

Questions on Notice: Responses from Mark Wakeham & Dr Nick Aberle, Environment Victoria

8. Can you provide your assessment of the implications for capacity in Victoria and the NEM if Yallourn power station was to close immediately. What would be the implications in five years?

If Yallourn was to close immediately there may be some energy security issues in Victoria in periods when electricity demand is high. The severity of any energy security issue would be dependent upon the length of high demand, whether hydro resources were depleted or well stocked at the time of closure, the ability of peaking plant to ramp up production, and finally whether or not adequate demand management programs were in place. The closure of Yallourn would likely spur significant new investment in generation capacity in Victoria, however this capacity would not be available to dispatch for 2 to 3 years.

If Yallourn were to shut in five years time with sufficient notice there would be adequate time to replace its capacity with new generation. The Victorian renewable energy target with an auction mechanism will deliver significant investment in new projects by this time even without the closure of Yallourn. The Federal renewable energy target may also deliver additional investment in renewable energy projects in Victoria, however it has not been effective as a driver of new projects since the target was cut by the Federal government. If there was some forewarning and in 2 to 3 years the closure of Yallourn in 2021 was announced there would likely be a significant increase in investment in renewable energy projects and potentially an increase in capacity of peaking plant as both would become more profitable and therefore bankable.

If Yallourn closed suddenly in 2021 without any warning, and without a government plan for orderly closure, there may still be energy security concerns as there would be a lag between closure and new renewable energy projects being available to meet any shortfall.

9. Can you provide more details on what you see as the preferred mechanism for a phased orderly retirement of coal fired power generation and why?

Our preferred mechanism for the orderly retirement of coal-fired power generation would be age limits that correspond to a carbon budget which would see Australia meet its responsibilities to limit global warming to 1.5° to 2°C. This would spread early closures around the country and provide greatest energy security.

An alternative mechanism would be to have state-based emissions intensity standards. This would similarly provide a geographic spread of early closures and, like age limits, would set a very predictable timeline for the retirement of each generator. This in turn provides maximum certainty for investors in renewable energy and for the development of transition plans for communities.

While there is a trend towards using market-based mechanisms in the energy sector, it is likely that direct regulation such as age limits or emissions intensity standards would lead to better outcomes.

10. Given the increasing gas prices in Australia, what is your forecast for LCOE of gas fired generation over the next decade?

We would defer to others on this question.