Offshore Wind Sectoral Marine Plan Scoping Consultation
Marine Scotland Planning and Policy (1A South)
Scottish Government, Victoria Quay
Edinburgh
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SectoralMarinePlanning@gov.scot

23 July 2018

Dear Sir/Madam,

Sectoral Marine Plan for Offshore Wind Energy Scoping Consultation

Scottish Renewables is the representative body for the renewable energy sector in Scotland, working to grow a sustainable industry which delivers secure supplies of low-carbon, clean energy for heat, power and transport at the lowest possible cost. We represent around 260 organisations ranging from large suppliers, operators and manufacturers to small developers, installers and community groups, and companies right across the supply chain. We welcome the opportunity to respond to Marine Scotland's Sectoral Marine Plan for Offshore Wind Energy Scoping Consultation.

Scottish Renewables strongly welcomes Marine Scotland's support for further offshore wind deployment in Scotland. However, while we agree with Marine Scotland that the development of earlier-stage technologies, such as floating offshore wind turbines, holds "significant potential to contribute offshore wind energy supply at affordable prices," we are concerned that the approach set out in the Sectoral Marine Plan for Offshore Wind Energy relies too heavily on emerging technologies with insufficient scope for future deployment of more established technologies.

Only two of the 24 areas that have been identified as being suitable for offshore wind development in the Scoping 'Areas of Search' Study are in water depths of less than 60 metres. With fixed-bottom offshore wind deemed to be economically and technically viable up to 60 metres, the majority of the identified sites could only be developed with floating foundations. Under the proposed Sectoral Marine Plan for Offshore Wind Energy, future scalable offshore wind activity in Scotland beyond the current pipeline of projects being developed (1GW in operation or in construction, and 6.5GW in development) would depend primarily on the successful commercialisation of floating offshore wind.

We welcome the joined-up approach between Marine Scotland and Crown Estate Scotland (CES), noting that CES will only lease in areas identified in Marine Scotland's Sectoral Marine Plan for offshore wind and applications for new leases will not be considered unless they fall within this plan. The success of new leasing will be driven by developer interest in developing projects in the

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identified Areas of Search. This will be dependent on whether the Areas are capable of accommodating economically viable projects in the medium-term where commercialised technologies can be deployed.

We agree that the "continued growth of the renewable energy sector in Scotland is an essential feature of the future clean energy system and a potential key driver of economic growth." For this reason, while we welcome the great opportunity the draft plan offers floating wind, we would caution that over-reliance on a technology that is not yet commercialised risks jeopardising the overall development of offshore wind in Scotland, including the resultant opportunities for hundreds of supply chain companies, and an industry that currently employs 2,000 people (full-time equivalent)[1]. Limiting the growth in this way of an established, well understood technology off Scotland's shores, while that technology continues to be deployed elsewhere off the UK coastline and across Europe, would put the Scottish industry at a competitive disadvantage and could put at risk Scotland's renewable energy and climate change targets.

We have set out our comments on the various studies used to inform the draft Sectoral Marine Plan for Offshore Wind Energy in more detail below. If you have any questions on the comments set out in this response, please do not hesitate to get in touch.

Yours sincerely,

Stephanie Conesa
Policy Manager - Large Scale Renewables

[1]https://www.ons.gov.uk/economy/environmentalaccounts/datasets/lowcarbonandrenewableenergyeconomyfirstestimatesdataset

Context Report

Consultation Question

Please provide any comments you have in relation to the Sectoral Marine Plan for Offshore Wind Energy (encompassing Deep Water Plan Options) - Context Report.

As set out in the Context Report, the Scottish Government's 2011 plan for offshore wind energy development in Scottish Territorial Waters, Blue Seas Green Energy[2], included six short-term option sites as well as a number of medium-term areas of search for further consideration.

Of the six identified short-term option sites, three have progressed to consenting (Beatrice, Inch Cape and Neart na Gaoithe), while three of the sites (Argyll Array, Islay and Forth Array) are no longer being progressed. Based on this rate of development, it is crucial that the Sectoral Marine Plan for Offshore Wind Energy offers developers a wide choice of sites that can be developed with established offshore wind technology. The success of the Plan in delivering on the Scottish Government's objectives under the Scottish Energy Strategy[3] and Climate Change Plan[4] will be driven by developer interest and ability in developing projects in the identified Areas of Search. This will be dependent on whether the Areas are capable of accommodating economically viable projects in the medium-term where commercialised technologies can be deployed.

[2] http://www.gov.scot/Topics/marine/marineenergy/wind
[3] http://www.gov.scot/Resource/0052/00529523.pdf
[4] http://www.gov.scot/Publications/2018/02/8867

Scoping 'Areas of Search' Study for offshore wind energy in Scottish Waters, 2018

Consultation Questions

Please provide any comments you have in relation to the Scoping 'Areas of Search' Study for offshore wind energy in Scottish Waters, 2018.

A need for more shallow sites

We are concerned that the majority of the Areas of Search that have been identified in the scoping study are in water depths beyond 60m. This risks concentrating Scotland's future offshore wind potential on the development of technologies suitable for deeper waters, which are currently at an early stage of development. We therefore believe it is of strategic importance to industry and Scotland's energy ambitions to see a more balanced split between shallow and deep-water sites in the next leasing round.

Current technology that is economically viable for offshore wind foundations is limited to a maximum water depth of 50m to 60m. Although it may be possible to extend existing technology to slightly greater depths, deeper waters will require floating foundations. While floating wind technology shows great potential for cost reduction, the timing of this cannot be determined with certainty[5]. As stated in the Context Report, developing projects in deeper water "will pose greater technical challenges and potentially constrain efforts to reduce costs".

As set out in the Plan's Context Report[6], "the pace of future offshore wind development will, to a considerable extent, be governed by the availability of Contracts for Difference (CfD)." Other areas of the UK have a large remaining potential of shallow water sites so it is likely that further Areas of Search will be identified in these regions suitable for fixed bottom foundations. The next round of new projects in Scotland, if developed, are therefore likely to compete against fixed-bottom projects for contracts to deliver first power in the late 2020s. This could encourage the offshore industry to focus on shallower locations for the next round of development opportunities (i.e. outside of Scotland), which could then impact on the pipeline of supply chain activity.

A hiatus in offshore wind activity in Scotland could negatively impact the supply chain that is being established, with impacts on regional economic benefits and the cost competitiveness of Scottish projects. At present there is a pipeline of five confirmed projects in Scotland (either in construction or pre-construction with an agreed CfD) for delivery out to 2022. Three projects are expecting to bid into the next CfD auction, in spring 2019, for likely delivery between 2023 and 2025. A further two Scottish projects are in development that could compete in future auctions, bringing total potential Scottish capacity to approximately 6.5 GW. Including more shallow sites in future Scottish leasing rounds would provide a potential pipeline for development and delivery beyond these sites. A visible pipeline of potential future work is vital to give industry confidence to invest, particularly for large investments relating to supply chain infrastructure.

Models generated for the scoping study 2018

Our comments on the two models created to identify the areas of opportunity and constraint are set out below.

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[5] https://www.carbontrust.com/media/670664/floating-offshore-wind-market-technology-review.pdf
[6] http://www.gov.scot/Publications/2018/06/4322

The exclusion model and methodology

Existing oil and gas infrastructure was excluded from the refined Areas of Search. However, it is expected that 349 oil and gas fields in the North Sea will be decommissioned during 2017-25[7]. It would be useful to include analysis on how this could impact the areas considered suitable for offshore development. We suggest that these be identified as potential future Areas of Search and be kept under review.

Existing offshore leases are also not included in the refined Areas of Search. Clarity around the impact of consented/leased sites that have not been constructed on the Areas of Search would be useful. For example, the Forth Array site was leased by The Crown Estate in the 2010 Scottish Territorial Waters round; however, the developer has since cancelled its development.

Section 3.5.6, Fishing activity, states that "It is important to assess both the areas that are currently fished and to investigate those that may be fished in the future as patterns do change and the fishing industry will adapt by returning to historically fished zones or discovering new ones." While we agree that the fishing industry is socially and economically important to Scotland, we believe that the approach set out by Marine Scotland may be an overly exclusionary approach.

Additionally, omitting locations currently leased to aquaculture farming and existing oil and gas infrastructure precludes the possibility of collaboration on multi-use projects. We suggest that, as part of its work on the multi-use concept,[8] Marine Scotland should update the Scoping 'Areas of Search' Study to identify areas of existing and potential co-use of marine space between offshore wind development and other sectors as part of the Sectoral Marine Plan for Offshore Wind Energy.

The constraint model and methodology

The constraint model uses GIS layers "considered relevant to the selection process for sites of low impact on environmental, sociocultural or industrial factors that could indicate minimised consenting and licensing risk." Its corresponding output map identifies areas of high constraint and highlights areas that "minimise interaction with the existing uses of the sea" as being the most appropriate for offshore wind development.

However, some developers may be willing to take on higher levels of risk than those in Marine Scotland's model for a particular development site. Revising some of the model's input assumptions may show that more areas of shallower water are suitable for offshore wind development. We suggest that there should be more flexibility in Marine Scotland's approach to allow the consenting process to deal with environmental and other issues that might arise. The potential constraints of any given project would need to be addressed in a consent application.

As set out in section 3.5.2, "Offshore wind technologies often require an electrical grid connection to demonstrate the full commercial generation cycle. More distance from shore generally equates to more cost." Limited existing onshore grid infrastructure and the likely timescales involved in delivering new infrastructure will impact on both the cost and timescale associated with delivering offshore wind projects between 2025 and 2035. Further, the costs associated with offshore grid connection for projects located far from shore will be a limiting factor for projects. We recommend that the Draft Plan acknowledges these limitations and identifies how they will be addressed.

[7] https://www.ogj.com/articles/2017/11/uk-dominates-north-sea-decommissioning.html
[8] https://muses-project.eu/consortium/marine-scotland/

Social and Economic Impact Assessment Scoping Report

Consultation Question

Please provide any comments you have in relation to Sectoral Marine Plan for Offshore Wind Energy (encompassing Deep Water Plan Options) - Social and Economic Impact Assessment Scoping Report.

Scottish Renewables is a member of RenewableUK's Aviation Working Group. The Group is working towards "a future co-existence strategy that encourages aviation communication, navigation and surveillance stakeholders to share the balance of risk, as a stepping stone to aviation self-managing wind within its baseline environment."

We are concerned that the approach towards civil aviation set out in the Plan is not consistent with that of the Scottish Government as set out in its Onshore Wind Policy Statement[9]. Table A.3.4 Potential interaction pathways (pg.44), states that "Developments that compromised air safety on approaches to and from commercial airports would not be granted consent." Table 8.2 Potential interaction pathways (pg.88), goes on to state that "Radar mitigation will be required as a condition of consent if there is a potentially significant effect. This cost will be borne by the developer."

We encourage the Scottish Government, including Marine Scotland, to align and update their policies to be consistent with the progress made by the work streams of the UK Government-chaired Aviation Management Board (AMB), which includes representatives of the Scottish Government. The Board has a strong focus on offshore wind and aviation matters for civil air traffic control (ATC) and air defence (AD), and Ministry of Defence (MOD) ATC and AD issues. This would ensure that policies for offshore wind and aviation are aligned with those of the Scottish Government's Onshore Wind Policy Statement for these issues.

We recommend that Scottish Government departments and agencies should facilitate a proactive, collaborative and strategic approach between stakeholders towards radar mitigation processes that are transparent and cost-effective for the 2020s and beyond. This should include engagement to focus on how stakeholders in the civil aviation and MOD scope how they self-manage as the Duty Holders with updated communications, navigation and surveillance (CNS) systems, processes and regulations that allow them to operate within the baseline environment that includes existing and planned offshore wind in the UK Continental Shelf (UKCS). A systems approach that can inherently self-manage the environment that includes offshore wind should be encouraged and supported by Scottish cross-government departments.

[9] http://www.gov.scot/Resource/0052/00529536.pdf

Strategic Habitat Regulations Appraisal: Pre-Screening Report

Consultation Question

Please provide any comments you have in relation to the Sectoral Marine Plan for Offshore Wind Energy (encompassing Deep Water Plan Options) - Strategic Habitat Regulations Appraisal: Pre-Screening Report.

As set out in Section 2.4, a 200nm fishery limit around Scotland and a 100km buffer south of the Scottish border was applied as a “pre-screening buffer zone” at this initial stage of the HRA. While we recognise that development should avoid natural protected areas, we believe that this approach is overly conservative. As set out in the pre-screening report, Marine Scotland recognises that not all relevant features within this buffer zone will necessarily be affected by development. We believe that it should be up to developers to decide their relative risk profiles for buffer allocation, and discuss and agree the potential for a likely significant effect with key stakeholders through the consultation process.