Pottinger Wind Farm: Submission by Alan Moran of Regulation Economics, representing the Australian Environment Foundation

The Pottinger Wind Farm's 247 Wind Turbine Generators, with a total capacity of 1.3 Gigawatts. The Project is situated entirely within the South West Renewable Energy Zone.

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

The consultants estimate annual benefits of the Project on the NSW economy at up to:

- \$486M in direct and indirect output.
- \$209M in direct and indirect value added.
- \$134M in direct and indirect household income.
- 1,365 direct and indirect jobs.

Such benefit may be achieved if the project were to be developed by private enterprise without being reliant upon subsidies from the government directly or indirectly through requirements upon electricity customers who, through their retailers must include growing proportions of otherwise uncommercial wind and solar energy in their mix.

Without subsidies to renewable energy, Pottinger and other such facilities would not be developed, hence as products in a competitive market, they cannot bring increased wealth.

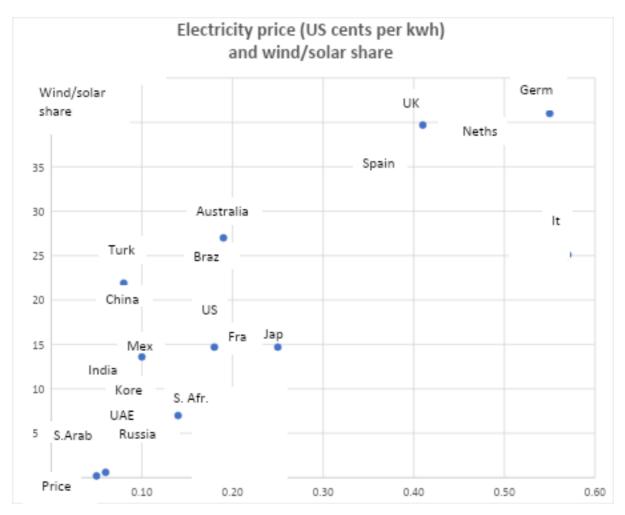
Subsidies have steadily risen since their original introduction over 20 years ago and now nationally amount to some <u>\$16 billion</u> a year. They comprise:

- 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 South West Renewable Energy Zone, which are needed because of the dispersed and less dense supply of wind and solar.

Though commercial for the sponsors, the project's cost to the community is considerable. The **Pottinger Wind Farm**, in addition to its market revenue, will obtain a subsidy through the Large Scale Generation Certificate scheme that is currently \$20 per MWh. If the 1.3 GW facility operated at 30 per cent capacity it would generate 3,416,000 MWh a year. Its subsidy from that scheme alone would amount to \$70 million a year.

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.

In addition, blackouts in renewable heavy Spain and Chile have demonstrated the fragility of inverter-based networks reliant on wind and solar. The key assessment considerations of the Commission include energy security.

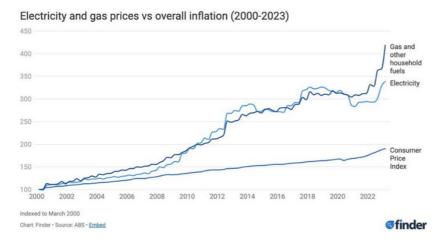
It is sometimes claimed that the ageing nature of the existing coal plants brings increased loss of power. Such notions are absurd when placed in the context of wind power, the variability of which changes from minute to minute and there are often days on end of "wind droughts". In any event, as the 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.

So, the people of NSW are being required to pay \$70 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 the firming costs of intermittent wind. This is a cost the community will incur costs many times in excess of the stated cost of the project itself.

China, 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 with another 20 per cent nuclear hydro and gas. Compared with Australia's coal 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 causing climate change, it is exceedingly weak as Australia has just over one per cent – and declining - of the global total. And the US Administration has overturned renewable subsidies calling for more gas and <u>coal</u>, thereby utterly negating the case for emission savings. 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 Pottinger proposal is clearly against the public interest and the Commission should reject it.