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FS007188 RWE_Response to Prescribed Body Observations

Dear [REDACTED]

Thank you for providing the submissions from the Prescribed Bodies in response to the consultation on Foreshore Licence Application, FS007188.

Please find attached RWE's current response to the matters raised in the Prescribed Body observations as received. The main observations made by each Prescribed Body have been reproduced in the attachment, in bold, italicised text, to indicate the specific points the response relates to. Please refer to the Prescribed Body submissions for the full text of their submissions.

Should the Department require any further clarifications we would be more than happy to provide additional information.

Yours sincerely

[REDACTED]
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Enc: Applicant's response to prescribed body observations.

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Applicant's response to Marine Institute observations, dated 14 December 2021

There are no licenced aquaculture sites within the proposed site investigation area on the Foreshore and therefore impacts on aquaculture are not considered likely.

There is commercial fishing activity within the proposed site investigation area on the Foreshore and therefore some interaction with fishing activity may occur. Notwithstanding this, it is noted that the applicant has appointed a Fisheries Liaison Officer (since 2019) who will engage with the fishing community in the area during investigations.

We note that the Marine Institute have confirmed that impacts on aquaculture are not considered likely. We recognise that there will be interaction with fishing activity during some of the proposed survey activities and confirm that the Fisheries Liaison Officer, who has been in place for the project since May 2019, will continue to be available to the fishing community to ensure effective communications during the planning and execution of the proposed surveys.

The NIS submitted identifies a number of risks to conservation features (e.g., marine mammals) likely to result from the proposed activity. As mitigation, a number of actions are suggested that should reduce the risk. Foremost among these is the use of marine mammal observers (MMO) during operations including a 'soft start' protocol. The MI is satisfied that such measures will mitigate any risk to marine mammals in the immediate area during the site investigations. However, it is advised that DHLGH identify any similar geophysical/geotechnical surveys that might be carried out along the eastern seaboard and ensure that they not coincide with this survey. Furthermore, in light of the intensive nature of the methodologies proposed, it would be important that DHLGH consider the cumulative effects of these activities in light of the

location and timing of similar activities along the East Coast and consider the likely longer term effects on marine mammals and biota, if any?

RWE acknowledge the Marine Institute's confirmation that the measures proposed, including the use of marine mammal observers (MMO) during operations including a 'soft start' protocol, will mitigate any risk to marine mammals in the immediate area during the site investigations. RWE note the Marine Institute's recommendation that consideration be given to the timing of similar geophysical/geotechnical surveys proposed off the east coast. Information to aid the Minister's assessment of the potential for effects of the proposed works to arise, in-combination with other plans and projects is provided in Section 4.3 of the Applicant's NIS, Annex F to the application, which concluded that there are no adverse effects upon the European Sites' integrity as a result of the in-combination proposed works.

Applicant's response to Development Applications Unit, Department of Housing, Local Government and Heritage observations, dated 16 December 2021

Nature Conservation

Potential interaction with marine mammals can be ameliorated by the application of "Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters" as outlined in Section 4.4 of the NIS supporting this application. National Parks & Wildlife Service request that utilisation of this guidance should be added as a condition of consent.

RWE note the response from the Department of Housing Local Government and Heritage pertaining to matters of nature conservation and reconfirm our commitment to implementing the DAHG, 2014 "Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters" in relation to the proposed geophysical acoustic surveys and geotechnical investigations, or updated related guidance as agreed with the National Parks and Wildlife Service (NPWS) if such should be published prior to the commissioning of the works.

Archaeology

It is not clear that due consideration has been given to the overall archaeological potential of the development area and in particular the high number of historically documented losses of ships which are recorded as having been wrecked in the development areas but have yet to be located.

While known and located wrecks are documented in detail in the MAA report, the assessment does not appear to deal with documented losses of vessels which have yet to be located.

The Archaeological Impact Assessment should address both known archaeological sites/receptors and also assess the impact that the works may have on potential archaeology such as documented losses.

There is also the potential for earlier wrecks to have occurred along the cable route or windfarm site, for which no documentation survives, and which await discovery.

The term marine archaeology receptors used within the Archaeological Report, Annex D of the application documents, includes:-

(a) Known receptors - for example, physical resources such as shipwrecks, aviation remains, archaeological sites, archaeological finds and material including pre-historic deposits and,

(b) Unknown receptors - such as documented losses or other archival documents and/or oral accounts of wrecking events recognised as of historical/ archaeological or cultural significance.

The Marine Archaeological Report, Annex D of the application documents takes into account all wrecks within the study area recorded in the Wreck Inventory of Ireland Database (WIID). Section 3.5, Wrecks, obstructions and documented losses, of the Marine Archaeological Report describes the high potential to find new wrecks within the Foreshore Licence area. The potential for wreck material from earlier periods, based on current archaeological understanding, is included in Section 3.4 Maritime activity.

As agreed during a meeting with the UAU on 13th January 2022 further information is provided in Appendix A to this response to demonstrate how the discussion of archaeological potential presented in Sections 3.4 and 3.5 of Annex D has influenced the archaeological impact statement and mitigation strategy.

It noted that known wreck sites will be avoided and exclusion zones will be established around them, which is welcomed. However, as indicated above, any number of wrecks or associated artefacts may lie waiting to be discovered in the Array area or along the proposed export cable routes.

Should this development proceed it is possible that intrusive seabed SI works will negatively impact on previously unrecorded/unlocated wrecks.

The mitigation measures should also be updated to reflect the impact of the works in areas of high archaeological potential, including on submerged landscape horizons. A list of all wrecks should be included in an appendix in the Marine Archaeology Assessment and this shall be resubmitted to the National Monuments Service for review.

In light of the above it is recommended that the Foreshore Unit request submission of an updated Underwater Archaeological Impact Assessment (UAIA) as further information. Once the Underwater Archaeology Unit, National Monuments Service, Department of Housing, Local Government and, Heritage reviews the updated archaeological assessment report, further recommendations will be issued with regard to potential further foreshore licence conditions.

The Marine Archaeology Report refers to both known and unknown receptors, the latter includes potential archaeology and documented losses not yet located. As noted above, additional information is provided in Appendix A to this response, to demonstrate how the discussion of archaeological potential presented in Sections 3.4 and 3.5 of Annex D has influenced the archaeological impact statement and mitigation strategy. Additional information regarding documented losses is also provided in Appendix A.

Clarifying text has been added to the wording of the mitigation measures and these are also presented in Appendix A. RWE are committed to implementing all the mitigation measures as presented in Appendix A, and outlined in Section 4 of Annex D.

A copy of the Dublin Array Offshore Wind Farm EIAR Protocol for Archaeological Discoveries (PAD) shall be supplied to the NMS for review and agreement prior to the works proceeding.

RWE commit that a copy of the PAD will be submitted to the NMS for review and agreement prior to the works proceeding.

The results of all SI works, including core samples, etc., shall be made available for assessment to the consultant archaeologist for review. Such assessment shall seek to identify any cultural material contained within the samples, evidence for palaeo-environments, etc. A follow up Archaeological Report detailing the results of the SI samples shall be forwarded to the National Monuments Service for review and consideration and to inform any future Foreshore/Planning application for the proposed offshore windfarm.

RWE commit to the above recommendation for archaeological assessment of the results of all available Site Investigation works. The wording of Mitigation Measure 3 has been updated to clarify the scope of the archaeological assessment which will be undertaken of the geophysical and geotechnical data and is presented in Appendix A.

It is noted that the geophysical data from the Dublin Array 2021 campaign will be assessed ahead of any seabed impact at geotechnical, ecological sample and buoy deployment locations. The results of this assessment shall be compiled into a report and forwarded to the National Monuments Service for review in advance of the works taking place.

RWE have committed to this mitigation measure, see Mitigation Measure 2, Appendix A.

Where archaeological assessment of geophysical data is not possible, or data is not available or of sufficient resolution/standard and an impact on the seafloor/inter tidal zone is expected, it is recommended that a dive/ intertidal survey is carried out accompanied by a metal detection survey. Both the dive survey and the metal detection survey should be licenced under the National Monuments Acts 1930-2014.

RWE accept the above recommendation. The wording of Mitigation Measure 5 has been amended to clarify the commitment regarding archaeological monitoring and survey. The amended wording is presented in Appendix A. Mitigation Measure 1 captures the commitment to acquire the relevant archaeological licences for the works.

The Marine Archaeology Assessment report refers to an archaeological report compiled by Marine Archaeology which assessed the results of previous SI investigations (Maritime Archaeology, 2020a). A copy of this report shall be forwarded to the NMS for review prior to works proceeding.

It is noted that archaeological walkover and metal detector surveys were carried out at both of the cable route landfalls (Dive Licence no. 21D0045 & 21D0046 & Detection Device Licence no. 21R0070 & 21R0071). A copy of both assessment reports shall be forwarded to the National Monuments Service for review in advance of the works taking place.

It is also noted that archaeological monitoring of a number of benthic grab samples was undertaken in 2021 (Excavation Licence no. 21E0082). A copy of the monitoring report shall be forwarded to the National Monuments Service for review in advance of the works taking place.

RWE will ensure that the assessment and monitoring reports requested will be sent to the NMS in advance of the works commencing. These reports include:

- Niall Brady and Dominick Gallagher, 'Archaeological monitoring, Dublin Array Benthic Survey. 21E0082' (ADCO 2021).
- Niall Brady, 'Archaeological intertidal survey, Ringsend, Dublin Array. 21D0045, 21R0070' (ADCO 2021).
- Niall Brady, 'Archaeological intertidal survey, Shanganagh, Dublin Array. 21D0046, 21R0071' (ADCO 2021).
- Maritime Archaeology, Archaeological Assessment of geophysical data. Dublin Array. 21R0027 (Maritime Archaeology, 2021).
- Maritime Archaeology (2020a), 'Dublin Array Offshore Wind Farm EIAR Stage 1 Geoarchaeological Report', January 2020

Applicant's response to Dublin City Council observations, dated 16 December 2021

The applicant is requested to take cognisance of the following policies and objectives from the Dublin City Development Plan 2016-2022.

The applicant is recommended to also give consideration to Dublin City Council's Draft Dublin City Development Plan 2022-2028, the relevance of which shall be determined by when the applicant submits their application.

The policies and objectives of the Dublin City Development Plan 2016 - 2022 in addressing climate change are noted and welcomed as are the proposed policies and objectives within the draft Dublin City Development Plan 2022-2028 which recognise the potential benefits of the marine sector to the city's economic growth.

It is recommended that a visual impact assessment be submitted as part of any future planning application in order to assess the level and character of impact of the proposal on the landscape and the built environment for Dublin City and the surrounding area.

RWE confirm that a Seascape, Landscape and Visual Impact Assessment will be completed for the proposed wind farm development and included in the Environmental Impact Assessment Report which will be submitted in due course as part of our future Development Consent application in accordance with the Maritime Area Planning Act, 2021 and associated regulations.

More localised and recent data is available than the NPWS Site Synopsis referenced, e.g. Birdwatch Ireland's Dublin Bay Birds Project data, NUIG data on Zostera beds in the area, and IWDG data on marine mammals.

This data should be consulted before concluding NIR/EIA.

RWE note the existence of the environmental information as highlighted by DCC and have requested this data from the relevant organisations. RWE understand that the data relates to conservation features of the South Dublin Bay and River Tolka Estuary SPA, South Dublin Bay SAC and the Rockabill to Dalkey SAC. The Report to Inform Appropriate Assessment Screening, Annex E of the application documents, recommends that all of these sites should be screened into an Appropriate Assessment and the availability of more recent data would not change that conclusion.

The mitigation measures which RWE have committed to implementing recognise the dynamic nature of the environment and the potential for changes to have occurred to the baseline environment between assessment and commencement of the works. Ecological walk over surveys of the inter-tidal areas are proposed to confirm the location and extent of sensitive habitats and features, including those that provide foraging or roosting habitat for bird species, so that impact upon these features can be avoided. Marine mammal mitigation includes the use of Marine Mammal Observers who will undertake pre-start monitoring for at least 30 minutes prior to sound-producing activity commencing, between 1st May and 30th September the monitoring period will be extended to a minimum of 45 minutes, thus ensuring that there are no marine mammals within 500m radial distance of the noise source.

In relation to the conservation features to which the data relates, RWE have committed to the following mitigation measures which are presented in the Applicant's NIS, Annex F of the application documents:

- The inter-tidal survey at Poolbeg, within the South Dublin Bay and River Tolka Estuary SPA will be carried out outside of the period September to March to avoid disturbance to over-wintering bird species which are qualifying interests of the SPA;
- An ecologist will be present during the inter-tidal survey at Poolbeg to ensure disturbance to bird species is minimised and site integrity is maintained. If roosting birds are present on the shore during intertidal works, the nearby sample stations will be postponed until the birds have departed;
- A pre-commencement walk-over survey would be completed to identify sensitive habitats and sampling locations micro-sited to avoid impacts;
- Drift lines which could contain the highest proportion of potential food source for bird species will be avoided by machinery and personnel;
- Access to the near-shore and intertidal area will be agreed with the monitoring ecologist to ensure sensitive habitats are avoided by machinery and personnel;
- Reinstatement of the intertidal habitat will be carried out to pre-survey conditions;
- DAHG, 2014, Guidance to Manage the Risk to Marine Mammals from Man-made Sound in Irish Waters will be implemented for during geophysical and geotechnical surveys.

Applicant's response to Inland Fisheries Ireland observations, dated 17 December 2021

IFI would point out that the mitigation measures and guidance of NPWS in regard to marine mammals are not transferrable to fish species. The fish remain invisible to any shore- or boat-based observer. Mitigation measures should aim to reduce the sound generated, in intensity and duration. The use of soft-start and ramp-up procedures for any sound-generating surveys undertaken – both on a day-to-day basis and on re-start after any stoppages within any day should be undertaken. This measure should be a condition of the

foreshore licence. The comments of IFI in this regard relate to fish species of conservation significance and of leisure angling significance all of which constitute part of IFI's brief.

RWE reaffirms its commitment to follow DAHG, 2014, Guidance to Manage the Risk to Marine Mammals from Man-made Sound in Irish Waters. This commitment was included in the following documents which were submitted as part of the application, Section 7.2 of the Supporting Information Report, Appendix A to the EIA Screening and Environmental Report, Annex C, and Section 5.4.4 of the Applicant's NIS, Annex F. The mitigation measures that will be adopted include those recommended by the IFI, i.e. the use of soft-start and ramp up procedures at the commencement of acoustic geophysical surveys and following breaks in sound output of greater than 10 minutes.

It is recommended to contact the Sea Fisheries Protection Agency (SFPA) to seek advice regarding the timing of survey works to avoid clashing with spawning periods of commercial fish in the area. This will reduce any potential for noise damage to larval and juvenile life stages of fish when they are more susceptible to noise damage than adults.

Seven species of fish are known to spawn in the vicinity of the proposed Foreshore Licence area, with the exception of plaice, all spawning is recorded as being of low intensity. Spawning grounds for all seven species are widely found within local and regional areas, and as such, there will be no discernible loss of resource for these species in the context of the Irish Sea populations due to the limited spatial extent of disturbance associated with the proposed surveys.

The timings of the work should be cognisant of the migratory window of diadromous species. The application notes that, migratory fish are known to have a temporal or spatial overlap with the proposed Foreshore Licence application area, although no SACs for migratory fish species are present. Various life stages of the migratory fish species (including but not limited to Salmon, European Eel, Sea lamprey, Shad, Sea trout) would be expected to migrate through or forage within the defined licence boundary area.

Migratory species, including sea lamprey, Atlantic salmon and sea trout are hearing generalists, where-as European eel and shad species have a higher hearing sensitivity as the swim bladder is linked to the auditory system in both species. Of the geophysical equipment, which is the subject of this licence application, the Sub Bottom Profiling (SBP) systems operate at the lowest frequency, 2 - 200kHz which is outside the hearing range of most of the migratory species listed which are capable of detecting only very low frequency sounds (below 380Hz). Shad species are the exception and detect sounds above 20kHz. Popper *et al.*, 2014 observed that while it is evident that hearing specialists exhibit behavioural reactions to seismic airguns, there is limited evidence of mortality. The SBP surveys which will be used for the survey works are relatively low power in comparison to the seismic airguns reported in Popper *et al.*, 2014 and are expected to illicit a very short-term startle response should fish be in the immediate vicinity of the sound source. Effects upon migration are therefore very unlikely to occur.

The application outlines the potential cumulative effects from other foreshore licence activities in the area and the report concludes that they will not interfere in any of the Natura 2000 sites. While the works outlined here are of short duration the cumulative effect of multiple works taking place in specific areas is difficult to quantify. The local fish community will be present so the applicants need to be cognisant of

overlapping or consecutive works taking place in areas. IFI considers that this potential for cumulative impacts is one that requires consideration by the Foreshore Division.

RWE acknowledge that there are a number of Foreshore Licence Applications within the vicinity of the Kish and Bray Banks which have either been determined but not yet implemented, or have been submitted but not yet determined, and we recognise the importance of assessing the potential for cumulative effects. The potential behavioural effects on fish arising from the proposed surveys for Dublin Array will occur only in close proximity to the survey activity and will be short term, therefore the EIA Screening and NIS (Annex C and Annex F of the submitted application) do not predict any significant cumulative impacts to fish ecology to arise as a result of the survey operations. To minimise the risk of any cumulative effects on commercial fisheries RWE have committed in the application documentation to maintain the services of a Fisheries Liaison Officer who will consult with relevant fishermen's groups in order that appropriate actions can be taken to avoid or minimise any interactions with ongoing fishing / angling activities in the area during the course of the surveys.

The application notes the widespread use of the investigation area by sea and shore angling and while we acknowledge the appointment of a Fishery Liaison Officer we believe the local angling clubs should also be informed in advance of the dates for investigation works.

Arrangements will be made by the applicant for the publication of formal Marine Notices through the Department of Transport. The Marine Notices will provide vessel and contact details together with a general description of operations and approximate dates of marine survey commencement and completion, deployment timing and location of fixed monitoring equipment. We will also liaise directly with the IFI to identify the relevant angling clubs to inform in advance of the commencement of survey activities.

Applicant's response to Marine Survey Office observations, dated 20 December 2021

We note that the Marine Survey Office has no observations at this time.

Applicant's response to Wicklow County Council observations, dated 22 December 2021

Wicklow County Council has no objection to the proposal but would recommend the inclusion of the following conditions:

With respect to notifications / public awareness, Wicklow County Council recommends that the licence includes conditions whereby the applicant / licensee:

- 1) Notifies Wicklow County Council's Marine Officer at Wicklow Harbour Office prior to the commencement of each stage of the site investigations.***

2) Liaises with Wicklow County Council's Marine Officer with regard to the publica on of a local marine notice. The local marine notice should give a general description of operations, commencement dates and planned completion dates.

RWE accept the recommendation from Wicklow County Council that the Foreshore Licence, if awarded, should include the above conditions.

With regard to water pollution and protection of the marine environment Wicklow County Council recommends the inclusions of following requirements:

3) Regular observations for the presence/absence of oil/water pollution in the vicinity of works and the maintenance of a register/log of such observation. The register/log should include incidents reported.

4) A marine pollution response plan with capability for fast mobilisation should also be included.

RWE accept the recommended conditions with regard to water pollution and protection of the marine environment subject to clarification that it will be undertaken by the Licencee or by an appropriately experienced contractor working on its behalf.

Applicant's response to Department of Agriculture Food and Marine, dated 14 January 2021

Marine Engineering Division noted that there are increasing numbers of proposals for the Irish Sea and that as with those applications, appropriate monitoring and measures and best practice must be followed during the to ensure that the proposed survey works do not cause any direct or cumulative negative impacts on FHC access and navigation, environmental sites, aquaculture and fishery harbour operations.

RWE have committed to following appropriate good practice techniques and guidance in undertaking the works proposed under the Foreshore Licence. In addition to the surveying and investigation methods proposed RWE have also included a range of mitigation measures set out in the Supporting Information Report and relevant Annexes which were submitted as part of the application.

RWE will liaise with the local harbours, including Howth, Dun Laoghaire, Wicklow and Greystones regarding timing of the proposed works and will issue a Marine Notice via the Department of Transport in addition to local marine notices giving a description of operations, commencement dates and planned completion dates.

Prior to the survey commencing discussions will be held with the Harbour Master at Dublin Port to agree the final location of geotechnical and ecological sampling locations and the timing of works in the vicinity of the Traffic Separation Scheme. A communication protocol will also be agreed along with restrictions on the number of survey vessels operating at any one time within the Port's jurisdiction. Information will also be provided to Dublin Port for inclusion in a Notice to Mariners to be issued for works within the Port's jurisdiction.

BIM noted it is likely that these works could impact the activity of vessels in many fisheries from inshore boats such as whelk, lobster, crab, shrimp, razors etc. as well as whitefish trawlers plus some scallop/queen scallop activity. Every effort should be made by the proposers of this project RWE Renewables Ireland to engage/consult with the fishing and aquaculture sector in the area concerned directly through their Fisheries Liaison Officer before and during the survey. These should include, inter alia, the Producer Organisations, SE RIFF, NE RIFF and the two major processors that purchase fisheries products in the area, Sofrimar Ltd. and Errigal Bay with details of the proposed site investigations and not just rely on the publication of a Marine Notice when the site investigations take place.

RWE have committed to maintaining the services of a Fisheries Liaison Officer who will consult with relevant fishermen's groups and the identified Producer Organisations and named processors in order that appropriate actions can be taken to avoid or minimise any interactions with ongoing fishing / angling activities in the area during the course of the surveys.

For clarity it should be noted that there are no licenced aquaculture sites within the proposed site investigation area. VMS data indicates no otter trawl or beam trawl activity within the proposed geophysical and geotechnical survey area, although trawling is known to occur within the ecological monitoring area. The ecological monitoring activities which are proposed include benthic sampling, potting and fisheries trawl surveys as well as deployment of static acoustic monitoring devices (SAM). The location of ecological monitoring surveys and SAM deployment locations will be defined after consultation with the local fishing industry and the Sea Fisheries Protection Authority (SFPA). Ecological monitoring vessels will comply with the International Regulations for Preventing Collisions at Sea, 1972 (COLREGs), including the requirement to display lights, shapes and signals as appropriate. Appropriate radio / nav-text broadcast warnings to advise of survey activity will also be made. Each SAM location will be marked by means of a buoy with top mark and light as agreed with Irish Lights.

The main concern for the SFPA is a pollution event. The applicant is in direct communication with the SFPA Howth Office and is also aware that should an event occur then SFPA Howth is to be contacted immediately via sfpahowth@sfpa.ie or by telephone.

RWE will contact the SFPA Howth Office immediately should a pollution event occur during the course of the proposed works.

Applicant's response to Department of Housing, Local Government and Heritage dated 7th February

Conclusion/Recommendation

In principle I have no objections to this application. As outlined above, I recommend that Foreshore Section of DHLGH engage a suitable qualified IEC¹. On completion of the Public and Prescribed Bodies Consultation

¹ Independent Environmental Consultant

and the work of the IEC, I will furnish my Appropriate Assessment Screening Determination and Environmental Report. If the Minister adopts and approves these reports and a determination is made that a Stage 2 Appropriate Assessment is required a public consultation will be held on the Appropriate Assessment. My Final Environmental Report with Determinations which may include any case specific conditions will follow having regard to the information obtained during public participation.

RWE note the next steps regarding the Appropriate Assessment Screening Determination and Environmental Report
