

AIMPE



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

Submission re

Indian Ocean - Bunbury Offshore Renewable Energy Zone proposal

March 2024

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. 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 aquaculture vessels and Border Force vessels. AIMPE members also carry out technical roles ashore including as Marine Surveyors.

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 Indian Ocean near Bunbury WA and seek further involvement in all future consultations.

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

AIMPE and AMOU are strongly supportive of the concept of developing Offshore renewable energy generally and in the Indian Ocean near Bunbury in particular. The maritime industry has long played a critical role in the movement of bulk cargoes through the Port of Bunbury including alumina, mineral sands, grain and woodchip exports as well caustic soda, mineral sands and even coal.

The unions also support the development of other REZs elsewhere around Australia including the Victorian coast, the NSW Hunter and Illawarra coasts, and off Northern Tasmania.

AIMPE and AMOU believe that the Indian Ocean Bunbury 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 including in the Offshore Oil and Gas industry in the north west of WA. 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 COP27¹.

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 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 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 Indian Ocean off Bunbury 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 vessels². Hydrogen as a marine fuel is now being trialled both for tug operations and for crew transfer vessels³. Several other alternative fuels have been assessed in the review for the Maritime Emissions Reduction National Action Plan⁴. Another 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 2022⁵. Meanwhile, CSL has announced a hybrid ship that will be built with the capability to convert to fully electric operations for AdBri in South Australia⁶ with delivery expected in 2026.

Without being prescriptive about 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

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 [Port of Antwerp-Bruges & CMB.TECH launch the Hydrotug 1 | CMB.TECH](#)

⁴ [MERNAP Issues Paper: Energy Sources and Technologies \(infrastructure.gov.au\)](#)

⁵ [POAL - Sparky, world's first full sized, ship-handling e-tug arrives in Auckland](#)

⁶ [CSL and AdBri Partner to Build First Fully Electric Battery Capable Self-Unloading Ship | CSL \(cslships.com\)](#)

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

3. AIMPE and AMOU concerns regarding the Indian Ocean Bunbury REZ

AIMPE and AMOU do have some concerns about the Indian Ocean Bunbury REZ. The Port of Bunbury is a significant regional trading port with over 17 million tonnes of trade passing through the port in the last 12 months involving over 430 ship visits. These large commercial ships require unrestricted access to the port at all times. The activities associated with the Indian Ocean Bunbury REZ should not interfere with the normal shipping operations which should have priority. Location and spacing of wind farms should only be approved outside of existing shipping lanes. These lanes include the routes to and from Australia's east coast as well as routes to international ports. These include long-standing trades between Bunbury and Portland, Adelaide and Geraldton.

The Indian Ocean off Bunbury does experience heavy weather from time to time. Any renewable energy projects will have to be designed and engineered to handle the strong winds and high seas which are frequently experienced in the Indian Ocean Bunbury 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.

Also attached is a copy of the Maritime Workforce Position Paper which has been commissioned by INPEX and which provides an overview of the major workforce issues which exist now and which deserve early attention from those seeking to build offshore wind farms. Please note at the moment this is not a public document; the official public launch of this paper is expected by the end of March 2024.

Any developer of offshore 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 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 Indian Ocean Bunbury Offshore Renewable Energy Zone.