

WORKING TITLE: South Australia electricity facts are no fun

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The folk who predicted the carbon price would give us \$100 legs of lamb, that China's demand for coal would keep rising, and that NSW would run out gas are at it again. Wind energy, we are now told, is ruining the economy. Run for the hills!

The average annual wholesale price of electricity in South Australia has fallen by 40% since 2007-08. Scary isn't it. The same old bedwetters in the media and business community have been spooked by some big spikes in the spot price of electricity in South Australia. Cooler heads have highlighted that the vast majority of industrial and domestic customers are on long run contracts, that renewables sometimes push the electricity spot price below zero, and that there have been no blackouts. But facts are no fun.

Most economists believe that increases in the supply of a product like electricity reduces its price, that introducing new competitors to a concentrated market reduces collusion and lowers prices further still, and that increasing trade between regions with different attributes leads to better outcomes for both regions (doesn't anyone remember comparative advantage from Econ101?).

Back in 2014 Tony Abbott commissioned climate sceptic Dick Warburton to lead an inquiry into the Renewable Energy Target (RET). Embarrassingly for all concerned, the report found that investment in wind and solar was pushing down electricity prices and that cutting the RET would drive up energy costs. Whoops.

But facts, or indeed the pursuit of cheap energy, have never featured prominently in the campaign to protect fossil fuel sector from competition. Take 'gas policy' for example. Spot wholesale prices of gas in the Adelaide market have risen from around \$3.50 to \$7.50 per gigajoule in the last 18 months as a direct result of government policy to link our formerly landlocked east coast gas pipeline to the seaborne gas market. When carbon pricing threatened to push gas prices up it was said to be a 'wrecking ball' for manufacturing, but when liquefying it and sending it offshore drove much bigger increases it was seen as an 'opportunity'.

The hypocrisy doesn't stop there. Another reason for the recent price spikes in South Australia is that the owners of the Pelican Point gas fired power station reputedly decided it was more profitable to on-sell its gas supply contracts into the new export market than to burn it to make electricity. But the

boosters of our new 'gas policy' are strategically silent about this element of the South Australian 'renewable energy crisis'.

Another reason for the recent volatility in South Australia's electricity spot price is that the Heywood Interconnector has been operating below capacity as it was being expanded. Of course the reason it was being expanded was to increase the future capacity for South Australia to export more electricity on windy days and import more electricity on calm days. Raging against the price volatility during the upgrade is like arguing that temporary traffic delays associated with road widening are proof that roads don't work.

Most people evaluate the performance of their super on a quarterly or annual basis rather than ride the hourly roller coaster of the ASX. It is true the wind doesn't blow 24 hours per day at any one spot, but it is also true that the stable output of so called 'base load' power stations makes them useless for matching the 'peak load' problems that happen every afternoon.

As more wind turbines are spread around the country the risks of calm weather are reduced. As more solar panels are installed the average day-time peak price of electricity will continue fall significantly. And as the rules governing the National Electricity Market catch up with modern technology customers will be able to volunteer for lucrative payments to use less electricity during the five minute price spikes that have caused the recent fuss.

And then there are the batteries that are not just getting cheaper, but smarter. The price volatility that has always been a feature of the electricity market, especially when the 'base load' only generators struggled to cope with surges in demand, creates enormous opportunities for arbitrage. If only someone could invent a product that could store electricity when it was cheap and sell it when it was dear. If only.

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