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Submission in response to proposed Southern Ocean region offshore wind area

The Clean Energy Council (**CEC**) welcomes the opportunity to make a submission on the proposed Southern Ocean area for offshore renewable energy projects as published by the Department of Climate Change, Energy, Environmental and Water (**DCCEEW**).

The CEC is the peak body for the clean energy industry in Australia, working with over 1,000 of the leading businesses operating in renewable energy and energy storage. As the peak industry body for offshore wind, we represent 48 companies that are actively contributing to developing offshore wind in Australia, including publicly announced offshore wind projects alongside many more that are yet to be announced.

We are committed to accelerating Australia's clean energy transformation and recognise the critical role offshore wind will play in decarbonising the nation's electricity network. Offshore wind also creates a significant opportunity for investment and economic development: benefits will flow directly from the construction and operation of projects that feed electricity into Australian grids, while also supporting the growth of a hydrogen export industry, which has the potential to contribute to significant amounts of export revenue as our exports of coal and gas decline.

The proposed Southern Ocean area is well-suited to the development of offshore wind and the CEC strongly supports the declaration. The remainder of this submission will expand further on arguments presented by DCCEEW in supporting information as to why the Southern Ocean region should be declared an area for offshore wind development under the *Offshore Electricity Infrastructure Act*.

The Southern Ocean Region

The Southern Ocean region presents strong opportunity to employ the long coastline, extensive continental shelf and powerful consistent winds off Victoria and South Australia to deliver offshore wind generation for Australia. Paired with existing high-voltage transmission networks, consistent high electrical load, and an industrial workforce, the Southern Ocean region presents an exciting opportunity for regional communities in Southern Australia to generate offshore wind.

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With very high capacity factors of around 55-57%[1], the proposed Southern Ocean area has already proved of strong interest, with four projects ranging from 750 MW to 2 GW being proposed in the region from world leading developers.

Proximity to transmission and load capacity

The proposed Southern Ocean region is well located to connect offshore wind generation into existing transmission capacity. Locating offshore from Portland Aluminium 500 kV substation and the 275 kV Heywood interconnector, offshore wind generation in the Southern Ocean region will be well positioned to supply not just consumers across the southern seaboard with clean electricity, but enable South Australia and Victoria to grow their export capabilities in the National Electricity Market (NEM).

Moreover, the load opportunity generated from the energy-intensive Portland Aluminium smelter presents ample opportunity. With existing strong high-voltage connections, offshore wind electrons produced in the Southern Ocean region can secure local demand in the grid with a relatively low transmission distance.

Notwithstanding, the CEC urges DCCEEW as well as the Victorian and South Australian Governments to ensure transmission capabilities connecting offshore generation into onshore networks are not overlooked in the planning phases. Ensuring new transmission is built in advance of offshore developments will require coordination between developers, network operators and government departments, ultimately helping to avoid delays in connecting offshore wind capacity.

Support existing industry and communities

As referenced in the Overview of the Proposed Area paper, the Victorian Governments Offshore Wind Policy Directions Paper estimates creation of up to 3,000 job for 15 years during the development and construction phase, and an additional 3,000 for ongoing operations. For the long-established industrial townships of Portland, Warrnambool and Mount Gambier, this presents immense opportunity for local communities.

With four offshore wind projects already publicly announced for the Southern Ocean region, we can expect to see a large uptake in employment opportunities not only to replace retiring industries, but adding to the workforce.

There is also the prospect for the offshore wind industry to support development of future clean industries in the area, such as onshore and offshore hydrogen, green steel, and green aluminium – all which will contribute to good jobs and stimulate economies within the Southern Ocean region.

Proximity to Port of Portland

The proposed region is ideally located with the Port of Portland centrally located along the

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[1] Blue Economy CRC, *Offshore Wind Energy in Australia,* July 2021, p. 52-53

coastline. As the only deep-water seaport between Adelaide and Melbourne with good connectivity to road and rail, this well-established transport hub will be well placed to support the offshore industry.

While upgrading of the port facilities would be required to accommodate offshore wind infrastructure, this well-established port will provide deepwater access and skilled maritime personnel to support delivery and ongoing maintenance for the offshore wind industry.

The CEC would recommend that DCCEEW and the Victorian Government consider how to best support port development, both in Portland and Australia wide, as early in the development process as possible. Ports will be critical in achieving the national target of 82% renewable energy by 2050. Without early and proactive development of Australian ports, clean energy infrastructure will cause destructive bottlenecks at import terminals, dramatically increasing project costs and deterring foreign investment.

Dimensions of the draft area

At approximately 5,100 km2, the proposed area is considerably smaller than the previously declared Gippsland offshore wind area (approximately 15,000 km2). However we do welcome this region being larger than the most recently declared Hunter region.

With maximum Feasibility Licence areas of 700 km2, the draft Southern Ocean region could accommodate up to 7 projects. This seems appropriate for a first round of developments, to avoid too many constraints on likely early bottlenecks such as port capacity.

We calculate that approximately 70% of the proposed area has water depths deeper than 70 m, making it suitable only for floating foundation projects. The deepest fixed-foundation offshore wind projects deployed around the world to date are around 60 m. It is important to retain sufficient area that is shallower than 60 m water depth in the final declared area to support several feasibility licences. This is critical to ensure that offshore wind projects in the Southern Ocean region can be delivered in a timely manner and support the transition to renewable energy for local industries. Providing for multiple feasibility licences with fixed foundation technology in the final declared area is also critical to ensure that the scale of the industry is sufficient to justify investment in local supply chain capability and infrastructure in Portland, thereby providing local economic benefits and supporting regional development.

We would also recommend that no height restrictions be applied to the Southern Ocean area, as was done in the Hunter region. Including height restrictions limits the turbines that can be used, and in some cases, may make projects unviable as they are unable obtain discontinued models of turbines from manufacturers that meet the requirements. As the industry progresses with haste, we must ensure that any areas declared to support this offshore industry can grow in alignment with this pace.

Overall, the draft area should not be reduced in size, to ensure productive allocation of Feasibility Licences and promote competition. Anything less than the current area, in particular in the

shallower waters, risks curtailing interest in the region and causing delays in achieving emissions reductions targets.

The award process and other offshore regions

We recognise the extensive workload being undertaken by DCCEEW, the Offshore Infrastructure Regulator and NOPTA to enable offshore wind deployment in Australia, which has already seen extensive interest from offshore wind developers both domestically and internationally. We are concerned however with the lack of clarity of existing feasibility award processes and future offshore area opportunities.

Given the extensive timelines and substantial cost, offshore wind developers are eager for as much information as possible at the earliest time to ensure they make the best decision for their entity. With the Gippsland Feasibility Licence award process in train (and without clear guidance on timelines), as well as the Hunter region applications open, it is challenging for developers to determine suitability of the third proposed region of the Southern Ocean. The CEC and our members would welcome timelines for award for existing and future regions, as well as clear capacity guidance (proposed megawatts or square kilometres) for future potential areas.

As always, the CEC welcomes further engagement from DCCEEW to discuss any of the information presented in this submission. Further queries can be directed to Morgan Rossiter at the CEC (mrossiter@cleanenergycouncil.org.au).

Kind regards

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