Design Review Report
Tidal Stream Energy Project, Ynys Môn Anglesey

DCFW Ref: N179
Meeting of 13\textsuperscript{th} February 2020
Declarations of Interest

Panel members, observers and other relevant parties are required to declare *in advance* any interests they may have in relation to the Design Review and meeting Agenda items. Any such declarations are recorded here and in DCFW’s central records.

Consultations to Date

Various early consultations with statutory consultees and the local community have been undertaken and are ongoing. DCFW welcomed the approach to consultation befitting of a significant infrastructure project.

The scheme has been reviewed previously by DCFW in October and December 2018 and this report should be read in conjunction with previous reports.

The Proposals

The project proposes the use of sub-sea and surface positioned tidal stream energy generating devices, to be located just offshore within a demonstration area with a theoretical capacity identified of 8 x 30MW zones making a total of 240MW. The zone is among those identified and designated by the Crown Estate in an assessment process as appropriate for such use and occupies the coast of Ynys Môn off Holy Island and Tredur Bay. The devices will be connected to a shore-side substation. This will condition the electricity to grid standards and transport to the grid connection, allowing users access to the low carbon energy source.

Main Points

We welcome the further client and design team engagement with the Commission at this stage in the process. Continued engagement will help the team ensure that the project maximises quality and contributes positively to the context, especially when proposed interventions on land are designed.

The verbal presentation in the review filled several gaps and added value to the previously submitted materials. Effectively communicating ideas and demonstrating clarity of ambition are paramount for this proposal and prerequisites for instilling confidence and ensuring that the benefits are clearly understood. This kind of proposal in a sensitive and outstanding coastal location requires the utmost commitment to quality on all fronts. The
following points therefore summarise key issues that should be considered in further design development:

**Consultation with Statutory Bodies**

DCFW were made aware of feedback from statutory consultees and our analysis of their responses post-review, suggests that a significant amount of work needs to be done in order to address their concerns.

Although the Design Commission understands that the area has been allocated for tidal energy by the Crown Estate, Natural Resources Wales’ correspondence highlights serious concerns regarding the project that will clearly need to be fully addressed by the design team if the project is to progress further.

Liaising with the statutory bodies is of critical importance for the success of the scheme, as inability to do this could seriously risk the project by affecting the timeline of European Regional Development Funding (ERDF) and partner funding. Evidence is needed to address the concerns of DCFW and of the statutory bodies.

The Design Commission commends the broad aims and aspirations of this project in terms of the response to energy needs and the harnessing of technologies. However, there is a question as to whether it can be delivered in this locality without detrimental ecological impacts. This question speaks to the concerns of the statutory authorities and how those concerns can be addressed remains a matter so far insufficiently demonstrated.

**Raising Awareness of the Innovation of the Scheme**

Notwithstanding the environmental and ecological issues noted in the statutory responses so far, the project team should not lose sight of the innovative nature of this proposal, and its potential to become a nationally significant source of low carbon energy generation. There is however still an issue with the level of information provided given the nature of the project. It is possible that working with a Communications professional or team could better assist clearer communication of the scheme’s aspirations and draw upon the successes of engagement with the general public, as well as other stakeholders and investors. Focusing on the potential benefits will help to clearly communicate strengthen the rationale for the proposals.

**Offshore Development Design**

The Design Commission is concerned about the design approach to the offshore development, in particular the question of visibility.

The Commission would like to see an innovative design approach that reflects the pioneering nature of the project and encourage the designers to consider celebration of the innovation of the proposal. The incorporation of educational information and interpretation onshore, as well as storyboards/exhibitions explaining the background of the project, could assist communication of the project motivation, whilst under construction and in use.

The visual impact of the offshore development on seascape in this remote, high value and attractive coastal area of Wales, requires greater testing and assessment in order to ensure no demonstratable harm could result to this nationally important resource.
It seems that the colour and lighting of units is an issue, and the Commission would encourage the design team to continue discussion with Trinity House and Isle of Anglesey Council regarding these issues.

The design of the cable route from seabed to the landside receiving station remains to be addressed. We would be concerned if the original intention to use directional drilling to form a conduit through which cables can be drawn by suppliers is unfeasible, as this has potential for a greater visual impact on the highly visible cliff edge.

**Onshore Development**

The current proposals for onshore development were very early design ideas. Much more work is needed, and it would be beneficial to see plans with indicated wall depths as well as sections and elevations. The design philosophy should be explored in order to determine the character and the nature of the buildings, as well as how they respond to the surrounding landscape and their functional use. A thorough site and context analysis is necessary along with consideration of the vernacular architecture of the area. Applying the findings of this analysis in the development of the design rationale and approach is essential.

**Next steps**

Providing greater clarity on the nature of this project would help to build more confidence in the scheme. Currently there are mixed messages about whether it is a temporary innovative test-bed scheme, ‘real world research’ run by a research organisation, or a long-term energy generating project.

It is important to explore what the results of the success of this scheme could be – in terms of the effects it could have on local communities and employment, and what it could mean for renewable energy in Wales and beyond.

The Design Commission welcomes further opportunity to review the scheme with the aim of enhancing design quality opportunities through ongoing constructive dialogue at key stages in the programme. It would be advantageous to see the scheme once analysis, rationale and clearer design concept have been developed and to consider plans, sections and elevations of onshore infrastructure, when they are, along with initial seascape and landscape characterisation and assessment material.
A Welsh language copy of this report is available upon request.

### Attendees

**Agent/Client/Developer:**
Gerallt Llewellyn Jones, Menter Môn
Graham Morley, Menter Môn

**Design Review Panel:**
**Chair:** Kedrick Davies
**Lead Panellist:**
Ben Sibert
Simon Power
Steven Smith
Jen Heal, Design Advisor, DCFW
Carole-Anne Davies, Chief Executive, DCFW
Efa Lois, Place Advisor, DCFW

**Observers:**
Taya Selars, Caren Shek, Kenneth Brodie