

Fake electricity

By Jeremy Beck

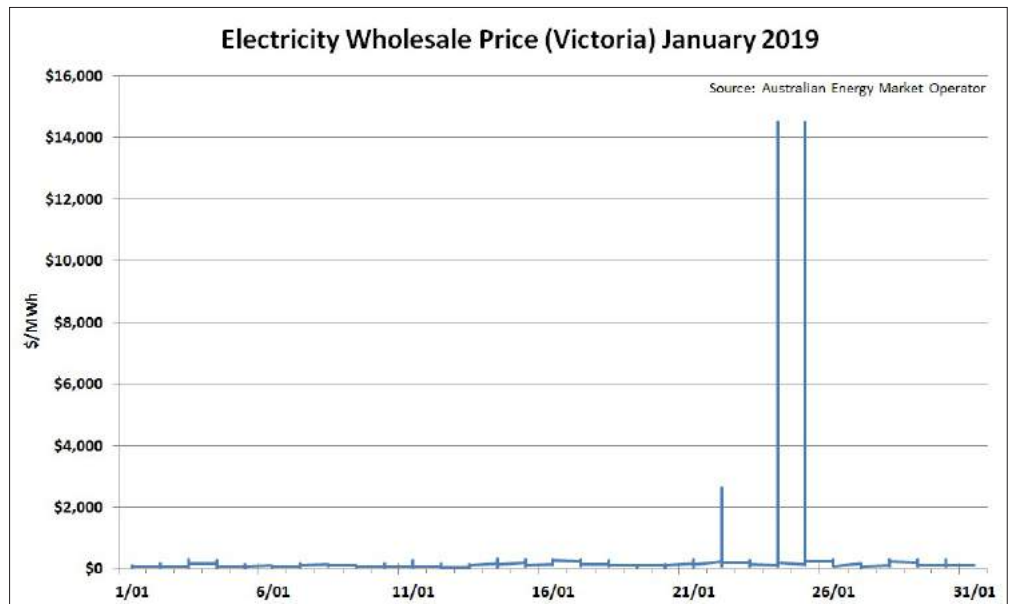
Skyrocketing electricity prices in January and rolling blackouts are markers of fake electricity: cheap power that authorities insist exists, but in reality is not available. When electricity was deregulated in the 1990s, we were promised that market forces would drive competition and lower prices. But the wholesale electricity bill nearly topped \$1 billion for just one day's power on 24 January, while energy company CEOs get to pocket multi-million-dollar bonuses. Wind power installed capacity is now at 5,361 megawatts (MW), but this is a fake. Irregular winds mean that on average only one third of this nameplate capacity is available. Worse, power output is often much lower, just when we need it most. Solar power scores worse, being pathetic on cloudy days and in winter, when the sun is low in the sky at peak demand times; yet annually we waste \$2 billion in subsidies for rooftop solar.

For the National Electricity Market (NEM), the total wholesale cost of electricity in January was \$3.21 billion, of which 24 January cost \$989 million and 25 January cost \$247 million. South Australia and Victoria got stung for the lion's share, but on 25 January over 200,000 Melbourne households and businesses had the power cut. No compensation will be paid, so they'll end up paying for fake electricity!

The American documentary *Enron: The Smartest Guys in the Room* should be a wake-up call, given what we're seeing in Australia's electricity market today. It shows a toxic culture of greed that rewarded Enron executives with millions while the population suffered skyrocketing prices and rolling blackouts, which Enron bosses engineered to game the market. The extent of the looting led to what was at the time, in December 2001, the largest corporate bankruptcy in US history. Enron boss Kenneth Lay, a Bush family friend, in the end was indicted by a grand jury and was found guilty of 10 counts of securities fraud.

In January, Victoria's total wholesale electricity cost was \$1.34 billion. But what would be a fair price? In Victoria the average wholesale electricity price was \$25.38 per megawatt hour (MWh) in 2004, and in January of that year it was just \$22.52/MWh. This occurred before 95 per cent of the state's intermittent wind and solar power was installed. According to the Reserve Bank of Australia's online inflation calculator, that \$22.52 equates to \$31.58 in 2018 dollars, so let's assume a power cost of \$32/MWh today. This would mean the state's power would have cost \$121 million for January, not \$1.34 billion. The \$1.219 billion rip-off difference would be enough to build a gas, coal or nuclear power station that would generate more electricity than all the wind farms in Victoria, and more than double that of rooftop solar. Moreover, the power would be dependable—not at the whims of the weather.

But solar and wind advocates beg to differ. Giles Parkinson, for example, is founder and editor of *Renew Economy*, and founder of One Step Off The Grid. He writes



On 24 and 25 January electricity prices soared to the cap of \$14,500/MWh, a 15,700 per cent jump from average prices, costing Victoria and South Australia a collective \$1.12 billion.

extensively on “renewable energy” and was once business editor of the *Australian Financial Review*, so naturally many people assume he's well informed on such matters. But on 29 January in *Renew Economy*, he made a bizarre claim: “Renewables, which traditionally provide around 20 per cent of [Victoria's] capacity, actually provided around 36 per cent at the time of the imposed ‘load shedding’ that caused up to 60,000 homes and businesses to lose power at any one time.”

In fact, “load shedding” commenced at 12:00 noon on 25 January when the Victorian operational demand was 9,298 MW (according to official data). At the time Victoria's wind turbines were providing 592.1 MW, or just 6.4 per cent of the 9,298 MW demand. But the winds were slowing, and just 45 minutes later the entire state's wind farms contributed a token 367 MW. Were the 1,600 MW Hazelwood Power Station still open, not only would the blackouts not have happened, but electricity consumers would not be facing the prospect of skyrocketing bills as wholesale prices start to feed into retail prices.

Quoting capacity values for intermittent wind and solar generators is sophistry. This is fake electricity! These generators rarely reach full output: on average wind turbines produce a third of their nameplate capacity, and rooftop solar only about 15 per cent! How does this work in reality? Consider 2 February in South Australia. Solar generation peaked at 1:30 PM (unsurprisingly at solar noon) adding 701 MW to the NEM, but as demand increased throughout the afternoon, solar provided less and less. By 8:20 PM at peak demand, solar rooftop provided a mere 12 MW. Wind only contributed 16 MW as it was hardly blowing, and there were no batteries discharging as they'd run out of juice! Gas-fired generators ramped up to provide 1,863 MW, but were it not for 500 MW coming from Victoria the state would have collapsed.

If you think we just need more storage, please research the cost of the various options and think again. Bottom line, South Australia has the world's most expensive power, and it's no coincidence that this has occurred under a privatised system that “generates” masses of intermittent fake electricity. Only once we reject this fraud will we have cheap reliable electricity again.