



AUSTRALIAN PARENTS FOR CLIMATE ACTION

Australian Parents for Climate Action
Submission to the Energy Security Board:

Post 2025 Market Design Options Paper

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Australian Parents for Climate Action represents over 14,000 parents, grandparents and carers from across Australia. We are Australia's leading organisation for parents advocating for a safe climate. Our supporters are from across the political spectrum, across all Australian electorates, and from varied socio-economic positions. We seek non-partisan responses to climate change and its impacts.

We advocate for Australian governments and businesses to take urgent action to cut Australia's carbon emissions to net zero as quickly as possible. We encourage Australia to take a leadership role on the world stage, leading by example and calling for other nations to take the necessary action to protect our children's futures.

For more information, visit www.ap4ca.org

This submission was prepared by Sydney-based volunteer David McEwen, an independent climate risk consultant, with support from additional members, and approved by Marie Carvolth, Chair of Australian Parents for Climate Action.

Submitted via email to: info@esb.org.au

Submission

Australian Parents for Climate Action is strongly opposed to any mechanisms under consideration that might commercially incentivise coal and/or gas electricity generators to remain in operation any longer than is absolutely necessary. While we appreciate the requirement to ensure grid security services, we note that emissions-free alternatives can undertake such services, often more effectively and efficiently.

The Climate Imperative

It is imperative that all electricity (and broader energy) market regulation is now aligned with the duty of care principle recently established by the Federal Court in [Sharma v Minister for the Environment](#). In this landmark case, using evidence uncontested by the Minister, Justice Bromberg found that, when exercising powers under sections 130 and 133 of the EPBC Act, the Minister "must take reasonable care to not cause the Children harm resulting from the extraction of coal and emission of CO₂ into the Earth's atmosphere."

The Court's judgement found an incremental link existed between a particular coal project and catastrophic harms associated with climate change that are likely to adversely affect Australia's young people. By extension, any activities causing greenhouse gases to be emitted could be subject to similar challenge, particularly if it is established that the emissions reduction trajectory associated with those activities is not aligned with the cumulative emission budget principles established by the Paris Climate Agreement, to which Australia is a signatory. The harms established include up to a million of today's young Australians suffering hospitalisation or worse due to heat exposure, and economic opportunity costs of \$245,000 per individual.

It must be noted that Commonwealth and State emissions reduction targets are currently woefully inadequate and will result in catastrophic climate harms befalling our children. The Intergovernmental Panel on Climate Change established in its landmark 2018 [1.5 Degree Report](#) that to have any chance of maintaining a safe(-ish) climate, global emissions needed to reduce by 45% from current levels by 2030.

Given the relative emissions budgets established between developed and developing nations, the Australian [Climate Change Authority](#) (CCA) found in 2014 that Australia's Paris 2030 target should be in the order of 40-60%. Applying the CCA's methodology, and recognising the lack of material Australian emissions reduction between 2014 and 2020, the [Climate Targets Panel](#) re-estimated Australia's 2030 target at 74% off 2005 emissions and net zero by 2035. This stands in stark contrast to the 26-28% by 2030 target set by the Australian government, and is, for example, more than double the 35% by 2030 target set by the NSW government.

There is growing international pressure, and a climate imperative, for all jurisdictions to further their ambitions for emission reduction, especially leading to the COP 26 international climate talks in Glasgow later this year. The International Energy Agency, in its recent [Net Zero by 2050 Roadmap](#), stressed that due to the inequality of past emissions and the likely

need to aid developing countries with decarbonisation, advanced countries should cease coal power operations by 2030. Currently only 4 of Australia's 19 coal power stations are set to close by 2030. Reforms currently proposed by ESB do not address this important timeframe and the need for more ambitious targets. Policy options should provide clear signals and paths to ensure that coal power stations close in Australia by 2030 and are not replaced with other carbon intensive forms of generation.

The electricity sector is one of the easiest to decarbonise. It benefits from technological alternatives to emissions intensive coal and gas generation that are mature and increasingly economically superior (including firming costs associated with variable renewables). With a combination of distributed renewable generation, appropriate zero emissions storage options, suitable transmission connections, an efficient demand response market, and - critically - the right regulation, it is foreseeable that the NEM could be 100% emissions free as early as 2030. This will leave more time for decarbonising harder to abate sectors such as some industry and agriculture.

As such, it is incumbent upon the ESB, in concert with other energy market regulators, to ensure that all regulation creates the right incentives for rapid decarbonisation of the sector, rather than handbrakes. All possible incentives should be offered to emissions-free generation, storage and network services options. Regulation must avoid creating incentives that prolong existing coal and gas generation or encourage new fossil fuel entrants.

Market Design Options

If prolonging fossil fuel use in the electricity mix is detrimental to climate change outcomes, it is also increasingly detrimental to grid reliability and security. As the recent events at the relatively new Callide C coal plant demonstrated starkly, reliance on monolithic generators is a failed experiment.

Renewables provide highly predictable generation, particularly given recent advances in highly localised wind/cloud forecasting, machine learning, and the move to 5 minute settlement. Being highly distributed, both within a wind/solar farm and given the relatively large number of individual generators, they are relatively less likely to cause grid security issues than large fossil generators that can fail without warning. As demonstrated by the success of the Hornsdale Power Reserve, the addition of grid scale batteries to the NEM provides unparalleled security services given their ability to respond instantaneously. There are many additional battery projects that will be delivered by 2025.

Australian Parents for Climate Action is concerned that the proposed Physical Retailer Reliability Obligation could add significant costs to consumers while extending the life of coal power stations. *Prima facie*, it appears to create yet another fossil fuel subsidy. This would not be a good outcome in the lead up to the critical COP 26 climate talks, and the world is watching.

The Orderly Exit Management Contract is also troubling. Some commentators have observed that coal generation assets are at best worth nothing given wholesale prices

pushed down by renewables with \$0 marginal costs leading to declining future profits versus site rehabilitation liabilities. The incentives are aligning for coal generators to exit the market early: encouraging for the climate, but not so good for families dependent on a reliable grid. However, we see potential for State Energy Ministers to negotiate as a group to force an Orderly Exit Management Contract down to a “bare bones” operation with essentially no profit for the operators, such that the contract acts *only as an obligation* to remain operational, *not as an incentive* to do so.

Conclusion

Australian Parents for Climate Action reiterates that it is incumbent upon the ESB to ensure that State or Commonwealth government policies to significantly accelerate the pace of emissions reduction are unconstrained by regulatory constructs that create incentives for coal or gas generators to continue to operate a moment after system security needs can be met via zero emissions means. We trust that this will be taken into account in your assessment and detailed design of the various options. You have a duty of care to protect our children from catastrophic climate harms.