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1: ENERGY TRENDS AND ISSUES

ADDRESS TO THE COMMONWEALTH BANK
ENERGY EFFICIENCY AND YOUR BUSINESS SEMINAR
by W S (Bill) Cummings
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2: Critical to energy investment decisions by businesses will be expectations about what is likely to happen to grid electricity prices.

My comments are based on some of the conclusions that come out of research for the Far North Queensland Electricity Users Network we have been supporting. The Network involves 19 organisations and has an objective of trying to get electricity prices down.

3: Despite the fact that the industry has been under the scrutiny and control of AER, the Australian Energy Regulator, electricity prices have risen sharply over recent years causing a great deal of trouble for industry, consumers and vulnerable households.

4: There are some important elements in understanding why this has happened.

One relates to over investment in network reliability, mainly as a result of the integration of State grids into a national grid, but also rising peak loads.

Another relates to AER allowing too high a return on the investments involved.

A third and most powerful relates to the cost structure of electricity generation and distribution, the way AER has regulated it and changes in industry, business and consumer demand for electricity from the grid.

5: **This chart gives a break-up of the cost of electricity in the Ergon area.**

About 20% accounted for by generation, about 20% by retail, almost 50% by the cost of the distribution network and over 10% added by cost of Solar and Green Schemes.

In Queensland's case, a 5% headroom charge was allowed to encourage retail competition even though there is no retail competition in the Ergon area.

6: **But it is that 50% in the distribution - the "poles and wires" that is the main key to understanding what has happened. It is a major fixed capital investment, something of the order of $11bn in Ergon's case.**

Some 70% of all Ergon's costs are taken up in maintaining and servicing that fixed investment, either in servicing borrowings or paying amounts to the State Government as the owner in dividends and shadow taxes.

7: **In the AER regulated period 2010 to 2015, demand for electricity from the grid was lower than expected.**

The result was increased charges to cover the fixed costs. Increased charges affect consumption and a downward spiral commenced of increasing prices and falling demand for grid electricity.

8: **The chart illustrates the downward trend for Queensland households.**

9: **Over the past two years, the Australian Energy Regulator has been looking into the "poles and wires" segment to set limits on revenue for the industry over the period 2015 to 2020.**

Groups like the FNQ Network have been emphasising the damaging impacts of the upward spiral in prices and seeking to get the energy regulator to clamp down to ensure that prices come down.

The AER determination is now out and has limited Ergon's revenue cap substantially. But in 2016, it is expected to only result in a halt to the price rises, not a significant decrease.

But there is uncertainty about future years. If projected use of grid electricity upon which the AER determination is based, is not realised, there is likely to be further price rises to cover the fixed costs.

10: **In the meantime, things in Queensland have been further complicated by the new Government's reference of the question of electricity prices to the new Productivity Commission along with the question of solar power feed-in tariff.**

An Issues Paper has been circulated and public forums scheduled to receive input.

11: **On the main issue of electricity prices, the question has been raised of cost reflective tariffs and introduction of competition, especially in retail in regional Queensland.**

While the Government has said it will not move away from the long established Uniform Tariff Policy, the above objectives threaten the Uniform Tariff Policy and the Network has been concerned that the case for maintaining the Uniform Tariff is clearly presented.

A move from Uniform Tariff would likely see electricity prices rise in northern coastal regions by about 30% and Mt Isa by almost 140%.

12: **On the solar feed-in tariff, the Government has abandoned the 44¢ feed-in scheme which currently leaves a $3 billion burden on Ergon's costs over the period to 2028. The current feed-in tariff is 6¢.**

What the Productivity Commission will recommend is still unclear, but realisation of the State Government's policy of having 1 million households on solar by 2020 (ie. 600,000 more), is at stake. Higher feed-in tariffs would further increase grid costs.

13: **Looking into the future, there is no doubt that improved battery technology will progressively enhance the prospects of viable off-grid generation. However fully efficient technology seems to be still a little way down the track.**

Accelerating the trend to renewables has been the advent of Solar Power Purchase Agreements whereby companies like AGL and others are offering to pay the capital cost of installing roof systems under agreements with householders to purchase the output over time.

14: **So what is the take-home message for potential investors in solar and renewable off-grid power generation.**

Until battery technology and costs improve, there are few systems involving renewables that can exist without a grid connection.

On the balance of probabilities, we believe that the projections of use of electricity from the grid adopted by AER will probably prove over optimistic.

Against the fixed cost scenario of the grid, this will almost inevitably lead to higher grid tariffs, probably in the form initially of higher fixed as opposed to variable charges.

The high fixed cost scenario also applies to much of the coal fired power generation. Already, as solar reduces day time revenue, the generous off-peak rates at night have been a casualty with increases in 2015-16.

Thus, for supply from the grid, there seems a strong probability that charges will be higher in future years rather than the same or lower.

15: **In relation to renewables, this region has a long history in this field due to the Barron and Tully Hydro Electricity Schemes, the windfarm near Ravenshoe, and cogeneration from sugar mills. A number of new schemes are proposed. It makes underlying economic sense (that being at the end of long supply lines from central Queensland with transmission losses), for renewable generation capacity to be located in this region.**

16: **End.**