

AIMPE



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

Submission re

Hunter Coast Offshore Renewable Energy Zone proposal

April 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) off the Hunter Coast adjacent to New South Wales and seek further involvement in all future consultations.

AIMPE and AMOU Support the Proposal for a Hunter Offshore Renewable Energy Zone

AIMPE and AMOU are strongly supportive of the concept of developing Offshore renewable energy generally and off the NSW Hunter coast in particular. Since the closure of the Newcastle Steelworks over 20 years ago there has been a lack of major investment in the region and as a consequence a lack of economic development in the Hunter. The unions also support the development of other REZs elsewhere around Australia including the NSW Illawarra coast, the Tasmanian coast, the Victorian coast and the WA coast.

AIMPE and AMOU believe that the Hunter Offshore Renewable Energy Zone (REZ) could generate a significant amount of investment in a series of 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.

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 identified by Oceanex¹ in their supply chain report about their planned floating offshore wind project:

Development and feasibility

- Survey Vessels
- Research Vessels

Construction and installation

- Offshore Crane Vessels
- Construction Support Vessels
- Tug Vessels
- Anchor Handling Tug Supply Vessels
- Crew Transfer Vessels
- Cable Laying Vessels
- Dive Support Vessels

Operation and maintenance

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

¹ [Oceanex Energy | Energising the new economy | Oceanex](#)

- Tug Vessels

AIMPE and AMOU see 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 the 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.

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 COP27².

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 which 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 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 vessels³. 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 2022⁴.

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 construction vessels and the longer-term maintenance vessels should be required to demonstrate net zero operations.

AIMPE and AMOU also support the inclusion of a requirement that such vessels be constructed locally. The Newcastle region once had a strong shipbuilding industry and this could be an opportunity for the revival of ship construction in the Hunter. Of course, the aluminium smelter at Tomago could provide the raw material for some of the vessels required for the long-term operation of the Offshore projects e.g., aluminium catamaran crew transfer vessels.

² [Mapping a Maritime Just Transition for Seafarers | UN Global Compact](#)

³ [DNV study of seafarer training and skills needed to support decarbonization - DNV](#)

⁴ [POAL - Sparky, world's first full sized, ship-handling e-tug arrives in Auckland](#)

AIMPE and AMOU concerns regarding the Hunter REZ

AIMPE and AMOU do have some concerns about the Hunter REZ. The Port of Newcastle is a major international and domestic trading port and as such large commercial ships require unrestricted access to the port at all times. The activities associated with the Hunter REZ should not interfere with the normal shipping operations which should have priority – particularly when shipping is tidally restricted.

The Port of Newcastle is a river port and routinely requires maintenance dredging. Activities associated with the Hunter REZ should not interfere with the port dredging operations which are essential to keep the shipping channels at the required depth.

In addition, there are times when ships visiting Newcastle need to drop anchor offshore awaiting a berth in the Port. The anchorage area off the Port of Newcastle must be available for shipping at all times.

The NSW coast also sees a good deal of traffic which passes Newcastle heading north or south without entering the Port of Newcastle. Marine traffic lanes need to be kept clear at all times to ensure that vessels heading to Port Jackson, Port Botany, Port Kembla, the Port of Brisbane and elsewhere can all transit freely and safely.

As is well known to seafarers, the waters off the NSW coast can be very challenging. The memory of the bulk ship Pasha Bulker stranded up on the rocks near Nobbys Head is still fresh. Over a longer period, the NSW coast has seen many ships wrecked including in the Newcastle region. There is a strong correlation between the major East Coast lows and these shipping losses. Any renewable energy projects will have to be designed and engineered to handle the heavy winds and seas which are frequently experienced in the Hunter region. Emergency response arrangements will also need to be put in place for all phases of each project.

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.

Luckily the Hunter TAFE College is well positioned to be able to assist in the training of a new generation of Australian seafarers to participate in these emerging opportunities. 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. 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.

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 Hunter Offshore Renewable Energy Zone.