Victorian Government
Department of Environment, Land, Water and Planning

Submitted via email: offshorewind@delwp.vic.gov.au

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Offshore Wind Policy Directions Paper

The Australian Energy Council ('AEC') welcomes the opportunity to make a submission to the Victorian Government's consultation on the Offshore Wind Policy Directions Paper.

The Australian Energy Council is the peak industry body for electricity and downstream natural gas businesses operating in the competitive wholesale and retail energy markets. AEC members generate and sell energy to over 10 million homes and businesses and are major investors in renewable energy generation. The AEC supports reaching net-zero by 2050 as well as a 55 per cent emissions reduction target by 2035 and is committed to delivering the energy transition for the benefit of consumers.

The AEC has actively participated in Victoria's decarbonisation journey to date, recently contributing to the roundtable discussion to help determine Victoria's 2035 interim emissions reduction target. These contributions come on the backdrop of the AEC announcing its own support for an economy-wide emissions reduction target of 55 percent by 2035, following on from our endorsement of a net-zero by 2050 target in June 2020.[1]

Like the AEC, the Victorian Government has also committed to a 2050 net-zero target and its recent offshore wind announcement is part of that journey. The AEC's long-term view, however, is that carbon policy should be pursued through:

- Technology neutral approaches, which value carbon abatement as broadly as possible, allowing different technologies to compete against each other. This will direct scarce capital to the technologies likely to give the largest and quickest environmental returns.
- National approaches, ideally operating efficiently across the economy. The AEC cautions against sub-national actions, which fail to benefit from the efficiencies that can be found by exploring the full diversity of Australian geography and activities. National approaches allow us to look for the cheapest ways to abate carbon across this vast continent, saving consumers money.

The Victorian Offshore Wind Policy appears to conflict with both aspects of the AEC's view. Notwithstanding the above, the AEC acknowledges that the Victorian Government is committed to developing this policy. In this submission, the AEC considers how this policy can be developed and delivered in the best interests of customers.

A technology neutral approach will promote more efficient renewables investment

The Australian Energy Market Operator's ('AEMO') 2022 Integrated System Plan ('ISP'), states that offshore wind has "great potential", but "is currently a higher cost solution than on-shore options".

[1] Australian Energy Council 2021, 'Australian Energy Council backs economy-wide 55% emissions cut by 2035', https://www.energycouncil.com.au/news/australian-energy-council-backs-economy-wide-55-emissions-cut-by-2035/; Australian Energy Council 2020, 'Australian Energy Council backs net zero emissions by 2050', https://www.energycouncil.com.au/news/australian-energy-council-backs-net-zero-emissions-by-2050/.

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Accordingly, the ISP concludes that "without significant cost reductions, no offshore wind development is projected in Victoria in any scenario."[2] While the Policy Direction Paper cites the potential for offshore wind costs to scale over time, this is not certain whereby intervention risks inefficient government investment.

The AEC believes it is better to treat all renewable sources equally. In that respect, we support the recent changes by the Federal Government to make commonwealth waters available for the purpose of offshore wind generation.[3] For Victoria's purposes, rather than limiting a scheme to this technology, the Victorian Government's existing Renewable Energy Auctions should be extended to permit the competitive participation of offshore wind. If, after considering value to the taxpayer, offshore wind proves competitive in these auctions against onshore alternatives, it will naturally play a role in Victorian energy supply.

National coordination can better utilise Australia's fuel diversity

Part of the argument presented in the Policy Directions Paper for Victoria investing in offshore wind is that it will provide 'increased diversity in the sources of renewable electricity' and this will 'enhance the resilience of the Victorian electrical grid'. In the AEC's view, Victoria's resilience comes from being part of an interconnected, national grid.

Different states have different comparative advantages in fuel types, but interconnection enables all states to benefit. Victorian electricity consumers, for example, benefit from the efficiencies of having solar generation produced in Queensland or hydro and wind generation coming in from Tasmania. The Policy Directions Paper is less convinced about the efficiencies of state interconnection, citing a source that claims importing electricity has a 60-75% cost premium compared to offshore wind due to the costs of building new interstate transmission.[4]

This analysis is indicative only and there are national processes already underway to ensure future transmission investment is efficient. Furthermore, the new Federal Government has committed to fostering cooperation between itself and the states on energy policy should reduce the need for states pursuing insular policies. The AEC believes that determining renewable investment through a nationally coordinated plan, principally AEMO's Integrated System Plan (with additional consideration towards the Energy Security Board's (ESB) Renewable Energy Zones), will enable resources for generation like offshore wind to be allocated most efficiently, reducing costs for customers in Victoria and across the NEM.

Adding diversity to Victoria's fuel fix

The AEC remains cautious about the ability of offshore wind to add diversity to Victoria's fuel mix. Widespread calms do occur in offshore areas with the potential to occur simultaneously with calms in nearby onshore areas. The graph below shows onshore wind output in Victoria and Tasmania over a specific three-day period. As can be seen, on this occasion, and noting the data is for onshore and not offshore locations, the lull in output occurs at the same time despite the different geographic location ie, either side of Bass Strait.

[2] https://aemo.com.au/-/media/files/major-publications/isp/2022/2022-documents/2022-integrated-system-plan-isp.pdf?la=en, p43.

[3] Australian Government, 'Establishing offshore renewable energy infrastructure', June 2022, https://www.industry.gov.au/regulations-and-standards/establishing-offshore-renewable-energy-infrastructure.

[4] Policy Directions Paper, p20. Source is: "Nous analysis of literature. Indicative analysis only."

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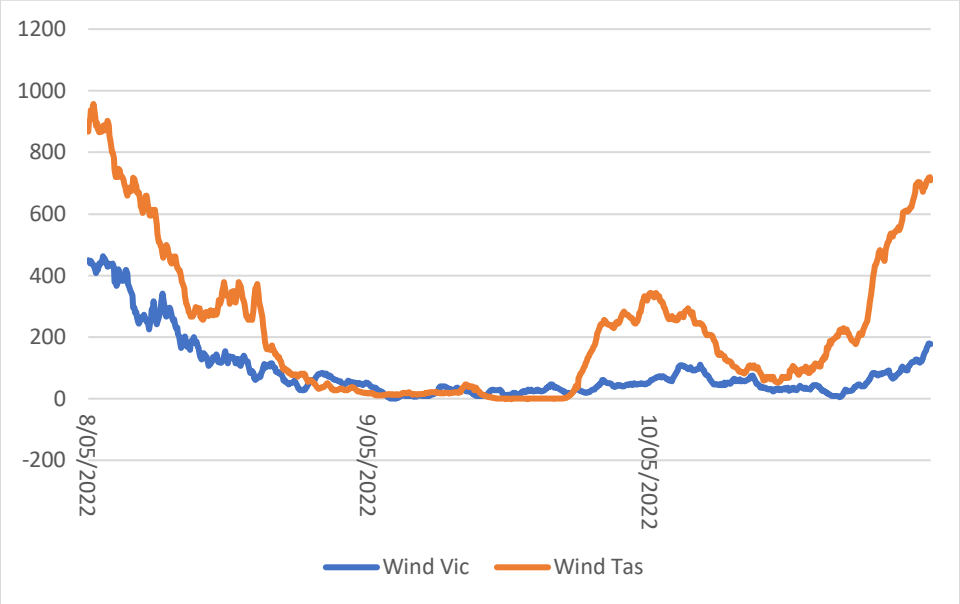
Figure 1: Onshore wind output in Victoria and Tasmania over a 3-day period



When integrating offshore wind into Victoria's energy mix, the AEC believes it should not be treated as a substitute for dispatchable generation. This is not to say it is without benefit, but that it does not have the same capacity value as storage, hydro, or combustible fuels. The recent de rating factors (i.e. reliability of generation being online at the time of peak demand) from the Energy Security Board show that wind generation is not always online, including in Great Britain where much of the wind is offshore.[5]

Figure 2: De-Rating factors of different technologies across jurisdictions with capacity markets

Market	Coal	Gas	Hydro	Wind	Solar	Storage
CAISO	Equal to most recent maximum capability test		61 - 73%	8 - 33%	0 - 39%	100%
PJM	Equal to UCAP		42 - 96%	15%	54%	83 - 100%
GB	80%	91 – 95%	91%	6.3%	3.3%	10 - 95%
Ireland	N/A	82 - 91%	80 - 89%	9.1%	12.7%	14 - 68%
WEM	99 - 100%	79 - 100%	N/A	7 - 28%	10 -15%	25%-100%

Enabling Victoria's Just Transition

The Policy Directions Paper suggests that the Victorian Government wants offshore wind to enable their commitment to a just transition away from coal-fired generation. A government-funded report completed last year about offshore wind considered whether it can provide reasonable employment opportunities to workers in fossil fuel industries. It found that offshore wind was a highly transferrable area of work for

[5] Energy Security Board, 'Capacity Mechanism High-Level Design Paper', June 2022, p36, https://www.datocms-assets.com/32572/1655620351-20220620-capacity-mechanism-high-level-design-consultation-paper_final.pdf.

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those in offshore oil and gas sectors; however, the alternative employment opportunities for workers at coal-fired power stations were less established.[6]

Promisingly, the Star of the South – the first proposed offshore wind project – has shown a commitment to support efforts to retrench workers at Energy Australia's Yallourn power station, scheduled to close in 2028. It has said that it is 'working directly with Energy Australia on skills mapping and transition opportunities for the Yallourn workforce' as well as engaging with key stakeholders like the Latrobe Valley Authority.[7] However, the Star of the South also caution that these opportunities require support from government. It is important the nuance of opportunities for coal-fired workers versus other fossil fueled workers is not lost in the Victorian Government's promise of new jobs and that tailored support is provided. The AEC is working closely with its coal-fired generators on worker transition and would welcome the chance to be part of this conservation.

Any questions about this submission should be addressed to Rhys Thomas, by email Rhys.Thomas@energycouncil.com.au or mobile on 0450 150 794 or Peter Brook by email peter.brook@energycouncil.com.au.

[6] Blue Economy Cooperative Research Centre, 'Offshore Wind Energy in Australia', July 2021, p10, https://blueeconomycrc.com.au/offshore-wind-key-to-australias-clean-energy-future/.

[7] Star of the South, 'Submission to Inquiry into the closure of the Hazelwood and Yallourn power stations', October 2021.

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