Renewable surge could unsettle grid, energy giants warn

Perry Williams (Senior Business Writer) and Matt Chambers (Senior Resources Reporter)
The Australian Business Review
10 October, 2018

Power giants AGL Energy and Origin Energy have raised concerns over a surge of wind and solar generation creating a new wave of volatility in Australia's electricity grid due to a lack of back-up capacity, amid fresh market expectations power prices will rise next year.

While clean energy accounts for the bulk of new generation in Australia's national electricity market, an increasing number of industry participants argue there needs to be a greater emphasis on dispatchable or firm generation to ensure the stability of the system.

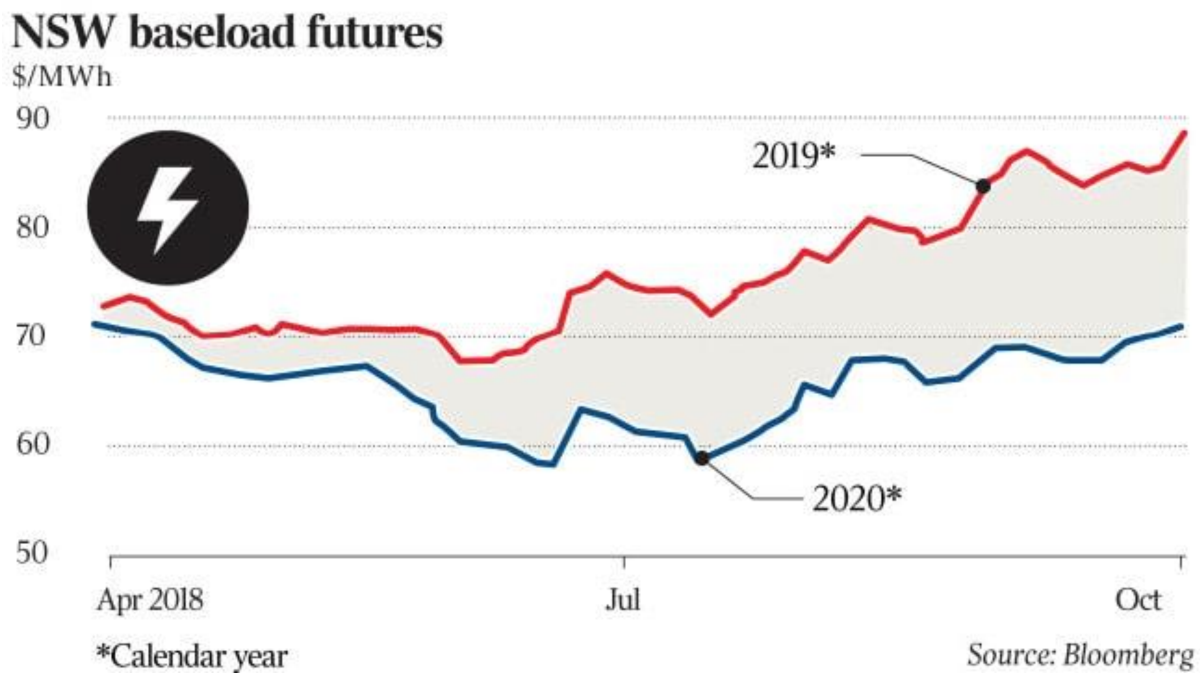
AGL, the country's largest electricity generator, said there needed to be a greater emphasis on ensuring intermittent renewables had sufficient back-up systems in place.

"I think there is increasing risk within the national electricity market because the lack of a good mechanism means the firming generation that's needed is not being built as quickly as the renewable generation is being built," AGL's interim chief executive Brett Redman told *The Australian.* "That does start to drive towards a lot of volatility in the market and volatility is the enemy of existing baseload generation."

Adding to the tension within the sector, wholesale electricity futures prices are pointing to a surprise increase in 2019, reflecting power retailers' difficulty in meeting Energy Minister Angus Taylor's call for lower prices in the next round of tariffs.

Origin Energy chief Frank Calabria said $10 billion of large-scale solar was approved in 2018, noting a new solar farm can be permitted in 90 days and built in 18 months, compared to seven years for coal plants.

But the Origin boss said this was a problem because it had not been coupled with an energy policy that recognised the intermittency of renewables, as recent problems in South Australia had illustrated.



“We still don’t have a policy that promotes either existing firm generation staying in the market or new investment in firm generation,” he said.

While AGL is confident of how the energy landscape will look in a decade, it warned of potentially “choppy” markets in the interim.

“The next 10 years will be dictated by the quality of planning and quality of policy that goes with it and there is increasing risk that we’re going to see choppiness over the next 10 years,” said Mr Redman. “And choppiness or turbulence is a different way of saying higher cost.”

Mr Calabria said a wave of renewable energy that had led to the exits of the Hazelwood and Northern power stations was still putting pressure on coal plants.

“Lower-cost renewables tend to push the higher-cost sources of dispatchable power — coal and gas — out of the market early,” Mr Calabria said.

“Today, we see several markets where the prices are hollowing out, sometimes to zero, in the middle of the day.”

Clean energy operators were also putting a lot more power into the system than expected under the Renewable Energy Target, according to the Origin boss.

“Only several years ago we thought that target might not be met,” Mr Calabria said.

“It’s now going to be met with such a force that it will have at least the equivalent of Hazelwood — 1600 megawatts extra — by 2020.”

Energy Security Board chair Kerry Schott said the make-up of the market was verging on being disruptive.

“We’ve got economics driving a lot of wind and solar both on rooftop solar and wide-scale solar and wind,” said Ms Schott. “We have got grid constraints, we have got distribution not really ready to deal with the huge amount of solar that is going in and nothing has really been co-ordinated very carefully, and we have got a whole lot of work to do.”

The government’s attempts to lower power prices also look challenging. A jump in 2019 wholesale electricity futures prices in NSW and Victoria has cast doubt on consensus that prices were heading lower because of the growing amount of wind and solar in the system. Instead, unreliable coal plants are partly to blame, with unplanned outages driving the jump.

Average 2019 futures prices in NSW and Victoria had risen by about $20 per megawatt hour in the past four months to $88.5 per megawatt hour and $96.1/MWh respectively, according to Credit Suisse analyst Peter Wilson.

This is about 10 per cent higher than rolling 12-month spot prices in each state. “An accepted assumption has been that the electricity market has passed through the point of peak market tightness, and that the trend going forward would be year-on-year decreases to wholesale prices due to Renewable Energy Target-induced renewables supply,” Mr Wilson said.

“While we are not yet prepared to invert our thinking here, we must admit that it is challenged by the 2019 futures.”

The jump had been driven by unplanned outages at coal-fired power stations including those operated by AGL during the quarter, a hotter, drier climate outlook and rising gas and coal plants are partly to blame, with unplanned outages driving the jump.

Average 2019 futures prices in NSW and Victoria had risen by about $20 per megawatt hour in the past four months to $88.5 per megawatt hour and $96.1/MWh respectively, according to Credit Suisse analyst Peter Wilson.

This is about 10 per cent higher than rolling 12-month spot prices in each state. “An accepted assumption has been that the electricity market has passed through the point of peak market tightness, and that the trend going forward would be year-on-year decreases to wholesale prices due to Renewable Energy Target-induced renewables supply,” Mr Wilson said.

“While we are not yet prepared to invert our thinking here, we must admit that it is challenged by the 2019 futures.”

The jump had been driven by unplanned outages at coal-fired power stations including those operated by AGL during the quarter, a hotter, drier climate outlook and rising gas and coal prices.