

The endless wind drought crippling renewables

Rafe Champion



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The spectre of power failure is haunting Europe as Britain and Germany demonstrate that modern societies can't run on wind and solar power. Wind droughts are the fatal flaw in the system and one can envisage a future book titled *How Wind Droughts Destroyed Western Civilisation*. Think about the consequences of a system blackout if Net Zero policies are pursued to the bitter end in Western Europe and Australia...

Texas in 2021 gave us a glimpse of the abyss during a spell of low wind and a serious cold snap. Hundreds died and it would have been thousands if the state had gone completely black, instead of hanging on by a thread. Now, Texas is planning to **subsidise gas producers** to maintain capacity in the face of competition from subsidised wind and solar power.

Don't laugh, this was happening here with a deal in Victoria to maintain the supply of coal power from **Loy Yang A to the Portland aluminium smelter**. However, plans are now in motion to close **Loy Yang B ahead of schedule** with things looking **increasingly grim** for the smelter. Both the major parties in NSW promised before the recent election to keep the coal fires burning at **Eraring**.

Wind droughts were not properly considered in the rush to decarbonise the power supply, but they can't be ignored any longer. The burning question is: How did the meteorologists fail to issue wind drought warnings? They monitor every other kind of extreme weather to feed the inexhaustible appetite of the media for bad news about 'climate change'.

In Australia the answer is easy. According to a CSIRO report in 2002, the Bureau of Meteorology used the average velocity of the wind for weeks and months to measure wind resources with information collected at hundreds of sites established by the BOM during the 1990s. **Tom Quirk and Paul Miskelly** first reported wind droughts using the AEMO data which reports the output from the registered wind farms at five-minute intervals.

Our wind droughts mostly last less than a day and they max out around three days, based on the AEMO records. In the BOM records, a wind drought lasting three days would simply lower the number for the week or the month without signalling that there was a serious restriction in the supply.

The neglect of wind droughts in Europe is harder to explain because the *Dunkelflaute* or 'dark doldrums' (the still, dark periods), can persist for weeks. They must have been well-known to sailors for centuries, also to the millers who pumped water in Holland and those who milled grain across the continent. And what about the experience of recreational sailors in modern times? In the absence of readily available historical records, it was helpful to read this comment by 'Michael' on a recent post by my colleague Peter Smith. It is an extract from a 1901 book by H.G. Wells.

'Wind was extremely inconvenient for the purpose of pumping [water from mines] because in these latitudes it is inconstant: it was costly, too, because "at any time the labourers might be obliged to sit at the pit's mouth for weeks together whistling for a gale".H.G. Wells, in *Anticipations of the Reactions of Mechanical and Scientific Progress upon Human Life and Thought*, 1901.'

Yes Virginia, they did have wind droughts in England before 2020!

Official recognition in the wind industry was slow in coming, although the German policy of *energiewende* was clearly in trouble in 2018 when a government report admitted that it was failing on three vital metrics: cost, reliability, and emission reduction. Recently, there has been more coverage of wind issues, but officially the green transition is still happening. More research is required, with hard questions directed to the responsible authorities.

On the home front, in 2021 I put some hard questions to the energy ministers in each state to present a paper at a seminar organised by the Clean Energy Authority. The paper would describe the due diligence performed in each state to take account of wind droughts

The abstract was submitted in good time, but it was not accepted for the program. Still, the investigation went on. All the states had ambitious green energy plans and I asked how they would deal with a month like June 2020 with multiple wind droughts. The bottom line was: 'Please specify the quantity and the estimated cost of the various kinds of storage and any other resources that would be provided to cover a period like that.' The relevant departments sent their plans but in my opinion, did not provide the detailed information that was requested.

Then followed persistent requests to the NSW Department of Planning, Industry, and Environment, for a conversation with a planner to discuss the matter of wind droughts. Eventually, they referred me to an officer in AEMO. He invoked the Holy Trinity of

transmission lines, pumped hydro, and batteries. This is clutching at straws as energy realists have **repeatedly explained**.

We are left with serious concerns about the diligence and competence of our energy planners. Let's see how it goes in NSW after Liddell Power Station closes at the end of the month. If you are worried, think about a home generator, or a move to Tasmania.

Got something to add? Join the discussion and comment below.