



Energy for
generations

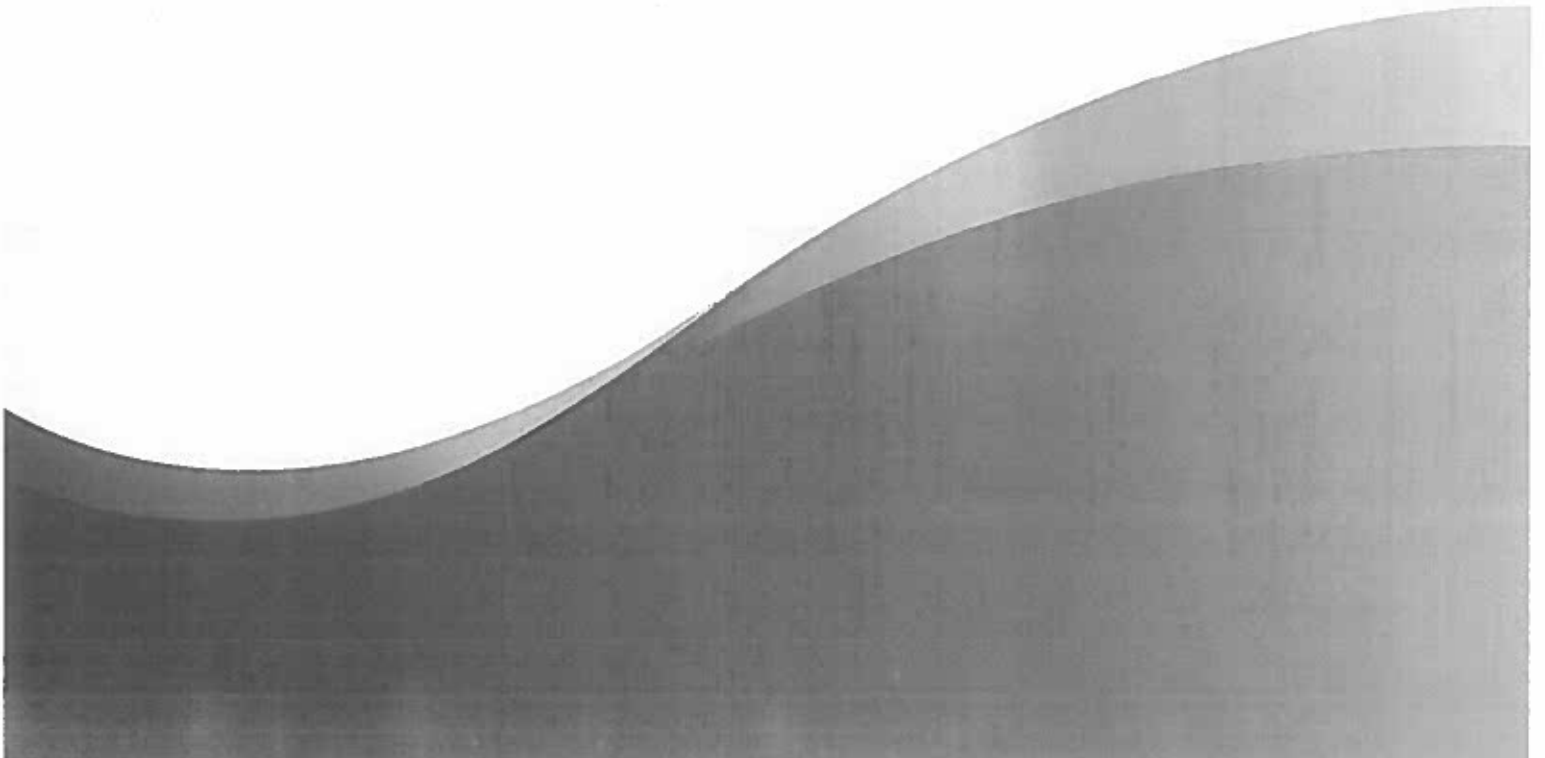


Energy for
generations

Maritime Area Consent (MAC) Assessment for Phase One Projects

18th of February 2022

ESB Generation & Trading





Energy for
generations

Contents

1. Executive Summary	3
2. Introduction	5
2.1 Climate Action and role of Offshore Wind	5
2.2 ESB's Offshore Wind Vision	5
3. Consultation questions	6
3.1 MAC Technical Capability Assessment	6
3.2 MAC Financial Capability Assessment	7
3.3 Public Interest.....	11
3.4 Additional (non-assessment) areas of the MAC regime	11
4. Additional Comments.....	14
4.1 Innovation and security of supply criteria	14
4.2 Geographic boundaries of the proposed project	14



1. EXECUTIVE SUMMARY

ESB Generation and Trading (GT) welcomes the opportunity to respond to Maritime Area Consent Assessment for Phase One projects.

Ireland has committed to achieving net-zero emissions no later than 2050, and to deliver a 51% reduction in emissions by 2030 from a 2018 baseline. Renewable electricity will play a significant role in bringing these ambitions to fruition. The 2021 Climate Action Plan set out a target to provide up to 80% of demand through renewable generation by 2030. Offshore wind is anticipated to deliver a large proportion of this goal with the government also committing to a further target of at least 5GW of offshore wind by 2030.

The awarding of Maritime Area Consents signifies the first major step in the new marine planning process. The timely awarding of Maritime Area Consents will be essential in kick starting the industry. Any further delays to this process must be avoided to ensure that the first O-RESS auction can open later this year and allow projects to delivery as soon as possible, maximising their contribution in reducing the power sector emissions out to 2030. The energisation of these projects could prove instrumental in adhering to Ireland's legally binding carbon targets towards the end of the decade.

ESB in general agrees with the assessment criteria as set out in the consultation document and associated annexes. Offshore wind projects are major engineering projects that require large upfront capital with access to various technical and financial expertise. It critical that this assessment process can certify that the potential MAC holder has the adequate capability and track record to bring a project to fruition. This importance of this process to avoid speculative applications/O RESS auction bids is further heightened given that planning permission will not be a requirement to enter the first O RESS auction.

The pass/fail approach proposed is appropriate for Phase One projects were there is no competing applications. ESB believes however this will need to move to a competitive process for Phase 2. We have included recommendations in this response that would enhance the process for Phase 1 along with some recommendations to improve the process for Phase 2.

We outline the main recommendations for the process below

- **Technical Capability Assessment**

It is critical that the technical capability of the applicant can be established through this assessment to ensure that projects can be delivered and allow Ireland to meet its 2030 targets. In certain areas of experience, a large emphasis is placed on offshore wind



development. This could disadvantage Irish developers despite strong track record in other major energy infrastructure projects. This is out of step with similar process in other jurisdictions.

- **MAC Financial Capability Assessment**

The metrics are stringent and require participating parties to demonstrate a strong balance sheet at a relatively early stage in the development process. However, given the significant financial commitment associated with offshore wind projects such metrics are considered acceptable.

- **Levy framework**

An operational levy linked to annual revenue is considered the optimal method for charging projects under the MAC regime. The proposed operational Levy of 2% is in line with other jurisdictions and is deemed reasonable.

- **MAC duration**

The proposed duration of 30 years for the MAC is too short and completely inconsistent with the lease terms observed in other jurisdictions. We request that the Department give strong consideration to standardising the MAC term to a period of 60 years. This is consistent with best practice seen in other international markets.

- **Innovation and Security of Supply Criteria**

Although noted that it will not form part of the technical assessment criteria for the Relevant Projects, we agree that this would be a very important criteria to promote projects that are taking novel approaches to support decarbonisation targets for Phase 2. We also recommend that the Department also consider security of supply as a criterion for the Phase 2 MAC process. Projects that can demonstrate a capacity to generate green hydrogen or facilitate novel storage solutions to help provide back up to Ireland's growing penetration of intermittent renewables should be awarded appropriately.

- **Geographical boundaries**

Consistent and equal treatment of projects in establishing their development boundaries must be upheld to ensure a fair First O-RESS auction. We propose an average power density requirement to be applied to the NISA project (which did not apply for a foreshore lease under the terms of the Foreshore Act) to ensure a level playing field between projects. We also recommend that the project boundary should remain within the 12 nautical mile limit, a limit that was imposed on the rest of the relevant projects.



2. INTRODUCTION

2.1 Climate Action and role of Offshore Wind

Developing a strong and sustainable Irish offshore wind sector provides a rare opportunity for the State to deliver on a wide range of central governmental policies, from delivering on carbon reductions ambitions, improved energy security, opportunity for export, to job and supply chain creation, and regional development.

Ireland's climate action plans are largely hinged on the nation's ability to rapidly scale up renewable electricity generation, a considerable proportion of which will be offshore wind. This will take a strong concerted effort to streamline processes and align key policies, including a robust Marine Area Consent Assessment process, the focus of this consultation. The opportunity for further onshore wind development in Ireland is constrained as suitable sites are not in plentiful supply, leaving offshore wind as the remaining renewable generation technology of significant scale. As such, offshore wind will play a central role in realising Ireland's ambitions and delivering on the up to 80% RES-E target by 2030. This was clearly appreciated within Ireland's Climate Action Plan, where a target of at least 5 GW of offshore wind was set out.

2.2 ESB's Offshore Wind Vision

We believe that the development of offshore wind at scale is key to tackling the climate emergency with the potential not only to meet national but growing international demand for clean power. ESB GT is demonstrating its commitment to support this objective by developing the Oriel Wind farm Project and the nearby Clogherhead project off the coast of Co. Louth. Oriel is a designated "Relevant Project" which means that will be eligible in competing in the O RESS1 auction. ESB GT is also progressing plans for five different offshore wind farms in Irish waters all around the coast, including floating offshore wind farms off the south and west coasts.

We also believe that we can deliver a greater ambition by utilising our existing grid connections and generating plants to further the aim of reducing emissions. This vision and capability can be facilitated through various market and regulatory changes to allow hybrid offshore connections to participate in the Energy Market. Such an approach would drive greater competition and better use of existing infrastructure, both leading to the reduction of cost to the consumer.

ESB GT are developing both fixed and floating offshore wind farms, both of which we believe will play a role in delivering the urgent 2030 ORE target. The Programme for Government also set out a long-term plan to take advantage of a potential of at least 30GW of floating wind. A separate pot should be



Energy for
generations

allocated to floating offshore wind farm in future auctions given the potential of this technology in allowing Ireland to realise its full offshore wind potential across its coastline and make better use of the current grid infrastructure.

ESB proposes to transform Moneypoint in Co. Clare, a 915MW coal-fired power station, into a Green Energy Hub (Green Atlantic at Moneypoint) with an ambitious investment plan to deliver huge benefits to the region. Moneypoint will become a centre for the construction and assembly of floating wind turbines. A deep-water port already exists at the site, making it an ideal staging ground for the construction of the wind farm. The development of Moneypoint will support the wider plans of Shannon-Foynes port and help make the Shannon Estuary a focal point for the offshore wind industry in Europe.

We welcome the urgency injected by the most recent Climate Action Plan to scale up this industry through the target to develop at least 5GW of offshore wind. We also welcome the commitment to proposals that are more long-term, and which could provide strong economic growth for Ireland.

3. CONSULTATION QUESTIONS

3.1 MAC Technical Capability Assessment

3.1.1 To what extent do you consider that the Guidance sets out a technical capability assessment process that is effective, efficient, and transparent? Are there any specific aspects of the Guidance that you consider require further clarification?

ESB believes the technical capability assessment process is effective, efficient, and transparent.

Clarification is required on the form and breadth of documentation that is expected to accompany the applications. Any specific documents that are deemed essential to the application (i.e., without which the application will not be successful) should be specified.

It is standard practice in the industry for Companies, Consortium or Joint Ventures to incorporate a subsidiary SPV to advance the project. For the avoidance of doubt, it should be acknowledged that the projects and professional experience cited in Appendices A & B will not (are not expected to) have been carried out by this company.

3.1.2 Do you consider the criteria to be appropriate? What alternative criteria, if any, would you suggest?

While experience in 'renewable energy development' is permissible in 4.2 (professional work experience for members of the project team), it would appear that in 4.1 (corporate experience), only



offshore wind experience is deemed relevant. The skills and experience accrued in the development of other major energy infrastructure projects are transferrable to the offshore wind sector and that these projects also merit consideration. It should be noted that experience from other major energy infrastructure projects was considered through the Scotwind process.

The expectation of professional experience in the order of 10 years of offshore wind experience seems to be an unreasonably high bar for what is a nascent sector in Ireland, and it may discount many Irish developers.

3.1.3 Do you consider the templates sufficiently clear to understand the specific information being requested in each case?

It should be acknowledged that at this early phase in the project lifecycle, timelines for key milestones are purely indicative. Clarification is needed as to why contact details are required, and assurance given that this data will be protected.

We believe the process could be improved by DECC affording the applicant the opportunity (within a defined period) to address an omission. In section 3.1, *"In cases where information is missing, the Relevant Authority reserves the right not to accept the application"*. This should be expanded to provide an opportunity for further information or clarification to be provided by the applicant. Even with legal advice, an applicant's interpretations of the requirements may differ from that of the landlord. The evaluation of Scotwind bids included a 'Clarification' process whereby some applicants were asked to clarify / provide further information on sections of their applications within a 5-day window. As it stands, the omission of some vital information (for whatever reason) could render a MAC application void on arrival.

3.2 MAC Financial Capability Assessment

3.2.1 To what extent do you consider that the Guidance sets out a financial viability assessment process that is effective, efficient, and transparent? Are there any specific aspects of the Guidance that you consider requires further clarification?

Given the pass/fail nature of the financial viability assessment, ESB would consider the process effective, efficient and transparent. Some ability to provide some qualitative analysis alongside exceptional items in a particular financial year might prove useful. The provision in section 2.1 of Annex 2 whereby the authority may seek additional information should a party fail the financial viability test is welcome.

Clarification is required around the following point to understand potential triggers of the financial assessment process.



- Will there be a materiality threshold in relation to, for example, sale of shares in a project SPV holding a MAC that would trigger a reassessment?

3.2.2 Do you consider that the Guidance is sufficiently clear to understand which parties within a consortium need to submit documentation for assessment?

The guidance is clear in terms of the parties required to submit information. It is understood by ESB that a Relevant Person will be financially assessed based on its pro rata commitment to the project. In practice the MAC applicant will be the project SPV with the parent company entities as Supporting Entities being subject to Financial Viability Assessment based on their percentage ownership of the project SPV.

It should be noted that ESB does not believe that a joint and several agreement between consortium members is viable given the scale of the potential construction funding costs should a project progress to this stage following receipt of a MAC. Each consortium member will be required under the respective consortium agreement to provide its proportionate share of project funding, however a joint and several agreement is very unlikely at MAC application stage given the uncertainty around development permission and a potential route to market.

3.2.3 Are there any specific aspects of the pro-forma Supporting Entity Guarantee that would prevent you from undertaking your ORE Project(s)? To what extent do you consider the Relevant Authority should be able to recover costs under the guarantee?

The general principle of the Supporting Entity Guarantee appears reasonable however some clarification is required.

- It is not clear if the guarantee relates to costs associated with the MAC or the Total Financial Obligations of the project as defined. ESB would consider a guarantee of MAC related costs appropriate. Supporting the total (potential) project outlay via a parent company guarantee would not be feasible. We have seen guarantees put in place to cover equity contributions of parent entities, but these have been required under project finance packages and Financial Close under a project finance debt package could not be achieved without a subsidy award to stabilise revenue.
- At what point would the Supporting Entity Guarantee be put in place? At the point of application or following the award of the MAC to the relevant party? Provision of the Supporting Entity guarantee within a defined period following the receipt of the MAC would seem appropriate e.g., on receipt of ORESS subsidy award



- 3.2.4 Do you consider the criteria to be appropriate? What alternative criteria, if any, would you suggest?
- 3.2.5 Are there any quantitative metrics within the criteria that you consider should change? For example, the current and gearing ratios have been deliberately set at levels that would identify companies at significant risk of financial distress. Should these metrics be more stringent?
- 3.2.6 The net assets and cash criteria assess the financial capacity of Relevant Persons to deliver ORE Projects at scale. To what extent do you consider these metrics will limit market competition, including from new entrants?

The metrics are stringent and require participating parties to demonstrate a strong balance sheet at a relatively early stage in the development process. However, given the significant financial commitment associated with offshore wind projects such metrics are considered acceptable. Please see our comments on individual metrics below.

Going concern status, without material uncertainty (subject to adequate mitigation)

Appropriate – no further comment

Nets assets greater than €[50] million

Appropriate – No further comment

A current ratio greater than [0.65]

Appropriate – No Further Comment

Gearing of [90]% or less.

A proposed Gearing Ratio maximum of 90% appears relatively high and would generally not be characteristic of a reputable entity (subject to the characteristic of that entity's cash flows). We would propose that the maximum level be set at 80% (while there should be no such prescriptive limit when it comes to SPV that houses a ORE and has been financed through non-recourse project finance).

A cash cover ratio of greater than [1.0]X (i.e. cash resources greater than the forthcoming three years of the Relevant Person's commitments, across all of its ORE projects in Ireland

A cash cover ratio which looks forward three years could see the inclusion of construction costs in this initial Cash Cover Ratio assessment. Project Finance will likely be the principal form of financing for up to 90% of the value of these projects. However, achieving access to committed funds under this option requires well developed projects with key milestones achieved such as planning, grid connection and a route to market. Committed financing will also likely not be available from balance sheet sources for the same reasons. As such, there may be cash cover shortfall if viewed on a three year look forward basis at the date of MAC application. We would suggest that a Relevant Person indicate their preferred

Maritime Area Consent (MAC) Assessment for Phase One Projects



funding method in the same way as currently required under RESS auction rules, with a Director declaration or through provision of indicative (non-binding) letters of support from potential funders (see Declaration of Financeability), possibly coupled with provision of credentials on reaching Financial Close on large scale project financings.

A separate cash cover ratio for the period up to Financial close could also be assessed providing comfort around the equity injections and early development expenditure of Supporting entities.

Cash resources greater than €[50] million

Appropriate – No Further Comment

Turnover greater than €[50] million per annum (in each of the prior two years).

Appropriate – No Further Comment

3.2.7 Do you consider that the outcome of the financial viability assessment is adequately clear?

3.2.8 Do you consider that the Relevant Authority has too much / too little flexibility to ensure that Relevant Persons with the financial capability to deliver ORE Projects pass the financial viability assessment?

The outcome of the Financial Viability assessment is clear based on pass/ fail nature of the financial metrics. Given the complex nature of offshore wind projects and the significant development investment incurred by Supporting Entities, flexibility to allow additional qualitative analysis around financial metrics by the Regulatory Authority is supported.

3.2.9 Do you consider that the financing arrangements listed in the Guidance are appropriate? Should any other financing arrangements be identified in the Guidance?

The financing arrangements listed appear appropriate but should not be considered exhaustive and as acknowledged by the consultation paper other innovative forms of financing should be considered acceptable during the MAC application process.

It is not clear however if the Specific Financing Arrangements listed in the guidance are intended to be considered in meeting any/all Financial Viability Criteria or are intended only to be considered in the funding of Total Outstanding Financial Commitment.

Also, the reference to “an executed loan agreement” under the Loan Arrangements section is not viable as Financial Close could not be achieved, and a Facilities Agreement under a project finance debt package could not be executed until planning permission has been –received, a route to market sourced and a significant amount of project de-risking has occurred through engagement with construction and operation service providers.



3.2.10 Do you consider that the other financing arrangements provide adequate flexibility for companies to demonstrate their ability to demonstrate their financial viability in the future? For example, financial close for ORE Projects may occur several years after the grant of any MAC. To what extent is the timing of the financial viability assessment problematic?

Please see our detailed comments on Cash flow Cover which address the issue of financial close.

3.3 Public Interest

3.3.1 Are there any other public interest considerations which the Department should consider at MAC application stage?

We welcome the definition of public interest provided by the Department. We strongly support the idea that sustainability, equality and inclusivity practices should be given due consideration as part of a MAC application for Phase 1 projects. Furthermore, it is an area that we consider should be subject to weighted scoring by MARA in relation to Phase 2 MAC applications.

We recommend that the Department also considers the principle of security of supply in the context of Phase 2 MAC applications. Projects that can demonstrate a capacity to generate green hydrogen or facilitate novel storage solutions should be awarded appropriately.

3.4 Additional (non-assessment) areas of the MAC regime

3.4.1 The Department invites feedback on the below proposed levy model for Relevant Projects:

- Operational Levy: 2% Gross Revenue/annum
- Development Levy: €20,000/km²/annum

An operational levy linked to annual revenue is considered the optimal method for charging projects under the MAC regime. A percentage of revenue allows all MAC stakeholders to share in the upside of strong performance in any given year. An area-based levy arrangement would expose projects to annual fluctuations in wind yield which would require a risk premium to be applied.

The proposed operational Levy of 2% is in line with other jurisdictions and is deemed reasonable.

The proposed Development levy of €20,000/km²/annum appears high given the project still requires a grid connection, planning and a route to market to be commercially viable. For example, the average fee for an Agreement for Lease in the recent ScotWind offshore wind program was £100,000/km² for a 10-year period equating to approximately €12,000/km²/annum. ESB would deem a fee at this level appropriate.

Whilst not an issue for Phase One projects which are relatively mature, consideration should be given to the earlier stage of development of Phase 2 projects and projects under the enduring regime. An option to redefine the seabed area on which the development levy would be charged should be



available at a particular trigger point in the process –i.e., on the receipt of development permission and finalization of required seabed area. The seabed area to be released back could be capped at an appropriate level such as 10% of the original MAC award.

3.4.2 Which of the two options is the most appropriate for the Relevant Projects? Are there any other application fee models which would be more appropriate?

- Option 1: Charge no fee
- Option 2: Charge a handling fee based on the likely calculated workload in processing and assessing MAC applications

We believe that the most appropriate fee model is set out in Option 2 and involves the payment of a handling fee based on the likely calculated workload in processing MAC applications. There is an administrative cost associated with the consideration of each MAC application and it is reasonable to conclude that applicants should have to bear that cost. We suggest that this fee is set at an amount of €15,000.

3.4.3 Is two months a reasonable duration for the MAC application window? If not, how long should the Department keep the MAC submission window open for? Responses should be informed by the readiness of applicants to submit all information required at MAC application stage, as outlined in this consultation.

It is critically important that all applicants have sufficient time to consider the final assessment criteria to enable the required information to be collated appropriately. If the adopted criteria are published immediately prior to the opening of the application window then ESB is of the view that a period of two months is potentially insufficient for some or all of the applicants to make robust applications. A fairer arrangement would involve the publication of the final assessment criteria with the application window opening one month later. This period of advance notice would allow the necessary time for all applicants to carefully consider the extent of information required and make arrangements to put it in place.



3.4.4 Based on international practice, a period of thirty years is often cited as a common duration for maritime area consent (or equivalent authorisation). Is thirty years an appropriate duration for a MAC? Responses should have regard to:

- Time required to apply for other consents
- Time required to complete site investigatory works
- Procurement
- Supply chain considerations
- Construction time
- Reenergisation
- Decommissioning

The proposed duration of 30 years for the MAC is too short and completely inconsistent with the lease terms observed in other jurisdictions. We request that the Department give strong consideration to standardising the MAC term at a period of 60 years.

We expect it to take approximately 7-10 years for a project to move from the point of MAC award to commercial operation. Each phase of planning, securing a route to market, procurement, financing and construction all need to be concluded. When you subsequently consider the requirement at the end of the allocated term to decommission the project, an effective operational life of only 20 years is achieved.

We draw the attention of the Department to the World Bank's report entitled Key Factors for Successful Development of Offshore Wind in Emerging Markets which highlighted the significant importance attached to certainty of tenure, and the need for lease periods "to reflect project development and operation timescales". The report notes that in existing markets "leases are being issued to cover >50 years (up to 80 years), which can enable project life extension or repowering, allowing developers to plan beyond the current typical 25-year operating life of offshore wind turbines."

With respect to the typical 25-year operating lifetime, we would suggest that technology developments mean that this estimate is likely to already be low, with 35 years now possible. This is reflected in the World Bank report which notes "offshore wind project operating lives are now anticipated to be between 25 and 35 years".

A period of 30 years could, therefore, see projects having to decommission whilst equipment still potentially has a decade left in which it could continue to operate, something which would be hugely counter-productive to Ireland's decarbonisation aims and will push up costs. To fully transition our energy system and economy to net zero we need renewables to be cost effective. A 30-year MAC duration is unlikely to be conducive to this aim.



It is notable that the recent Scotwind process in the UK has provided a lease term of 60 years to successful applicants to take into account increased lifespans and the potential for repowering. The opportunity to repower will, in decades to come, be key to ensuring progress made in decarbonising the energy sector and economy is not lost and to ensure that the consumer will benefit from projects which can make use of existing infrastructure.

3.4.5 Are there any specific aspects of the assessment methodology that you consider requires further clarification?

4. ADDITIONAL COMMENTS

4.1 Innovation and security of supply criteria

ESB welcome the inclusion of an innovation criteria as stated below.

“Each MAC Applicant will provide a description of any novel and innovative measures they have undertaken which they consider has led to a reduced risk, reduction in programme delivery timeline or addresses specific challenges of delivering ORE projects in Ireland”

Although noted that it will not form part of the technical assessment criteria for the Relevant Projects, we agree that this would be a very important criteria to promote projects that are taking novel approaches to support decarbonisation targets.

As stated earlier in response to the consultation questions, we recommend that the Department also consider the principle of security of supply in the context of Phase 2 MAC applications. Projects that can demonstrate a capacity to generate green hydrogen or facilitate novel storage solutions to help provide back up to Ireland’s growing penetration of intermittent renewables should be awarded appropriately.

4.2 Geographic boundaries of the proposed project

We wish to highlight an inconsistency in relation to the treatment of one of the Phase 1 projects, namely North Irish Sea Array (NISA). NISA is the only project to qualify exclusively under Part (b) of the transitional protocol (offshore wind projects which have a valid connection agreement from Eirgrid or are confirmed by Eirgrid as eligible to be processed to receive a valid connection offer) although it should be noted that the Oriel project (of which ESB is a shareholder) qualified under both part (a) and part (b). As NISA is the only project not to have made an application for a foreshore lease under the terms of the Foreshore Act a question arises in relation to the applicable development boundary for this project. It appears to be the case that the NISA project boundary even extends beyond that which was identified in the foreshore licence application (Ref. FS007031) made in January 2020, in respect of an area extending to 227km², approximately. As outlined in the table below, this site area is far in excess of all the other Phase 1 projects and extended beyond the 12 nautical mile limits, an option



which was not available to other relevant Projects. As NISA is the least mature of any of the projects it seems particularly unfair that they have been awarded such a competitive advantage. In the circumstances, we respectfully suggest that a fair resolution would involve a reduction in the allowable development area for the NISA project to 50.5km² within the 12 nautical mile limit of the foreshore area (equates to the average power density for Phase 1 projects excluding NISA). We would ask the Department to give due consideration to this matter in the context of fair, consistent, and equal treatment of all projects.

Project	Area (km ²)	Projected MEC (MW)	Power Density (MW/km ²)
Oriel	28	350	12.5
NISA	227	500	2.2
Dublin Array	56	750	13.4
Codling	126	1,200	9.5
Arklow Bank	65	520	8
Sceirde Rock	29	400	13.8
Average density			9.9
Average density (excluding NISA)			11.4
NISA - fair area (allowable MEC/average P1 density)			50.5

