstances of each system; and*
- *State and regional development issues, requiring investments in network infrastructure for the benefit of regional communities and the State."*[17]

[16] Western Australia: Electricity Reform task Force Op Cit.

[17] Ibid.

In addition, Horizon Power views that the activities that it undertakes in the NWIS and NIS continue to be sufficiently different to those being undertaken in the SWIS to warrant continued separation from SWIS mechanisms and the Government-owned businesses (Synergy, Verve Energy and Western Power). As elaborated in the Horizon Power submission to the State Energy Initiative, the most immediate economies achievable in the NWIS and the NIS lie in deriving efficiencies at every point in the energy supply value chain, rather than the creation of a competitive market as is the case in the SWIS. In contrast, in the SWIS the policy initiatives are directed at establishing a competitive electricity market while maintaining reliability of supply. Improvements to reform the domestic gas market, given its immaturity and oligopolistic structure, remain critical and common goals State-wide.

There are few synergies between SWIS activities and the respective NWIS and NIS. For instance, reflecting the demographics of the customer base and the geographic dispersion of the service area (42,474 customer connections over 2.3M km^2), the networks and retail activities required to service the NWIS and NIS must have greater focus on local issues. While Horizon Power supports these functions from its Corporate Offices in Karratha and Bentley, the appropriate skills and resources largely reside at, or near, the location. Horizon Power's customers attach substantial value to the strong regional presence that has been developed. Centralising service provision would be inappropriate as the business would lose the focus that it has on regional service provision.

A5.3 Developing the Performance Bargain

Horizon Power has highlighted the need for greater certainty and clear linkages between the Horizon Power mandate, required service delivery standards and the provision of funding. Horizon Power identifies a series of key characteristics which are critical to the success of such a Performance Bargain:

- An appropriate risk return balance for the business to alleviate the need for interventionist activity by Government[18];
- An appropriately framed definition of Sustainable Revenue Requirement (SRR) which either enables pass through of those costs which are beyond Horizon Power's control or the ability to re-open the price setting process. Horizon Power outlines its preferred definition of SRR in Section B3 below;
- Establishes a clear linkage between the sources and quantum of funding; Horizon Power's service mandate and reliability standards;
- Provides sufficient funding for the maintenance and growth of Horizon Power's assets to meet demand and operational needs;
- A consolidated regime which is capable of recognising the scale and diversity of Horizon Power's systems. What can be relatively small changes in the SWIS can create substantial operational and financial risk for individual Horizon Power systems; and
- Applies dynamic design principles – is capable of evolving as Horizon Power and its systems evolve. This will allow the incorporation of the evolving market frameworks, new regulatory regimes and potential incentive schemes.

[18] As has recently been experienced with Verve Energy.

Part B - Financial Modelling

Section B1 - General Comments

Horizon Power understands that the Authority's approach to conducting the Inquiry will require the Authority to construct a generic financial model for each of Horizon Power's systems for the provision of services from regulated assets. Horizon Power identifies that there will be a number of specific attributes which will need to be considered by the Authority in the review process. The business will work closely with the Authority to articulate these matters during the process. Matters which Horizon Power is able to identify at this point in time include:

- None of Horizon Power's 34 networks are "covered" by an Open Access Regime and as such data is not readily available to adequately establish a "regulated" asset base. The data that Horizon Power will provide relating to asset histories and values will be extracted from Horizon Power's accounting records;
- The current Tariff Equalisation Fund calculation and Horizon Power's legislation (to achieve an economic profit of zero through cost efficient operations) includes ALL Assets to derive a capital return regardless of funding source (Horizon Power, customer or government [Equity]). As a reflection of the data obtained by Horizon Power at its establishment, Horizon Power has limitations on the information that it is able to provide the Authority relating to gifted and contributed assets within the asset base on 1 April 2006;
- Reflecting the vertically integrated nature of the former Western Power's accounts, Horizon power does not have access to detailed expenditure or revenue data prior to its establishment on 1 April 2006. Many of the expenditures and revenues which would now be associated with Horizon Power's service areas were accounted for in other parts of Western Power's accounts. Horizon Power does not view pre 1 April 2006 revenue and expenditure data as relevant to the Inquiry;
- There are 34 small independent systems in remote and regional areas as opposed to one large interconnected system in the SWIS. This has significant implications to the volume of data and scale of transactions. Horizon Power advises the Authority that data collection associated with this Inquiry is substantial. Further, the Authority's presentation requirements for this data will necessitate the business's review and reformatting to facilitate easy uptake by the Authority. Horizon Power advises of the substantial resources being engaged by the business to assist the Authority with the Inquiry;
- Horizon Power operates an integrated supply chain under the Decentralised Operating Model. As such there are a substantial volume of corporate and direct "District" level costs which are not directly costed to individual systems. Horizon Power has recently reviewed its internal cost allocation methodologies and will make these available to the Authority;
- Regulated revenue is 90% of Horizon Power's total revenue. Horizon Power does not separately cost between expediture relating to regulated and non regulated revenue. Horizon Power identifies that the removal of non regulated expenditure from its accounts would be arbitrary and highly time consuming;
- Data for small systems is comparatively volatile. Demand forecasting on a system by system basis can be unreliable, particularly for long forward projections and where demand is closely linked to commodity movements;
- The classification of expenditure within Horizon Power's vertically integrated chart of accounts is not always unambiguous. For example, an expense could relate to both generation and transmission costs and could relate to more than one system or district. This will have some implications at an individual system level and for individual value chain categories of expenditure (Generation, Transmission, Distribution and Retail) within each system;
- Regional escalations for labour, materials and transport are significantly different to that of the Perth metropolitan or SWIS escalators. These escalations present more volatility with economic development in the regional areas which have in the past lead to significant cost and demand pressures;

- Fixed costs for Power Purchase Agreements vary significantly from system to system and so the cost-to-serve for each system is significantly different depending on the fuel source, plant contracted, terms of contract and relative customer base; and
- Given the vertical integration, geographic dispersion and socio economic diversity of the Horizon Power service area, any bench marking needs to be carefully scrutinised.

Section B2 - Reliability Standards

Horizon Power appreciates consideration of appropriate reliability standards for the business being incorporated into the Inquiry. Determination of appropriate service standards is highly relevant to the Inquiry as these service standards drive the level of efficient costs. Further, it is these service standards to which the Treasurer must have regard when making a Tariff Equalisation Fund determination[19]. Consistent with Horizon Power's previous comments (Section A 5.3), the setting of reliability standards should be an informed and iterative process as part of the agreement of the business's Performance Bargain with Government. Once reliability standards are agreed within this process, the required funding (Revenues plus Ongoing Funding plus Funding for Investment) must be maintained to enable Horizon Power to adequately deliver against its performance obligations.

Horizon Power holds the view that the costs of meeting these requirements, under the specific operating conditions experienced in Horizon Power's service areas, is significantly different to that experienced in other jurisdictions, particularly the SWIS to which Horizon Power is often compared. Horizon Power has undertaken substantial analysis on the Value of Customer Reliability (VCR) based on the methodology applied by Vencorp to quantify the cost of unexpected /involuntary loss of supply to customers. This methodology is used in the draft National Guidelines for Electricity Network Development currently being developed by the Energy Networks Association (ENA). The VCR methodology was chosen as the basis as this is the normal tool used for the Victoria Transmission justifications and no study has been conducted within Western Australia. Horizon Power has developed a framework of differentiated reliability targets, on the basis that levels of service should reflect the service that could be expected, based on similar system types throughout the State. It has been assessing asset performance data to understand system capability and working to understand customer expectations. A strong justification has been established for distribution reliability standards to differ between varying geographical areas of the State based on system type, environmental and climatic conditions. On large, interconnected systems such as the NWIS and the larger regional towns such as Broome, Esperance (Urban areas) and Carnarvon, customers expect a level of service standard similar to that received on the SWIS Urban areas. Customers on longer rural feeders (up to and exceeding 200km) and the more isolated regional towns, not serviceable within the time periods expected, where resources are available close at hand to rectify problems, are perhaps more accommodating of longer outages. Horizon Power is able to make its analysis available to the Authority.

Horizon Power holds the view that the individual focus and reporting of performance on an individual system basis is a critical success factor to achieving Horizon Power's legislated mandate, as previously articulated. The creation of average "artificial" performance standards for Horizon Power's entire service area incorrectly incentivises the business to focus on ensuring that only the larger systems meet their service standards.

What constitutes an appropriate balance between the reliability of supply and the cost of energy is a matter of judgement, but not a judgement that should be determined solely by Government. Despite a large service area, varying demographics, asset ages and utilisations, reliability energy regulations are consistently applied across the State, making it very expensive.

Horizon Power views that regulatory mechanisms which allow for pricing discounts (or cost savings) associated with differences in reliability of service should be a matter for specific public consultation with the outcome being reflected in Horizon Power's Performance Bargain.

[19] In accordance with section 129D of the *Electricity Industry Act 2004 (WA)*

Section B3 - Defining Horizon Power's Sustainable Revenue Requirement

The whole energy supply chain influences the level of efficiency, reliability and security of supply. This extends from the availability and distribution of primary fuel sources, the reliability of primary fuel sources, the reliability of energy transport and transmission systems and the alternatives to these in times of failure, the amount and reliability of generation sources and the performance of distribution networks. Horizon Power adopts a coordinated approach over the whole energy supply chain to achieve the desired efficiencies, reliability and security.

B3.1 Efficient Operating Expenditures

The *Electricity Corporations Act 2005 (WA)* defines the term "efficient cost of supply" as "*those costs that would be incurred by a prudent service provider acting efficiently and in accordance with accepted and good industry practice*"[20].

Accordingly, a broad definition of efficient cost of supply has traditionally been used in the determination of Horizon Power's Tariff Equalisation Fund. Listed below is a summary of the types of costs that are incurred by Horizon Power and incorporated in the Tariff Equalisation Fund calculation.

These costs represent a blend of expense elements and activities.

- Distillate/Waste Oil;
- Gas Purchases & Transportation Costs;
- Electricity Purchases;
- Renewable Energy Costs;
- Hedging Costs;
- Operations Costs;
- Maintenance Costs;
- Works Delivery;
- Property Costs;
- Fleet Costs;
- Metering and Billing Costs;
- Customer and Stakeholder Management Costs;
- IT&T Costs (including networks, generation and retail systems);
- Other Direct Costs; and
- Overhead Recovery.

The Authority has advised that the allowance for operations and maintenance expenditures will be calculated under a building block approach on 'efficient costs'.

Horizon Power contends that its costs are the efficient costs of electricity provision to remote and regional Western Australians in the current industry structure and Government policy settings.

There are likely to be a range of matters associated with the determination of efficient expenditures which will require the Authority's consideration. Matters which the business is able to bring to the Authority's early attention include:

- Horizon Power is working with the Authority to provide detailed forecasts of expenditures for the current period through until 2013/14. The expenditures are calculated as a product of Horizon Power's Asset Management Planning processes to meet forecast demand and documented standards and requirements;
- Ever changing Commonwealth and State regulatory environment results in significant compliance costs against a backdrop of ageing assets. Horizon Power manages its assets to a full (100%) safety and regulatory compliance standard. This must be reflected in any determination of efficient expenditures;
- The application of Horizon Power's Decentralised Operating Model results in services being delivered on a District basis, not an individual System basis. This enables the clustering of towns to provide a critical mass of functions and allows the business to derive economies of scale. As such, many costs which would normally be accounted for as "direct" costs in a much larger system (such as the SWIS) being that they relate to

[20] *Electricity Corporations Act 2005 (WA) Section 129B.*

core service provision are accounted for as "indirect" costs. A similar rationale exists for accounting for Corporate Overheads. Horizon Power has recently reviewed its overhead accounting methodology for both District and Corporate Overheads and can provide the supporting information (rationale and underlying data) to the Authority;

- Any efficiency assessment will, by necessity, consider Horizon Power's asset valuation. However, in the absence of a regulated asset valuation, Horizon Power views it as likely that the Authority will rely on a valuation which is based on Indexed Historical Cost. Horizon Power's historical asset base incorporates assets at a zero written down value. This base is likely to provide for a substantially lower set of efficient costs than those which would be achieved from an optimised or current cost asset valuation methodology. While recording assets at this value is acceptable from an accounting perspective, an economic analysis must be adopted for determining the Sustainable Revenue Requirement, with such a valuation incorporating asset values and adequate depreciation allowances for all assets used by Horizon Power to provide its services (Refer to Section B4) Further, should the Authority or other stakeholders seek to apply the outcomes of this Inquiry to the development of a regulatory framework for Horizon Power, it would be necessary for substantial valuation work be undertaken on the asset base to ensure that Horizon Power's asset data is fit for this purpose;
- Operating and maintenance costs reflect the fixed and variable costs associated with the actual provision of the service. Horizon Power draws to the Authority's attention that some of the contracts which give rise to its cost structure[21] were inherited at disaggregation, having been contracted by Western Power or Government directly. While in the longer term Horizon Power has some flexibility to recontract these arrangements and obtain greater flexibility, in the short term the business has very limited opportunities with which to introduce efficiencies or manage cost exposures. Horizon Power believes that fixed contracts, inherited at disaggregation, should be treated as a cost pass through;
- COAG agreed to a National Renewable Energy Target that aims to have 20% of Australia's energy come from renewable sources by 2020. Western Australia highlighted the need for increased electricity network investments in the State to meet these targets. Horizon Power's service area is highly prospective for a range of renewable energy resources, including geothermal, biomass, wind, tidal, wave and solar energy. Presently the most commercial viable, mature and proven renewable technology is wind turbine technology. Wind energy is highly variable. This has significant efficiency and security of supply ramifications and a flow on effect to the overall cost of supply from wind generation. It is critical that adequate funding is provided for within the generation and transmission cost stacks to accommodate renewable technologies and support Western Australia's compliance with the Renewable Energy Target;
- Horizon Power is constrained in the manner in which it can manage its cost of carbon exposures. The majority of its costs are incurred through existing, inherited, Power Purchase Agreements. While contracts are "commercial in confidence", the business can provide some general insights into its exposures and is happy to engage with the Authority on this matter; and
- It is noted that over the last two to three years the ground has shifted dramatically with regard to the development of a National Emissions Trading Scheme and the Expansion of the Renewable Energy Targets. Such shifts in policy foundations make it extremely difficult for Horizon Power to plan for the future, contract for fuel and electricity supplies and to forecast the true cost of electricity supplies. It is likely that these policy foundations will continue to evolve during (and subsequent to) this Inquiry as the Commonwealth Labor and Liberal parties develop their policies and following the 2010 Federal election.

[21] Such as Power Purchase Agreements.

Horizon Power highlights to the Authority the need for any determination of efficient expenditures to allow sufficient environmental cost allocations to ensure Horizon Power can continue to deliver the high level of compliance expected of Horizon Power's Board in general. Reflecting the dynamic state of Commonwealth Environmental Policy development, the business views that an appropriate margin should be reserved within the costs of supply to meet potential costs through to June 2014. Alternatively, should the nature of these policy frameworks evolve, the consequential cost exposure to Horizon Power should be clearly flagged as a sufficient justification for a re-evaluation of Horizon Power's funding requirements.

Horizon Power appreciates that in an incentive based regulatory scheme, there is an expectation that there will be on-going gains made in the efficiency of service delivery. Horizon Power actively pursues these gains. The businesses successes are well demonstrated in its track record since establishment. However, it is an acknowledged shortcoming of efficiency frameworks that over time and without technological or structural change, the opportunity for such efficiency gains are gradually eroded.

Horizon Power's Strategy & Business Development; and Islanded Systems Development Divisions are resourced to undertake a range of support activities for the business's operational (business as usual) groups. Carrying the technical, innovation and commercial acumen also enables the business to pursue commercial opportunities and harness new technologies to provide greater efficiencies and commercial returns to the business. For example, the supply and construction of camps and loading facilities for the mining industry and Government authorities.

Clearly the progression of major structural change for the State's electricity supply industry is beyond the mandate of Horizon Power. However, Horizon Power has explored opportunities to harness economies of scale and scope. In this regard the business identifies the Authority's report: Inquiry on Competition in the Water and Wastewater Services Sector (30 June 2008), which recommended that "business cases be developed for providing electricity, water and wastewater services in the area of operations currently covered by Horizon Power". Such horizontal integration has the potential to provide Horizon Power with further economies of scope and scale, delivering greater efficiencies to end customers and to the State. Horizon Power has therefore been assessing the merits of aggregating these utilities into one multi-utility to operate in remote and regional Western Australia.

Horizon Power appreciates the Authority's consideration of the potential of achieving further economies of scale and scope in remote and regional service provision.

B3.2 Approach to Asset Management

Horizon Power manages its business based on a comprehensive Asset Management Plan (AMP) and associated strategy. The objectives of the Asset Management Strategy align with the business's broader social, environmental and economic benefits. Within the current planning period Horizon Power is moving from a strategy of Fit for Purpose to Asset Lifecycle, with the main change being that assets are managed based on their condition and not on age. This strategy will treat all assets individually instead of on an asset class basis and enhances the practice of ensuring assets are operated in a safe, innovative and efficient manner.

In this context, the business's Asset Lifecycle Strategy means that Horizon Power's assets:

- Present minimal risk to the safety of staff and communities;
- Supply quality and reliable power;
- Are designed to keep pace with demand growth in our communities;
- Represent value for money;
- Are replaced based on their condition and in accordance with optimal life cycle costs;
- Are proactively inspected and maintained to minimise points of failure; and
- Comply with all regulations, codes and standards.

Horizon Power's Asset Management Strategy is

implemented through a cascading set of Asset Management Plans:

- Strategic Asset Management Plan. This provides guidelines, methodology and performance targets for each of the asset classes and is used to develop District Asset Management Plans;
- Instruction modules that detail the method and criteria assets need to meet and where to record the analysis; and
- Asset Management Plan. Horizon Power develops one asset management plan that collates all of the analysis undertaken by each of the six districts on their assets. Each of the districts compares their asset performance against the criteria developed in the instruction that leads to targeting and developing solutions for closing performance gaps.

Within the business's current Strategic Asset Management Plan the focus has been on developing and implementing Asset Management Plans for Horizon Power owned assets. Horizon Power is also progressing a substantial undergrounding project which will see the entire electricity networks in Karratha, South Hedland, Onslow and the remainder of Roebourne undergrounded in the period to the end of 2012. This project, which incorporates "smart-grid" technology, is being funded under the Royalties for Regions programme, with additional contributions from Local Government. This project will result in substantial improvement in reliability, amenity and operating costs.

From 2011 onwards the focus will be on ensuring the sustained capacity, safety and performance of assets. To achieve this Horizon Power will adopt the following principles of operation:

- Proactive asset management and maintenance;
- Ensuring assets are always ready to meet the required demand;
- Steady replacement of assets as they are identified as not meeting the criteria;
- Smooth budgeting / monitoring; and
- Continuous improvement and review of performance.

B3.3 Efficient Capital Investment

Whether the need for an individual investment can be predicted with much certainty, or whether Horizon Power can influence control over the costs of this investment depends on the precise circumstances. The following general comments are made:

- The historically inadequate investment and re-investment in Horizon Power's service area over the two decades prior to Western Power's disaggregation has now been recognised within Horizon Power's Asset Management Planning Systems. Horizon Power has assessed the implications of this low level of investment on safety, quality and reliability and prioritised system expenditure to meet the most critical needs;
- Quality enhancements pursued by Horizon Power come from two main sources: mandated or voluntary. The business has a 100% compliance ethos. Therefore investments aimed at meeting safety and regulatory obligations are not considered discretionary. As highlighted in Section A5, Horizon Power views the further development of the Performance Bargain, including the provision of adequate funding, as being a fundamental step in empowering the business to meet its service delivery obligations;
- The NWIS brings with it particular challenges which must be separately addressed. Major transmission network infrastructure will be needed in the future to stimulate and nurture the development of this region's natural resources and potential in other areas of industry and commerce. The lack of an electricity network to fully service the Pilbara is not only creating uncertainty for major investments in the region but also limiting access to large scale renewable wind and solar energy developments from customers;
- As far as expansion investment is concerned, the extent to which this can be predicted with confidence depends on the circumstances. The out-turn demand may well differ substantially from what is forecast and some driving factors may be inherently harder to predict.

For example, Horizon Power is likely to have several years lead time of the need to connect new generating plant to transmission infrastructure. However, some new customers could occur with little notice, or less notice than that needed to build the investment in the typical three years of the Tariff Equalisation Fund setting process;

- From a size of system perspective, a new load increment that is considered to be relatively routine for larger systems like the SWIS, and potentially the NWIS, can have severe impacts on smaller systems. For example, in a community like Exmouth, an increment of 5 GWh, such as would occur with a new resort marina, would constitute approx 20% of the total load, requiring a substantial upgrade to generation and distribution infrastructure, significantly changing the operating profile of the system and the overall cost of supply; and
- In terms of efficiency of capital investment, the Horizon Power business model offers the ability to optimise the investments over the entire value chain. The decisions on how much new generation capacity will be added and where it will be located are often taken by the same people who plan and manage the transmission. In evaluating the options available the complete system is considered including localised demand management, generation and transmission options.

Section B4 - Deriving an Appropriate Return on Investments

It is appropriate that Horizon Power is remunerated for the capital employed in the provision of services, both for existing capital and for new assets. Horizon Power views this as occurring through two separate charges:

- The opportunity cost of capital employed which is proxied by the allowed rate of return, which reflects the cost of both debt and equity finance; and
- The consumption of the existing assets to provide the services, proxied by the depreciation charge.

As a competitively neutral commercial business Horizon Power is expected to pay tax and recover its cost of capital. On this basis, Horizon Power must be funded to achieve at least an economic profit of zero. This should provide Horizon Power with a cash surplus to enable the business to manage risks and accommodate variations between budgeted and actual expenditures within each Tariff Equalisation Fund determination period. However, Horizon Power also acknowledges the State's significant sunk investments in remote and regional electricity infrastructure. Prior to the implementation of the Energy Reform Programme, many of these investments were made by means of debt and equity investments. Horizon Power therefore views it as appropriate that Horizon Power's Sustainable Revenue Requirement be set at a level which will allow Horizon Power, and in turn the State, to recover a market rate of return on its investments.

The Sustainable Revenue Requirement determined using a 'building block approach' is favoured by Australian economic regulators of network businesses. This approach is calculated as:

*SRR = AV * WACC + D + O&M + 'S-factor' + Pass-throughs*

Where:

SRR = Aggregate Annual Sustainable Revenue Requirement

AV = the forecast value of the regulated asset base

WACC = the weighted average cost of capital

D = the annual depreciation allowance

O&M = forecast efficient operating and maintenance expenditures

S-factor = adjustment based on actual performance as against forecast performance

Pass-throughs = allowance for costs that cannot be forecast with reasonable certainty.

Electricity businesses are capital intensive. Therefore the value of the asset base used in the calculation of the Sustainable Revenue Requirement is the most significant factor in determining sustainable revenues. It impacts on both the return on and return of capital. The return on capital is the asset value multiplied by the WACC, while the return of capital is the depreciation component in the SRR formula above. Taken together, these items typically

represent some 75 per cent of the SRR.

In determining the SRR, the valuation methodology applied to the asset base is critical.

B4.1 Asset Valuation

There are a number of methodologies for determining the opening asset values. The method that has generally been adopted by jurisdictional regulators across Australia for the initial valuation of assets has been the Depreciated Optimised Replacement Cost (DORC) methodology[22]. However, as previously noted, Horizon Power does not have a regulated set of accounts or asset values. The ambitious timeframe that has been set for the Inquiry will not be sufficient to enable a full review of the business's assets, for each of its 34 systems, to establish a valuation appropriate for an economic analysis. Utilisation of the accounting data will significantly undervalue the assets from an economic perspective. Reflecting Horizon Power's aging infrastructure, some of its assets are fully depreciated with a zero book value and therefore an insufficient allowance is made for return of capital. Further, any assessment of an appropriate level of maintenance expenditures based on this lower (accounting) valuation of assets would also be significantly understated.

Horizon Power has undertaken some preliminary assessments of potential optimised and current cost valuations for its larger integrated network in the NWIS and is able to make this information available to the Authority. However, the potentially significant implications of adopting such a valuation methodology, even if solely for regulatory purposes, is yet to be fully assessed by Horizon Power or its shareholder.

Horizon Power wishes to reinforce to the Authority and stakeholders more generally the explicit Terms of Reference for the Inquiry and to note that any adoption of asset values other than for the purpose of the Inquiry will require further evaluation by Horizon Power, the Shareholder and more broadly within Government, prior to their application. Given Horizon Power's earlier comments providing further clarity to Horizon Power's Performance Bargain, Horizon Power would be happy to engage with stakeholders on progressing these matters.

B4.2 Weighted Average Cost of Capital

The determination of an appropriate Weighted Average Cost of Capital (WACC) is fundamental to determining an appropriate Sustainable Revenue Requirement. Horizon Power provides its perspectives on an appropriate WACC for the purposes of the Inquiry.

Horizon Power differs from the typical regulated utility (such as Western Power) in various ways, including:

- Horizon Power is much smaller, serving some 42,474 customers versus approximately 900,000 customers for Western Power;
- Horizon Power conducts generation, distribution and retail activities;
- The business's transmission and distribution networks are non-interconnected and low density;
- Much of the service area is remote, serving Aboriginal and mining communities;
- The service area is located primarily in harsh climates, ranging from deserts to tropical locations;
- The business faces input prices (labour and materials) that are generally higher and more volatile than the State or National averages; and
- The business faces customer growth rates that are generally higher and more volatile than that faced by typical utility service providers.

Horizon Power also faces more risk relative to Western Power (for example), and this risk cannot be easily diversified, because it is asymmetric risk. Such risks include:

[22] More information on alternative methodologies is available from: *Regulation of NSW Transmission Revenues: Issues Paper*, issued by the Australian Competition and Consumer Commission, December 1998. See also: Bonbright, J. et al 1998, *Principles of Public utility Rates*, Public utilities reports Inc, Virginia; Choy, E. 1996, *Asset Valuation by GTEs: an Evaluation of Pricing Issue*, Australian Society of CPA's Public Sector Accounting Centre of Excellence, Melbourne; and Steering Committee on National Performance Monitoring of GTEs 1994, *Overview: Guidelines on Accounting policy for Valuation Assets of GTEs*, Industry Commission Melbourne.

- An unanticipated fall in commodity prices could result in business and residential electricity demand falling substantially in some mining locations and hence Horizon Power will be unable to recover the full cost of its assets;
- An unanticipated mining boom could put substantial upward pressure on local wage rates, and freight and materials costs, over and above the rates assumed when forecasting the Sustainable Revenue Requirement; and
- An unanticipated mining boom could also result in a large and sudden rise in demand, requiring expansion of generating and distribution capacity not foreseen when the Sustainable Revenue Requirement was determined.

The degree to which Horizon Power is exposed to risk depends on the particular regulatory model. This is difficult for Horizon Power to quantify fully at this point in time, given its limited understanding of the model to be developed by the Authority for the Inquiry. However, Horizon Power identifies that the inclusion of direct cost pass through for some expenditure items (such as fuel) may act to reduce the overall level of risk the business faces.

As a general comment however, Horizon Power contends that being substantially smaller and facing much more volatility in demand and input price markets provides a reasonable justification for a risk premium in equity markets. A corresponding premium should therefore be added to the WACC, above and beyond a comparative WACC used by the Authority, such as, for example, the current Western Power WACC. Horizon Power is able to provide its supporting analysis.

B4.3 Asset Data

Horizon Power identifies to the Authority a range of other matters associated with the business's asset data:

- Reflecting Horizon Power's vertically integrated structure, not all of the business assets possess a sole purpose. For example, the business's Karratha head office provides services to all 34 systems. This 'sharing' of assets is economically efficient. It does, however, give rise to some issues when allocating assets for regulatory purposes;
- Horizon Power's assets are utilised to produce non-contestable and contestable revenues. Given the ratio of non-contestable to contestable revenues, Horizon Power recommends that the entire asset value is assigned to the asset base;
- The choice of index used to measure the inflation adjustment will be critical to the determination of the rolled forward asset base Horizon Power identifies its strong preference for the selection of an index which is appropriate to the energy industry in remote and regional Western Australia, and not to price changes in the economy as a whole. That is, the index needs to be representative of the erosion of purchasing power relevant to the underlying costs of each of the specific components of the asset base and lead to a measure of the movement in the current replacement cost of the capital base. Clearly, in these circumstances, a set of Western Australian industry-based indices would be far more relevant than a single general index such as the All Groups CPI;
- The adjustment of the asset base for customer contributions is aimed at ensuring that where a customer makes a contribution to the construction of assets, the value of the contribution is deducted from the asset base when calculating the return to be earned on those assets. Horizon Power identifies to the Authority that at the date of disaggregation (1 April 2006), assets were transferred to Horizon Power at their written down value. Horizon Power does not have detailed records to separately identify those assets which were developed with the assistance of customer contributions prior to 1 April 2006;
- Horizon Power views that there is some flexibility in the method applied for depreciation as long as, over the economic life of the asset, the real value of depreciation is equivalent to the value at which the asset was initially included in the asset base. The approach to depreciation generally adopted in Australia is a straight-line methodology based on the economic life of the assets[23]; and

[23] For example, the most recent pricing determination made by the ESC in Victoria used straight line depreciation with the support of all five distributors.

- Horizon Power identifies benefits in utilising the straight-line methodology as it is transparent in application and easily replicated. This approach returns invested capital to Horizon Power and in turn the Shareholder, at a constant rate (in real terms) over the life of the asset. The business identifies one key pitfall with the straight-line methodology in that it reflects a steady utilisation of assets on the basis of consistent demand. This assumption does not hold true for much of Horizon Power's service area. Therefore, in periods of extremely high demand and volatile demand, it is possible that the depreciation allowance may not be sufficient to compensate Horizon Power for the actual diminution of asset life. In addition, and consistent with the comments made previously, Horizon Power draws to the Authority's attention the business's concern that the asset base is suitably adjusted for those assets which have a zero written down value but which are utilised to provide the business's services. Consistent with the economic approach to asset valuation, such assets must have an adequate valuation incorporated into the asset base.

Section B5 - Retail Tariffs

According to Horizon Power's expectations of the continued future interplay between regulated tariffs, the Uniform Tariff Policy and the Tariff Equalisation Fund, connection of regulated customers in remote and regional Western Australia is likely to continue to result in losses for Horizon Power, and these losses are to continue to be funded from the Tariff Equalisation Fund.

The following section provides Horizon Power's perspectives on the Government policy mechanisms which deliver Horizon Power's regulated revenues.

B 5.1 Tariff Structures

Through the past tariff setting processes, energy pricing has been distorted in Western Australia. This has meant that the energy industry has had to face a relatively reduced revenue stream, placing significant constraints and pressures on the industry. To the extent that a significant proportion of Western Australia's energy sector is in fact State owned, the impact of distorted energy prices is

passed back to the Government and to the tax payer.

Horizon Power supports moves towards understanding the true cost of supply within its service areas, both in base and peak terms. To be clear – Horizon Power strongly supports the Uniform Tariff Policy from the perspective that it provides equity to customers in remote and regional Western Australia, enables Horizon Power to deliver against its mandate and service standard obligations and positions the State for future economic growth. Horizon Power is therefore not advocating for the removal of the Uniform Tariff Policy, but for the clarity that an understanding of the true costs of supply will provide policy makers.

Part C - Responses to ERA Questions

The Authority has invited submissions on a series of key questions. Horizon Power provides specific responses to the questions posed and requests that the Authority reads these responses in conjunction with the main body of Horizon Power's submission.

1) Do you think that the regulatory approach to be taken is appropriate? If not, what alternative methodology should be considered?

In general Horizon Power views the regulatory approach to be taken by the Authority as appropriate. Horizon Power understands that the Authority will recognise within its methodology the substantial differences between Horizon Power's service area, demographics and integrated supply model when compared to other energy supply utilities.

Horizon Power operates within a loose Performance Bargain with Government. Specifically, the business operates in accordance with its Strategic Development Plan (SDP), agreed and approved with the Minister for Energy and concurred with the Treasurer through the State Budget process. The SDP process endorses the Horizon Power mandate, strategic direction for the business and performance targets which underpin Horizon Power's Business

Plan. Horizon Power manages its assets to a full (100%) safety and regulatory compliance standard. It is this broad mandate, strategic direction and performance targets which must be taken into consideration when setting the business's efficient expenditures.

Any efficiency assessment will, by necessity, consider Horizon Power's asset valuation. However, in the absence of a regulated asset valuation, Horizon Power views it as likely that the Authority will rely on a valuation which is based on Indexed Historical Cost. Horizon Power's historical asset base incorporates assets at a zero written down value. This base is likely to provide for a substantially lower set of efficient costs than those which would be achieved from an optimised or current cost asset valuation methodology. While recording assets at this value is acceptable from an accounting perspective, an economic analysis must be adopted for determining a Sustainable Revenue Requirement, with such a valuation incorporating asset values and adequate depreciation allowances for all assets used by Horizon Power to provide its services.

There are a number of methodologies for determining the opening asset values. The method that has generally been adopted by jurisdictional regulators across Australia for the initial valuation of assets has been the Depreciated Optimised Replacement Cost (DORC) methodology[24]. However, as previously noted, Horizon Power does not have a regulated set of accounts or asset values. The ambitious timeframe that has been set for the Inquiry will not be sufficient to enable a full review of the business's assets, for each of its 34 systems, to establish a valuation appropriate for an economic analysis. Utilisation of the accounting data will significantly undervalue the assets from an economic perspective. Reflecting Horizon Power's aging infrastructure, some of its assets are fully depreciated with a zero book value and therefore an insufficient allowance is made for return of capital. Further, any assessment of an appropriate level of maintenance expenditures based on this lower (accounting) valuation of assets would also be significantly understated.

Horizon Power has undertaken some preliminary assessments of potential optimised and current cost valuations for its larger integrated network in the NWIS and is able to make this information available to the Authority. However, the potentially significant implications of adopting such a valuation methodology, even if solely for regulatory purposes, is yet to be fully assessed by Horizon Power or its shareholder.

Horizon Power wishes to reinforce to the Authority and stakeholders more generally the explicit Terms of Reference for the Inquiry and to note that any adoption of asset values other than for the purpose of the Inquiry will require further evaluation by Horizon Power, the Shareholder and more broadly within Government, prior to their application. Given Horizon Power's comments within the body of this Submission of the benefits of developing a closer linkage between the Horizon Power mandate, service standards and the overall level of funding, Horizon Power would be happy to engage with Government and stakeholders more generally to progress these matters.

Horizon Power identifies to the Authority that as a new and evolving business, detailed costing, revenue and asset data is not available on an individual System basis. The business has recently developed its allocation methodologies to enable such accounting to take place and is in the process of implementing the necessary systems and processes. Further, at Horizon Power's establishment on 1 April 2006, Horizon Power was not provided with detailed information as to its Historical Asset Base, including separation of those assets within the base which were gifted or customer contributed. Revenues and Expenses relating to remote and regional service provision within the former Western Power Corporation's accounts (prior to 1 April 2006) are difficult to obtain and do not relate comparatively to current Horizon Power revenue and expenses as a reflection of the former Western Power Corporation's accounting methodologies for revenues, expenses and Corporate Overheads.

In taking appropriate consideration of Horizon Power's specific circumstances, Horizon Power requests that the Authority:

[24] More information on alternative methodologies is available from: *Regulation of NSW Transmission Revenues: Issues Paper*, issued by the Australian Competition and Consumer Commission, December 1998. See also: Bonbright, J. et al 1998, *Principles of Public utility Rates*, Public utilities reports Inc, Virginia; Choy, E. 1996, *Asset Valuation by GTEs: an Evaluation of Pricing Issue*, Australian Society of CPA's Public Sector Accounting Centre of Excellence, Melbourne; and Steering Committee on National Performance Monitoring of GTEs 1994, *Overview: Guidelines on Accounting policy for Valuation Assets of GTEs*, Industry Commission Melbourne.

- Recognise Horizon Power's endorsed mandate, strategic direction and compliance obligations (safety, regulatory; and asset related) when setting efficient expenditure requirements. Address other matters relating to efficient expenditures as identified in section B 3.1;
- Adopt an appropriate valuation methodology for the RAB. Horizon Power recommends that for the purposes of this review Indexed Historical Cost be used, with assets indexed from their date of acquisition, as identified in section B 4.1;
- Select an appropriate risk adjusted WACC, accommodating the specific matters identified in section B 4.2;
- Recognise the efficiencies delivered by the Decentralised Operating Model and the consequences of this model on management accounting practices. Specifically that many costs relating to core service provision are provided by District and Corporate resources and are therefore not directly costed to individual systems (as identified in section B 3.1); and
- Absent corporate benchmarking.

2) Which tariff design approach, direct cost pricing or LRMC pricing, is preferable to generate the cost reflective pricing structure and why?

Horizon Power believes that the tariffs calculated by the Authority for the purposes of providing a transparent cost of supply must reflect the costs of energy service provision in remote and regional Western Australia. Failure to provide adequate costs and sufficient margins affect Horizon Power's financial sustainability and have flow on effects on the business's ability to contract effectively with counterparties for energy purchases, new infrastructure projects and large sales contracts. Critically for the State, without adequate and sustainable revenues, Horizon Power's infrastructure would be at risk of deterioration, with the prospect of reductions in the quality and reliability of supplies, and ultimately an inability to meet current demand and growth needs.

Horizon Power identifies advantages and disadvantages with the two approaches suggested by the Authority for application in calculating the cost reflective pricing structure.

The assessment of the LRMC is a much more stable approach to setting a price and is generally preferable to a Direct Cost pricing assessment as it will deliver Government and customers with the most efficient outcome. The LRMC approach is also more stable, not subject to the same level of pricing volatility that can be experienced in Direct Cost pricing, and has stronger analytical foundations and relatively high transparency of key input assumptions.

Horizon Power notes however, that the LRMC approach will fail to address Government's sunk investment in Horizon Power, much of which was financed through debt and equity injections. The cost of providing Horizon Power's services today, at the load levels currently existing in many of Horizon Power's service areas will not reflect the costs of gradually incrementing the systems for small level of growth as and when they occurred. An assessment of LRMC today will deliver the optimal price of incrementing the system in the current contracting environment. Horizon Power draws to the Authority's attention the substantial costs of operating many of its systems under the inherited Power Purchase Agreements (contracted by Government and the former Western Power). The existing contracts offer Horizon Power very limited flexibility in the short term with which to efficiently optimise its cost base. Horizon Power contends that were it to be confronted with a similar business decision today, it would progress a substantially different solution. As such the business views these items should be treated as a full cost recovery (pass through).

While being generally supportive of the LRMC approach, Horizon Power identifies some concerns with regards to the assessment of key variables. These concerns are identified below:

- A regulator's "best guess" of efficient costs is no substitute for the rigours of a commercial business, whose job it is to ensure that its services are delivered at the efficient cost. Horizon Power believes that any assessment of wholesale electricity costs for the purpose of establishing cost-reflective tariffs should be based on a build up of actual costs.

That build up of costs should not be based on a hypothetical mix of efficient infrastructure to meet the required load. It should be based on the costs of the infrastructure actually installed, so that recognition is then given to the sequential nature of decisions to invest in infrastructure over time;

- Gas prices can be particularly volatile. Domestic gas supply contracts (including Horizon Power's contracts) are confidential. However, even if the prices being paid by current industry participants were considered, it would be unsafe to base the tariffs on these prices. Future prices will not be negotiated on the same basis as current contracts. Price reviews within the current contracts will also render current prices meaningless over the long term;
- The increasing prevalence of intermittent renewable energy, particularly wind, is expected to increase the average cost of wholesale electricity, both as a result of the inherent costs of the technology, but also the additional system costs required to balance the intermittency;
- While the rise in commodity prices (iron ore, nickel, aluminium) is expected to slow, prices are not expected to fall significantly given the continued global demand and the expectations concerning the booming Chinese economy. Driven in part by the Chinese demand, the boom in the Western Australian economy is expected to continue for the next five years, with the cost pressures identified in the Issues Paper likely to continue;
- The increases in construction costs, and the apparent emerging upward trend in interest rates, will likewise put pressure on construction costs. This will be reflected in costs of power purchases or in Horizon Power's own capital expenditures;
- The balance between efficient network costs and public expectations of power availability and reliability need to be considered. Cost savings in networks can be achieved by changes to the way standards are set (For example, maintenance of low-use lines, speed of response to outages), however this will have regional development and social equity implications;
- The full costs of compliance with the Renewable Energy Target, including the purchases of Renewable Energy Certificates (RECs) need to be included in the wholesale cost of supply. In previous years this cost has been quite volatile, particularly in periods close to annual acquittal. In the absence of appropriate funding to manage a comprehensive hedging strategy, Horizon Power must have access to full pass through of RECs costs to customers and indeed this cost reflective pricing is a fundamental tenet of most carbon abatement policy settings;
- Electricity retailing costs can be broadly classified as billing and revenue collection costs; call centre costs; corporate costs; and retail margin. Of these, billing and revenue collection costs, call centre costs, and corporate costs are largely fixed for the period of the Inquiry. The cost to deliver the same level of customer service as is received in the SWIS, as required by legislation[25], is considerably greater in remote and regional areas. Unless a specific decision is made by Government to progress legislative amendments to link service levels to location, this cost disparity should be recognised in assessing Sustainable Revenue Requirements; and
- There is no appropriate comparative basis for determining retail margins. Retail margins will vary between businesses and jurisdictions, and each of the approaches usually used to determine these margins – from individual categories of costs and associated risks, using an asset pricing model, and from benchmarks – focuses on a different aspect of margin determination. Each approach requires considerable exercise of judgement in its application. Horizon Power's retail margin should reflect the appropriate margin to compensate the business for the level of risk that it incurs.

With these issues in mind, Horizon Power recommends a blended approach for determining the business's Sustainable Revenue Requirement,

[25] Reflecting Horizon Power's functions within Section 50 of the *Electricity Corporations Act 2005 (WA)*.

with the LRMC used to set the price floor. In some instances it will be necessary for the Authority to utilise pass through to ensure that Horizon Power is not put at risk by short term supply issues if the true costs incurred are more volatile and significantly higher than the LRMC.

Horizon Power identifies that it is difficult for the business to provide detailed comments on the appropriateness of the methodologies adopted as the Issues Paper does not contain detailed information on how LRMC or Direct Cost prices would be calculated for Horizon Power.

Horizon Power provides some general principles for adoption in the selection of an appropriate pricing methodology:

- Supply efficiency – Horizon Power should recover sufficient costs to deliver its endorsed Mandate and service standards, sustaining the business and enabling the future provision of services required by customers;
- Based on a solid theoretical foundation – any cost concept or methodology employed should be based on a solid theoretical framework;
- Fair and objective – the pricing methodology should be based on objective decision criteria and result in a fair outcome;
- Pricing stability – the charges, and components making up the charges, resulting from application of the methodology should not fluctuate substantially from year to year;
- Transparency and reliability – the pricing regime should be explainable and credible to customers, defendable to the Shareholder, and minimise potential for error;
- Practical and understandable – the pricing methodology should be understandable, easy to use and practical; and
- Flexibility – the methodology, when applied to all of Horizon Power's systems under differing scenarios, should be adaptable and yield sensible outcomes.

3) Do you agree with the range of performance measures Horizon Power currently reports against? And

4) What alternative performance measures could be considered?

Horizon Power's service area is characterised by its large geographic area, its small customer base and its relative isolation. Further Horizon Power serves an extremely diverse customer base, ranging from the Pilbara with its immense reserves of natural resources and economic development to remote and regional communities, including isolated aboriginal communities. The integrated nature of the Horizon Power business, as reflected in the Decentralised Operating Model, is also somewhat unique in Australia today.

The combination of these characteristics and the breadth of the Horizon Power mandate make it problematic to find similar energy businesses to benchmark against. In addition, as highlighted in Section A2 of this Submission, Horizon Power's Performance Bargain requires the business to harness innovation, develop commercial strategies, and at times compromises to deliver solutions when stakeholder needs are in conflict. Such conflicting needs can place the business in the situation of having potentially conflicting performance drivers. These concerns are a significant motivation for Horizon Power to work with Government and stakeholders more generally to develop a clearer Performance Bargain, with closer linkages between the Horizon Power mandate, universally endorsed service standards and funding.

Horizon Power reports against a cascading serious of performance measures, ranging from operational Key Performance Indicators (KPIs) to its balanced scorecard through which the business manages overall corporate performance. While the majority of Horizon Power's performance measures are enduring, reflecting good commercial, safety, asset and customer management practices, other elements represent a commitment to service levels to customers. The full scopes of the regulatory reporting requirements are covered in the Governance and Regulatory Structure section (Section A3.4) of this Submission.

Summary Tables 1 and 2 below illustrate the substantial number of performance measures and the significant administrative burden of compiling and reporting on these measures.

The resources required to achieve this are essentially the same as for larger organisations such as Synergy and Western Power, while the number of customers served by Horizon Power is significantly smaller, leading to diseconomies of scale and a proportionally larger cost burden on customers that cannot currently be alleviated.

Horizon Power views the Inquiry as an opportunity for stakeholders to reconsider the value of such a large range of performance measures and their merit in the context of the Horizon Power's operating environment and the effective use of resources within the business.

Table 1: Summary of Horizon power Internally Utilised KPIs

Activity	Measure
Customer Service	Volume phone calls Respond to customer complaints within 4 business days Resolve complaints within 15 business days Number ombudsman complaints for the month Customer calls being answered (within 30 seconds) Fault calls being answered (within 30 seconds) Cyclical meter reads, read on time Special meter reads, read on time Actual meter reads for the month (non estimated) Customer calls being answered (within 30 seconds) Volume phone calls Respond to customer complaints within 4 business days Resolve complaints within 15 business days Number ombudsman complaints for the month Cyclical meter reads, read on time Special meter reads, read on time Actual meter reads for the month (non estimated) Faults calls Customer satisfaction survey
Safety	LTIFR (12 month rolling average) AMIFR (12 month rolling average)
Reliability	SAIDI SAIFI
Quality and Capacity	Systems Exceeding Generating Capacity
Regularisation	Remote & Indigenous Communities Regularised
Business Value	Normalise EDBITDA Average Unit Costs Capital Efficiency
Environment	Greenhouse Gas Intensity

The table below outlines the Authority's reporting requirements for Horizon Power and the annual reporting obligations applicable to all electricity licence holders in respect to relevant legislation and the Electricity Licence Reporting Manual. The reporting obligations for each type of electricity licence are summarised in Table 2.

Table 2: Summary of 2009/2010 Annual Reporting Obligations for Electricity Licences

	Generation Licence	Retail Licence (small use customer)	Retail Licence (no small use customer)	Distribution Licence (small use customer)	Distribution Licence (no small use customer)	Transmission Licence (small use customer)	Transmission Licence (no small use customer)
Annual Compliance Report	✓	✓	✓	✓	✓	✓	✓
Annual Performance Report	-	✓	-	✓	-	-	-
Network Quality and Reliability Code Report	-	-	-	✓	-	✓	-
Code of Conduct Report	-	✓	-	✓	-	-	-

5) Do you think that Horizon Power's performance around a set of benchmarks should attract a financial penalty or reward for the company?

As identified in Section A 3.10 of this Submission, Horizon Power's performance since establishment in 2006 has exhibited dramatic improvement. Horizon Power attributes this to the strong focus on performance brought to bear by the Decentralised Operating Model. Horizon Power fully supports the incentivising of the business through an endorsed and universally accepted set of performance indicators. Consistent with Horizon Power's response to Question 4, above, the formation of such benchmarks must be the result of significant engagement with Government and stakeholders more generally. Reflecting the uniqueness of Horizon Power's service area and the diversity of the Horizon Power mandate, it is unlikely that such standards will be capable of comparative benchmarking between service providers. Horizon Power does however support the use of time-series assessments of Horizon Power's performance.

In addition, the development of any such framework would need to address the limitations inherent in the current ownership model whereby the Government is both provider of funding and recipient of any dividend distribution; neutralising the benefit to the State and dampening the

effectiveness of any incentive on Horizon Power. Horizon Power therefore highlights the need for a corresponding development of the Horizon Power Performance Bargain and supporting frameworks to accommodate any financial incentive or penalty.

6) How could Horizon Power be encouraged to operate more efficiently?

Horizon Power came into existence with a range of legacy systems, both commercial and operational. The efficiency drive to date has been targeted at realigning these to a more effective basis. Within this submission Horizon Power has provided a range of examples, including the development of the Decentralised Operating Model, the IT&T separation programme, development of the Management Plan for Independent Power Producers and the Asset Management Plan. The implementation of these systems and processes are fundamental to Horizon Power achieving direct control over the levers on efficiency.

Horizon Power notes that in the majority of cases the size and demographics of Horizon Powers' systems preclude the business from reaching the efficiencies typical of the SWIS and the NEM. However, as each system develops, in load and with more participants, there is a natural evolution from a centralised and highly coordinated monopoly system towards the coordination of multiple participants engaging in market type structures. Such evolution will require coordination and support infrastructure. These matters are outlined in greater detail in Section A5 of this Submission.

The constraints on how quickly improvements can be realised, primarily arise from the resources available to undertake the required programmes, together with the recognition that while there will be gains, it is not possible to achieve the efficiencies of a SWIS or NEM[26]. Setting benchmarks or funding criteria on the basis of SWIS or NEM standards would see Horizon Power discriminated against due to it's unique position and would act as a disincentive for Horizon Power's engagement in the future growth and evolution of the State.

As outlined in Section B 3.1 of this Submission, Horizon Power could leverage its existing remote and regional service capabilities to provide additional efficiency gains through an expansion of the customer base, including through horizontal growth into a multi-utility service offering, or through Government support to engage in large scale full commercial offerings to large customers.

Such activities continue to provide a clear focus on the issues of remote and regional Western Australians and are consistent with Horizon Power's legislative imperative (refer Section A 3.1). Horizon Power views multi-utility and fringe of grid service provision as an effective means of providing the business with the opportunity to move to the next level on the efficiency scale.

7) How could costs of supply be grouped together to produce a sub-set of cost reflective tariffs inside existing tariff structures?

Horizon Power's general supply tariffs L2 and M2, and its residential tariff A2, are, respectively, the same as Synergy's general supply tariffs L1 and M1, and residential tariff A1, and this gives effect to the Uniform Tariff Policy. In each case, the tariff has two parts: a fixed charge and a charge for metered consumption. Horizon Power acknowledges the outcomes of the Electricity Retail Market Review under which retail tariffs for the SWIS were set to provide price signals which more closely reflect the cost of supply in the SWIS.

Horizon Power highlights to the Authority that clearly SWIS tariffs will not reflect Horizon Power's costs of service provision and will not provide appropriate price signals to consumers connected to Horizon Power's networks. Decisions of the relative merits of a subsidy to remote and regional electricity customers and support to State growth and regional development in general as opposed to the need to send cost reflective pricing signals to customers are within the ambit of policy makers and should be considered by Government when setting Uniform Tariff Policy and Horizon Power's Performance Bargain.

In considering such matters Horizon Power wishes to highlight to the Authority the significant variation in the cost of supply within remote and regional Western Australia. This variation is not specific to Horizon Power's service area - significant cross-subsidies exist within the network tariffs applicable

[26] Reflecting the smaller customer base available to Horizon Power, over which to defray costs.

to small business and residential customer classes (all customers with peak loads less than 1000 kVA) within the SWIS. This cross-subsidy is formed through the even allocation of network costs across customers within a particular class, to produce a tariff which reflects average costs across the SWIS, producing a significant urban to rural cross-subsidy.

With this in mind, Horizon Power views that while some may identify a weakness in the current subsidy arrangements for remote and regional Western Australia, cross subsidies do indeed exist within other parts of the State. Such subsidies have a natural place in ensuring the equitable supply of essential services to all Western Australians and facilitating State growth and Regional development.

8) How else could Horizon Power deliver its service in remote regions?

As outlined in Section A 3.9 of this Submission, the adoption of the Decentralised Operating Model, focussing solely on service provision in remote and regional areas, has enabled Horizon Power to deliver higher standards of service and obtain efficiencies that were not achievable under the previous Western Power service delivery model. In managing its operations, the business evaluates decisions on a case by case basis to extract maximum efficiency benefits while continuing to deliver against its performance obligations. The application of this approach can be seen in the mix of Horizon Power's own generation, contracts with Independent Power Producers, in-sourced and out-sourced service provision[27].

In its current phase of operations, and as required by the business's legislated mandate, Horizon Power is directing its efforts to consolidate system and process improvements and grow profitable revenue. This will provide the Shareholder, with future flexibility and choice in regard to funding levels, dividend yields and business reinvestment. Opportunities are pursued on the basis that they will improve profitability, complement Horizon Power's existing service offerings and provide customer value on a sustainable basis.

One potential alternative solution for Horizon power to deliver it's services in remote and regional areas would be to move to a higher level of outsourcing.

As the business's electricity requirements are predominantly already supplied by third parties under Power Purchase Agreements, the only significant additional outsourcing opportunity would be the contracting with external parties to undertake the distribution and transmission activities. The scale and geographic diversity of the systems that Horizon Power operates results in very few of the business's systems, singly or in combination, readily lending themselves to outsourcing on a scale that would bring economic benefits.

Any additional outsourcing must also be considered in light of recent experiences in the more remote systems. Specifically, Horizon Power has been asked by both State and Commonwealth Governments to step in as the energy provider (via the ARCPSP and TRRP) due to the difficulties of the private sector in these challenging service areas. In Horizon Power's experience remote service provision is primarily driven by social need. Such propositions, which are typically non-commercial making can be a challenging fit for private/commercial participants.

One of the strengths of the Horizon Power Decentralised Operating Model arises from the location of the business's key service personnel within local communities. This enables the business to comply with the mandatory service delivery standards, such as SAIDI. Horizon Power highlights to the Authority the linkage between the service delivery standards and costs of service provision - should Horizon Power further outsource its services, it would continue to be necessary for the outsource provider to have personnel located in regional locations to meet the mandated standards.

There is therefore limited scope for cost efficiencies above those currently achieved by Horizon Power through the Decentralised Operating Model, without the diminution in service levels and a breach of compliance obligations.

[27] For example, Horizon Power was previously contracted with Synergy under a non-binding Service Level Agreement at disaggregation. The business recently assessed its options and outsourced customer care, billing and Customer Information System services to Serviceworks Management Pty Ltd. This is as compared to the business's requirements for ENMAC which were assessed and recontracted to Western Power.

Horizon Power notes that there is another alternative service provision model in remote and regional Western Australia, where the responsibility for electricity service provision would transition back to the various Local Government Authorities (LGAs). This would retain the management in public hands and allow an emphasis on local support, positioning service standards over profit motivation. However such a move would exacerbate the diseconomy of scale currently confronting Horizon Power and result in higher costs to consumers and taxpayers in general.

All of the above are predicated on the requirement to continue to deliver to customers the current mandated level of service required out of equity and the various statutory obligations.

9) Are there any issues that you believe need to be brought to the Authority's attention as part of this inquiry?

Horizon Power will engage with the Authority throughout the Inquiry, drawing specific matters to the attention of the Authority as and when they arise.

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