AIMPE

AMOU
Australian Maritime Officers Union

Australian Institute of Marine and Power Engineers
&
Australian Maritime Officers Union

Submission Re

Illawarra Offshore Renewable Energy Zone Proposal

August 2023

to

Department of Climate Change, Energy the Environment and Water

Martin Byrne,
Federal Secretary
AIMPE

Mark Davis,
Executive Officer
AMOU

Background

The Australian Institute of Marine and Power Engineers is the registered organisation which represents qualified Marine Engineers throughout Australia. AIMPE came together as a national body in 1881 after several years during which local organisations were formed in the various colonies of Australia and New Zealand. AIMPE members operate, maintain and repair marine vessels of all sorts including commercial cargo ships of all types and sizes as well as vessels dedicated to the offshore oil and gas sector, tugboats, dredges, ferries, defence support craft, research vessels and Border Force vessels.

The Australian Maritime Officers Union is the oldest union continuously registered under the Fair Work Act 2009 and represents the professional and workplace interests of Ship's Masters (Captains) and Deck (Navigating) Officers in the maritime 'blue water', offshore oil and gas, ferry, dredging and tourism sectors, Marine Pilots, Coastal Pilots, tug Masters, bunker (refuelling) tanker Officers, Stevedoring Supervisors, Port Services officers, vessel traffic services (VTS)/harbour control officers and professional/ administration/ supervisory/technical staff of port corporations and maritime authorities.

AIMPE and AMOU appreciate the opportunity to make a submission regarding the proposal to declare an Offshore Renewable Energy Zone (REZ) in the Illawarra on the NSW South Coast and seek further involvement in all future consultations.

1. **AIMPE and AMOU Support the Proposal for an Illawarra Offshore Renewable Energy Zone (REZ)**

AIMPE and AMOU are strongly supportive of the concept of developing Offshore renewable energy generally and in the Pacific Ocean off Illawarra coast in particular. The unions also support the development of other REZs elsewhere around Australia including the Gippsland, NSW Hunter, the Southern Ocean, the Tasmanian coast, and the WA coast.

Port Kembla has long been a centre of significant maritime operations. The steelworks at Port Kembla and the export of coal from the NSW South Coast were the early drivers of this maritime activity. Grain from across Southern NSW has also been a commodity which has been exported through Port Kembla for many decades. While these remain as important activities, in more recent times substantial volumes of trade have been transferred from Sydney Ports to Port Kembla. These include the motor vehicle import trade and the cement trade. LNG importation is yet another trade which is under development.

The long-term continuation of the vital strategic steel-making industry is probably dependent on a secure supply of renewable energy. The vision of "green steel" produced in Port Kembla is unlikely to be realised without the establishment of a significant Offshore Wind capability off the Illawarra coast.

AIMPE and AMOU believe that the Illawarra Offshore REZ could generate a significant amount of investment in a series of other projects. These projects could also be the catalyst for new investments in shore-based industries associated with the construction and operation of the renewable energy projects as well as new industries which could take advantage of the green energy produced.

2. **AIMPE and AMOU interest in the REZ**

AIMPE and AMOU have a strong interest in the maritime operations that will be required for all phases of the development of Offshore renewable energy projects. AIMPE and AMOU represent the Australian seafarers who are employed on marine vessels of all types. These will be involved in all phases of all offshore renewable energy projects of all varieties. They include the following vessel types:

Development and feasibility

- Survey Vessels
- Research Vessels

Construction and installation

- Offshore Crane Vessels
- Construction Support Vessels
- Tugs and Towage vessels
- Tug and Barge operations
- Anchor Handling Tug Supply Vessels
- Crew Transfer Vessels
- Dredgers
- Cable Laying Vessels
- Dive Support Vessels

Operation and maintenance

- Crew Transfer Vessels
- Service Operation Vessels
- Dive Support Vessels
- Tug Vessels

AIMPE and AMOU expect that there will be peak employment for Australian seafarers during the construction and installation phase of each Offshore renewable energy project. The vessels which will need to be deployed for the construction phase are very similar to vessels routinely used in the Offshore Oil and Gas industry. AIMPE and AMOU members are employed by all of the vessels' operators in the Australian Offshore Oil and Gas industry.

It is noted that there is a likelihood that Offshore Wind projects for the Illawarra coast will need to deploy floating wind turbine towers because of the deep waters off the NSW coast. This is likely to require fewer Construction Support vessels and crane vessels and more Tugs including Anchor Handling Tugs to tow out the floating towers and run out the massive anchor chains required.

The development of Offshore renewable energy projects represents an opportunity for Australian seafarers to make a transition from the hydrocarbon industries to the low or zero carbon emitting industries of the future. This is consistent with the United Nations Global Compact report to COP27[1].

AIMPE and AMOU submit that national co-ordination of the construction phase of Offshore renewables projects should be encouraged to avoid the boom-and-bust type of cycle seen for example in the LNG led resources boom in Australia earlier this century. That boom saw at least 5 LNG projects under construction almost simultaneously. Co-ordination could even out the peaks and troughs and avoid excessive competition for the offshore installation vessels that are already in great demand globally.

There is also strong demand globally for both Offshore Wind construction vessels and for the seafarers to operate those vessels. For this reason, AIMPE and AMOU urge that consideration be given to the acquisition (purchase or long-term charter) of sufficient numbers of vessels to ensure that Australian projects, including projects in the Illawarra REZ are not delayed due to lack of construction and related vessels.

There is an emerging trend in the global maritime industry towards net zero operations by 2050. There are many varied ideas about the use of different fuels including hydrogen as a fuel for ships and other vessels[2]. An alternative that is already being deployed in certain particular applications is the electric vessel. For instance, in the Port of Auckland an electric tug has been in operation since August 2022[3].

Without being prescriptive of which type of approach to "net zero" propulsion systems, AIMPE and AMOU would urge that as part of the transition to net zero, the propulsion systems of the vessels used for project construction and the longer-term maintenance vessels should be required to demonstrate net zero operations.

3. AIMPE and AMOU concerns regarding the Illawarra REZ

[1] Mapping a Maritime Just Transition for Seafarers | UN Global Compact
[2] DNV study of seafarer training and skills needed to support decarbonization - DNV
[3] POAL - Sparky, world's first full sized, ship-handling e-tug arrives in Auckland

AIMPE and AMOU do have some concerns about the Illawarra REZ. Port Kembla is a nationally significant trading port and as such large commercial ships require unrestricted access to the port at all times. The activities associated with the Illawarra REZ should not interfere with the normal shipping operations which should have priority.

The NSW coast also sees a great deal of marine traffic heading both north and south and across the Tasman. Marine traffic lanes need to be kept clear at all times to ensure that vessels heading to and from Brisbane, Melbourne, New Zealand ports and elsewhere can all transit freely and safely.

As is well known to seafarers, the waters off the NSW South Coast can be very challenging. Over a long period, the NSW South Coast saw many ships wrecked during heavy storms often due to strong southerly winds driving ships onto the rocks. Any renewable energy projects will have to be designed and engineered to handle the heavy winds and seas which are frequently experienced in the NSW South Coast region. Emergency response arrangements will also need to be put in place for all phases of each project.

4. AIMPE and AMOU broader concerns

AIMPE and AMOU also have some broader concerns which we seek to raise at this early stage in the process. The demographic profile of the Australian maritime workforce is an ageing one. There is an acknowledged need for a new national training program to ensure that the workforce of the future is trained ahead of the future demands on the maritime industry.

AIMPE and AMOU have raised these workforce concerns recently in our submission to the Strategic Fleet Taskforce and rather than repeat them at length our submission from December 2022 is attached.

Any developer of renewable energy projects should be required to commence maritime workforce training at the earliest possible stage to ensure the availability of the qualified seafarers and in particular the qualified Engineer Officers, Masters and Deck Officers who will be required. Obtaining these qualifications is not a quick fix that can be achieved in the six months prior to project commencement. The training of these personnel is based on a combination of college-based studies and practical experience. This means that it usually

takes around 10 years for a person to progress from commencement to attainment of the highest qualification. These are statutory requirements underpinned by international conventions.

5. Future consultations

AIMPE and AMOU wish to thank DCCEEW for the opportunity to make a submission to this consultation and seek to be involved in all future consultations concerning the maritime aspects of the proposed Illawarra Offshore Renewable Energy Zone.