SUBMISSION IN RESPONSE TO THE OFFSHORE WIND PHASE TWO CONSULTATION DOCUMENT DECEMBER 2021 (THE "CONSULTATION DOCUMENT") DATED 9 MARCH 2022

We have responded to the questions set out in the Consultation Document below. Tethra's responses to the questions are in blue.

As a general opening comment, and one which we feel is of paramount importance for Phase 2 consideration, is the necessity to include offshore floating technology within the wider application of Phase 2, and not merely as a sub-category under the umbrella of 'Innovation'. The reality is that the technology in this area is being developed at such a rapid pace that what may be considered in the Irish context today as innovative technology is fast becoming commonplace or preferred technology in other parts of the world. It is therefore crucial that fixed bottom turbines are not preferred over floating technology at this stage while a planning framework is being developed, which by its very nature, must be forward thinking.

The security of our energy supply is at its greatest risk. Today, the ambition needs to be the provision of a framework that enables the development of offshore wind that is going to mirror, insofar as it can, base load energy generation. We feel it would be a grave mistake to pass over the opportunity that exists now to make provision for the best available technology and future technology which may ensure the security of offshore wind generation.

To facilitate the constant technological progressions, the Phase 2 MAC application process needs to cater for floating technology where a developer can demonstrate it can comply with the MAC conditions and can deliver in advance of the 2030 deadline.

To not include floating technology in Phase 2 now would, in our opinion, lead to a scenario where the Irish offshore energy framework is in a constant state of catch up, as well as causing an unnecessary intensification of activity in the near shore area, which is an unbalanced approach to marine planning.

Pilot floating projects have already been successfully delivered in neighboring jurisdictions. A prime example of the immense potential offshore floating technology offers is Hywind Scotland, which is the world's first commercial wind farm using floating wind turbines, situated 29 kilometres off Peterhead, Scotland. Floating turbines have the potential to be amongst the most environmentally friendly and best performing projects. We have set out below a selection of the advantages offered by floating technology should it be included in Phase 2. We believe the following factors will in fact increase the viable deliverability of floating projects:

- floating technology is very much in compliance with the objectives of the National Marine Planning Framework as well as with EU guidelines;

- installation of floating turbines is less environmentally impactful than the installation of fixed foundations;
- floating projects generally face less resistance from local communities, in particular fishing communities, than near shore projects and reduce the inevitable negative visual impact on nearshore marine space usage such as tourism and leisure;
- floating projects are environmentally appropriate as they reduce noise during installation and use to the fullest extent possible the local marine supply chain given that floating turbines are built at port and floated to the wind farm site;
- floating turbines have a reduced impact on marine biodiversity as they involve a more gentle installation that reduces the sediment distribution in the water column protecting the integrity of shellfish grounds in close proximity; and
- the positioning of floating turbines further offshore increases the potential scale and capacity factor of the wind farms which increases consistency. Being further offshore also affords the opportunity to install more elevated structures, thus achieving a much higher capacity factor.

Offshore wind projects need to be able to avail of the most cost efficient and robust infrastructure and so innovation and new technology should be embraced within Phase 2. Our grid capacity 'Shaping our Islands Future' limits the energy generation of offshore wind however alternatives to those projects should not be discouraged from applying for a MAC and so should run in parallel to the proposed options. Importantly, off grid solutions should not be time bound as with those projects consistent with Eirgrid's roadmap.

CONSULTATION DOCUMENT QUESTIONS AND TETHRA'S RESPONSES

1. Which is your **preferred option** and why of:
a. The above options?
b. The above options, variations of same, and other possible options within the parameters outlined in this paper, particularly sections 3 and 4?

On the basis of our observations in respect of the need for the inclusion of floating technology in Phase 2, in our opinion, none of the current proposed options are preferable.

2. 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?

We believe the security should be calculated in a manner consistent with international standards while remaining mindful of the need to ensure security of supply and reduce risk posed to current developers in the Irish offshore industry who have already invested into viable Irish projects. A similar fee to that required of Phase 1 projects is, in our opinion, appropriate.

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? Under what terms should this security be drawn down?

Post issue of a MAC with a reasonable timeframe being 12 months in the event that the developer has not made its application for development permission. If a developer has applied to ABP then this process should be allowed to run and bonds should not be drawn down. If development permission is

then refused again this is outside of the control of the developer and a bond should not be drawn. This timeframe should be clearly outlined for developers in advance of granting of a MAC.

c. 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?

Our view is that there are two separate entities managing the processes of MAC and ORESS. Given there are two possible routes to market, being ORESS and/or a corporate PPA, the bond should not be rolled over.

d. What other terms should apply to this security?

This security should fall away in the event that the applicant is granted or refused development permission.

As a general comment, the requirement to align with grid capacity as identified by Shaping Our Islands Future, or EirGrid's latest roadmap, to be eligible to apply for a MAC is unfair in that in does not take into account corporate PPAs, viable 'off grid' projects and projects that are not currently fixed bottom turbines. It is our opinion that alignment with the roadmap should not be a precondition for MAC application eligibility but rather should be a consideration for a separate grid connection policy, ensuring equal access to the MAC application process for all viable projects with pre-2030 deliverability potential.

In addition, the proposed expiry of a MAC in advance of the Enduring Regime would exert further pressure on projects being developed under what is already a tight timeframe under Phase 2. At a practical level, it may force projects to accept prices for services and supplies that are less than competitive thereby increasing the overall cost of a project and ultimately the end cost to the consumer.

3. 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?

There is no need to have a MAC auction unless two applications overlap. If an applicant can demonstrate clearly that they have progressed their projects sufficiently e.g. survey works undertaken, project teams established and stakeholder engagement underway, then this indicates the serious intentions of the developer and should set projects ahead of others. This approach is consistent with Phase 1 and will mitigate against an overwhelming number of applicants for a Phase 2 MAC.

As noted above, the MAC application process needs to be separate to the grid connection process and capacity auction. MARA needs to ensure projects focused on best practice can access the MAC application process, once an applicant is deemed to fit the correct criteria. However, it should not be within MARA's remit to determine whether an applicant should be given grid capacity, which is the responsibility of SEMO. Again, innovative technologies should also form a large part of the consideration under this proposed option.

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

As above, there is no need to have a MAC auction unless two applications overlap.

c. Should a deployment bond be maintained under this option? Why, or why not?

Yes, it should be treated in the same manner as set out under option 1.

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

a. Is this the correct approach? Why?

If a Phase 1 project has been unsuccessful in securing its development permission within a defined timeline then there should be no need to retain a MAC.

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?

Projects with improved technology will continually present. If a project is permitted to retain its MAC to the exclusion of other projects then this will not result in the best outcome for the sector, state or consumers. This however should be on a case by case basis and only be implemented where there is a further competitive application in the same location.

c. If Option D was selected would this require unsuccessful Phase One projects to relinquish their MAC before ORESS2? 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.

In respect of Option C and D, we believe that the proposed sequencing of the ORESS competition happening first would lead to there being no clear definition of where the grid connection and capacity auction end and where the MAC process begins. This approach risks undermining progression of projects that have already spent considerable money on surveys. Options C and D are also the opposite in sequencing of how Phase 1 projects have been treated giving Phase 1 projects an unfair commercial advantage.

We do not believe Phase One projects should be given a preference such as a right of first refusal as they are already at an arguably unfair advantage compared to Phase Two projects in that they have the experience of having bid in the ORESS1 auction.

5. 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?

At a minimum any projects that are off grid or hybrid projects (capable of connecting to grid and producing hydrogen) should be afforded the opportunity to retain the MAC on the portion that relates to hydrogen production or the off-grid solution. This makes even more sense in circumstances where a development permission has been granted.

b. Would this approach incentivise deployment and/or discourage hoarding of the maritime space?

Possibly, but it may also create increased risk to investment and a balance should be sought.

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

Yes, it would discourage projects with poor pre-2030 deliverability.

6. 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?

The grid offers should be awarded to projects that achieve a development permission rather than being tied to auction results. This approach is consistent with grid connection onshore and enables projects to trade energy merchant in the market.

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?

Yes, but in addition the project should be permitted to trade the energy merchant in the market.

7. 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?
b. Should any nodes or regions be reserved for non-ORESS routes to market?
No comment.

8. 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?
b. How should grid orders of merit be established? Is using ORESS 2 bidding order, possibly by grid node/region, an appropriate methodology?
c. What obligations should be placed on reserve projects and what, if any, compensation should be provided?
d. How should reserve projects be serviced so that they can readily progress if required?
e. How should reserve projects be held to the terms of their ORESS 2 offer?
No comment.

9. 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?
No comment.

10. 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?
b. 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.
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?
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?

The problem we foresee here is that those generators with existing grid connection will benefit from hybrid connection creating unfair competition.

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?

11. 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?

Off-grid should be treated separately and in parallel with Phase 2 projects as they do not take up grid capacity but support security of supply.

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?

Our suggestion is that all projects should consistently be selected in ORESS based on their energy price. The innovative projects seeking to connect to grid should then have a defined multiplier (technology dependent) to reflect the potentially higher capital cost.

c. Should these types of projects also be required to deliver by 2030?

While these projects should be encouraged and supported to be delivered in advance of 2030, allowances should be made for supply chain delays. However, a project should be responsible for setting out clear timelines.

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?

We believe that this should not be capped. Projects that can demonstrate their deliverability before 2030 in this category should be afforded the opportunity to access a MAC but with a longstop date of 2040. These projects will provide an accelerated timeline to meet Irelands energy goals and also provide for security of supply and export of energy as required.