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The Australian Energy Regulator's Wholesale electricity market performance report

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The more desperate the situation of an industry, the more reports and regulatory overseers' governments require, blind to any recognition of an industry's malaise being created by their own actions. And so, with electricity we have an alphabet soup of regulatory agencies analysing, advising and fiddling. At the Commonwealth level we have the ESB, AEMO, AEMC, AER and ACCC all seeking a place in the sun. On top of this are state regulatory agencies and conventional line departments. Then we have government research agencies like CSIRO and the Cooperative Research Centres.

The Australian Energy Regulator has one necessary function, which it discharges effectively, namely setting the price the monopoly poles and wires businesses may charge for their services. It has other functions of less obvious worth. Among these is a requirement to report every two years on "the performance of the wholesale electricity market, including analysing and identifying whether there is effective competition in the market and whether there are market features that may be detrimental to effective competition or the efficient functioning of the market".

Its first such report was issued shortly before Christmas. The report's main themes are:

- Prices have risen, largely due to the closure of Hazelwood and other coal power stations, but that increased coal prices may have contributed to this as might also, to a limited and declining extent, monopolistic behaviour on the part of Queensland government owned generators.
- In spite of a diminished controllable supply, in the shorter term there is sufficient capacity to avoid blackouts.
- The surge in renewable investment is creating problems for system stability, especially in South Australia; this has brought about a much larger call for Frequency Control Services and interventions, using the

Reliability and Reserve Trader, by the by the market manager (AEMO), a consequence of which may mean price distortion and a crowding-out of market responses.

- The rise in wind/solar will call for more firming capacity (gas turbines) and increased use of storage
- Barriers to entry cited by market participants included a lack of "stable policy" and, incongruously, concerns that there could be some uncommercial generator investment by government bodies.
- Lack of contract availability of financial instruments to manage market exposure was cited, (as it has been by other government institutions, jawboning the major generators to make these available on better terms).

The elephant in the room

The report, in line with other official analyses, hugely understated how the electricity market has been undermined by 15 years of government subsidies to the inherently low-quality supply that is wind/solar.

Those subsidies (grants, regulatory favours and soft loans) not only favour less efficient supplies but, the renewable power injected into the market in near random fashion, imposes additional costs on the coal generators that supply over 80 per cent of the power. Coal generators are designed to operate at 90 per cent capacity but have to back-off in response to 'must-run' renewables which have subsidised revenues and low marginal costs. The coal generators' response undermines their plant economics both through forcing sub-optimal capital use and by imposing increased wear and tear.

Renewable suppliers bear few of the costs they impose (they do get paid the price at their times of operation which tend to have below average prices, and the market manager has required South Australian wind farms to curtail production 10 per cent of the time). They do not pay for the market disruption they create, including the increased requirement for frequency control (costs that the AER note have increased from under 2 per cent of energy to 15-20 per cent) and reduction to system strength they cause.

The effects of 15 years of the market manipulation through subsidies brought the 2016 closure of Hazelwood. Consequently, wholesale prices doubled (AER, perhaps euphemistically, says higher prices have "coincided" with the

growth of renewables). In addition, there was the South Australian state blackout, at the very least aggravated by the inherent loss of reliability from converting to a wind-reliant system.

The AER report describes the supply industry as responding to a market outcome. It says

The market is undergoing a significant transformation. The NEM is transitioning to a lower emissions generation mix. Significant coal capacity has retired from the market and further plant closures are expected in the future. Meanwhile the share of generation from intermittent renewable sources has increased rapidly in recent years and more is on the horizon. Over time, this transformation will change market dynamics, with fast response 'flexible' generators, demand management and storage likely to have an increasing role.

The report hints that the cause of the current market malaise was wind/solar investment, "supported by the renewable energy target, and other emissions reduction initiatives", but suggests this may no longer be the case. It maintains (P. 53) "the current high prices mean wind and solar investments may no longer require the support of mechanisms like the RET to be commercially viable".

That myth of wind/solar now being cheaper than coal was further propagated by a CSIRO report also issued in December; this, if true, would render nugatory the debate over whether the renewables share should be set at zero, 23, 30 of 50 per cent. Group-think among policy advisers is that renewables are on the cusp of competitiveness, an oft-repeated notion that has failed to be achieved for 40 years, but few support the corollary of eliminating immediately all subsidies and requiring all supply sources to fully pay for themselves. And powerful political pressures from green groups seek to prevent finance flowing to fossil fuel generation.

Compounding its naïve acceptance of renewable industry disinformation, the AER report also repeats the canard that "Australia is particularly well suited to wind and solar due to our abundance of sunshine and strong winds". This is true only of central Australia – the east coast is similar to most other world regions.

Such shortcomings severely deflate the report's airy conclusion that we need policy stability

It is now more important than ever to support an effectively competitive market so that the transformation can deliver outcomes that are in the long term interests of consumers.

Concluding comments

Its analytical shortcomings aside, the report's call for stable policy is a forlorn one. With half a dozen major Commonwealth policy direction changes since 2001 (and many others at the state level) **there is zero prospect of policy stability.** There never can be such stability when energy policy is inextricably tied to emission reduction policy and the targets for renewable energy vary from zero to 100 per cent.

The government will be disappointed that the AER report did not endorse its view that government support is required for a new coal fired power station. The fact is that with existing policy settings favouring wind/solar, a new coal power station would simply expedite the closure of an existing coal station, though the AER, unfortunately, did not offer this as a reason for avoiding government investment.

The day following the AER report's issuance, the government directed its soft loan energy agency, the Clean Energy Finance Corporation, "to support the development of a market for firming intermittent sources of renewable energy and to prioritise investments that support more reliable, 24/7 power". While this may assist in reducing the market-undermining stemming from renewable subsidies, its effect will be minor in view of the existing volume of subsidised renewable energy and the on-going program, one likely to be augmented, especially by an in-coming Labor government.