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Lodged via offshorerenewables@industry.gov.au

Submission in response to proposed Hunter region offshore wind area

The Clean Energy Council (**CEC**) welcomes the opportunity to make a submission on the proposed Hunter 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. For offshore wind, we represent companies that are actively developing more than 25 GW of 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 Hunter 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 Hunter region should be declared an area for offshore wind development under the *Offshore Electricity Infrastructure Act*.

The Hunter Region

The long coastline of NSW, with high wind speeds and extensive continental shelf, makes the Hunter area ideal for floating offshore wind development. Paired with existing transmission networks, retiring capacity and an industrial workforce, the Hunter region presents an opportunity to lead Australia, and the world, in offshore floating wind.

The proposed Hunter area has already proved of strong interest, with several projects ranging from 1 GW to 3 GW being proposed in the region from world leading developers.

The area is also expected to have high capacity factors for offshore wind, around 40-45%¹, and has the lowest correlation with the NSW onshore wind resource – helping to diversify electricity generation profiles. This area is considered the best offshore wind resource in NSW.

Proximity to transmission and retiring capacity

The proposed Hunter region is well located to connect offshore wind generation into existing transmission capacity. With several already established 275 kV, 330 kV and 500 kV high-voltage transmission lines, offshore wind generation in the Hunter region will be well positioned to supply consumers in key NSW load centres across the eastern seaboard with clean electricity.

Moreover, with future loads expected to connect to the grid in coming years such as the Waratah Super Battery, as well as retirements of thermal coal plants including Liddell, Eraring, and Bayswater, there is ample opportunity for offshore generation to complement the grid. And following the forecast growth of the offshore wind industry in Australia, we would expect capacity generated to displace additional fossil fuel generation over the coming two decades.

Notwithstanding, the CEC urges DCCEEW as well as the NSW Government 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

As a well-established industrial hub, the Hunter region offshore wind area will generate immense opportunity for local communities. The proposed area is adjacent to existing coal power generation facilities, oil and gas terminals, coal port facilities, and heavy industry services, with many of these operations planning to close or expected to see a reduction in output with a transition away from fossil fuels. This presents ample transition opportunity for the existing workforces in Newcastle and surrounding towns.

As referenced in the Overview of the Proposed Area paper, the Global Wind Energy Council estimate that for the lifetime of a 500 MW offshore wind project, approximately 8,560 jobs can be created. In Australia currently, there are approximately 5,000 jobs in coal-fired power (across both plants and mines)². With a number of publicly announced offshore wind projects already proposed in the Hunter area, we can expect to see a large uptake in employment opportunities not only to replace retiring industries, but adding to the workforce.

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

² Blue Economy CRC, *Offshore Wind Energy in Australia*, July 2021, p. 10

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 Hunter region.

Proximity to Ports

The proposed region is ideally located with access to key NSW ports of Newcastle Harbour, Port Botany and Port Kembla. While upgrading of all of these facilities would be required to accommodate offshore wind infrastructure, these well-established ports will all provide deepwater access and skilled maritime personnel to support delivery and ongoing maintenance for the offshore wind industry.

Dimensions of the draft area

The size of the proposed area

At approximately 2,500 km², the proposed area is significantly smaller than the previously declared Gippsland offshore wind area (approximately 15,000 km²). With maximum Feasibility Licence areas of 700 km², this would most likely limit the draft Hunter area to only 3 or 4 projects. Having a smaller number of initial projects may be appropriate for a first round of developments, to avoid too many constraints on likely early bottlenecks such as port capacity.

However, we would hope to see expansion of the offshore wind region and another round of Feasibility Licence applications within a few years once initial projects are in train. This would allow for staggering of projects that would mean creating a more consistent pipeline of long-term activity, which incentivises investment in a range of supply chain opportunities.

The draft area should not be reduced in size, to ensure productive allocation of Feasibility Licences. Anything less than the current area risks being unworkable and causing delay in achieving emissions reductions targets.

The shape and location of the proposed area

- The north-west tip of the area could be pushed slightly further back from the coast, beyond the proposed 10km setback, to further avoid existing tourism activities in the Port Stephens area. This could be extended to 15 km.
- Noting that this would reduce the size of the overall area, we would only support an additional setback in the north-west if the area could be expanded to the south by 10-20 km.
- A key benefit of an expansion south is that this would open up more sea-bed at more accessible depths. A significant proportion of the draft area (approximately a quarter) is deeper than 200 metres, which presents more challenges for floating offshore wind projects, making these more expensive to deliver (and thus increasing the cost of the electricity they can supply to consumers).

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

A handwritten signature in black ink, appearing to read 'N. Aberle', written in a cursive style.

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