

COAL-FIRED POWER STATIONS — CLOSURE

**363. Ms J.J. SHAW to the Minister for Energy:**

I refer to the government's decision to retire all state-owned coal-fired power stations by 2030.

- (1) Can the minister outline to the house why this decision is needed in order to ensure the security of the system and protect against higher power bills as WA transitions to greater use of renewables?
- (2) Can the minister advise the house how responsible transmission compares with the energy policy authored by the member for Cottesloe, which Hon Dr Steve Thomas called "the stupidest policy" he had ever seen?

**Mr W.J. JOHNSTON replied:**

I am very happy to answer that superb question from the member for Swan Hills. I know that Hon Dr Steve Thomas will make a great shadow Minister for Energy when the leadership of the Liberal Party is changed. I hope he has a long career as the shadow minister.

- (1)–(2) I make the point that we are dealing with some fundamental challenges in the system. The amount of rooftop solar is constantly increasing; in fact, the amount of rooftop solar goes up by one megawatt every day. Already, 35 per cent of families and home owners in WA have rooftop solar. We expect that to get to 50 per cent. That is fundamentally changing the dynamics of the system. Last year about 300 megawatts of rooftop solar went on the system. To put that in context, that is the same capacity that exists at the Collie coal-fired power station, which is the largest single generator on the system. Members can see that we have to deal with that. That electricity is instantaneous. It is pushing down the value of electricity to negative values in the middle of the day. We regularly have negative prices of wholesale electricity in Western Australia. Those losses are suffered by Synergy because Synergy buys 100 per cent of the electricity generated by rooftop solar. It then has to dispose of that electricity into the wholesale energy market.

At the same time, what is called the ramp rate, the difference between the minimum and maximum demand, is getting very steep. The change in the dynamics of the market is such that we go from low demand to high demand very quickly and it is not possible for coal-fired power stations to respond to that demand. For example, it takes 18 hours for a coal-fired power station to go from cold to fully operational; it takes 16 minutes for a gas turbine to do the same thing. Coal-fired power stations cannot operate in that dynamic market. We can see how rooftop solar is pushing out the ability to use coal stations that work best when there is stable demand.

What is also happening, as I told members, is that the low value of the energy Synergy is buying means it has to buy energy from others to respond to that high peak, and is therefore buying energy at the highest price in the spot market. Synergy is on the wrong side of both trades. It has to buy rooftop solar and sell it at a negative price and then buy other people's electricity to cope with the peak. Synergy's business model of using coal-fired power stations as its principal generation simply no longer functions. It is not a question of ideology; it is a question of economics.

We are, over a staged period with a long notice time, giving the community a long time to adapt to these changes. We are going to retire those coal plants and introduce some additional generation, but also, much more importantly, storage. As the member for Swan Hills knows, as she is a highly competent person out of the sector, we want to raise the belly of the duck to cut off its head. In other words, we want to raise midday consumption of electricity to reduce evening consumption. We will put some of the energy into storage and then return it to the market in the evening. That levels the rate of electricity and removes that rapid ramp that we have to cope with in the evenings. It makes the system much more efficient. It makes it more secure. It makes it better. It makes it able to respond to individual changes in demand throughout the day. It is a much better structure.

We will do that over a sensible period, having previously announced the retirement of coal plants three years ago. We can think about it as a 10-year retirement phase for the coal-fired power stations that will allow us to do a moderate build over that long period. In contrast, the member for Cottesloe proposed the stupid idea to have everything shut within three years. It was just crazy!

A member interjected.

**Mr W.J. JOHNSTON:** It is dangerous.

The member asked me a moment ago whether we could guarantee that we would do the build over the next seven years. Think about it. We are doing it over seven years. His proposal was to do it within three years. This is a sensible policy response to an actual need to change. We will get advantages all over the place from this policy and that is why we are also investing in the people of Collie, because we do not want to leave them behind. This is a good policy and that is why everybody in the industry has been so supportive of it.