



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

22nd July 2020

Re: Public Consultation to Inform a Grid Development Policy for Offshore Wind in Ireland

Dear Sir/Madam,

The National Offshore Wind Energy Association of Ireland (NOW Ireland) welcome the opportunity to respond to the Public Consultation to Inform a Grid Development Policy for Offshore Wind in Ireland and do so on behalf of our member companies Codling, ESB, RWE, Parkwind, SSE Renewables and Statkraft which are currently active in developing offshore wind projects in the Irish Sea. NOW Ireland was established to promote the development of Ireland's substantial offshore wind resource and to ensure that our island leads the way in building a green energy economy.

The projects being developed by NOW Ireland's members will be integral to meeting the government's targets of 70% RES-E, Ireland's interim EU emissions targets and the newly increased target of 5 GW offshore wind capacity (at least) by 2030. The projects represented by NOW Ireland include 6 of the 7 "Relevant Projects", as identified by the DHPLG in May this year (including all east coast Relevant Projects), as well as Arklow Bank Phase 2 which is progressing under the Foreshore Act. NOW Ireland limits itself to comments on the implications of the potential grid model on the Relevant Projects and Arklow Bank only.

NOW Ireland preferred model

NOW Ireland strongly welcomes the acknowledgement in the consultation that only the developer-led approach is compatible with Relevant Projects. We note that Navigant's Options Paper for Offshore Wind Grid Delivery identifies four potential models for delivery, with developer-led models represented by Options 1 and 2. Whilst there are aspects of Option 2 that NOW Ireland would support, our recommendation is that a model following Option 1 is chosen for the rapid development of the Relevant Projects and successful delivery of 2030 targets.

The key principle that NOW Ireland has identified in making its recommendation is that the grid connection process should be an enabler of development of projects rather than a potential bottleneck. Therefore, where the appropriate projects have been identified (i.e. consented or Relevant Projects), they should be allowed to progress in as timely, cost effective and efficient manner as possible. This will be critical to Ireland reaching its renewables targets.

Design features of Option 1 would be the most appropriate for Relevant projects including:

- The grid connection point should be onshore, as facilitated by existing regulatory environment.
- The developers are responsible for consenting and, following successful participation in an auction, are responsible for financing and construction of the windfarm and all transmission assets from the onshore substation to the windfarm.
- The offshore transmission assets are operated and maintained by the windfarm.

The main aspect of Option 2 that NOW Ireland would support is in the proactive approach to onshore network reinforcement. This approach to grid for the Relevant Projects has now begun, with EirGrid starting to proactively engage with projects to identify sensible onshore reinforcements. Such proactive development of the onshore grid reinforcements will be important in facilitating as effective a development of the east coast as possible. Given the significant time such grid reinforcements can take, early development of these upgrades is welcomed by NOW Ireland and its members.

To ensure there is sufficient focus and resourcing on the delivery of these reinforcement works, however, we would recommend that there is a dedicated project office and an associated delivery board established to oversee the development and construction of the works. We would suggest that as well as EirGrid and ESB Networks there should be representatives from DCCA, CRU and the Relevant Projects/consented projects. It is also critical to ensure that all the relevant state organisations and bodies are sufficiently resourced to meet the requirements that this work programme dictates.

No minimum distance from shore, or buffer zone, should be included within any chosen solution. Applying a blanket buffer zone around the coast in Ireland will hinder the progression of Relevant Projects. Due to the existing geological and bathymetric conditions around Ireland, fixed bottom offshore wind infrastructure will be located closer to the shoreline. The impact on seascape and landscape of any potential development on the coastal environment will be thoroughly assessed in an EIA processes which will apply appropriate mitigation measures where necessary.

Future-proofing of technical requirements

Though we recognise the Department's and TSO's interest in the potential for "future-proofing" in the development of Ireland's initial offshore wind farms it is important to note that the Relevant Projects are well-advanced in their designs and planning requirements. It is therefore a significant concern that future proofing requirements, where not known, could significantly impact on Relevant Project consenting and construction timescales and costs.

Historically, System Operators have requested additional infrastructure be installed in parallel with the construction of renewable projects. Whilst this may be deliverable for an onshore project with relatively little impact on complexity and cost to the consumer and developer, this is not so for an offshore project. Any deviation to technical requirement or "over-specification" for offshore infrastructure will lead to substantial complexity and cost increases.

Any additional functional requirements should be carefully considered by the Regulator to ensure they represent value for money, and that potential solutions utilising onshore infrastructure have been fully considered (given costs will be orders of magnitude less than for offshore infrastructure). Any future-proofing requirements should only be stipulated following a positive cost benefit analysis, including consideration of all other options, which concludes such requirements will be of benefit to consumers in Ireland. We note such cost-benefit analysis was beyond the scope of Navigant's report.

Globally, the direction of travel is for offshore platforms to get lighter and smaller. The future-proofing of offshore substation requirements, to facilitate an offshore bootstrap, would represent a step in the other direction and fundamentally change the foundation type, substructure and topside design adding very significantly to the cost of the offshore platform and substation. This is not the most cost-effective way to create additional capacity along the coast (a so called "bootstrap" , should such a project be seen as necessary by the TSO) when the offshore platforms are located nearshore.

Relevant Infrastructure – Developer Experience

The consultation rightly identifies the opportunity to leverage developer experience and expertise in the delivery of offshore infrastructure. The developers represented by NOW Ireland have between them significant experience in the successful delivery of offshore wind farms globally and represent some of the world's leading offshore developers. This experience, and proven track record, will be of significant benefit in delivering Ireland's offshore wind industry on time, and in the securing of low-cost financing to support Ireland's first generation of offshore wind farms. We would strongly challenge Navigant's conclusion that experience is "not a differentiator between models" and indeed, believe that Ireland should harness the knowledge and experience of offshore developers and view this as a key strategic advantage in the establishment of Ireland's offshore wind industry.

Asset Ownership

We would seek clarity as to how the structure for ownership and O&M of the offshore transmission assets as set out in Option 1, Option 2 and Option 3 is compatible with EU unbundling regulations and existing domestic legislation in relation to the ownership and operation of a transmission system. The consultation paper notes that EirGrid can seek to transfer grid connection ownership to the TAO in any option where the developer builds the asset.

This raises the question of responsibility for outage risks which should be borne by the asset owners. In a case where grid connection ownership is transferred to the TAO, service obligations will be required to ensure that adequate maintenance and timely repairs are undertaken to guarantee the availability of transmission infrastructure that will be critical to project viability. The model that is brought forward should be assessed in terms of a projects ability to secure finance.

Summary

As outlined throughout this response, NOW Ireland welcomes acknowledgment in the consultation that a developer-led model will be needed for the delivery of the Relevant Projects and recommends progression of these projects via a variation of Option 1, including proactive development of onshore transmission infrastructure reinforcement. Such an approach:

- Can enable Ireland to establish its offshore wind industry, delivering in support of EU interim emissions targets and supporting the Programme for Government's target of 5 GW offshore wind by 2030.
- Makes the most efficient use of the projects already in development.

- Provides for competitive delivery of Ireland's first offshore wind farms and associated transmission infrastructure.
- Leverages developers' significant experience in the development of offshore wind farms.

NOW Ireland's members have undertaken significant investment so far in the development of offshore projects and are poised to invest billions of euros in the establishment of Ireland's offshore wind sector, creating thousands of jobs (both direct and indirect) in the process. This imminent investment takes on particular significance as we look towards Ireland's economic recovery from coronavirus. Our recovery must be twinned with Ireland's fight against climate breakdown. Leveraging the available capital investment in Ireland's offshore wind industry should therefore be viewed as a priority, providing national investment, stimulus into towns and communities along the east coast, whilst also further decarbonising Ireland's energy supply.

NOW Ireland look forward to further engagement with the Department in the coming months on the development of the grid model for delivery of the Relevant Projects and Arklow Bank as well as the development of Ireland's first offshore specific RESS auction.

Yours faithfully,

NOW Ireland