

**Senate Select
Committee on
Electricity Prices**

**Information relating to
Public Hearing of
3 October 2012**

Committee Secretary

October 2012



TABLE OF CONTENTS

<u>EXECUTIVE SUMMARY</u>	3
<u>BACKGROUND NOTES SENATE SELECT COMMITTEE ON ELECTRICITY PRICES – BRISBANE HEARING</u>	4
<u>QUESTIONS ASKED ON NOTICE BY COMMITTEE MEMBERS</u>	6
<u>INFORMATION ON ELECTRICITY MARKET CONTRACTS AND SPOT PRICES</u>	8
INFORMATION IN RELATION TO RENTERS	9
<u>ENERGY NETWORKS ASSOCIATION SUBMISSION</u>	10

EXECUTIVE SUMMARY

Ergon Energy was represented by Ian McLeod, Chief Executive, Ergon Energy at the Select Committee on Electricity Prices Public Hearing on 3 October 2012, in Brisbane.

During the hearing Mr McLeod was asked a number of questions on notice by Committee Members. Answers to these questions form part of this submission.

In addition, a copy of talking points supporting Mr McLeod's introductory statement is included with this submission, along with further material relevant to the committee's deliberations.

Ergon Energy is acutely aware of the contribution that distribution businesses have made to electricity prices in recent times. The reasons for this forms part of this submission.

In the third year of the current regulatory control period, it is clear the environment in which Ergon Energy now operates is significantly different to that anticipated at the time Ergon Energy's Distribution Determination for the period 2010-15 was made. In particular, Ergon Energy expects energy consumption and peak demand to remain significantly below the levels forecast in the Distribution Determination and that customer demand for network connections will also remain suppressed throughout the remainder of the current period.

Consumption of electricity by Ergon Energy's distribution customers dropped for the first time in Ergon Energy's history in 2010/11 and remained well below forecast in 2011/12. Peak demand has also been well below forward forecasts over the last two years. As a result the total investment over the current regulatory period has been reduced by \$1.5 billion or 20%. It should be noted that our current regulated capital investment for the two years to 2011/12 was also around 20% lower than allowed by the regulator. Investment is made where prudent and efficient and alternative lower cost energy solutions are used where they can be.

In line with the expectation from our Board, our shareholder and our customers, Ergon Energy needs to minimise its impact on electricity prices and address affordability concerns. Ergon Energy's strategic objective is to limit future increases in average network charges to CPI or less by 2020, and to 1% less than CPI by 2025.

Our expectation based on our modelling is that if current electricity and capital market conditions prevail into the next regulatory period then network revenue and potentially network prices should stay down. Prices will be subject to changes in consumption.

In the 2015 to 2020 period it is expected that energy costs, not network asset costs, will be the predominant driver of increased electricity prices in Queensland due to the Renewable Energy Target (RET) and relevant green schemes placing upward pressure on wholesale energy prices. This is currently masked by over supply and falling demand.

Background Notes for Senate Select Committee on Electricity Prices – Brisbane Hearing

Below are the background notes that support the introductory statement made by Mr Ian McLeod at the public hearing in Brisbane on 3 October 2012.

Ian McLeod - Chief Executive Ergon Energy.

Chairman - Ergon Energy Queensland, Ergon Energy Electricity Retail Company.

Chairman of SPARQ - joint venture ICT Company with Energex.

Director - Energy Supply Association of Australia.

Ergon Energy is a Queensland state Government-owned Corporation. Ergon Energy did not provide a submission to the inquiry, however Ergon Energy views are represented in the submission by the Energy Networks Association. (**Attachment 2**)

Ergon Energy was formed in 1999 from six former regional electricity distributors and their subsidiary retailer. Ergon Energy covers 97% of Queensland servicing only 700,000 regional distribution customers via 150,000 kilometres of powerlines and associated infrastructure. We have one of the lowest densities of customers per kilometre of line in the western world.

We own and operate 34 small powerstations of which 33 predominantly diesel fueled stations supply communities isolated from the national electricity grid such as the Torres Strait.

Under the *Electricity Act 1994 (Qld)* we have an obligation to connect customers and to operate, maintain and protect the supply network to ensure adequate, economic, reliable and safe connection and supply.

Ergon Energy operates under a regulated revenue cap where we take the risk of growth being above allowed regulatory projections, as was the case in 2005-10, and the customers take the risk should growth be under the allowed projections, as is the case in the current period.

Our retail entity is non-competing, can only offer regulated Notified Prices to Ergon Energy's network customers and has around 685,000 retail customers. As revenue from Notified Prices is well below the real cost of distributed electricity, the Queensland Government pays Ergon Energy Queensland a Community Service Obligation (CSO).

Ergon Energy is unique in that it is trade exposed. Our program rises and falls on the back of China.

Currently, networks are the key driver of increased electricity prices in Queensland due to:

- Lack of true market signals through tariffs to influence customer behaviour and reduce peak demand and investment (Reserve Bank);
- Subsidisation of energy to achieve uniform tariffs and impact on consumption and peak demand;
- Under-investment in the network pre-2000;
- Replacement of ageing and unserviceable infrastructure;
- Increasing and larger natural disasters such as Tropical Cyclones Yasi and Larry and the recent Queensland floods;
- Significant growth in customer connections and peak load in the last decade due to the mining boom, sea change, high immigration and increased personal wealth and access to credit driving lifestyle investments, ie. air conditioning saturation;
- Increased construction input costs in the last decade due to high demand and tight supply;
- The need to meet regulated reliability standards and government security standards (*Somerville Report 2004*);
- The higher cost of debt post the global financial crisis;

- The impact of carbon related policies reducing the efficiency and utilisation of the network and increasing costs, such as:
 - Rooftop Solar PV's increasing peak while reducing the charge base;
 - Feed in Tariffs paid through the Distribution business and recovered from the total customer base; and
 - Roof Insulation program;
- Contraction in consumption from 2010/11 and its influence on unit costs;
- Excessive regulation – technical, customer service, environmental (vegetation offsets); and
- The pricing model for large connections pre 2010 didn't reflect real costs.

And from an energy perspective cost drivers have been:

- Drought;
- Fuel and water costs;
- Renewable Energy target – 20% and picking the winner, i.e. supply versus demand;
- Small Scale Renewable Energy Certificates; and
- Carbon price and uncertainty on Emission Trading scheme.

But these are currently being masked by lower demand creating excess supply and therefore lower wholesale prices. In my opinion the RET will be the predominant driver of increased costs in Queensland post 2015 to 2020.

From an industry perspective the issues are:

- Duplicated, inefficient and subsidised investments across the entire supply chain;
- Investment is moving towards the user; and
- Lack of a sensible, planned and orderly transition.

What are we doing about it?

- We recognised the problem and drivers some time ago;
- We don't consider our network business to be a monopoly as the product it delivers can, and is, being substituted with local options, i.e. solar PV;
- Target of achieving an increase in network charges of CPI and less in the medium term;
- We are working with the Queensland Government on the review of retail tariffs to ensure the market is effective and efficient;
- Joint energy efficiency research projects like Magnetic Island Solar City;
- In 2007/08 we initiated with Energex, Powerlink and the state government the Energy Conservation and Demand Management program. This included customer communication, education, engagement and demand-side participation;
- We are on track to achieve 103MW of reduced demand this regulatory period and have deferred \$428 million in capital expenditure as a result;
- Demand versus capacity solutions are considered on a commercial basis in the first instance;
- Jointly working with Energex to improve alignment, procurement and productivity is delivering benefits of around \$110 million;
- We negotiated revised network security criteria through the government's Electricity Networks Capital Review (ENCAP - Somerville Review 2) which resulted in \$250 million of avoided capital costs in this regulatory control period;

- Avoided price increases by absorbing Tropical Cyclone Yasi and other allowed costs of over \$120 million;
- Targeting \$1.5 billion (20%) total expenditure reductions due to revised security criteria, alternative energy solutions, increased efficiency and productivity, flat peak demand and reduced consumption;
- Returning \$99 million over three years in reduced revenue requirements; and
- Our current Network Capital spend is 20% below the Australian Energy Regulator (AER) allowances for 2010-15.

Questions asked on notice by Committee Members

- (1) *Senator BOSWELL: In the same submission you go on to say that, if the government persists with a RET of 20 per cent, it should consider reducing the aggregate target of 41,000 gigawatt hours because updated electricity demands mean this amount will be much higher than 20 per cent. Can you explain to us what the additional cost would be if the RET is not reduced to match the latest electricity demand forecast?*

Mr McLeod: No, I would not be able to answer that. I am not—

Senator BOSWELL: Could you take it on notice?

Mr McLeod: I could take it on notice and give our view, but we do not construct—

Senator BOSWELL: I would even appreciate your view.

Answer

Ergon Energy has not modelled the impact of reducing the Renewable Energy Target to a "true" 20% target. We note publicly available modelling work carried out by Acil Tasman for TRUenergy which shows the 2020 target could reduce to around 28,000 GWh instead of the current level of 41,000 GWh. Clearly such a reduction would directly reduce the number of certificates Ergon Energy Queensland (Ergon Energy's electricity retailer) would need to purchase and, indirectly, reduce the unit price of these certificates. The combined effect of reduced volume and price would substantially reduce the impact of the scheme on electricity consumers.

- (2) *Senator BOSWELL: We are running against the clock here, so I will ask these questions pretty quickly. The electricity regulator in New South Wales has estimated the RET and the carbon price will add around \$270 to a residential customer's bill in New South Wales in 2012-13. What is the comparable figure for Queensland's electricity consumers?*

Mr McLeod: The Queensland state government passed through the cost of carbon and the cost on the bill was 11 per cent.

Senator BOSWELL: What about the RET?

Mr McLeod: Regarding the renewable energy target, I could not answer that straight off the bat. It is absorbed into all the other calculations. If the cost of your traditional sources is going down and renewable energy is going up, they offset each other. I would have to look at the QCA's determination.

Senator BOSWELL: Can you answer that question on notice: what is the comparable figure for Queensland's electricity consumers if there is a \$270 increase for residents of New South Wales because of the carbon tax and the RET? I thank you if you could take that on notice.

Answer

As a non-competing retailer, Ergon Energy Queensland (EEQ), which covers approximately one third of Queensland customers and no capital city customers, does not set retail electricity prices, but is instead restricted to offering regulated retail prices. In Queensland, regulated retail prices are set by the Queensland Competition Authority. The final determination for current prices,

including information in relation to the carbon price and the Renewable Energy Target, can be found at www.qca.org.au/electricity-retail/NEP/NEP1213/FinalDet.php

- (3) *Senator BOSWELL: In 2008 Ergon and Ergon made a joint submission on the then CPRS estimating that the inflationary impact would add up to about \$150 million to Ergon's energy distribution business costs over 2010-15. Have you updated figures on these costs recently?*

Mr McLeod: I think the Queensland government asked for impacts from the emissions trading scheme, particularly the price on carbon, and we have submitted that.

Senator BOSWELL: What was that?

Answer

Ergon Energy has determined that it is not directly liable to purchase carbon permits under the carbon scheme, as it does not operate a facility that emits more than 25,000 tonnes of carbon dioxide per annum.

Ergon Energy has undertaken an analysis of the likely impacts of the carbon scheme on the business. The most significant impact is the increase in wholesale electricity costs for Ergon Energy's retailer, Ergon Energy Queensland Pty Ltd.

For the 2012/13 financial year, this is expected to add approximately \$164.3 million to Ergon Energy Queensland's electricity costs. The cost of the carbon scheme to Ergon Energy Queensland includes an increase in electricity tariffs of \$138.5 million and a shortfall in tariff revenue which is expected to increase the CSO by \$25.8 million.

- (4) *Senator WATERS: On an unrelated point, and a question to each of the companies here, how many of your customers have signed up to GreenPower? ... A figure as a proportion would be helpful too.*

Answer

Ergon Energy, as of August 2012, has over 59,000 residential customers that have signed up to the Ergon Energy Clean Energy product. This is approximately 10.8% of residential customers. Green Energy subscriptions start at \$12 per quarter which is equivalent to a purchase of Green Energy to cover 10% of the average home. Almost 99% of Green Energy customers have chosen this level of subscription.

- (5) *Senator IAN MACDONALD: On notice, can you refer me to a website where I could find out what dividends you have paid to your owners—that is, the state government, since, say, 2000?*

Answer

Ergon Energy publicly declares all dividends paid to shareholders in our annual report. By way of example the recently released 2011/12 Ergon Energy Annual Stakeholder Report, which can be found at www.ergon.com.au/about-us/company-information/company-reports discloses five years of dividends on page 7.

Information on Electricity Market Contracts and Spot prices

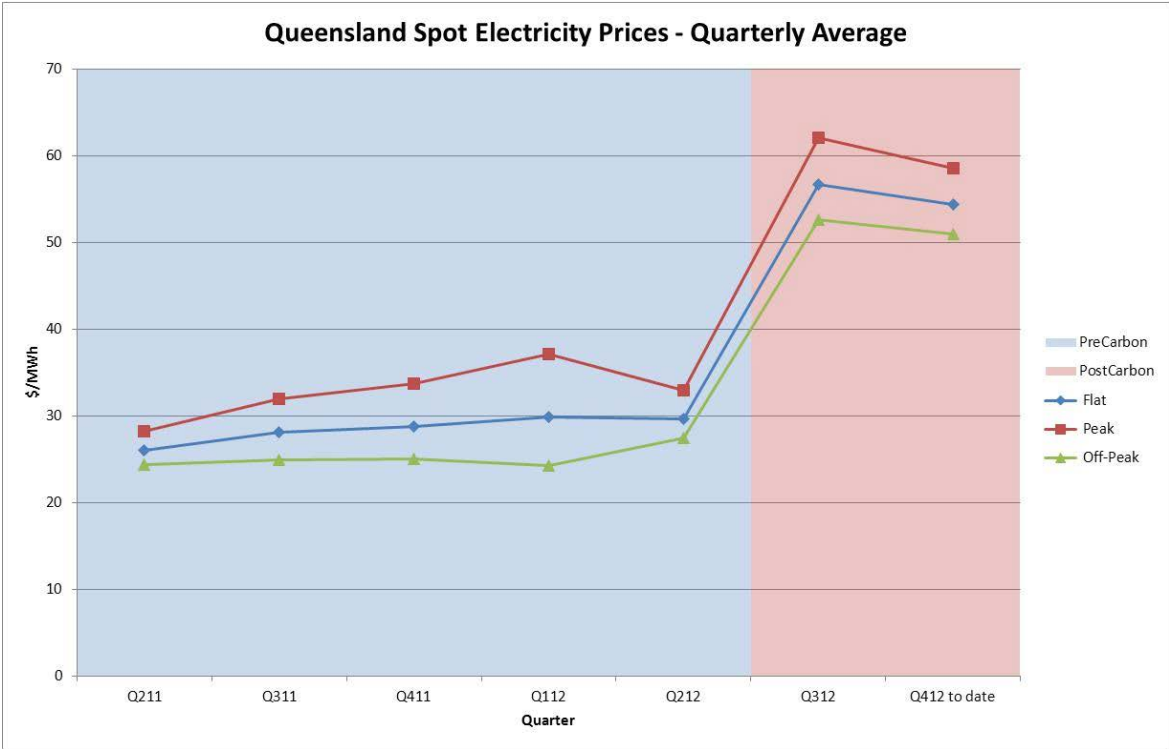
During the Committee hearing Senator Boswell asked some questions in relation to electricity purchases from generators. For completeness please find below further information on that issue.

Since the start of the clean energy legislation on 1 July 2012 the electricity spot price has reacted accordingly to the impost of \$23/mt equivalent for carbon pollution. This can be seen in the charts below.

Chart 1 depicts the Queensland electricity spot price for the second quarter 2012, i.e. before the carbon price, and depicts the third quarter 2012 Queensland spot electricity price, i.e. accounting for the carbon price on 1 July 2012. The average Queensland spot electricity price for the second quarter 2012 was \$29.69/MWh while the average Queensland spot electricity price for the third quarter 2012 was \$56.69/MWh. Not all of the \$27.02/MWh difference between the prices was attributable to the carbon price. Some physical supply issues and generator bidding behaviour contributed to higher spot electricity prices in addition to the cost of carbon pricing.

The Average Carbon Intensity (ACI) for the third quarter 2012 was 0.8500 (up to 22/9/12), i.e. the amount of carbon produced in generating a MWh of electricity. When multiplied by the \$23.00/mt, the uplift created by the carbon price on electricity was \$19.55/MWh in Queensland.

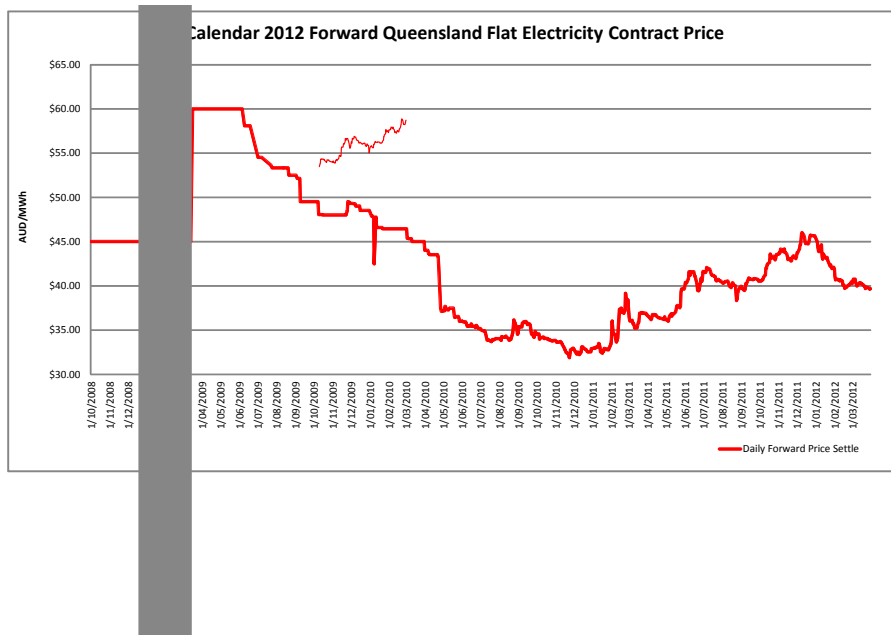
Chart 1 - Queensland Spot Electricity Prices



As seen from Chart 2, the contract, or forward average price for electricity in the Queensland Calendar 2012 contract has varied significantly since October 2008. This is due to a number of reasons. The increase in the price to the \$60/MWh level, mid 2009, was due to the expectation of price levels brought about by the Emissions Trading Scheme (ETS). The decrease in price up until the rapid fall in April/May 2010 is considered to be related to the uncertainty of carbon pricing being introduced at the time. The sharp decline in pricing in April / May 2010 was caused by the discontinuation of the ETS. Pricing for this contract declined as carbon pricing was no longer expected to be introduced until, in February 2011, the Gillard Labor Government announced that a carbon scheme was to be re-introduced in the form of Clean Energy Future Legislation commencing in July 2012. Pricing continued in an upward trend until December 2011, reaching a high of approximately \$46/MWh, when pricing decreased on the back of reducing demand for electricity and subdued spot electricity pricing during October - December 2011.

Consequently from the announcement of the carbon price the rally in the 2012 Queensland forward contract price from \$31.85/MWh to its high of \$46.03/MWh is largely attributable to the market's expectation of the carbon price introduction.

Chart 2 - Queensland 2012 Flat Electricity Contract Price



The Calendar 2012 average spot Queensland Electricity price has to date priced out at \$39.06/MWh.

Information in relation to Renters

During the hearing in Brisbane, Senator Edwards asked a question of a witness in relation to “the number of home dwellers who are renting that have no access to any of these renewable schemes” and further that “there is no incentive for landlords to put panels on the roof to save a tenant money.”

While it was understood that Ergon Energy would be asked for information later in the hearing in relation to this issue, this did not occur. For completeness Ergon Energy offers the following information.

The total percentage of rental properties within the Ergon Energy footprint is approximately 28.5% and therefore residential accounts for rentals total approximately 156,000.

The energy efficiency options available to this sector are limited and include energy advisory information on web sites, access to energy advisors, and actions that they themselves can take to reduce energy i.e. behavioural changes.

Products such as in home displays, CFL's or LED's, standby devices and energy efficiency appliances, are all available for the customer for purchase.

Products aimed more at load control benefit, such as pool pumps and hot water are mostly difficult for renters to access as they require capital improvements to the property. Ergon Energy products are mostly aimed at demand management and are available to renters. However as the works are usually at the premise, i.e. capital improvements, it is acknowledged that this usually requires landlord endorsement (and possible payment).

Demand Management options to reduce customer bills:

- "Save a Bomb" pool program. Running since September 2011 offers to customers to connect pool filtration and sanitation equipment to Economy Tariff 33, or to purchase an energy-efficient pool pump.

- Sept 2011 - June 2012: T33 connection had an "up to \$350" cash back, or for an energy-efficient pool pump, a \$250 cash back to customers.
- July 2012 - June 2013: T33 connection has an "up to \$250" cash back, or for an energy-efficient pool pump a \$150 cash back to customers.
- Hot Water Economy Tariff 33/Night Rate Tariff 31 campaign commenced 1 October 2012.
- October 2012 - June 2013 (funding available to June 2014): T33 or T31 connection "up to \$100" cash back to customers.

Outside of Ergon Energy efficiency options to reduce customer bills:

- Climate Smart Home Service (CSHS) (up to end of April 2012) gave customers energy efficiency solutions with an energy monitor. Originally CFL's and water saving shower heads were provided, but moved to standby power removers for all participants. Renters had the option to access the CSHS.