## Valley of the Winds Wind Farm: Submission by Alan Moran

The State Department of Planning, Housing and Infrastructure claims (DPHI), "The project would result in benefits to the State of NSW and is therefore in the public interest and is approvable". ACEN Australia Pty Ltd says it is a 943 megawatt (MW) wind farm, in the Central West Orana Renewable Energy Zone (CWO REZ) and involves the up to 131 turbines with a maximum tip height of 250 metres high, a 320 MW / 640 MWh battery energy storage facility. Its capital cost is approximately \$1.68 billion.

The proposal and the DPHI is predicated on the basis that more of this renewable power is required to support the "energy transition", which is assumed to be pre-ordained. Its aim is to replace coal, which presently supplies 61 per cent of the state's electricity supply and which current policy says is ageing, more costly than wind/solar and has unacceptable emissions of carbon dioxide.

Government opposition to coal is manifest in the subsidies to renewable energy, without which none of that energy would be commercial.

Those subsidies have steadily risen since their original introduction over 20 years ago and now nationally amount to some <u>\$16 billion</u> a year. They comprise:

- the subsidy equivalent of requirements on energy retailers to incorporate designated renewable sources within their supply mix,
- direct purchases by the government at premium prices of these energy sources, direct taxpayer funded subsidies (which in NSW amount to \$386 million a year in addition to those paid by the Commonwealth), and
- requirements on consumers to reimburse the additional costs of transmission lines like the Central West Orana Renewable Energy Zone, which are needed because of the dispersed and less dense supply of wind and solar.

Th expenditures required of taxpayers and customers also impose costs on coal facilities which are forced to back-off when the wind blows and the sun shines – something that occurs about 22 per cent of the time with wind.

In spite of subsidies, increased levels of wind and solar cause higher energy prices. And the greater the subsidies the higher the prices.

This can be seen from international comparisons of price and the solar/wind market shares. The readily available data by country for the <u>wind/solar renewables</u> share and price of <u>electricity</u> show a high share of renewables is concomitant with high electricity costs. The cheapest electricity is found in the nations with the lowest renewable energy share: Saudi Arabia, Russia, India, UAE and Korea. Germany, the UK, the Netherlands, Spain and Italy have high prices and high renewables shares.



The key assessment considerations include energy security. If the **Valley of the Winds Wind Farm** proceeds it will deliver electricity at excessive costs with unacceptable reliability. It is sometimes claimed that the ageing nature of the existing coal plants brings increased loss of power.

Such notions are absurd when placed in the context of wind power, the variability of which changes from minute to minute and there are often days on end of "wind droughts". In any event, as the market operator AEMO makes clear in its 2024 Statement of Opportunities, between 2019 and 2024 NSW coal generators' unplanned outage rate fell from 17 per cent to 5 per cent; in spite of the plants growing older and being obliged to accommodate subsidised renewables by operating stop-start rather than continuously, the coal plants' reliability is holding up.

Though commercial for the sponsors, the project's cost to the community is considerable. The **Valley of the Winds Wind Farm**, in addition to its market revenue, will obtain a subsidy through the Large Scale Generation Certificate scheme that is currently \$23 per MWh. If the proposed facility operated for 1.8 million megawatt hours per year, its subsidy from that scheme alone would amount to \$42 million a year.

So, the people of NSW are being required to pay \$42 million per year for a facility that actually undermines the low-cost energy that they seek.

The wholesale price of electricity before renewable energy subsidised supplies started to eat into the coal fired generators' market, and thereby cause them to be uneconomic, was less than \$50 per MWh (in 2025 dollars).

Last year the wholesale price in NSW was \$145 per MWh. The direct subsidies to renewables dominate their revenues and the effect of subsidised renewable energy supplies forcing out cheaper coal, has been a 3-fold increase in the wholesale market price to the great disbenefit of the community as a whole.

The ABS data shows that general prices this year are double their 2000 level, while electricity prices are three and a half times their year 2000 levels.



That price trajectory will continue. Though renewables are said to be cheaper than coal (and gas and nuclear) this is only the case if costs of firming of the intermittent renewables are excluded and if we exclude the costs (now set to rise considerably) of providing the increased transmission.

Firming costs are incurred because the proposed facility's unreliable high-cost renewable energy must be balanced. We cannot rely on electricity to be supplied subject to the vagaries of weather.

The project sponsors would not incur these firming costs themselves (indeed they will seek to capitalise upon them by battery installations) but the replacement of existing coal capacity, on which the project is founded, requires such an additional cost to allow present levels of reliability. To achieve this, the community will incur costs many times in excess of the stated cost of the project itself.

It is notable that <u>Chinese coal plants</u> are to receive an additional payment of 330 yuan (\$45.25) per kilowatt of installed capacity per year. This capacity payment is to ensure coal plant is adequately remunerated and that their economics is not undermined by wind/solar cutting in and out. China, in introducing these subsidies to coal, is concerned that its growing level of wind/solar will impact in the security and reliability of its network. Subsidies to wind and solar in Australia have brought these sources to some 35 per cent of supply, a much higher share than in China and, accordingly, we should have a much greater concern about the deleterious effect these supply sources have on our own network.

China itself, now the world's leading economic power (with over half of global supplies of steel aluminium and vehicles), uses coal for some 60 per cent of electricity supply. Compared with Australia's capacity of 22 megawatts, China has 1171 megawatts in operation and a further 217 megawatts planned. These have given China the energy cost-competitiveness that

Australian is jettisoning with renewable energy subsidies and planning processes like the present one.

Moreover, if the case for subsidised renewables is based on CO2 emissions, it is exceedingly weak as Australia has just over one per cent – and declining - of the global total. Not only could eliminating this entirely have no effect on global climate but the ostensible demonstration effect of Australia's self-harming actions is not working. And most estimates of the effect on emission levels neglect the CO2 inputs contained in wind turbines themselves and the additional batteries and transmission lines they entail.

As <u>Roger Pielke</u> illustrates nothing short of a miracle could allow the goal of net zero to be achieved.



Moreover, this trajectory takes no account of a changed global view of emissions and their supposed dangers that has been ushered in by the new the US Administration. The policy of forcing the closure of coal generating electricity facilities has been overturned by the Trump Administration. Trump is calling for more <u>coal</u>, thereby reversing the US position established by Obama. And EPA <u>Administrator Zeldin</u> is dismantling the environmental barriers that have been erected to make coal more expensive saying, "We are driving a dagger straight into the heart of the climate change religion to drive down cost of living for American families, unleash American energy, bring auto jobs back to the U.S. and more".

The lack of evidence of harmful effects of CO2 emissions, the absence of international support without which any Australian measures are ineffectual, and the taxpayer/consumer costs imposed mean the Valley of the Winds proposal is clearly against the public interest and the Commission should reject it.