

Design Review Report

Mona Offshore Wind Project, Denbighshire

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Meeting of 17th August 2023



Review Status

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PUBLIC

17th August 2023
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Renewable Energy Infrastructure
Denbighshire
N302
Pre-planning

Key Points

- The process that has been undertaken to date was presented clearly and concisely demonstrating a rigorous process that has been followed.
- A narrative is needed that reflects the qualitative commitments and ambition of the project beyond the technical requirements and how this translates into stewardship of a piece of the community in which the onshore interventions are located.
- The narrative should reflect a positive, enhancing approach to the landscape rather than just mitigating impact.
- There is a cumulative impact of various interventions related to the National Grid connection point at Bodelwyddan which needs to be considered and would benefit from strategic coordination.

Consultations to Date

This is the first Design Review with the Design Commission for Wales.

The Proposal

The Mona Offshore Wind Project is an offshore energy generating station and, for consenting purposes, is categorised as a Nationally Significant Infrastructure Project (NSIP). At the current stage of development, the Mona Array Area (i.e. the area within which up to 107 offshore wind turbines will be located) is 449.97km² in area and is located 28.2km (15.2nm) from the Ynys Môn (Anglesey) coastline. The key components of the Mona Offshore Wind Project include:

- Offshore wind turbines
- Foundations (for wind turbines and Offshore Substation Platforms (OSPs))
- Scour protection
- Inter-array cables linking the individual wind turbines to the OSPs

- Connection works to the existing Bodelwyddan National Grid substation
- Temporary construction compounds, including storage areas
- Permanent and temporary access roads
- High Voltage Alternating Current (HVAC) transmission system including: – OSPs, Offshore interconnector cable(s), Offshore export cable(s), Mona 400kV Grid Connection Cable, Onshore export cable(s), Onshore Substation

Context

The onshore export cables and onshore substation will be located within the Mona Proposed Onshore Development Area, which overlaps Conwy and Denbighshire, in north Wales. Connection will be made with the Bodelwyddan National Grid Substation to the west of St Asaph. The proposed location of the substation was selected in the days prior to this design review and is identified as Option 2 in the pre-review material. This is located to the south of the National Grid Substation, south of St Asaph Business Park. Several other substations are located or proposed in this area relating to other offshore wind farms that also plan to connect to the grid at this point.

Main Points

Design Principles

The design process presented was largely driven by constraints and the assessment process whereas the discussion in the review revealed a potentially more ambitious approach that seeks to better understand and then enhance the landscape. This needs to be documented, presented and communicated as part of a narrative for the scheme and, crucially, embedded into firm commitments for the project. To inform this approach, a more qualitative analysis of the existing landscape context needs to be developed and fed into a clearly presented vision. This analysis should include consideration of the history of the area, landscape character and functions, natural vs manmade interventions, noise, views etc.

Further work is needed to inform the proposals and present a coherent approach to design which is clearly discernible amongst the myriad of other material that accompanies a consent application of this scale. This work should include definition of high-level design principles that are guiding work across the whole project, that can then lead to sub-sets of more detailed principles or design commitments specific to individual elements of the work or individual sites, enabling appropriate responses to local context.

Design Development

Once identified, those design principles should inform design considerations at all levels.

The approach to minimal impact and restoration along the route of the cable seems to be the right approach and we support avoiding significant mature trees and tunnelling under mature hedgerows. Consideration should still be given to any 'gaps' the proposals may leave in existing vegetation in the longer term due to over planting restrictions on such cable corridors.

There is much more scope for creative intervention at the substation site. Early indicative 3D visuals of the sub-station site are helpful to begin a discussion about the design and provide a much more informative idea of the scale and potential visual impact of the facility than a parameters plan/box which, visually, is highly misleading and unhelpful in engagement with stakeholders and the community. It is always helpful to show the site in context including orientation, access and surrounding landscape features. Aspects to consider at this stage include the shape of the operational site and how it relates to existing field boundaries, boundary treatments, approach to the design of any internal buildings, lighting, positive integration of SuDS requirements, land surface treatment and whether this is overlooked from higher land, access, potential for arts contributions. Each of these should be informed by the design principles.

For the purposes of future community engagement, it would be helpful to be clear about what decisions and designs are fixed and what can be influenced at any consultation stage.

Strategic Coordination

The proposed substation at Bodelwyddan is one of several that have been or will be located in this area but there has been no apparent strategic planning around how all of these significant interventions will work together. Consequently, the area is developing in a piecemeal way and, understandably, the local community is cautious about the overall impact. Some creative thinking is needed in relation to what sort of place this will be. It is divorced from both the source of the energy generation and its point of use and yet the area is being heavily influenced by energy infrastructure. A creative interpretation of what this means for the area and how this could influence the landscape and west St Asaph as a place would help to inform the design of each of the substations and other energy related development. A landscape-led 'masterplanning' approach to the area would be helpful and could help to define important aspects of the immediate area and the adjacent business

park (such as key views to/from) and the surrounding landscape and how each of the new interventions can fit into this. It might also consider how local communities can best engage with and understand such infrastructure and its wider purpose and benefits. Such an approach might well also consider any collective community, landscape, ecological or other benefits, facilities or initiatives to improve the immediate area that could be supported by the multiple proposals.

Consideration should be given to how best to use contributions from any planning performance agreements to contribute to some of this strategic thinking whilst also ensuring partiality. DCFW would welcome further engagement in this and can potentially offer a facilitation role in future workshop discussions.

A piece of more strategic work could also help to inform some general design principles and design guidance for the area, potentially in the form of an SPG document or similar. It is recognised that with increasing demand for electrical energy, substantial new and expanded National Grid infrastructure and supplier substations are inevitable across Wales, therefore similar strategic work is needed at a national level.

Next Steps

A rigorous process has been undertaken but it is now time to look back and ensure that a design approach that reflects the stated ambitions of the project has been undertaken and can be presented clearly.

The Design Commission would welcome a further Design Review at which we would like to see the design principles refined and presented, and a demonstration of how these are informing the design of the substation and any incorporated mitigation and enhancement, on and off site.

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A Welsh language copy of this report is available upon request.

Attendees

Client:	Philip Rew-Williamson, BP Paul Carter, BP
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Stakeholder Engagement:	Ifer Gwyn, BP
Local Authority:	Paul Mead, Denbighshire County Council
Observing:	Cllr Martyn Hogg, Denbighshire County Council

DCFW Design Review Panel

Chair:	Andrew Linfoot
Panel:	Simon Power Ewan Jones Jen Heal, Deputy Chief Executive, DCFW Max Hampton, Design Advisor, DCFW

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.

There were no declarations of interest.