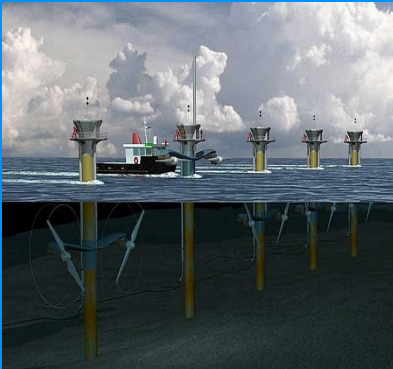


Skerries Tidal Stream Array CASE STUDY

Client: Marine Current Turbines (MCT)/SeaGeneration (Wales) Ltd.

EIA Consultant: PMSS

Survey Periods: August 2008
Nov-Dec 2008
August 2009



Aims: Conduct marine traffic data collection, navigation study and a navigation risk assessment covering the construction, operation & decommissioning of the tidal stream array at the proposed site, located between the coast of Anglesey & the offshore Skerries rocks; an area renowned for strong tidal currents.

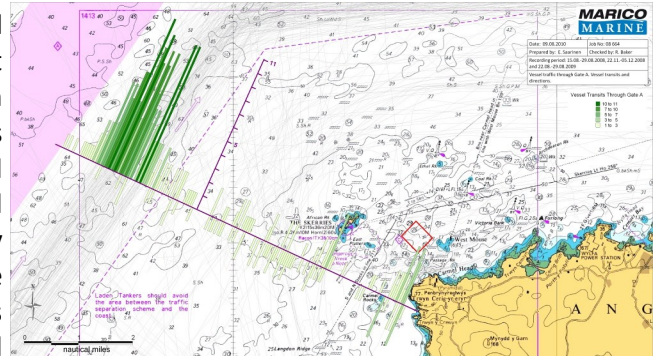
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Marico Marine conducted a navigation assessment for the Skerries Tidal Stream Array that is being developed by Marine Current Turbines (MCT).

The Skerries, 3km off Carmel Head in Anglesey, is a fast flowing body of water strewn with rocky islets. It is considered to offer ideal tidal conditions for the proposed 10.5MW Skerries Tidal Energy Farm. The area also lies close to a major route for ships traversing to Liverpool and Ireland.



Proposed Skerries Tidal Stream Array location

Marico were commissioned to undertake;

- Marine Traffic Survey;
- Navigation Assessment;
- Navigation Risk Assessment;
- Prepare the Navigation Chapter of the Environmental Statement.

Following detailed site assessments, a temporary shore based marine traffic survey station was established at Carmel Head. Traffic surveys, using Radar, AIS and visual observations were conducted at regular intervals over two years, typically providing 14 days (336 consecutive hours) of data per survey period based on 24hr operation.

All vessel traffic data was logged into a GIS track database, which then allowed subsequent analysis of vessel tracks for the Navigation Assessment. Marine Accident Investigation Branch and Royal National Lifeboat Institution accident and incident data was also analysed as part of the Navigation Assessment.

The Navigation Risk Assessment, based on the IMO Formal Safety Assessment process, combined outputs from the Navigation Assessment with local stakeholder consultation to accurately represent the potential navigational risks of the installation. Results showed that the proposed installation was at, or below, As Low As Reasonably Practicable (ALARP) levels, hence the installation should not unduly increase navigational risk in the area.



Radar scanners, AIS and data logging equipment employed in survey operations

Marico's Navigational Assessment and Navigation Risk Assessment reports formed the backbone of the navigation section of the Skerries project Environmental Statement, shortly to be submitted to the Marine Management Organisation (MMO) for consideration.



ISO 9001
FS 547102

