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Energy expert warns WA grid 'headed for disaster' without coal

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A former director of Western Australia's state-owned energy retailer says the state's key energy grid is headed for disaster under the McGowan government's plan to shutter its coal plants by the end of the decade.

Mark Chatfield, a former chief executive of Queensland utility CS Energy who was appointed to the board of WA retailer Synergy by the previous Barnett government, told The Australian that blackouts were inevitable under the ambitions outlined by the state government last year.

"The path we are on, of the simple retirement of coal and its replacement by wind and solar, is destined to fail," he said. Premier Mark McGowan and Energy Minister Bill Johnston last year announced the two remaining state-owned coal-fired power plants would close by 2030, with \$3.8bn set aside to help Synergy prepare for the change. WA has one of the highest rates of household solar installations in the world, and their combined daytime output has hurt the economics of coal-fired plants providing baseload power.

Energy experts including Mr Chatfield and the chair of renewables advocacy group Sustainable Energy Now, Fraser Maywood, told The Australian they could not see how WA's energy grid could be ready to cope with the scheduled coal plant closures. A forecast released last year by the Australian Energy Market Operator projected gas demand in WA's southwest would grow by more than 140 per cent by 2032, noting that the scheduled coal plant retirements would only be partially replaced by renewables.

Detailed modelling of the outlook for the WA grid, which Mr Chatfield said had taken him six months to compile, showed that delivering enough renewables and batteries to keep the grid stable after the coal plant closures would cost tens of billions of dollars and be impossible to bring in by 2030. Increasing the use of gas could help

shore up the grid, but he said there was not currently enough spare capacity on the pipeline that connects WA's southwest to the gas fields in the north to deliver what was needed.

"You have to expand the pipeline at the minimum, you have to buy more gas, and you have to add some more gas turbines if you're going to replace the coal," he said.

WA is installing its first large-scale battery, a \$150m unit that will be capable of supplying 100 megawatts of power for four hours, but Mr Chatfield said the state would need another 30 of those to keep a renewables-driven grid stable.

On top of that, he said pumped hydro – earmarked to bolster the state grid – is ill-suited to WA's flat topography and would be difficult to deliver by 2030.

Mr Maywood said the current \$3.8bn plan was "undercooked".

"We are concerned about the stability of the grid. It's not looking good. We have been lucky this year – we haven't had the very hot weather that really stretches the grid," he said.

Mr Maywood said he feared grid instability in the wake of the 2030 coal shutdowns could hurt the cause of renewable energy. "You don't need to do it all at once, but you need to have a vision, and you need a plan, and then you need your funding, and then you need to get all these projects rolled out as a coherent set," he said.

"We're not seeing that. What we're seeing is hand-to-mouth. We are just stumbling from one potential crisis to the next." Opposition energy spokesman Steve Thomas said the government's transition plan "absolutely cannot work" and industries that relied on the grid were increasingly worried about how they would fare beyond 2030.

He said while WA would eventually have a fully renewable energy system, the transition would take decades rather than years. "A sensible government would be hoping for the best but planning for the worst. This government is just hoping for the best with its fingers crossed," he said.

Mr Johnston defended the government's strategy, which he said was based on extensive modelling and supported by independent power producers.

"All serious and knowledgeable commentators support our plan," Mr Johnston said. Extending the life of coal plants beyond 2030, he said, would increase costs and reduce reliability.