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SEA Consultation,
Sustainable Energy Authority of Ireland,
Wilton Park House,
Wilton Place,
Dublin 2

5th May 2011

Dear Sir / Madam

Consultation response: DRAFT Offshore Renewable Energy Development Plan (OREDPA)

We welcome the Irish Government's positive statements in support of marine energy and its willingness to engage with the industry in order to develop policies which will foster this promising industry's growth.

We also welcome the explicit recognition of the need for a strategic approach which will foster renewable energy development in a sustainable manner and which recognises the significant social and economic benefits a thriving marine energy industry can bring.

Please find attached our response to the consultation document. We hope you find these comments helpful, and if we can help by clarifying any of the points made, please get in touch.

Yours sincerely,

Neil Davidson
Public Affairs Manager

1 About Us

Aquamarine Power is a wave energy company, with head offices in Edinburgh and further operations in Northern Ireland, Orkney and the USA. In 2009 the company successfully deployed its flagship technology, known as 'Oyster', at the European Marine Energy Centre (EMEC), in Orkney. The device operated successfully for 6000 hours over two winters. The device was removed earlier this year and the company is about to install its second full device in Orkney later this summer.

Aquamarine Power's goal is to develop commercial Oyster wave farms around the world.

Aquamarine Power has signed an agreement with renewable energy company SSE Renewables (formerly Airtricity) to develop up to 1,000MW of Oyster wave farms by 2020. Discussions are in progress with further potential development partners.

Oyster is designed to capture the energy found in nearshore waves and convert it into clean usable electricity. It uses a simple hinged flap connected to the seabed at around 10m depth. Each passing wave moves the flap which drives hydraulic pistons to deliver high pressure water via a pipeline to an onshore turbine which generates electricity.

Multiple Oyster devices will be deployed in wave farms typically of 100MW or more.

Aquamarine Power offers a wave farm site development service to support the growth of Oyster. The company's innovative computer modelling system allows it to identify and develop the best sites for wave energy production around the globe.



Oyster in operation at EMEC, Orkney

2 General comments

Aquamarine Power welcomes the opportunity to respond to the Draft Offshore Renewable Energy Development Plan (OREDPA).

Aquamarine Power is a member of the Marine Renewables Industry Association (MRIA) and supports fully the consultation response of the MRIA.

We believe the OREDPA effectively recognises the benefits a successful marine energy sector will bring to Ireland in the medium term - but that it should go further in quantifying the economic benefits that could accrue to Ireland today.

Ireland has the best wave resource in Europe. If this resource could be allied to a proactive process of permitting and accelerated grid access, there is potential for Ireland to benefit from some of the 'early mover' advantage which is currently flowing to Scotland and the rest of the UK.

At the local level, Aquamarine Power has already, for example, spent over £2 million directly in the Orkney Islands economy and worked with more than 30 local businesses during the deployment of its first Oyster device and the development of its second device.

Nationally, the UK marine energy sector has already succeeded in attracting significant inward investment from global companies including ABB, Rolls Royce, Morgan Stanley, SSE, E.ON, Iberdrola, Vattenfall and International Power to commit £multi-million sums to technology and project development.

The OREDPA offers Ireland an opportunity to implement policies to build an international reputation as a 'go-to' country for marine energy. At present, this is not happening – investment in the sector is coming primarily from the public purse and is not leveraging private funds.

In order to fully capitalise on the potential benefits Ireland must not only set out a clear and ambitious plan: it must set out a step-by-step progress to systematically remove barriers to development, and it must act with a real sense of urgency.

3 Specific comments

- We share the MRIAs deep disappointment at the lack of a clear pathway, targets and deadlines (particularly for the near-term) within the draft plan to realise Ireland's unique opportunity in ocean energy. We believe ocean energy presents an opportunity to build on an abundant natural resource and capture €9bn in added value and thousands of new jobs. Moreover, the draft documents fail to highlight and to communicate the relatively benign environmental risk of wave energy in particular.
- We are concerned the draft plan fails to highlight the target set by Government to reach a total of 500MW of wave and tidal generating capacity in operation by 2020 - the target is in the Draft OREDPA but in a low key fashion and set within a 2030 framework and deadline. The 2020 target has been critical to date in mobilizing both the private and the public sectors to develop ocean energy in Ireland and should be retained and highlighted in the plan
- We are concerned that the recommended actions within the SEA Environmental Report Conclusions cites 'maximising distance from shore where possible' as a factor in the consideration of overall potential cumulative environmental effects. Proximity to shore is a landscape consideration, not an environmental consideration. There is no evidence to suggest that nearshore marine energy devices pose greater or less environmental

impact than devices further out at sea. Proximity to shore should not be included in the consideration of potential cumulative environmental effects.

4 Suggested actions

- **Schedule the publication of a consenting scheme.** The plan should set a firm date for the publication of the proposed new consenting regime and allow for a period of consultation on what will be both a complex and a vital piece of future governance. The MRIA has had a constructive dialogue to date with the Department of Environment, Community and Local Government on this key issue of consenting.
- **Prepare and execute an initial leasing round.** The plan should state the intention of all concerned to pursue with urgency the work required to enable an initial leasing round to take place in early 2012. Note that Northern Ireland has publicly announced its intention to complete its initial leasing round in the spring of 2012 while Scotland completed its initial round in Spring 2010 and now has a rolling programme with new rounds opening every six months. Consenting and leasing round dates have been sought for many years and have now become urgent. The MRIA published clear recommendations and actions for reform in its white paper on [Foreshore Licencing and Leasing](#) in August 2009. These recommendations present a clear pathway to reform.
- **Commence planning for grid connections to enable the 2020 target.** The provision of grid connections is a core component of the ocean energy challenge. Grid is complex, expensive and new capacity cannot be provided quickly. To realise the huge opportunity to realise new jobs involved in ocean energy, Ireland needs appropriate connections to the grid for ocean energy so that it may contribute to the provision of a balanced and secure portfolio at home of energy sources and give access to export markets via interconnectors. In particular, the plan should address the need to provide grid access to enable the 2020 target of 500MW in marine renewables. The MRIA has set out its view on the priorities in its white paper [Initial Development Zones to Focus on Realizing Ireland's Ocean Energy Potential](#), published in August 2010. The planning of grid connections should proceed in line with the other actions on consenting, leasing and licencing.
- **Support Westwave.** The NER (New Entrant Reserve) 300 Scheme promoted by the EU provides a unique opportunity to trial and showcase Irish ocean energy. The Westwave project is promoted principally by ESBI but supported by many other organizations, including Aquamarine Power and the MRIA. We suggest that the Government should now identify marine renewables as the Irish priority area under NER 300.

5 Conclusion

The draft OREDP is a welcome step in the promotion of marine energy in Ireland. However if Ireland is to capture any of the 'early mover' advantages this exciting new industry will bring, the plan must articulate a set of clear, achievable and time-bound actions which will attract inward investment on the scale we are now starting to see in Scotland and the rest of the UK.

Developers and investors require clarity and certainty – particularly in the areas of revenue support, planning and grid. If, through the OREDP, Ireland can offer this, there is no reason it cannot capitalise on one of the country's greatest national assets.

As sense of urgency is the key. As the ministerial foreword to the draft OREDP states: "If we get this right, and get it right quickly, Ireland can be at the forefront of this area internationally." Without urgency, the opportunity will be lost.