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Your ref. SC DMAP
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Contact
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Dún Laoghaire, 14th June 2024

SC DMAP - Consultation response

Dear Sir / Madam,

Thank you for providing us with the opportunity to provide comments on the above consultation. RWE is a leading global energy player active in almost 30 countries worldwide, with a 38 GW global generating capacity and ca. 18,200 employees worldwide. RWE is already one of the leading companies in the field of renewable energy. Between 2024 and 2030, RWE will invest 55 billion euros worldwide in offshore and onshore wind, solar energy, batteries, flexible generation, and hydrogen projects. By the end of the decade, the company's green portfolio will grow to more than 65 gigawatts of generation capacity, which will be perfectly complemented by global energy trading.

RWE has been active in the Irish market since 2016 with two offices, one in Kilkenny and one in Dún Laoghaire. We have two operational battery storage projects in Ireland which are currently providing a range of services to EirGrid via the DS3 tariffs, an operational onshore windfarm and a growing pipeline of battery storage and onshore wind sites across Ireland. We were successful in the first offshore wind auction for our Dublin Array project.

We welcome the opportunity to provide comments on the draft South Coast DMAP consultation, the first of its kind under the new Plan Led approach.

We are broadly supportive of the Plan Led approach therefore, our objective with this response is to focus our comments and suggestions on those areas which we believe create the greatest risks to a robust and implementable policy document.

RWE has contributed to the Wind Energy Ireland response to this consultation and support the views expressed within it. While some of the areas mentioned below are set out in the WEI response, we consider them as key issues for RWE and worth re-emphasising.

Our response focuses primarily on the implications for the ORESS 2.1 auction site; Area A / Tonn Nua but also considers issues affecting the wider DMAP area / areas B-D.





RWE, like other offshore developers active in Ireland, is considering preparing a bid for the ORESS 2.1 auction. An increasingly important element feeding into this decision process is the level of certainty in understanding the full meaning and implications of the terms and conditions of the auction and we set out our key concerns and areas for clarity in our response to the ORESS 2.1 Ts and Cs Consultation submitted last week. We have the same concerns with this consultation document and will need to see much tighter language to avoid any potential for subjective interpretation which would be unhelpful in any document which is designed to specify why the specific areas were chosen, how the future development will work and what the objectives of the DMAP are, and how those objectives will be measured. Naturally any requirements specified for projects developed within the DMAP will need to be very transparent so ORESS 2.1 bidders can reflect the costs for those requirements in their bid price.

How will the objectives / policies of this document be understood by the consenting authority when considering a consent application? They will obviously have to have regard for the document but when the language of the objectives / policies is so unclear there is a real risk of unforeseen outcomes / potential for objections etc. The key advantage of the plan led approach from RWE's perspective is increased planning certainty expected from the DMAP structure – imprecise language entirely undermines this advantage.

As this is a Plan Led process from Government there needs to be ongoing involvement / regulation provided for to ensure the objectives of the DMAP are achieved in a fair manner, it is neither acceptable nor realistic for DECC to designate a Plan Led process and then abdicate its responsibilities when novel issues {and those issues and challenges already identified by the Phase 1 projects) within the development areas arise; for Co-Existence and in particular in relation to Co-Existence with Aquaculture, Seafood and Fisheries (Section 7.1). To ensure the successful introduction of the Plan Led Process (via DMAPs) on the South coast and all subsequent DMAPs, DECC together with other Government departments and Regulatory Authorities will need to continue to work together to deliver the NMPF Objectives (as set out in Section 2).

As mentioned above, the provisions / objectives of this policy document will have significant impacts on the way projects are prepared for a planning consent application, constructed and managed long term within designated development areas of DMAPs.

Where the government has a clear objective on how it wants Wind Farms to be designed and managed within DMAPs, this needs to be unambiguously stated so there can be no confusion in the assumptions of ORESS 2.1 bidders and beyond. The language of the requirements of the developer in the objectives / policies is therefore critical and should be more legalistic in style; for example; 'the developer shall..', not 'the developer should..'

See some examples below;

WQ1;

To protect and improve water quality...

How can this be measured / verified to the satisfaction of the Planning Authority?

ML 2:



Projects brought forward under this Plan should minimise electromagnetic field (EMF) in the marine environment...

How should this be assessed? There will be a technical requirement for cable sizing of any project – it is not clear what will be required of the project and therefore could be open to confusion at planning consent stage.

CC 1:

To support Ireland's climate and renewable energy objectives by providing for ORE development. In addition to delivering renewable energy, projects should demonstrate the integration of a multi-benefit approach into their project, which may include the delivery of carbon sequestration, biodiversity enhancement, coastal management, water quality management or other ecosystem services through the project design and/or mitigation.

What level of benefit (s) would be acceptable to the relevant Planning Authority based on this statement?

SF6 and SF7:

Inter-array cables and export cables are extremely costly and crucial pieces of infrastructure in ORE. Every effort is always made in the design phase to ensure the cables are protected at installation and for the lifetime of the project. However, the ground conditions on every metre of their routes are central to this solution. It is sometimes not possible to bury cables (rock outcrop) or keep cables buried in sandy substrate (sandwaves) on a project – both of such ground conditions are present on this Tonn Nua site / export route. Ordinarily high-risk areas of the cable route will be prioritised for protection / protection maintenance where it is deemed the cable may be at risk of becoming exposed and damaged by fishing activity or other marine activities.

As non-static fishing grounds, (and the grounds in Area A are generally non-static fisheries); are highly variable, SF6 & SF7 could be read to imply that every metre of the inter turbine arrays and export line would need to be designed to be capable of being over-fished or over-trawled for the lifetime of the project. Is this the intention of DECC? If so, it needs to be stated more clearly in the document text.

This would have extremely serious implications to the design, maintenance and cost of any future cable network and therefore we would like the wording in these two clauses to be much more explicit so that developers (and EirGrid as TSO /OAO) clearly understand what they will need to provide for when designing the cable array for the upcoming ORESS 2.1 auction (and beyond). Noting this could have significant cost implications on the ability of developers and EirGrid to meet future maximum Strike Price Bids.

Policy Objectives for Overarching Environmental Protection (OEP)

We believe that these policies will need to be reviewed to clarify what specifically they are requesting / requiring the projects developed in the DMAP to do. Some examples: OEP 3:

To contribute to the ecological enhancement of the marine environment, projects should, through a project-specific Nature Enhancement and Rehabilitation Plan, provide for ecological enhancement and recovery of the marine environment that goes beyond measures required for project mitigation and which contribute to European, national and local biodiversity policies, including any National Nature Restoration Plan, and are commensurate with and proportional to the scale/footprint and potential environmental effect of the project. Projects



which incorporate features that enhance or facilitate species adaptation or migration, or natural native habitat connectivity will be supported, subject to the outcome of statutory environmental assessment processes and subsequent decision by the competent authority, and where they contribute to the policy objectives of this SC-DMAP.'

The above wording does not provide sufficient clarity to an experienced developer seeking to cost such works into a project design. This objective needs to be redrafted and appropriate language used to make it **either a condition of development** in a DMAP **or an aspirational** add on. What does 'will be supported' in this context mean, and by whom

MS 1:

'To ensure that statutory reviews of the SC-DMAP and projects brought forward under this Plan must consider the evolution of baseline conditions, which includes additional future national protected sites e.g., Marine Protected Areas (MPAs) and European Sites e.g., marine SPAs and SACs and data from regional level survey activities and projects.'

We would strongly suggest that this objective should be explictly written to exclude the Site A (Tonn Nua) project. If the DMAP is a plan led approach, we do not believe it is credible that any future MPAs, SPAs or SACs have not already been identified in or within close proximity to this site which is required to be developed within the next 10 years. Project development can't be a moving target – perhaps this could be considered for Areas B-D only.

Co-existence

'To maximise coexistence opportunities to as great an extent as possible, the draft Plan provides that mandatory permanent exclusions on additional activities or usages within Maritime Areas identified for future ORE development should be not imposed save relating to safety or in other exceptional circumstances.'

There needs to be more critical detail added to this statement – for example, could the developer reasonably suggest that cable routes need to be avoided where a fishing vessel is considering trawling in a wind farm area as sandwaves may periodically expose cables and the crew could be put in danger if the fishing gear were to snag. See below also.

SF1:

'Developers of proposed ORE projects and transmission infrastructure within the SC-DMAP area should maintain a record of engagement with Irish-registered fishers and the wider seafood sector regarding proposed survey activity and should optimise infrastructure design and layout to maximise opportunities for co-existence with fishing and seafood activity. Where feasible, a reduction of potential adverse impacts should be investigated through avoiding areas of identified high fishing activity or, failing this, through minimising and/or mitigating impacts on fishing activity, including through optimising windfarm layout to facilitate coexistence'.

This language will create potential issues in the planning phase of projects by suggesting that fishermen's input needs to be considered when the windfarm layout is being designed – we suggest it's deletion. The previous sentence is sufficient to require consultation on the windfarm / infrastructure design with the local seafood sector and SF3 sets out the requirements on the developer.



SF 3:

'A Fisheries Management and Mitigation Strategy (FMMS) shall be prepared by developers of proposed ORE projects and transmission infrastructure, in consultation with identified local fishing interests. All efforts should be made to agree the FMMS with those interests. Those interests must also undertake to engage with developers and provide spatial information in a timely manner to enable completion of the FMMS. The FMMS should identify management and mitigation measures for each commercial fishery that can establish within a reasonable timeframe to developers of prospective offshore wind projects and transmission infrastructure, through the provision of spatial information, that they would be adversely affected by the development. The FMMS will be updated and amended by developers throughout the lifetime of a project as appropriate and as necessary.'

This document allocates the 'burden of co-existence' onto the developer of the project. In the current setting of a Plan Led approach that has pre-determined the ORE development areas this requirement on its own is not an appropriate nor an acceptable approach. If co-existence is to be fostered in a Plan Led system the sponsor (DECC) or its appointees must regulate this space and mediate to achieve a solution where necessary. **DECC will need to describe their process for regulation of such policy objectives in this policy document.**

Furthermore, the interested developers in ORESS 2.1 will need to understand all their costs when bidding into this auction including possible mitigation payments for affected fishermen / marine users of Tonn Nua. It is incumbent on DECC, in this Plan Led scenario, to provide guidance on the level of mitigation payments that can be levied well in advance of the auction where a '.FMMS shall be prepared by developers..'

Wake Effects within SC (and other) DMAPs

The wake effect is the aggregated influence on the energy production of the wind farm, which results from the changes in wind speed caused by the impact of the turbines on each other. It is important to consider wake effects from neighbouring wind farms and the possible impact of any wind farms which will be built in the future. RWE and other developers are engaged in research projects to better understand these effects.

https://www.offshorewind.biz/2024/03/14/rwe-continues-taking-part-in-wake-effect-re-search-projects-in-anticipation-of-increasingly-densely-built-offshore-wind-farms/#:~:text=One%20important%20factor%20is%20the,the%20plan-ning%20of%20a%20project. 'RWE said its models predicted that large clusters of offshore wind farms could have far-reaching wind-shadowing effects, impacting the yield of future offshore wind farms. The company's preliminary model outlined that these effects can have an impact up to 200 kilometres or more and cause the energy yield in the wake areas to be reduced – in certain cases by over ten per cent.'



With the move in Ireland to a 'Plan Led' approach to ORE development within DMAPs and the recent publication of maps showing aeras A-D in relative close proximity to each other, DECC now needs to state a clear policy statement in this document on how wake effects arising between projects developed within these plan led areas will be considered and regulated.

This is a particularly urgent issue for the Tonn Nua (Area A) project as it will be auctioned in the upcoming ORESS 2.1 process and will need to precisely understand how potential wake effects from other adjacent, subsequent projects will impact its business case and ability to meet the Target Annual Energy Quantity. This policy remedy needs to also be referenced in the ORESS 2.1 Ts & Cs for clarity.

As the location of Areas A-D are unlikely to dramatically change at this stage of the consultation process, and as there is no clear timeline / sequence for the development of the other ORE areas B-D, any policy remedy will need to be retrospective in design. This Wake Effects policy will need to clearly state the requirement for subsequent projects in the DMAP, where possible, to mitigate for adverse impacts or if that is not possible to compensate for revenues lost through wake effects on existing or already contracted / consented projects.

Possible Remedy Options for the Wake Effects Issue

Recourse through the planning process

In the UK (a very mature market for offshore wind) we are seeing the start of a pattern of existing projects making submissions through the Development Consent Order (planning) process on proposed new adjacent projects, highlighting the potential impact of wake effects on their production and related revenues.

This has been seen to some extent on onshore wind developments in Ireland and is not desirable to have ORE developers objecting to other wind projects in such a public forum. (At least the 2006 Wind Energy Development Guidelines provide some guidance on 'Windtake'). Given the Plan Led direction of the ORE industry and the DMAP process, leaving disputed circumstances between projects to be adjudicated upon by the relevant planning authority would not a good approach, nor a good use of the Planning Authorities' resources.

MARA

Another approach could be a condition in the MAC granted by MARA to ensure adjoining projects are not financially or technically impacted but this seems to be along the same lines as the allowing the planning authority to decide disputes and is also not an optimal approach. At any rate MARA, would need a policy direction to allow them become involved.

UAEC

Another solution could be the use of the UAEC mechanism (for ORESS 2.1 project) to keep the existing project(s) business case whole. However, this would be an open-ended guarantee and would take away any requirement for adjoining new projects to mitigate their impacts initially and so probably not attractive to the State. It also would potentially not be applicable to future non-grid connected projects.



Co-Existence Approach

Given the document goes into specific detail on the requirement for ORE to co-exist with other marine users, there is space for this co-existence approach to be extended to regulate the relationship between new and existing ORE projects within the DMAP.

The document already requires ORE developers to engage with fishermen and to mitigate the effects of the ORE project on their activity SF1. Further, as stated above, SF3 requires ORE developers to enter into an agreement (FMMS) with fishermen to formalise the management and mitigation measures required. 'A Fisheries Management and Mitigation Strategy (FMMS) shall be prepared by developers of proposed ORE projects..'

This concept and policy is also set out in the NMPF under Co-existence and states:

'6.1 Co-existence Objective

• To encourage effective use of space to support existing and future sustainable economic activity through co-existence, mitigation of conflicts and minimisation of the footprint of proposals.

Planning Policy - Co-existence Policy 1

Proposals should demonstrate that they have considered how to optimise the use of space, including through consideration of opportunities for co-existence and co-operation with other activities, enhancing other activities where appropriate.

If proposals cannot avoid significant adverse impacts (including displacement) on other activities they must, in order of preference: a) minimise significant adverse impacts, b) mitigate significant adverse impacts, or c) if it is not possible to mitigate significant adverse impacts, proposals should set out the reasons for proceeding'

We suggest the policy on wake effects could mirror this approach and should follow this logic apart from the inclusion of a compensation mechanism option. Suggested wording below:

Policy Objectives for subsequent ORE projects and wake effects in DMAPs

Any subsequent ORE proposals that are close to or could affect existing ORE projects or sites held under a permission or that are subject to an ongoing permitting or consenting process for ORE should avoid significant adverse impacts on these projects. If proposals cannot avoid significant adverse impacts they must, in order of preference;

- a) minimise significant adverse impacts,
- b) mitigate significant adverse impacts, or
- c) if it is not possible to mitigate significant adverse impacts and the proposals wish to proceed, proposals should set out how they will compensate the affected ORE project(s) for production loss due to wake effects

Subsequent projects will then know the policy provision is there to keep the 'existing' project(s) whole and can design their project / calculate this cost into their own financial model / business case. This will avoid any objections being raised at planning stage between projects.



Some mediation of the policy may be required and this would be the responsibility of DECC (or its appointees) as the sponsor of the Plan Led approach.

If you have any questions regarding our response, please contact our Development Lead for the ORESS 2.1 project, I . His email address is

Yours sincerely

Director Offshore Development, Ireland