

## A Dead Man Warns of a Dying Grid

By Alan Moran, Quadrant Online, 5 April 2017

Not long before his sudden and premature death, Australian Energy Market Operator chief Matt Zema spoke candidly at a private conference of power-industry executives. The enormous subsidies heaped on renewables, he said, mean one thing and only one thing: "The system must collapse"

**Matt Zema, inaugural head of the Australian Energy Market Operator (AEMO), attended a meeting a year ago of the Regulation Economics Energy Forum at which a number of prominent electricity industry executives were present. Proceedings at the meeting were private, but the need for confidentiality was removed with **Matt's sad death three months later**. The following were among his remarks:**

*"The renewable developments and increased political interference are pushing the system towards a crisis. South Australia is most vulnerable with its potential for wind to supply 60% of demand and then to cut back rapidly. Each new windfarm constrains existing ones and brings demand for more transmission. The system is only manageable with robust interconnectors, but these operate effectively only because there is abundant coal-based generation in Victoria..."*

*... wind, being subsidised and having low marginal costs, depresses the spot price and once a major coal plant has a severe problem it will be closed...*

*... wind does not provide the system security. But the politicians will not allow the appropriate price changes to permit profitable supply developments from other sources. And the original intent of having the generator or other beneficiary pay for transmission and services over and above energy itself has now been lost so there are no market signals, just a series of patch-ups that obscure the instability and shift the problem to include Victoria. In the end the system must collapse..."*

A month later South Australia's coal-fuelled Northern Power Station was disconnected from the network because it was unable to operate profitably against subsidised intermittent renewable energy that has priority over other supplies.

In September, 2016, as a result of this capacity reduction, South Australia lost all its power when storms triggered outages and several wind generators were unable to "ride through", causing the main interconnector with Victoria to shut down. A more limited loss of power took place in February, 2017, when wind supply dropped from 800MW to under 100MW in four hours.

The September, 2016, blackout is estimated to have cost the state \$367 million. BHP, whose senior executives have long engaged in virtue-signalling in favour of carbon taxes and exotic "clean" renewables, reported a loss of \$US105 million with their Olympic Dam project — a loss magnified by the company being forced to suspend its proposed doubling of the mine's capacity as a result of power uncertainties.

**Alan Moran's new book, *Climate Change: Treaties and Policies in the Trump Era* can be ordered by clicking [here](#)**

Engie, the owners of Hazelwood announced in November, 2016, that the 1600 megawatt facility (supplying between 20% and 25% of the state's power) will be the fourth big coal-fired power station to close. Hazelwood had been allowed to deteriorate as a result of subsidised wind making the plant unprofitable, which did not stop Engie being ordered to complete major repairs to at least five of the eight boilers in order to meet occupational health and safety regulations.

The bottom line is that the loss of the coal-powered stations has resulted in at least a doubling of the wholesale electricity price in the southern states and the concomitant loss of reliability.

Blame shifting between politicians has characterised the various events. Reliable coal plants are being forced to close due to competition from renewables which currently enjoy a subsidy of \$84 per MWh, double the actual price received by coal plants. The forced closure of these plants has compounded the cost impost by forcing up pool prices. The subsidies favouring renewable energy include several put in place by state governments, but the most important regulations are at the Commonwealth level — especially those requiring increasing shares of wind and solar within the supply mix. These regulations give rise to the current subsidy for wind and solar, currently at \$84 per MWh and capped at \$92.5 per MWh.

The roll-out of new subsidised power is on-going. And various schemes are being floated for buffering and overcoming wind's intrinsic lack of reliability. Among these is the mooted South Australian battery investment using the technology developed by Elon Musk and the proposal floated by the Prime Minister to augment the Snowy hydro system with "pumped storage". These measures, should they go ahead, allow the transfer of power over time and, in doing so, reduce the gross power available.

New "solutions" using subsidised wind and solar abound.

Last week, for example, South Australian Premier Jay Weatherill announced a new solar-battery combination, Lyon Solar in the Riverland, which promises 300 Megawatts of capacity. This is the equivalent of perhaps 80 megawatts of coal fuelled electricity and comes at a cost of one billion dollars.

The now-shuttered Northern Power Station had 540 megawatts, yet Weatherill declined to take up an offer that would, for a mere \$25 million, have kept it open. Instead, he plumped to spend \$500 million-plus on a gas generator of half that capacity and, plus Elon Musk's much bally-hoed batteries!

On paper, the new Lyon Solar facility is profitable only because of the penalties imposed on coal. These include the subsidy under the Renewable Energy Target of \$84 per MWh. In addition, the facility benefits from the forced closure of the coal-fired stations. This has resulted in the wholesale price of electricity rising to a new norm of \$130 per MWh, compared with the average price in the four years to 2015 of \$50 per MWh. The bottom line is that the consumer will pay \$214 per MWh for \$50-per-MWh worth of electricity from the new facility.

With that sort of money being littered around the industry for gee-whizz exotic projects it is little wonder that moochers are circling the state like moths round a candle. In the end, renewables require at least three times the price of the supposed dinosaur facilities they are displacing; consumers and industry will need to pay this and, in addition, fork out for grid additions to offset some of the inevitable deterioration of reliability the brave new energy world entails. Obviously many outfits, especially those in the energy intensive mining and smelting

and agricultural processing sectors will not find it profitable to remain in an Australian market where wholesale electricity prices have more than doubled and the system's reliability has deteriorated.

We are seeing the future with these renewable energy facilities and it is not working. The contagion that is undermining the South Australian economy and impoverishing the state's households is spreading to Victoria.

Ominously, on the very day that Hazelwood closed, Victoria evidenced what will be the new norm.

Incredibly, with no heatwave or any other factor to inspire a spike in electricity demand, it had to import electricity from New South Wales and Tasmania.

*Alan Moran's latest book, **Climate Change: Treaties and Policies in the Trump Era**, is now published and, if not in your local bookshop, **available on Amazon** and direct from publisher **Connor Court**.*