

# Briefing for Morlais tidal demonstration zone project approval

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#### **Key communications messages:**

- Based on robust evidence and following the completion of several consultation processes, NRW has issued the Morlais marine licence application.
- NRW has carefully considered a wide range of views and particular challenges raised throughout this process. The decision we have made will allow this development to take place in a sustainable way that provides safeguards for people, wildlife and other users of the sea. We will continue to work with the developer to ensure compliance with those safeguards.
- All decisions for a marine licence are based on robust evidence and expert advice with extensive consultation.
- The project overlaps between two consenting regimes. A Transport for Works Act Order was submitted to the Welsh Ministers. Julie James, MS issued a 'minded to' letter on 22 October 2021; with a decision letter and the Order expected to follow in due course.

#### **Background**

The Morlais project will provide a consented tidal technology demonstration zone, specifically designed for the installation and commercial demonstration of multiple arrays of tidal energy devices up to installed capacity of 240 Megawatts (up to 620 tidal devices).

The offshore development area where proposed installation can be placed covers an area of 35km<sup>2</sup> to the west of Holy Island, Anglesey. There will also be an export cable corridor with an area of 4.75km<sup>2</sup> with landfall near Penthos Feliw, and associated onshore infrastructure contained within an onshore development area of 1km<sup>2</sup>.

This area provides communal infrastructure for tidal technology developers which provides a shared route to a local grid connection via nine export cable tails, an onshore landfall substation, and an onshore electrical cable route to a grid connection via a grid connection substation.

The Marine project elements include construction of the following;

- Up to nine export cables;
- Up to nine export cable tails (shared with onshore components);
- Navigation and environmental monitoring equipment;
- Mooring and foundation structures; and
- Offshore electrical infrastructure, including submerged, floating or surface emergent hubs.
- Up to 620 tidal devices, each comprising:
  - Foundation or anchors on or within the seabed;
  - A supporting substructure or mooring;
  - One or more Tidal Energy Convertors (TEC); and
  - Cable connections.

The project has been assessed under a Project Design Envelope (PDE), also known as a 'Rochdale Envelope'. This approach looks to provide flexibility, acknowledges the rapidly evolving nature of tidal stream technologies, and allows for future tidal stream innovations to be deployed across the site. The assessment of environmental effects has therefore been undertaken on the 'worst-case' parameters within the PDE. The marine licence defines the PDE and ensures that any devices deployed are within these PDE parameters.

### **NRW regulatory decision**

On the 14 December 2021, NRW Permitting Service has positively determined marine licence application ORML1938. Representations raised during consultation have been addressed by the applicant, many of which were resolved through mitigation and monitoring arrangements that are securable through the provision of appropriate conditions within the licence.

This project is using NRW's Adaptive Management and Phasing Guidance. This seeks to deal with uncertainty about the environmental effects of the project, specifically in relation to the lack of evidence surrounding the interaction of marine mammals and diving birds with tidal devices. Safeguards in the form of effective mitigation and monitoring are proposed to ensure there are no significant effects on the environment. Whilst this is considered appropriate to managing risks to the marine environment posed by the deployment of innovative marine renewables, it is important to recognise that there is still a risk of impact associated with the project, particularly in relation to marine mammals and diving seabirds fatalities that would be tolerated within the scope of the licence.

## Risks and mitigations

### Stakeholders' concerns

The application has been consulted with technical consultees and the public, on three separate occasions during our determination. Several significant concerns were raised during the consultation process by various consultees including NRW in its role as the SNCB for the Welsh inshore area.

Whilst the applicant has sought to resolve and address these key concerns, objections remain from the RSPB and Wildlife Trust Wales in relation to collision risks to birds and marine mammals, and the Royal Yacht Association relating to navigational risks to users of the sea.

### Scientific uncertainty and a phased approach and adaptive management

Catalysed by the regulatory challenges posed by the application's proposal to use a phased approach and the expectation of similar proposals by other developers, NRW published its [Adaptive Management and Phasing Guidance](#) in March 2021. This was approved by the NRW Board on 15 September 2020.

Adaptive management is a systematic and iterative approach allowing management of a project to be adapted based on learning once the development has been installed or constructed. Such an approach can in principle enable a development to proceed, in phases or otherwise, by reducing the risks associated with scientific uncertainties. Scientific uncertainty exists in relation to tidal stream technology and its potential effects on certain ecological receptors (e.g. collision risks to diving birds, marine mammals and fish).

Adaptive management has been proposed by the applicant for this project, with the number and scale of each phase of deployment linked to the outcomes of monitoring identified within their **Environmental Mitigation and Monitoring Plan (EMMP)**. An outline EMMP was submitted by the applicant, in support of their application, to demonstrate how the potential effects of the project on specific ecological receptors can be mitigated and monitored. Key elements of the proposed EMMP include:

- That Phase 1 and any subsequent phase, will have to be agreed with NRW PS prior to deployment and can only proceed at a scale that ensures no significant impact is predicted, based on best available evidence.
- Appropriate and effective monitoring methods will be agreed with NRW PS prior to operation of tidal devices. Monitoring will provide essential information to inform the potential scaling up of the project to the next phase, but also to determine if and to what level additional mitigation is required during the current phase of operation.

- Appropriate and effective mitigation will be agreed with NRW PS post-consent to prevent a significant impact from occurring. Mitigation will include the stopping or removal of tidal devices where no other effective mitigation option is possible.
- The deployment of any future phases will be dependent on the outcome of monitoring carried out.

Note: NRW PS will consult with NRW Advisory and other technical advisors during the assessment and determination of these post-consent submissions.