

Inis Offshore Wind:

Offshore Wind - Phase 2 Consultation Response

9 March 2022

Dear Sir/Madam,

Inis Offshore Wind ("Inis") welcome the opportunity to participate in this consultation for Offshore Wind – Phase 2. Inis is an Irish offshore renewable energy firm working to enable a sustainable energy future for the people of Ireland. Backed by the Temporis Aurora Fund, whose investors include the Ireland Strategic Investment Fund ("ISIF"), our purpose is to harness Ireland's vast offshore wind energy potential to accelerate and deliver Ireland's energy transition to a clean, sustainable, low-carbon system.

Temporis is an impact investment management house with operations in Cork, Dublin and London, with 19 operation wind farms and 12 hydro plants. The Temporis Aurora fund aims to support the development of preconstruction renewable energy projects and associated enabling infrastructure in Ireland. The involvement of ISIF in this fund gives the people of Ireland a direct stake in our future success.

Executive Summary

Inis believes that offshore wind deployment in Ireland will be a key contributor in decarbonising the energy sector and the government's targets of 80% by 2030 and beyond towards net zero. To achieve these ambitious targets, it is important that the next wave of projects is facilitated for delivery by 2030. Inis also recognises the challenge for Ireland to deliver on these targets, given the infancy of the ORE industry, supporting infrastructure and legislative processes required. Inis is committed to working together with government, ORE industry, communities, and stakeholders to achieve these goals—with a particular focus on involving Irish Citizens in the energy transformation.

The key points that we wish to highlight are as follows:

- (1) Inis is aligned with Wind Energy Ireland's ("WEI") view that a modified version of Option B, a competitive MAC process, is the most preferrable approach.
- (2) Inis is aligned with WEI that the maintenance of MAC through the project development lifecycle is important to ensure delivery of projects for 2030 and beyond. A MAC should be granted to Phase 2 projects with a clear path to delivery for 2030 for a defined period, with the possibility of extension for occurrences out of the developer's control. It is also important to ensure Phase 2 projects can participate in ORESS-3 to ensure equitable treatment of Phase 1 and Phase 2 projects.
- (3) Inis believe that the proposal of hybrid connections is premature in this consultation and should be done in consultation with Eirgrid, CRU and SEM following the award of Phase 2 MACs. Hybrid connections, as currently defined in this consultation, are subject to a number of potential technical, commercial and regulatory complications that will need to be overcome in advance of this proposal
- (4) Inis believe that Innovative technologies and concepts should be considered in Phase 2. It is felt, however, that regarding offshore wind technologies, Phase 2 should be technology neutral, and capacity should not be ringfenced for specific foundation technologies.
- (5) The range of innovations considered should also include social and financial aspects in order to increase widespread community engagement and opportunities for public participation. Inis believes that for the emerging offshore wind industry in Ireland to achieve its potential, it must secure a social licence from local communities, and that DECC should seek to involve Irish citizens in the energy transformation that is required in the coming decade for Ireland to realise its potential as a low carbon, competitive and secure energy society.



CONSULTATION QUESTIONS

Question 1 - Consultation Responses

Which is your preferred option and why of:

a. The above options?

Inis is aligned with WEI that Option B is the preferred approach. This would enable an assessment of the projects most likely to deliver on the 2030 targets set for offshore wind, while at the same time reducing the burden of work on the various departments (MARA, DECC, Eirgrid etc), as well as subsequent pressure on the planning authorities.

b. The above options, variations of same, and other possible options within the parameters outlined in this paper, particularly sections 3 and 4.

Inis is aligned with WEI that a variation of Option B would be beneficial to the department in awarding Phase 2 MAC's. Incorporating a pass/fail pre-qualification stage would in the first instance, ensure that MAC applicants are deemed a fit and proper person by assessing, for example, technical and financial strengths. Only qualified applicants should subsequently be eligible to be assessed for a MAC.

Question 2 - Consultation Responses

Option A proposes that a deployment security is required for to apply for a MAC in Phase 2.

a. How should the security be calculated and what rate should apply? If the security was to be calculated on the basis of planned capacity, what rate should apply?
 Inis is aligned with WEI and does not support the presence of a deployment security for Phase 2 projects. It is also our view that Option B is the preferred approach.

b. Should the security be required to be in place prior to application for a MAC or post-issuing of a MAC? If post-issuing, what is a reasonable timeframe?

Inis does not support the presence of a deployment security. A seabed/development levy should alleviate the need for a deployment security.

c. Under what terms should this security be drawn down?

Inis does not support the presence of a deployment security.

d. The security, as proposed, expires with the securing by a project of a route to market. For projects successful at ORESS 2, this is also the stage when the auction performance security is due be put in place. Would it beneficial for the deployment security to be rolled over towards the RESS performance security? How best this be managed?

Inis does not support the presence of a deployment security.

e. What other terms should apply to this security?

Inis does not support the presence of a deployment security.

Question 3 - Consultation Responses

Option B proposes a competitive MAC process.

a. What assessment criteria should be used in this process? What should the weighting of this criteria be?

Inis is aligned with WEI in that, of the options presented in the DECC consultation, Option B, a competitive MAC process, is deemed the most suitable approach. However, a modification of this approach is suggested, incorporating a pass/fail pre-qualification prior to a MAC process. Inis is aligned with this approach.



It is understood by Inis that Section 80(2) (a) and (b) of the Maritime Area Planning Act allows for Phase 2 criteria and the process to be set by DECC ahead of MARA enactment; however, MARA, rather than DECC, is to be the entity that would undertake the qualification and competitive processes. MARA is currently scheduled to be established in Q1 2023 as per the Climate Action Plan.

An outline of the design for this process is set out below.

- 1. A pre-qualification portion for Phase 2 projects can ensure that those applying for a MAC are credible offshore developers. The purpose of this PQQ is to establish a set of minimum pass/fail criteria for developers to meet, should they wish to qualify as a Phase 2 project. This process should be completed in early 2023 in line with the establishment of MARA.
- 2. A graded MAC application would then be opened by MARA inviting qualifying applicants to participate in the MAC process. This application would demonstrate a developer's strength to deliver its proposed project(s) by 2030—including: Corporate and Individual Experience and Capability, Preparedness, Project Development Plan, Development Budget, Resource Plan, Innovation and Public Interest. Each application would be scored, and MAC's awarded, based on the strength of the application, the capacity of Phase 2 available and the location of the project.

However, given the current schedule for the formation of MARA, and the need for urgency on awarding of MAC's, it will be advantageous to streamline the two-stage process by combining the prequalification round into the main competitive MAC process. The submission could be structured in such a way that Part A would be the pre-qualification, and if an applicant does not make it through the pass/fail section, then that applicant would be excluded for assessment in Part B.

b. Should a seabed levy auction be included in this assessment? What weighting should the auction result have?

Inis is aligned with WEI that a seabed levy should feature in Phase 2. However, an auction is not recommended for the assessment; rather, a capped seabed levy should be paid by all successful MAC applicants. It is also important that the term and value of this levy is in line with what is implemented as a development levy for Phase 1 projects (noting that any Phase 1 project unsuccessful in ORESS1 may seek to compete in ORESS2).

A capped levy can provide the optimal balance of value to the state for the seabed, while also ensuring that inflated seabed levies are not ultimately passed onto the consumer.

As an example of how this can occur, in the Round 4 Offshore Leasing process in England and Wales, the seabed levy was the deciding factor in the assessment of applications. At a minimum, assuming four years to undertake site surveys and necessary consenting processes, taking a 2030 reference site, the LCOE increases by 23% when an option fee of £150,000 per MW is applied over a development phase of four years. With potential consenting delays to a project, at six years, LCOE increases 35%, and if the development phase is extended to eight years, LCOE increases 49% versus the 'no option fee' scenario for the 2030 reference case.¹

c. Should a deployment bond be maintained under this option? Why, or why not? Inis is aligned with WEI that a deployment bond should not be maintained under Option B. If an annual seabed/development levy is applied to a project, there is no requirement for a deployment bond.

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¹ Miriam Noonan's Thoughts on Seabed Leasing Round 4 - ORE (catapult.org.uk)



Question 4 - Consultation Responses

All of the above options assume that Phase One projects retain their MACs for Phase Two.

a. Is this the correct approach? Why?

Inis is aligned with WEI in that Phase One projects should be allowed to retain their MACs for Phase 2, as should Phase 2 projects coming into the Enduring Regime. This remains consistent with the view that Phase 2 projects should have a MAC for a defined period, with the option to extend should a project be adversely delayed due to an issue out of their control.

b. Would requiring Phase One projects that are unsuccessful in securing a route to market, within a specified timeframe, to re-apply for MACs result in a better outcome for the sector, the State and consumers? Why?

Inis is aligned with WEI that reapplication for MAC would not provide a better outcome for the sector, State and consumers—primarily because this could increase the pressure for resources within MARA, jeopardising the already-tight timescales for any Phase 2 projects to meet COD before 2030.

In addition, a reapplication for MAC would increase development risk and costs – which would ultimately be recouped from consumers – without providing any additional benefit.

c. If Option D was selected would this require unsuccessful Phase One projects to relinquish their MAC before ORESS 2? If so, should these projects be given any preference such as a right of first refusal if they match a winning bidder's terms for their MAC area?

Inis is aligned with the WEI response in that it does not believe that Option D is a suitable route to follow for the Phase 2 selection process. As detailed in the WEI response, Option D creates significant complications that would affect 2030 deliverability timelines.

Question 5 - Consultation Responses

To incentivise swift deployment, discourage speculative hoarding of the marine space, discourage MAC applications by projects incapable of delivering by 2030, and facilitate the coherent transition to a plan-led Enduring Regime, it is proposed that all MACs awarded in Phase One and Phase Two will expire prior to the Enduring Regime, should the holders of these consents be unsuccessful in securing a route to market.

a. Is this the correct approach? Why?

Inis is aligned with WEI and does not agree that this is the correct approach, due to the significant additional risk that such a cliff edge would put on developers and investors, especially when a number of the causes of delays could be outside the developers' control. This could also reduce the potential for sufficient competition in ORESS by acting as a disincentive for developers to participate in the process.

It is important that consistency in approach is granted to each Phase. Phase 2 should be given the opportunity to bid into a second auction, ie ORESS-3. As it is not currently clear when the Enduring Regime will begin or whether ORESS-3 will happen before or after the Enduring Regime, we believe Phase 2 projects should, at a minimum, be permitted to retain their MACs subject to certain milestones being met.

In addition, there may be a circumstance where a project is in construction and delayed by circumstance outside the developer's control—eg when awaiting a grid upgrade. In such circumstances, it would be important for projects to be able to extend their MAC for a reasonable period on a 'force majeure' basis.

b. Would this approach incentivise deployment and/or discourage hoarding of the maritime space? Inis is aligned with the WEI response that the 'hoarding' of a MAC is not an issue in normal circumstance, given the long path to completion and likely high attrition rates of Offshore Wind projects.



It may also be the case that some projects may have a portion deliverable before 2030 and an additional portion deliverable after that date—or alternatively via a CPPA, private wire or green fuel offtake. Hence, the removal of a MAC in advance of the Enduring Regime would put this contribution to future decarbonisation at risk.

c. Would this approach discourage MAC applications in Phase Two from projects with poor pre-2030 deliverability?

Inis is aligned with WEI that this approach is considered premature and that there is a requirement to get a better understanding on the planned process for the Enduring Regime before decisions are made on MAC expiry.

Question 6 – Consultation Responses

What are your views on providing provisional grid offers to projects in the case where all projects receiving such an offer will not be able to obtain a full grid offer?

- a. How can and should the award of full grid offers be tied to the auction results?

 While projects applying for a MAC would need to demonstrate their alignment with Eirgrid's 'Shaping our Electricity Future' document, it is possible that direct interaction with Eirgrid on a provisional grid offer could unlock additional grid capacity that could allow for larger project sizes to be developed—thus enhancing a project's ability to deliver MW for 2030 targets.
- b. Should allowance be made for projects that do not effectively compete in the auction but share a preliminary connection offer with projects that do to remain eligible for a CPPA route to market? Inis is aligned with WEI response that this is not a recommended approach.

Question 7 – Consultation Responses

What are your views on auctioning capacity at particular grid nodes or regions in ORESS 2?

- a. How should this operate? Should successful projects be required to submit ORESS 2 offers that clear both the overall auction and the auction for a given grid node or region?
 Inis do not believe an additional auction for grid capacity would be beneficial to increasing the number of projects that get to commissioning for 2030. Adding an additional auction for grid capacity seems to be layering additional policy, time and cost risk, with limited benefit. The appropriate means of allocating available grid capacity would appear to be the combination of securing a route-to-market via ORESS along with development consent.
- b. Should any nodes or regions be reserved for non-ORESS routes to market?

 Inis is generally aligned with the WEI response. However, in areas that have more grid capacity than successful ORESS projects in that area, it may be worth assigning grid capacity to projects that have an alternative route to market to ensure it is used. Projects that can secure a CPPA via private wire or for use in green hydrogen, for example, should be facilitated.

The structuring of the MAC process should allow for projects to partially supply their generated energy to non-ORESS routes to market *in addition to offtake* that is compliant with 'Shaping' and delivered via ORESS-2, as this diversified route-to-market may be at a lower price than ORESS. It would be important of course that any non-ORESS route-to-market would not impact on the delivery of the ORESS portion to CoD for 2030.



Question 8 – Consultation Responses

In order to utilise grid capacity realisable by 2030 in totality, most options require the award of greater capacity in ORESS 2 than is realisable by 2030, and establishing reserve projects on grid orders of merit, possibly grid region.

- a. What are your views on grid orders of merit? How best could reserve lists be established in a robust manner that does not give rise to legitimate expectations by reserve projects?

 Inis is aligned with the WEI response that reserve lists should not be established as part of Phase 2.
- b. How should grid orders of merit be established? Is using ORESS 2 bidding order, possibly by grid node/region, an appropriate methodology?

Inis would propose to focus on ORESS-2 bid levels and the degree of development consent a project has received.

A potential methodology would be to create an auction for 'reserve project' position—analogous to the capacity markets—where a project is bidding for its place to provide such reserve capacity. However, this could create a time and delivery risk as the auction is being designed and run.

c. What obligations should be placed on reserve projects and what, if any, compensation should be provided?

A project may need to be entitled to some degree of compensation analogous to the capacity market, in that the project's developer would be being asked to spend development stage capital with no guarantee of buildout. Such a project should be entitled to recoup some defined amount of the necessary spend that the developer was required to make in order to remain as a reserve project.

In addition, it is possible that projects would need additional time in order to deliver to commercial operations date, and this may run past the end of 2030 deadline. Any additional time allowances would need to be reasonable.

- d. How should reserve projects be serviced so that they can readily progress if required? Inis is not currently proposing a strategy to service reserve projects
- e. How should reserve projects be held to the terms of their ORESS 2 offer?

 There should be some potential for indexation allowance on bids for higher costs due to an unknown freeze period. However, it would be important that such an indexation is in keeping with the original list of projects, so as not to offer an advantage to the reserve projects.

Question 9 - Consultation Response

Option D outlines an auction with mutually exclusive offers and multiple bidders specifying the same MAC area and/or connection point allowing multiple bidders to specify the same MAC area and/or grid node/region and using ORESS 2 results to allocate the MAC area and/or grid node/region capacity.

a. What are your views on the feasibility of this option? What are your views on the feasibility of solving the auction using an optimisation approach?
 Inis is aligned with WEI and does not agree that this is a feasible option, given the potential risk that additional complexity would be introduced into the Offshore process.

Question 10 – Consultation Responses

Hybrid grid connections are defined in this paper as single grid connections which facilitate the connection of both an existing or proposed thermal generation plant and a proposed offshore wind project.

a. Do you support the facilitation of such connections, as defined? Why?
 As currently defined, Inis believes that it is too early to consult on the facilitation of hybrid connections for Phase 2 projects in this consultation. Rather, the facilitation of such hybrid connections should be done in consultation with Eirgrid, CRU and SEM following the awarding of



Phase 2 MACs. To include consultation on this topic in the Phase 2 consultation assumes that all necessary regulatory changes have been made to facilitate these connections. More details on the reasoning for this are detailed below.

Three primary causes for concern exist:

- (1) Regulatory uncertainties will not be resolved by the time of the ORESS-2 auction. Action 125 of the Climate Action Plan² has a policy decision to be made in Q1 2023 by the CRU related to "trading of Maximum Export Capacity (MEC) behind a single connection point that enables Hybrid connections". A decision in relation to the Phase 2 process is anticipated in Q3 2022. There is a mismatch here, as the legislation needed to allow hybrid connections will not have been made in advance of the Phase 2 consultation decision. Furthermore, any decision relating to Action 125 in 2020 would be subject to implementation practicalities unlikely to be completed before 2025.
- (2) State Aid and Competition issues. The new Guidelines on State aid for climate, environmental protection and energy ('CEEAG') states: "The Commission will therefore also verify that the aid measure does not stimulate or prolong the consumption of fossil-based fuels and energy." Prolonging the consumption of fossil-based fuels and energy is the direct consequence of these Hybrid proposals. In addition, issues relating to 'Double State Aid' could arise in the interaction of CRM/DS3 revenues on thermal plant and ORESS revenues on Offshore wind projects sharing the same connection.
- (3) **Hybrid Sites may have an Undefined Connection Point to the TSO's Grid.** The recent Policy Statement on the Framework for Ireland's Offshore Electricity Transmission System has noted that the offshore transmission assets will revert to EirGrid's ownership. Existing conventional generation sites have a connection point on-land, meaning that either a) a single site will be non-contiguous with two separate connection points divided by the transmission system's assets, or b) the above Policy Statement needs to be revisited.

While introduction of hybrid sites may appear to deliver an opportunity for cost saving, the degree of that cost saving (if any) will be unclear. There is material regulatory uncertainty around each of the following: the technical grid code requirements for such a hybrid connection; the potential uncertainty on connection costs until the rules are robustly understood; and ongoing operational requirements of the sharing of the connection between the renewable and the conventional asset.

If a party, following receipt of MAC, wishes to explore with the TSO the potential for altering its connection to such a hybrid approach (be it with a large demand user that is also connected to the Grid, storage, other onshore renewable generator, synchronous compensator, or indeed a fossil fuel thermal generator) within the context of a corporate PPA, we believe such innovation should be allowed. However, this should only come after the primary connection as an offshore wind farm has been allocated and built under existing grid connection frameworks.

- Are you aware of any other jurisdictions where such connections are permitted? Describe how hybrid connections are treated from a technical and regulatory perspective in these jurisdictions.
 Inis is not familiar with whether such connections are permitted in other jurisdictions, and therefore if they are, how they might be facilitated.
- c. Are there potentially unintended consequences associated with permitting hybrid grid connections, such as potential impact on grid system services provided by the associated thermal plant or potential impacts on the reliability of the thermal plant?

² https://assets.gov.ie/207876/ab5e4b34-e381-4ee7-acf3-1e59e1a1b57d.pdf



Inis has been advised that the following unintended consequences could arise (some of which have been mentioned above):

- (1) Conventional generation is currently receiving payments under the Capacity Remuneration Mechanism (CRM), while Offshore Wind would receive payments under ORESS. These are 2 distinct pots of support, and issues associated with 'Double State Aid' are currently prohibited
- (2) Eirgrid currently operate a 'central dispatch regime', which needs to be allocated 36 hours in advance of delivery. The interaction between intermittent wind and conventional thermal could create significant modelling complexity in the dispatch and scheduling of the conventional asset for energy, for example:
 - i. Due to the central dispatch regime, a combined cycle generator which can operate in open cycle mode would need to declare that different technical capability hours in advance of real-time to be scheduled appropriately within the long-term schedule.
 - ii. The scheduling of these most-likely aging thermal assets has a direct bearing on their utility for delivery of DS3 and System Services.
- (3) Generator Transmission Use of System Charging, with two separate connection points to the Grid;
- (4) Determination of firm access, with addition of new connection point on a non-firm basis to an already firm generator connection.
- d. How should proposed projects with hybrid connections be treated so as not to distort competition or afford undue competitive advantage to the incumbent owners and operators of the associated thermal generators?

Particularly under Option B, which is the preferred option, the potential for a Hybrid connection should not afford any prioritisation under the MAC process under the Grid assessment criterion.

Inis believe that the inclusion of such generators in the Phase 2 and ORESS 2 process could lead to significant delays due to the uncertain regulatory environment, which is highly unlikely to be resolved, let alone implemented in detail, by the time of either process. Correspondingly, for all the above reasons, should the wider industry in time facilitate Hybrid connections (or should a project with MAC choose to proceed with a Hybrid connection), while it may not be suitable for inclusion in the ORESS 2, it may be appropriate for the Enduring Regime.

e. Do you support the facilitation of such connections, if the definition was adjusted to, e.g. an existing or proposed onshore battery, solar or other generator?

Inis would potentially support a wider definition of hybrid connections, if this resulted in both an optimal use of the existing grid network and a fair and equitable treatment of all potential hybrid generators—both new and proposed. However, this could appear more appropriate for the Enduring regime, rather than Phase 2, given the complications associated with regulation, legislation, State aid and dispatch.

Question 11 – Consultation Responses

Should any special allowances for innovation technologies be included in the Phase Two process?

a. What technologies should be provided with special allowances and why?

Inis would propose to widen the range of innovations to include social and financial aspects that have been used in other markets to increase widespread community support and engagement. These innovations would have the goal of creating more opportunity for coastal communities to get involved in the growth of offshore wind as a valuable indigenous industry for Ireland and could involve novel forms of engagement, investment, community ownership or otherwise.

Irish energy policy has been consistent for a long time on the importance of involving Irish Citizens in the energy transformation that is required in the coming decades to enable Ireland to realise its potential as a low carbon, inclusive, competitive, and secure energy society.



Inis is aligned with the Climate Action Plan 2021 when it says: "The impact of climate change will be felt by every individual, household, and community in Ireland and there is now a high level of awareness and understanding of this. Community investment and participation in renewable energy projects, as well as community benefit schemes, will help ensure fairness in the transition to a zerocarbon power system."

It is widely acknowledged, in the market and by Government, that Ireland can only achieve its 80% RES-E target with a functioning offshore wind sector that is able to deliver the turbines at sea and deliver associated grid infrastructure and services (supply chains, port infra) on land. The scale of this new infrastructure, which will entail investment of billions of euros, is unlikely to be delivered without support from communities. Achieving decarbonisation of the electricity sector will not be possible without the social licence given by local communities, making it vital that to bring them with us on the energy transition.

Inis is committed to engaging Irish Citizens and its communities as it develops offshore wind projects in Ireland. Inis believes that DECC should encourage and enable this approach to be adopted by the emerging offshore wind industry to secure its long-term success.

In addition, and in terms of specific technologies, the challenge will be to find a way to facilitate those that may assist in maximally utilising grid connections or increasing the production of renewable energies, while not also additionally burdening the consumer with a higher cost for this electricity.

For example, there is an emerging industry around underwater compressed air storage using the waters own pressure as a means to provide pressure. While this would likely be installed behind the meter, it could also offer potential as a standalone technology that could connect to a number of wind farms. An optimal application of grid charges to facilitate the efficient use of stored energy could enhance this potential.

- b. What allowances should be made? At what stage(s) of the Phase Two process? Should capacity be reserved in the MAC and ORESS processes for any of these technologies? Inis believes that Phase 2 offshore wind projects should be technology neutral—ie all technologies are competing for the same MAC on the same timelines. So, while innovations should be considered as part of the competitive process, capacity should not be reserved in the MAC and ORESS process for these technologies.
- c. Should these types of projects also be required to deliver by 2030? Inis believe that all offshore wind projects should be required to deliver by 2030. Innovations that facilitate in this delivery should be considered.

d.

What level of offshore wind capacity could be deployed before and after 2030 that does not depend on the Irish grid for offtake? i.e. generation that is instead utilised for non-grid offtakes such as green fuel generation or export by cable to another jurisdiction? Inis is aligned with WEI that there is significant opportunity when it comes to non-grid offtakes such as hydrogen, interconnectors, and private wire. However, this question should be answered following significant analysis by industry experts, and Inis would recommend that the department or industry carry out this study.