

Offshore Wind Grid Development Consultation
Energy Division
Department of Communications, Climate Action and Environment
29-31 Adelaide Road
Dublin 2
D02 X285

22/07/2020

EDF Renewables response to the Consultation to Inform a Grid Development Policy for Offshore Wind in Ireland

EDF Renewables is part of one of the world's largest electricity companies and our investment and innovation is bringing down costs for consumers and bringing significant benefits for communities. We operate in more than 20 countries around the world. We develop, construct and operate wind farms (onshore and offshore), solar and battery storage projects, and have more than 25 years' experience in delivering renewable energy generation. We have recently opened an office in Dublin and are already in advanced discussions for an onshore wind development pipeline of around 500MW, with aspirations for far greater growth in Ireland across all technologies, as can be seen by our recent acquisition of 50% of the Codling Offshore Windfarm Development, off the East Coast of Ireland.

EDF Renewables welcomes the opportunity to respond to the Consultation to Inform a Grid Development Policy for Offshore Wind in Ireland. We outline our response in the attachment to this letter in support of the positions held by IWEA and the Codling offshore wind project joint venture to this consultation, which is the preference for a developer-led model, leveraging experiences and expertise of international developers, with onshore reinforcements being delivered by EirGrid, as the only suitable option for the timely delivery of the 2030 RES-E targets.

EDFR believes that the key fundamentals of the grid delivery model should be:

- Delivering on the Government's Climate Action Plan and Programme for Government;
- Ensuring lowest cost of energy for the consumer;
- Allowing for a level playing field between projects; and
- Efficient allocation of grid capacity.

Following this, our main recommendations to this consultation are:

- We believe that the approach or strategy for delivery of Irish offshore wind is to deliver the Relevant Projects first "in the short term" as stated in question 15 in the consultation document. For Relevant Projects, the next steps need to recognise the urgent timeline needed to ensure the offshore development pipeline is not stalled and there is not an unnecessary long gap between the first phase of Relevant Projects and the following phase

that can be connected without wider system reinforcements, and the following phase of Relevant Projects which will require reinforcements.

- The development of the grid connections for the Relevant Projects should be developer-led with connection points onshore. It is assumed within this that connections should be radial in nature – that is to say each offshore windfarm will be connected to its land-based point of connection via a set of dedicated assets (though there may be some shared infrastructure at the point of connection). EDFR acknowledge the need to be mindful of future offshore connections and transmission grid reinforcements when progressing connection design, and all attempts will be made to minimise any possible sterilisation of routes for future grid infrastructure. This will require close collaboration with the System Operators and the CRU.
- We welcome the Navigant Report’s conclusion that only the developer led approach is compatible with Relevant Projects. We would agree that the plan-led options 3 and 4 are not in any way compatible with developing the Relevant Projects.
- We note the consultation allows responses that are not limited to the Navigant options. We believe that a hybrid of options 1 and 2 is the way forward to deliver the Relevant Projects by 2030 as is implicit in the start-up phase stated on page 14 of the consultation document. Our preferred approach is Option 1 with the additional element of EirGrid starting to proactively develop the sensible and realistic reinforcements needed for full realisation of the Relevant Projects now. The CRU has directed EirGrid to commence this process and the initial engagement between the Relevant Projects and EirGrid started in May. Meetings between EirGrid and Relevant Projects are now starting to take place and we would hope that by the end of the year the reinforcements required to deliver all the Relevant Projects will have been identified and the development process commenced. It is important the CRU and DCCAE support EirGrid and ESB Networks in being funded and incentivised to deliver the deep reinforcements in a timely and efficient manner through the upcoming Price Review 5 process.
- From the EirGrid’s 2019 East Coast Assessment it appears unlikely that there will be sufficient capacity for all the Relevant Projects’ capacity without deep reinforcement works. Ireland has also moved to an auction based renewable support scheme to ensure sufficient renewable capacity can be delivered to meet 2030 RES-E targets. We believe that the auctions should be designed to ensure the maximum level of competition, thus realising the lowest price to Irish consumers. Therefore, as grid capacity is limited on the east coast, and it is critical that competition is maximised, a critical aspect of grid connection policy is to ensure grid capacity is not hoarded and is available for the projects that are successful in the RESS auctions. Across all the Relevant Projects there needs to be ‘a level playing field’ for the allocation of grid.

Should you wish to discuss any of the issues raised in our response or have any queries, please contact Matt Streeter on [REDACTED], or me. I confirm that this letter may be published on the Department of Communications, Climate Action and Environment website.

Yours sincerely

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Attachment

Consultation to Inform a Grid Development Policy for Offshore Wind in Ireland
Response from EDF Renewables (EDFR) to your questions

Please see below for our responses to the individual consultation questions. For the questions related directly to Enduring Projects, we have noted that EDFR supports the IWEA position.

Consultation Question 1: *With respect to key driver (i), cost levels, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?*

Recent UK auctions provides evidence that the developer led approach (Option 1) can reduce prices for the delivery of offshore wind generation across multiple auction periods, and with competition realise the low prices to the consumers. Key principles for the design of the RESS offshore auctions should include:

- auctions should ensure that the maximum amount of offshore wind projects contribute to realising the 2030 target;
- there should be a level playing field between the Relevant Projects and indeed the Enduring Projects; and
- the criteria for auctions should be designed to ensure the maximum level of competition thus realising the lowest price to Irish consumers.

The development and construction of offshore connection assets for the Relevant Projects are best completed contestably. Since contestability was introduced in Ireland in the late 1990s almost all transmission connected generators have contested their shallow connection assets. Contestability has proven to be the most cost efficient approach for constructing shallow connection assets in Ireland. Contestability of the offshore connection works should ensure the assets can be provided at lowest cost and also as part of the efficient delivery of the overall offshore windfarm project.

Consultation Question 2: *With respect to key driver (ii), environmental impact, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?*

The *O'Granna* legal planning decision requires offshore windfarms to assess grid connections as part of the EIA for the offshore windfarm. Options 3 & 4 for the Relevant Projects would result in splitting the EIA of the windfarm and the offshore grid connection works. This is not permitted under EU EIA requirements. This is the main reason why options 3 and 4 are not compatible with the development of the Relevant Projects.

Similar grid deep reinforcements works, unless there is no feasible alternative, should not form part of the offshore grid connection works for Relevant Projects. To allow the Relevant Projects to progress on a timeline to meet the 2030 RES-E targets the grid connections for Relevant Projects should have connection points onshore and be radial in nature. Any other connection arrangements, such as offshore meshed connection assets, will add substantial consenting complexity, major timeline delays and risk to a relevant project.

Consultation Question 3: *With respect to key driver (iii), future proofing and technologies, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?*

We note in the consultation document that it is stated as an underpinning assumption of all options that all offshore grid assets are built to TSO transmission standards with appropriate oversight by the TAO. EirGrid can also seek to transfer grid connection ownership to the TAO. For Relevant Projects with onshore connection points we would not agree that this is appropriate. Future proofing of offshore connection assets would likely substantially delay the development of the Relevant Projects. We also have technical, commercial and regulatory concerns with this proposal. We would welcome the opportunity to engage further on this issue with the TSO and TAO and the issue should be explored in proper detail in future grid policy consultations.

Consultation Question 4: *With respect to key driver (iv), required infrastructure, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?*

EirGrid need to prioritise the development of onshore transmission assets and associated transmission upgrades required for the connection and operation of the Relevant Projects. EirGrid need to have identified in 2020 and started permitting in 2021 all the onshore grid reinforcements required to facilitate the Relevant Projects. The current model of progressing planning and design and making capital commitments on the required infrastructure only when backed off by contributions by developers is no longer tenable. EirGrid and ESB Networks need to be supported with funding and resources from PR5 to progress early with the consenting and development of these works. Experience from large clusters of onshore windfarms in regions such as the South West has shown that the development by EirGrid of the grid connection assets, including reinforcements that impact on the shallow connection of the windfarms, were often the critical path for the delivery of the windfarms. Improvements and lessons learned from the development and delivery of other major transmission projects in recent years should be applied to these works.

There needs to be collaboration between the stakeholders on the delivery of grid connection works required for the connection of the Relevant Projects. To oversee and ensure the successful delivery of the grid connections and reinforcements for the Relevant Projects it is proposed that a Delivery Management Board is established. This would be similar to the board established between EirGrid and ESB Networks for the delivery of the South West 220kV projects. There should also be

representatives from CRU, DCCAE and the Relevant Projects on this board. This board should report its progress under Action 25 of the Government's Climate Action Plan.

***Consultation Question 5:** With respect to key driver (v), compatibility with Relevant Projects, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?*

EDFR welcome that the Navigant report strongly agrees that only the developer-led approach is compatible with Relevant Projects. We would agree that the plan-led options 3 and 4 are not in any way compatible with developing the Relevant projects.

The next steps for the Relevant Projects need to recognise the existing contractual position and the urgent timeline needed to ensure the offshore development pipeline is not stalled and there is not an unnecessarily long gap between the first phase of Relevant Projects and the following phase needing reinforcements.

What is required is a bespoke approach to developing the Relevant Projects through a combination of aspects of Option 1 and 2. The CRU has directed EirGrid to commence this process and the engagement between the Relevant Projects and EirGrid started in May and are being followed with online meetings in July. We would hope by the end of the year the reinforcements required to deliver all the Relevant Projects will have been identified and the development process commenced.

Many of the aspect of Option 1 are also appropriate for Relevant Projects. The grid connection point should be onshore. The developers are responsible for consenting, and following successful participation in an auction, are responsible for financing and construction of the windfarm and offshore transmission assets. The offshore transmission assets are operated and maintained by the windfarm.

The critical feature of Option 2 that is required for Relevant Projects is for the proactive development of the onshore grid reinforcements. To accommodate all the capacity of the Relevant Projects it is agreed that onshore reinforcements are required. However, we believe that the necessary reinforcements, with appropriate priority and focus, can be delivered in a timeline to ensure the Relevant Projects can connect and contribute to our interim renewable targets and 2030 RES-E targets. The development of 220kV transmission infrastructure in the South West, critical to the delivery of the onshore wind required to meet the 2020 RES-E targets, demonstrates how substantial transmission infrastructure can be delivered in similar timelines.

Other aspects of Option 2, for example minimum distance, are not necessary or appropriate for the Relevant Projects considering the existing progress that has been made on development of the sites. The existing site boundaries for Relevant Projects will have to be recognised. The proposal in Option 2 for the TSO to determine the projects that are ready for RESS auctions, could only work as a mechanism if it creates 'a level playing field' for Relevant Projects and stops the hoarding of grid capacity. There would not be competitive RESS auctions if projects that could be successful in

auctions do not have access to grid capacity that is being hoarded by unsuccessful projects in the same auctions. There also needs to be consultation with industry and transparency in the process that EirGrid apply for determining the projects that are ready for RESS auctions.

Consultation Question 6: *With respect to key driver (vi), social acceptance, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?*

Consultation Question 7: *With respect to key driver (vii), facilitating the timely development of offshore wind capacity to achieve the 2030 target, which of models 1,2,3,4, or variant of these, delivers the most satisfactory results? Which features of the model, or variant, are the most influential for your given choice?*

It is important to identify that the approach or strategy for delivery of Irish offshore Wind is to deliver the Relevant Projects first “in the short term” as stated in question 15. As stated in the Navigant report options 3 and 4 are not compatible with the delivery of the Relevant Projects. The hybrid of options 1 and 2, as described in response to question 5, will provide the best opportunity for delivering the Relevant Projects capacity that is required to achieve the 2030 RES-E targets.

The proactive development of the grid reinforcement required to deliver all the Relevant Project capacity should be a critical feature of the option taken forward. There is a need for the reinforcements to be identified in 2020 and the development works to start in 2021. These timelines are required to ensure the 2030 targets for offshore can be achieved.

Consultation Question 8: *Rank the key drivers in order of importance 1-7, which have the greatest impact on the choice of model.*

EDFR is providing responses to this consultation focused on the needs of Relevant Projects. Ranking the key drivers from the perspective of Relevant Projects, the compatibility with Relevant project is the obvious most important driver. Considering the 2030 RES targets and the need for onshore grid development, the next most important drivers are timing and infrastructure. The other drivers of social acceptance, environment and cost would have equal ranking of importance. Considering the proposed connection arrangements for the Relevant Projects, future proofing would have the least importance of the drivers listed in the consultation.

Consultation Question 9: *How important is it for Ireland to develop an indigenous offshore wind energy industry? How best can an indigenous industry be developed?*

EDFR support IWEA’s detailed response to this question.

Consultation Question 10: *How should onshore and offshore grid connections be optimised? For example, should consideration be given to common hubs for adjacent projects?*

For the Relevant Projects it is not envisaged that there would not be shared offshore infrastructure. There may be the requirement for some shared onshore infrastructure. This would be similar to the grid infrastructure required to deliver the Gate 2 and 3 windfarms in the south west region. We expect that in EirGrid’s upcoming assessment of the Relevant projects that the design of the grid connections can be optimised. There will also need to be the development of grid connection policy

for the Relevant Projects to ensure the existing grid infrastructure can be optimised, for example phasing of grid connections.

It is also important that grid and RESS rules and policies ensure that grid capacity is not hoarded. This is also critical to ensuring that grid connection and capacity is optimised.

Consultation Question 11: *Are there any further considerations which might reduce the cost to the consumer?*

EDFR support IWEA's response to this question including the proposals on the Clean Energy Package and minimising curtailment & constraints.

Consultation Question 12: *Currently, developer compensation is not provided for delayed delivery of grid connections to renewable generators connecting to the network. Should developer compensation arrangements be provided for delivery of offshore grid connections to renewable projects? Similarly, who is best placed to bear the outage risks under the various options?*

For the Relevant projects it is envisaged that the offshore connection assets will be developed, constructed and operated by the offshore windfarm projects. On this basis the risk of delays and outages are managed by the offshore windfarm projects. This is an advantage to the consumer of the developer led compared to the plan-led approach.

The risk of delay to the delivery by EirGrid and ESB Networks of the non-contestable onshore connection assets still represents a risk to the offshore projects. As it appears unlikely that connection policy will be changed and allocate the risk onto the system operators, to it is critical that the project developers and the system operators have a collaborative approach to the delivery of the onshore shallow and deep reinforcements works. To help manage these risks we request in response to question 4 that a Delivery Management Board is established.

Consultation Question 13: *Are there any further drivers which should be considered when assessing a grid delivery model suitable for offshore wind development in Ireland?*

EDFR support IWEA's response to this question.

Consultation Question 14: *Overall, which model, or model variant, is most appropriate as an enduring grid delivery model for offshore wind in the Irish context?*

EDFR support IWEA's recommendation of a hybrid of Option 1 and 2.

Consultation Question 15: *It is accepted that a transition towards the chosen enduring grid delivery model will be required to leverage the development of the Relevant Projects in the short term. Taking into account the high level roadmaps set out at Figures 5 and 6 above, what should this transition look like?*

The Navigant report clearly recommends that Relevant Projects are not complementary to Option 4 and 5. We therefore support IWEA recommendations for the first phases of enduring projects, the hybrid of options 1 and 2. This would ensure that any Relevant Project can transition into the enduring process and there is not any stranded offshore development projects.

Until there is more progress on the development of the Relevant Projects and the enduring approach it is not possible to comment meaningfully on the need and type of transitional arrangements that may be required.

EDF Renewables

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