Government of **Western Australia**
Department of **Finance**
Public Utilities Office

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Senator Matt Thistlethwaite
Chair
Senate Select Committee on Electricity Prices
PO Box 6100
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CANBERRA ACT 2600

Dear Senator

SENATE SELECT COMMITTEE ON ELECTRICITY PRICES: QUESTIONS ON NOTICE

Please find following responses to: Questions Taken on Notice at the Senate Select Committee on Electricity Prices, Public Hearing, Thursday 2 October 2012 in Perth, Western Australia (questions 1 to 10 refer); and Written Questions on Notice provided by email on 5 October 2012 (questions 11 to 13 refer).

1. What is the dollar impact of the cost of carbon on generation?

ANSWER:

It is estimated that the average impact of the cost of carbon on the price of wholesale electricity purchased from the grid (South West Interconnected System) is $18.86 / MWh. The National Greenhouse and Energy Reporting System (NGERS) technical guidelines put the 2012/13 emission factor for the South West Interconnected System at 0.82 kg CO2e/kWh (i.e. 0.82 t CO2e/MWh). So the first order (immediate) impact would be about $23 x 0.82 = $18.86 / MWh. This cost on generation includes line losses, so it is not a 'sent out' value but applies at the point of consumption (on average).

2. What is the total cost of carbon passed through to retail customers?

ANSWER:

Synergy advises that current estimates indicate that its franchise customers will pay $128.39 million in 2012-13 in carbon costs.

3. What is the average Western Australian tariff for businesses?

ANSWER:

Synergy offers a range of business pricing options to accommodate various business needs, where appropriate plans are chosen based on a customer's

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consumption. Synergy's various pricing options are available on its website (www.synergy.net.au). Large customers who consume more than 50MW at a single site are deemed contestable and are able to negotiate their supply contracts with various electricity retailers.

4. What percentage of electricity in Western Australia is supplied by renewable energy and in what forms?

ANSWER:

In 2011-12 renewable energy met 9.2 per cent of electricity consumption in the South West Interconnected System. State-level electricity consumption data is not yet available for 2011-12, however the Public Utilities Office expects renewable energy to have met around 6 per cent of the state's electricity consumption in that year.

Two thirds of Western Australia's renewable energy electricity consumption was met by wind farms connected to the South West Interconnected System. Substantial contributions also came from landfill gas facilities, hydro-electricity in the Ord and growing numbers of residential solar photovoltaic systems.

5. Can the subsidy provided to Synergy be separated out as it applies to the generator, the network business and the retailer?

ANSWER:

No, the subsidy cannot be apportioned across different parts of the supply chain, it is a subsidy of the total cost of supply.

6. Were the Corporations asked not to attend the hearing?

ANSWER:

The Corporations were left to make their own decisions on whether to give evidence.

7. Can you please provide a carve up (in percentage terms) of a $100 electricity bill?

ANSWER:

The Economic Regulation Authority's Final Report on Synergy's Costs and Electricity Tariffs noted the following components contributing to the cost of electricity for 2012-13:

- the cost of generating electricity, accounting for around 46 per cent of total costs;

- the cost of transmission and distribution, accounting for around 33 per cent of total costs;

- the cost to retailers of meeting their renewable energy obligations and the cost associated with the newly introduced carbon pricing regime, accounting for around 11 per cent of total costs;

- the billing, call centre and other costs associated with running a retail electricity business, accounting for around 7 per cent of total costs); and

- the return that the electricity retailer must earn to have an incentive to provide a service, accounting for around 3 per cent of total costs.

8. What generation capacity and network capacity is required to meet peak demand and what is the impact on the cost stack?

ANSWER:

If peak demand is defined as demand which occurs for 10% or less of the time, then using data from the IMO's 2012 Statement of Opportunities, peak demand in the period April 2011 to March 2012 is between the maximum of 3854MW and 2550MW, a range of 1304MW in incremental demand to cover the peak period.

A proxy for determining the capital costs of a peaking generator is the Maximum Reserve Capacity Price which includes all reasonable costs associated with the development of a peaking power station.

Accordingly, to service this 1304MW of incremental peak demand, generation capacity costs are determined by multiplying 1304MW by the Maximum Reserve Capacity Price for 2011/12 ($164,100/MW) and dividing by the total sent out generation for 2011/12 (17,673,000MWh) which comes to 1.2c/KWh. This represents 3.9% of the A1 residential retail electricity tariff of 30.8c/KWh.

Western Power owns and operates the South West Interconnected Network. An electricity network is a diverse, geographically distributed system for transporting electricity over a wide area. Its capacity is not readily defined, except to the extent that it must be designed, constructed and operated to meet the forecast load of all the consumers on the network within specified standards for quality and reliability. It is not readily possible to determine the quantum and cost of network capacity catering specifically for peak demand (defined as 1304MW above).

9. How much has peak demand increased prices over the last 10 years?

ANSWER:

This information is not currently available.

10. How does that compare with the eastern states?

ANSWER:

This information is not currently available.

11. What are the Western Australian Government's views on the National Energy Customer Framework (commonly referred to as the NECF)?

ANSWER:

The Western Australian Government has monitored developments in the NECF since work began in 2006.

Western Australia is intending to monitor implementation of the NECF, in particular processes surrounding the Australian Energy Regulator's monitoring of regulatory decisions, stakeholder reactions, and the appropriateness of the level of customer protection under the NECF. Western Australia will then consider whether or not to pursue initiatives of the NECF..

12. Has the Western Australian Government adopted the NECF?

ANSWER:

See the answer to the previous question.

13. If not, why not? Are there other state laws and regulations which provide consumers with similar protections?

ANSWER:

Western Australia has not yet evaluated the costs and benefits of adopting the NECF.

In Western Australia, similar customer protections are provided through energy-specific legislation. The *Electricity Industry Act 2004* and the *Energy Coordination Act 1994* provide the heads of power for a range of regulations and codes for electricity and gas that are approximately equivalent to the requirements of the NECF.

An example is the Code of Conduct for the Supply of Electricity to Small Use Customers which includes provisions relating to billing, financial hardship, disconnection, reconnection and pre-payment meters.

Yours sincerely

Dr Ray Challen
Deputy Director General

17 October 2012