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Ofgem
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OTNR Ofgem Consultation

8 September 2021

Dear Neil,

We thank you for being given the opportunity to contribute to the ongoing Offshore Transmission Network Review (OTNR) review in the UK.

You might already be aware that bp and EnBW are partners in UK offshore wind and are currently developing the Mona and Morgan projects in the Irish Sea, the seabed for which is being provided under UK Round 4 leasing. Bp/EnBW have submitted a separate response to this consultation in this respect.

In this document we would like to cover additional aspects regarding:

1. 2030 Delivery and UK Supply Chain
- and
2. Multi-Purpose Interconnectors

[https://myenbw.sharepoint.com/sites/UK/Shared Documents/05 REG/5.5 Grid Connection/OTNR EnBW response to Ofgem v1.docx](https://myenbw.sharepoint.com/sites/UK/Shared%20Documents/05%20REG/5.5%20Grid%20Connection/OTNR%20EnBW%20response%20to%20Ofgem%20v1.docx)

Sitz der Gesellschaft: Karlsruhe
Amtsgericht Mannheim
HRB Nr. 107956
Steuer-Nr. 35001/01075

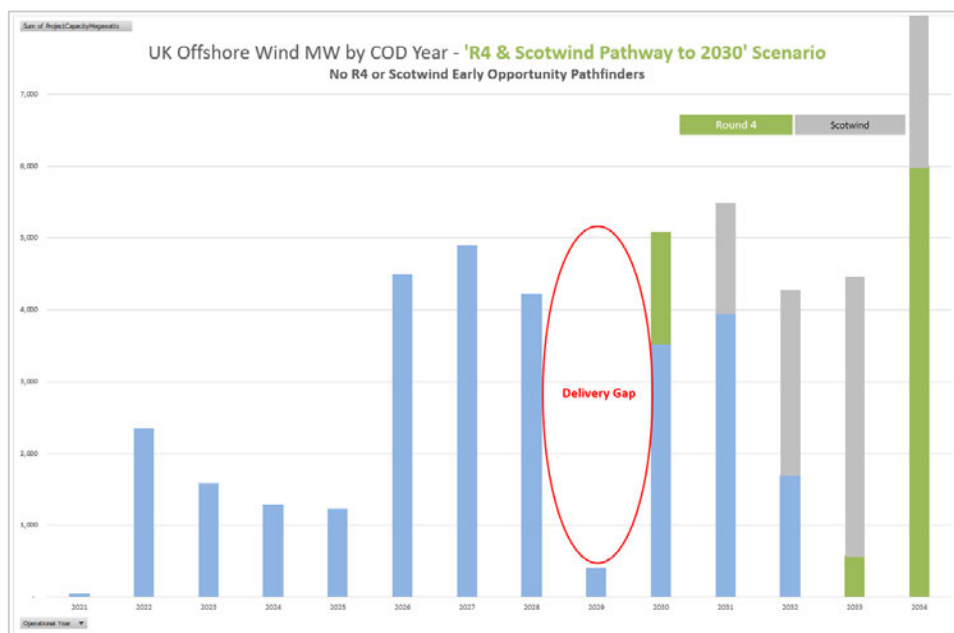
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1 2030 Delivery and UK Supply Chain

As a general remark to both the [Early Opportunities](#) and the [Pathway to 2030](#) i.e. the related chapters and questions in the main consultation document, we would like to raise awareness that there may be a potential delivery gap with respect to the UK Government's 2030 offshore wind target of 40 GW.

We have reviewed data of forecasted UK offshore wind commissioning and have concluded that there could be a significant delivery gap towards the end of this decade, as illustrated in the chart below:

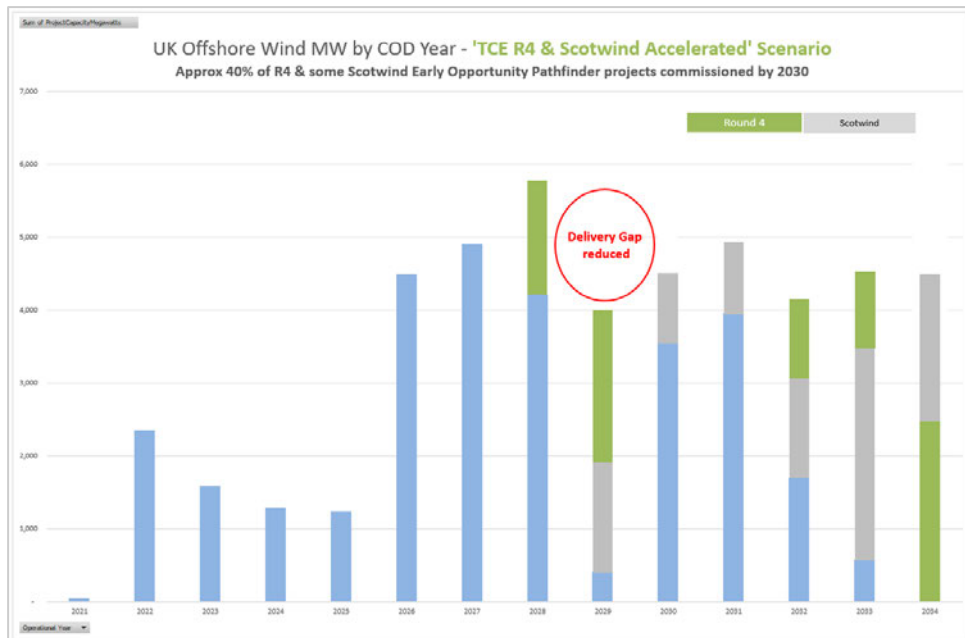


We believe that a good portion of the Round 4 (R4) projects and additional Scotwind projects can make a significant contribution to fill the identified delivery gap and thus help reach the 2030 UK offshore targets.

To enable this, we propose that all UK projects that can be commissioned up to 2030 should be considered as being Early Opportunity Pathfinders. If they are treated as "Pathway to 2030" their grid connection would be delayed such that these projects would not be able to fill the delivery gap.

Therefore, we propose a "TCE R4 & Scotwind Accelerated" scenario, as we believe the timing of the grid connection is a major, if not the only decisive factor for timely delivery of most of the R4 projects by the end of this decade.

In such scenario, a grid connection will be offered to approximately 40% of R4 projects as well as individual Scotwind projects prior to 2030. This could result in a modified delivery forecast as follows:



As a real-life example, bp/EnBW, partners in UK offshore wind, truly believe that our R4 1.5 GW Mona and 1.5 GW Morgan projects, for which the COIN processes had already kicked-off 9th April 2021, can be delivered as early as 2028/2029 in this scenario and can thus support the UK Government in meeting their targets regarding offshore wind capacity as well as the Sector Deal regarding UK content. Though, this would obviously require respective grid connections in those years.

The earlier a pre-2030 grid connection will be confirmed, the sooner R4 project developers can start working towards an ambitious but feasible pre-2030 target for commissioning of their projects.

UK Supply Chain Impact

It bears repeating that a national delivery gap such as the one identified in 2029 can lead to a dramatic change in demand for offshore wind supply chain companies.

Due to significant UK content criteria, the supply chain companies are likely to be predominantly UK based. Smoothing the overall annual project delivery and associated demand therefore leads directly to greater supply chain certainty, lower risk, better pricing, more sustainable jobs and ultimately a benefit to the UK economy.

2 Multi-Purpose Interconnectors.

Question 14: Do you think we are focusing on the right models at this stage, or are there other models we should be considering? Is it also necessary to consider the evolution of such MPIs from pre-existing assets? Ultimately, should Ofgem accommodate multiple MPI models (e.g. IC-led and OFTO-led) or just one? What factors influence your answer?

We believe that these two are the right models to consider.

Moreover, it might also be worth mentioning the possibility to consider energy islands as an additional model, however we believe energy islands are enhancements of these two existing models and not a new model in its own way.

For the IC-led MPI model we can imagine that existing IC assets can be extended to include an offshore generator. For OFTO-led MPIs, the project Kriegers Flak connecting Denmark and Germany demonstrated how an existing offshore connection system can be enhanced to become an IC-system. Therefore, we believe it is indeed necessary to consider the evolution of both MPI models from pre-existing assets.

Since it is possible to evolve existing assets into MPIs in both models and we are still at a very early stage of MPI developments, we believe it is necessary that Ofgem accommodates both MPI models. In different situations, especially with existing assets, one model or the other could be more suitable and naturally applied.

The decisive factor from a developer's point of view is predictability, irrespective of the choice of one model or the other. Consequently, it is essential that MPI development plans are binding and guarantee risks/costs sharing as well as timely completion of the interdependent assets.

Question 15: Do you agree with this position with regard to ownership structures of MPIs under the current framework?

We agree that the current legal framework foresees separate responsibilities for the ownership of connected transmission and generation assets and that any changes to that require significant legal changes. Looking at MPIs under the OFTO-led model, the current framework adds a third party which has to be involved in coordination processes, adding complexity and thereby scheduling risks.

We believe that the current system should be maintained, where the responsibility for the development of offshore connection system (potentially with IC-anticipating additional capacity) and offshore generator lies with the same developer as of today. This secures the efficient coordination, timely completion of the generator and its grid connection as well as reduces the risk of stranded investments. The IC development and the corresponding coordination and risks in turn should lie with a third party as long as there are no binding MPI development plans that mitigate the additional coordination and risks.

Question 16: What are the commercial, operational and regulatory factors that would drive a developers preference for either the OFTO-led or IC-led MPI model? and do you envisage a different usage of the component assets of an MPI depending on the MPI model?

As the developer of an IC-led MPI, coordination between two territories' regulatory provisions is needed, which adds complexity and may therefore delay the project. This is of particular relevance when developers must pay option fees for their lease (as it is the case with the UK R4 developers).

From our point of view, the OFTO-led MPI model would limit coordination responsibilities for developers and therefore support the timely completion of projects. Adding an IC to the responsibilities of the developer also adds complexity and increases the necessary investment volume for developers. These factors render the IC-led MPI model less attractive and make the OFTO-led MPI model preferable.

With binding MPI development plans in place beforehand, wind farm developers could also develop offshore transmission and interconnector assets. Otherwise, the additional risk for wind farm developers will prevent any anticipatory investment.

If the MPI evolves from existing assets, the actual capacity of L1 and L2 may foster the application of one or the other model. If the MPI is newly developed, we don't currently envisage a different usage of its component assets.

Question 17: How would the line to shore (L1) be used in practice and what would you consider to be the primary and secondary activities from a practical perspective? Please provide views for both the IC-led and OFTO-led models, highlighting any differences between L1 usages across the two models.

In a situation where the technical parameters of L1, L2 and the offshore wind farm are identical, we would expect that in an OFTO-led model, the offshore generated electricity will be prioritized over cross-zonal flows on L1, making the offshore generation exports to the GB shore the primary activity. In an IC-led model, offshore generation has to compete with cross-zonal flows via market mechanisms on L1, meaning that the market constantly (re-)decides the primary and secondary activity.

Irrespective of the choice of IC-led or OFTO-led model, the existence of a MPI will lead to a higher usage of L1 as it can and will be used for cross-zonal flows in times when the offshore wind farm cannot produce.

Question 19: What are your views on the feasibility of adopting a regime that requires developers to submit evidence to support their licence application (for assets that form part of an MPI) and commit to regular performance reports? Would this be practicable, proportionate, and effective? Are there other options that work well for industry that we could explore further?

According to our development plans, we would only ever assume the generator license and we see no necessary changes to this one license over time that would require regular reports to re-assess said license. Any re-application requiring a performance report should not be necessary within the first estimated life span of the generator.

BEIS Question 1: What do you consider to be the key challenges to the establishment and operation of MPIs in the UK presented by current and proposed regulatory requirements applicable in EU Member States or other countries which MPI projects may connect with, or by the TCA? [e.g., regarding the efficient operation of MPIs under both the Home Market and Offshore Bidding Zone approaches]. Are there further domestic challenges to these possible market design options?

We believe that the OFTO-led MPI can be better implemented under a Home Market solution, and an IC-led MPI better under an Offshore Bidding Zone approach.

From a short-term market perspective, an offshore bidding zone is more efficient. At the same time an offshore bidding zone poses substantial additional risks for generator revenues. This could lead to reduced willingness to invest or to higher bids in CfD-auctions. Especially the presently high level of regulatory uncertainty could lead to high-risk premiums.

However, for both market approaches, many regulatory questions remain, and EU regulation is not yet harmonized in these regards. Challenges and open questions include uncertainty regarding applicable regulation, tender and TSO responsibilities, promotion schemes, general cost-benefit-distribution and, with regard to all these aspects, public acceptance in the connected territories.

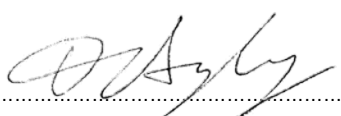
It would indeed be highly appreciated if the above comments can be taken into consideration during the ongoing Ofgem OTNR consultation, as we believe they can contribute to both system design and timely delivery of a larger number of new offshore wind farms with respect to the UK targets and ambition.

Yours sincerely

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