

FS007188

**REPORT OF THE MARINE LICENCE VETTING COMMITTEE
(MLVC)**

ON

**FORESHORE LICENCE APPLICATION FOR:
Site investigations for the proposed RWE Renewables Wind Farm.**

LOCATION:

**Irish Sea, from the High-Water Mark to approximately 17 km off the coast of
Dublin and Wicklow**

APPLICANT:

RWE Renewables Ireland Limited

The Marine Licence Vetting Committee (MLVC)

The Marine Licence Vetting Committee (MLVC) is a non-statutory multi-disciplinary committee which is convened, as required, for the purposes of undertaking a technical assessment and an environmental assessment of an application under the Foreshore Act 1933, as amended. Members undertake to participate in each instance voluntarily, as representatives of their individual organisations.

The Foreshore Section of the Department of Housing, Local Government and Heritage requested the MLVC to undertake the technical assessment detailed below for case FS007188.

This report has been compiled based consideration of submissions made by prescribed bodies, departmental technical advisers and independent environmental consultants (as required), the information submitted by the applicant and submissions made by the public to make an integrated recommendation on the proposal before the Minister.

1.0 Project Overview

RWE Renewables Ireland Limited (RWE) are applying for authorisation to undertake a geotechnical and geophysical site investigation for the *proposed* Dublin Array offshore wind farm development, in addition to ecological and wind, wave and current monitoring.

The purpose of the proposed site investigations are to collect geophysical, geotechnical, ecological and metocean data from the proposed array area, export cable corridors and related landfalls.

The Foreshore Licence application is solely for the purposes of completing these site investigation and monitoring activities. The Licence is requested for a duration of 5 years.

The site investigations will take place off the coast of Counties Dublin and Wicklow. The boundaries of the area for investigation is located generally to the south of Dublin Bay adjoining, in part, the functional areas of Dublin City Council, Fingal County Council, Dun Laoghaire and Rathdown County Council, Wicklow County Council and extends approximately 17 km offshore and includes the vicinity of the Kish and Bray Banks.

The Foreshore Licence application area lies within the 12 nautical mile limit and includes the proposed wind farm array area in the vicinity of the Kish and Bray banks and potential export cable route corridors and buffer zones as described below. The cable route corridors extend from within the array area towards shore to Mean High Water (MHW) at three potential landfall options, one at Poolbeg / Shellybanks and two options at Shanganagh.

The Foreshore Licence application area includes and buffer around the proposed wind farm array area, extending 16 km to the north and to the south and to the limit of territorial waters to the east and adjoining the coast to the west in the counties of Fingal, Dublin City, Dun Laoghaire-Rathdown and Wicklow. This buffer area is inclusive of the extent of one tidal excursion (14 km) along the tidal axis to enable ecological monitoring and an area extending to the north-east for the deployment of static acoustic monitoring devices which may form part of a marine mammal monitoring strategy..

The recently enacted Maritime Area Planning Act 2021 sets out special provisions for ORE projects satisfying the definition of “relevant maritime usage”. The Minister for Environment, Climate and Communications (the relevant Minister) was granted limited powers to invite applications for a Maritime Area Consent from ORE projects satisfying this definition for a specified period in advance of establishment of a new agency, the Maritime Area Regulatory Authority (MARA). Any project satisfying the definition of “relevant maritime usage” which is granted a MAC by the relevant Minister must seek the necessary development consent from An Bord Pleanála under the new consenting regime. Applications for planning permission will involve public consultation and full environmental assessment as provided for under the Act.

At the time of drafting this report, the relevant Minister is considering a MAC application in relation to the RWE Renewables Dublin Array project. This is a separate process and relates to possible future development that may be informed by the site investigations proposed as part of this application.

2.0 Brief Description of Works

The applicant is applying for a licence to complete the below surveys, which have been grouped into four types:

Geotechnical surveys, Geophysical surveys, Wind and metocean monitoring, Ecological monitoring.

Geotechnical surveys

To provide further information on ground conditions including soil stability to refine the foundation design, sizing and installation methodology and to finalise cable route and landfall detailed design and installation methodology.

-Up to 61 geotechnical boreholes to an approximate depth of 80m below seafloor and an outside diameter of up to 254 mm.

-Up to 61 Deep push seafloor Cone Penetration Tests (CPT) to an approximate depth of 80m below seafloor with a diameter of approximately 40mm.

-Up to 31 Seafloor CPTs with a diameter of approximately 40mm and 48 vibrocores with a diameter of approximately 150 mm diameter. The target depth of each technique will be approximately 6 m below seafloor. Up to five of each type may be located within the intertidal area.

-Up to 12 nearshore geotechnical boreholes with wireline logging and Rotary Cored Drilling, approximately 100 mm diameter to target depth of 45 m below seafloor (4 at each landfall option).

Geophysical surveys

To provide further detail regarding seabed feature variability and seabed mobility across the site to inform detailed foundation and cable burial design and installation methodologies.

-Refraction survey in nearshore & intertidal

-2D UHR & geophysical survey including Bathymetric Survey, Side Scan Sonar, Shallow Reflection Seismic (Sub-bottom Profiling) and Marine Magnetometer

-Geophysical survey including Bathymetric Survey, Side Scan Sonar, Shallow Reflection Seismic (Sub-bottom Profiling) and Marine Magnetometer;

Wind and metocean monitoring

To provide additional data regarding wind, wave and currents across the proposed site to assist with detailed wind farm design and layout optimisation.

-Up to two buoy mounted Floating Lidar (FLiDaR) Units and up to two buoys incorporating wave and current measurement devices.

Ecological monitoring

To collate data on the pre-construction baseline against which to monitor change in the environment.

- Up to 10 static acoustic monitoring devices (SAM)
- Up to 3 annual subtidal benthic ecology surveys comprising drop down video, grab sampling and epibenthic trawls
- Up to 3 annual potting survey and 12 seasonal trawl surveys (4 per year for up to 3 years)
- Up to 3 annual benthic ecology survey

Timeframe for Surveys

Estimated durations of the survey works are provided below however the work is weather dependent and may also be extended if unforeseen ground conditions are discovered. There may be pauses between different elements of the work resulting in a longer overall duration from commencement to completion.

- -Offshore geotechnical survey - approximately 2 – 3 months;
- -Nearshore geotechnical survey – approximately 2 months;
- -Offshore geophysical survey - approximately 2 – 3 months;
- -Intertidal refraction survey - approximately 2 – 3 weeks;
- -Wind measurement – temporary validation deployment 6 - 8 weeks, long term deployment between 12 – 24 months;
- -Wave and current measurement – 12 – 24 months;
- -SAM deployment will take approximately 2 weeks, the equipment will remain on site for the duration of the Foreshore Licence, to provide a long term data set of preconstruction monitoring of marine mammals;
- -Fish and shellfish surveys - approximately 1 – 2 weeks/year for up to 3 years;
- -Subtidal benthic ecology survey - approximately 1 – 2 months/year for up to 3 years;
- -Intertidal benthic ecology survey -approximately 1 – 2 weeks/year for up to 3 years.

The Licence is requested for a duration of 5 years.

A foreshore licence if granted will permit those site investigation activities that will result in physical interaction with or disturbance of the Foreshore. The proposed site investigation activities which are the subject of this application are being fully assessed under the relevant environmental legislation.

3.0 Other Relevant Consents

In August 2000 Foreshore Licences were issued to the Kish Consortium for site investigations on the Kish and Bray banks respectively. The licenced works included:

- Drilling and sampling of seabed sediments;
- Geophysical measurements;
- Deployment of wave, tide current and silt load measurement equipment.

In January 2006, Kish Offshore Wind Limited and Bray Offshore Wind Limited submitted two Foreshore Lease applications (FS006462 and FS00643) to the Department of Communications, Marine and Natural Resources, pursuant to Section 2 of the Foreshore Act 1933, as amended, for proposed wind farm development in the vicinity of the Kish and Bray Banks.

In September 2019 innogy (now RWE) submitted a Foreshore Licence application (FS007029) for permission to conduct site investigations, including geophysical survey, associated seabed sampling and deployment of buoy mounted metocean equipment. The scope of the works under FS007029 included:

- Geophysical survey, including Multibeam Echosounder; Side Scan Sonar; Shallow Reflection Seismic (Sub-bottom Profiling); and Marine Magnetometer;
- 48 sub-tidal vibrocores;
- 15 cone penetration tests (CPT) in intertidal areas;
- 3 boreholes on the shorelines;
- Drop down video and grab sampling (benthic) at up to 30 sampling locations;
- Up to two buoy mounted Floating Lidar (FLiDaR) Units and up to two metocean buoys incorporating wave and current measurement devices.

RWE completed a successful geophysical and benthic survey campaign between February and May 2021. Having completed the geophysical survey fieldwork it has been determined that, due to the limited scope and geographical extent of the geotechnical investigations authorised by the licence, and the need for a more comprehensive geotechnical investigation to inform the detailed design and assessment of the project, a more comprehensive geotechnical investigation is warranted.

Two metocean buoys and a FLiDaR have been deployed in accordance with a Statutory Sanction as received from the Commissioners of Irish Lights and an Automatic Identification System Licence issued by the Commission for Communications Regulation. This metocean and wind survey campaign is authorised for a period up to August 2023 (two years post successful calibration). A further metocean and wind campaign is included within this foreshore licence application.

4.0 Relevant Government policy

The published Programme for Government has committed to achieving 5GW capacity in offshore wind by 2030 off Ireland's Eastern and Southern coasts. Furthermore, the National Marine Planning Frameworks states that "Proposals that assist the State in meeting the Government's offshore renewable energy targets, including the target of achieving 5GW of capacity in offshore wind by 2030 and proposals that maximise the long-term shift from use of fossil fuels to renewable electricity energy, in line with decarbonisation targets, should be supported. All proposals will be rigorously assessed to ensure compliance with environmental standards and seek to minimise impacts on the marine environment, marine ecology and other maritime users."

The [Climate Action Plan 2021](#) recommits Ireland to the ambition to install 5GW of offshore wind capacity in our maritime area by 2030, and introduces a new objective, that by the same year, up to 80% of our electricity will be sourced from renewables. In addition to increasing our renewable energy share, these targets will support our carbon emission reduction commitments, meet anticipated increases in domestic electricity demand and increase our security of electricity supply.

5.0 Public Participation

The Foreshore Section of the DHLGH conducted the public consultation. All consultation was undertaken to conform to the requirements of the Section 19 of the Foreshore Act 1933 as amended, Regulation 42 of the European Communities (Birds and Natural Habitats) Regulations

2011 and the European Directive 2003/35/EC (known as the Public Participation Directive or “PPD”).

1st Consultation under section 19 of the Foreshore Act 1933

An initial consultation period was held between 18 November 2021 and 17 December 2021. Notices announcing the consultation were published in the Irish Independent, Wicklow People” and “Bray People” newspapers on the 17th of November 2021 and the “Dublin Gazette” newspaper on the 18th of November 2021.

Application documents were made available throughout the consultation period in:

- Dún Laoghaire-Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin, A96 K6C9
- Dublin City Council, Civic Offices, Wood Quay, Dublin 8
- Bray Library, Eglinton Road, Bray, Co. Wicklow, A98 W627
- Greystones Library, Mill Road, Greystones, Co. Wicklow, A63 KN52
- Wicklow Library, The Mall, Main Street, Wicklow Town, Co. Wicklow, A67 X504
- Shankill Garda Station, Dorney Court, Shankill, Dublin 18, D18 CD50
- Dún Laoghaire Garda Station, Corrig Avenue, Dún Laoghaire, Co. Dublin, A96 N299
- Blackrock Garda Station, 15 Sweetman’s Avenue, Blackrock, Co. Dublin, A94 X660
- Clontarf Garda Station, Strandville Avenue East, Clontarf, Dublin 3, D03 FA46
- Irishtown Garda Station, Irishtown Road, Irishtown, Dublin 4, D04 YE33
- Pearse Street Garda Station, 1-6 Pearse Street, Dublin 2, D02 W289
- Howth Garda Station, 8 Dunbo Hill, Howth, Co. Dublin, D13 YR70
- Wicklow Garda Station, Bachelor’s Walk, Wicklow, Co. Wicklow, A67 HK20

Application documents and notice of the consultation were published in the appropriate locations on the Department’s website.

Following this consultation process, the Independent Environmental Consultant, Arup & Partners Ireland Ltd (Arup) with Hartley Anderson Limited, were engaged to assess the application. The documentation submitted by the applicant was reviewed to assess whether it included the following:

- Robust scientific information and analysis including the reasoning and justifications for the conclusion.
- Compliance with the tests and standards of AA as presented in European and national guidance.
- A robust scientific assessment on the likelihood of significant effects.

The assessment was carried out on the entirety of information submitted as part of the consent application.

The Minister, on advice from this Department’s Marine Advisor (Environment) concurred with the findings of the IEC and made an Appropriate Assessment (Stage 1) Screening Determination and concluded that a Stage 2 Appropriate Assessment was required.

2nd Consultation and Appropriate Assessment- (screening and assessment of appropriate assessment is dealt with below).

A copy of the application, the Appropriate Assessment Screening Determination, and all other documentation relevant to the application were made available for public viewing from 30 June 2022 to 29 July 2022 at the following locations:

- Shankill Garda Station, Dorney Court, Shankill, Dublin 18, D18 CD50
- Dún Laoghaire Garda Station, Corrig Avenue, Dún Laoghaire, County Dublin, A96 N299
- Blackrock Garda Station, 15 Sweetman's Avenue, Blackrock, County Dublin, A94 X660
- Clontarf Garda Station, Strandville Avenue East, Clontarf, Dublin 3, D03 FA46
- Irishtown Garda Station, Irishtown Road, Irishtown, Dublin 4, D04 YE33
- Pearse Street Garda Station, 1-6 Pearse Street, Dublin 2, D02 W289
- Howth Garda Station, 8 Dunbo Hill, Howth, County Dublin, D13 YR70
- Wicklow Garda Station, Bachelor's Walk, Wicklow, County Wicklow, A67 HK20
- Dún Laoghaire-Rathdown County Council, County Hall, Marine Road, Dún Laoghaire, Co. Dublin, A96 K6C9
- Dublin City Council, Civic Offices, Wood Quay, Dublin
- Bray Library, Eglinton Road, Bray, Co. Wicklow, A98
- Greystones Library, Mill Road, Greystones, Co. Wicklow, A63 KN52
- Wicklow Library, The Mall, Main Street, Wicklow Town, Co. Wicklow, A67

Notification of the Public Consultation details were published in the *Bray People* and *Wicklow People* on 29 June 2022.

The Consultation was announced and documents were made available in the appropriate locations on the Department's website.

Public Submissions and Assessment

Seventeen public submissions were received during the 1st consultation (Public Consultation under s. 19 of FA 1933) and nineteen public submission were received during the 2nd consultation (Public Consultation under s. 42 of EC Birds and Natural Habitats Regulations 2011).

In the interests of public participation any member of the public that had made a submission in the first period of public consultations was contacted individually to inform them of the second period of consultation. All public consultation submissions and applicant responses can be found on the Department's website and their contents have been considered as part of this assessment.

In the first consultation, ten of the public submissions came from private individuals with submission also from Irish Whale and Dolphin Group (IWDG), Gus Cullen Solicitors acting for East Coast Fishers, Adela-Hare Centenary Commemoration Committee, Killiney Community Council, Wild Ireland Defence CLG, Coastwatch, and Coastal Concern Alliance.

Private individual's concerns included destruction of seascape, disturbing sea mammals, killing birds, damage to SAC, coastal and sand-bank erosion, foreign private developers working on purely economic grounds, outdated technology. Fishers are concerned about the impact on their livelihoods, lack on consultation, impact on fish stocks. Groups are concerned about habitat protection, impact on Natura 2000 sites, SPA, SAC, marine and protected environments, the lack of a valid selection site process for windfarm development.

In the second consultation, eight of the submissions came from private individuals, two came from Fishers, with submissions also from Gus Cullen Solicitors acting for East Coast Fishers, Wild Kildare, Adela-Hare Centenary Commemoration Committee, Wild Defence Ireland, Killiney Bay Community Council, Coastal Concern Alliance, People Before Profit (political party), South East Coastal Protection Alliance.

As stated above a range of concerns have been raised. All public consultation submissions and applicant responses can be found on the Department's website.

The submissions essentially raised a range of similar concerns which can be grouped into the following points:

- Opposition to site surveying and future siting of a wind farm in the vicinity of the Kish and Codling bank due to:
 - Possible hydrological issues arising such as altered movement of sediment, adverse impact on beaches along the Wicklow/ Dublin coast.
 - Stability of the bank to accommodate a wind farm and appropriateness the possible locations for cable landing points both from an environmental and amenity considerations.
 - Concerns as to the detrimental effect of a possible wind farm on visual amenity, particularly from Dalkey and Killiney.
 - Concern as to the environmental effects of a wind farm on protected sites and wildlife, particularly birds, fish and marine mammals.
 - Issues around safe navigation given the busy shipping lanes approaching Dublin port in particular.
 - Concerns with respect to the detrimental effects of site surveying on fishing in the area.
- A desire for off shore wind developments to be floating and placed well offshore.
- Detailed submissions were made in respect of the validity of the environmental assessments, including the identification of alternatives that were carried out as part of the consideration of this proposal.
- Reference was made to further need to take in combination effects into consideration.
- Reference was made by a number of submissions that the possible future environmental designations
- Concerns were raised as to the flexibility of site surveying locations.
- Concerns were raised regarding the significant underwater archeology in the area, particularly with respect to wrecks.
- Reference was made to the need for the state to develop its wind resource but with careful attention to the environmental implications of same. The need for appropriate environmental designations was also raised.

Having considered the submissions made a large number of the issues raised while referring to the site investigation proposal instead raise concerns that relate to the development of a wind farm on the site, rather than to the application for site investigations.

This proposal which is under consideration solely relates to site investigation works. While the results of any investigations will inform the layout, location of and other engineering considerations of a future proposed wind array, this will be the subject of a separate assessment including appropriate environmental and amenity considerations. It will also be the subject of a

separate public consultation procedure. It is Government policy to support the appropriate development of off shore wind farms to support the wider decarbonisation of the electricity network, reduce the national reliance on imported fossil fuels and to improve national energy security. The preparation of any detailed application for an offshore wind farm array does require significant site investigation work. This is to allow for the identification of geotechnical, hydrological and environmental conditions in the general survey area which will allow for the appropriate location for any proposed wind farm array and electricity cable link to the national grid that takes appropriate account of the engineering, geotechnical, hydrological and environmental conditions. Detailed site surveying is a necessary and appropriate activity that is required to take place in advance of any project that involves construction project.

An issue raised in a number of submissions is the indicative nature of the proposed site surveying locations. This is considered to be reasonable as the purpose of site investigations is gain a more complete understanding of the undersea and under seabed conditions, this will require flexibility as to the siting of particular borehole locations which will be governed by the specific local conditions. It is considered that the outline of the survey area is clear and the environmental considerations have been assessed appropriately. As this is for temporary activities in pursuance of site investigations the submitted information is considered to be both reasonable and acceptable.

Concerns were raised in respect of previous site investigation work/ approvals in the area by the applicant. The development of detailed proposals and specifications for a windfarm array located in a dynamic marine environment requires a number of more detailed and focused site investigations. This application reflects this process and will allow for more detailed technical and environmental information to be gathered which will inform a possible future application for the development of a wind farm array.

With respect to the ownership and development of the wind resource at this location. The state is the owner of the seabed out to the edge of the EEZ. As stated above it is Government policy to support the appropriate development of off shore wind farms, the construction, working of and financing of is a matter for Government.

There are a large number of wrecks located in the general area which is the subject of this site investigation application. In particular there are a number ships that were sunk during WW1. The preservation of these wreck sites is recognised. This application has been the subject of comment by the underwater archaeology unit of the Dept. and their recommendations will form part of any conditions which may be attached to this licence, if approved. The applicant has submitted significant information with respect to the location of known wrecks within the survey area and this information has been assessed by the underwater archaeology unit. It should be noted that the survey work may yet yield further more detailed knowledge as to the status of known wrecks and possibly unknown works.

With respect to environmental concerns raised concerns have been considered as part of the environmental assessment which have been referred to in other parts of this assessment. The environmental considerations of this particular application have been extensively considered and have included the undertaking of an appropriate assessment which was the subject of additional public consultation referred to above. Those submissions have been considered as part of the appropriate assessment which forms part of this overall assessment report.

It is considered reasonable and appropriate that in the interests of balancing the needs of existing users of the marine environment with that of the prospective future users that appropriate liaison structures be established. In that regard it is noted that a fisheries liaison officer has been employed by the applicant. This appointment should be formalised as a required condition of any licence that may be granted.

Submissions received have been considered as part of this assessment including the environmental assessment reports that have included a consideration of submissions relating to environmental assessment.

5.0 Prescribed Bodies Consultation

Foreshore Regulations 2011 (S.I. No. 353 of 2011) provides under regulation 3 that when considering a foreshore application, as set out under section 18A (1) of the Act of 1933, the Minister may seek observations from a number of prescribed bodies. For this application, observations were requested from:

- Marine Institute
- Marine Survey Office
- Department of Housing, Local Government, and Heritage Underwater Archaeology and Nature Conservation Units
- Department of Agriculture Food and the Marine (Aquaculture)
- Sea Fisheries Protection Authority
- Inland Fisheries Ireland (IFI)
- Fingal Council
- Dublin City Council
- Dun Laoghaire Rathdown Council
- Wicklow County Council
- Water and Marine Advisory Unit – Engineering and Environment (DHLGH)

Observations on the application were received from each of the bodies contacted during the 1st Consultation, except SFPA, Fingal Council and Dun Laoghaire Rathdown Council.

There were four responses to the 2nd Consultation from: Inland Fisheries Ireland, Marine Advisors (Engineering and Environmental) and Commissioners of Irish Lights.

All submissions made by the prescribed bodies have been considered as part of this assessment.

The prescribed bodies that responded had no objection, in principle, to the project and provided commentary which is listed in the consolidated Prescribed Bodies Submissions document on the Department's website.

A number of the submissions from the Prescribed Bodies raised particular observations and put forward suggested conditions to be included in any consent issued, these will be considered for their appropriateness.

In particular it is recommended that particular conditions be placed on any prospective licence to require the applicant to co-ordinate the timing of activities so as not to effect migration of fish species and to co-ordinate the appropriate transmission of underwater archaeological

information. These particular issues have been identified and are considered to be appropriately dealt with by condition as outlined above.

6.0 Environmental Assessment

As part of the comprehensive environmental assessment of this application, the Department engaged Arup with Hartley Anderson Limited to provide further detailed technical assistance. The independent environmental consultants conducted independent assessment of the information provided by the Applicant, having regard to compliance with the Habitats Directive, the Birds and Natural Habitats Regulations and taking account of the public and prescribed bodies' consultations where relevant. This work informed the work of the Marine Advisor (env) which has informed this assessment and the required environmental concluding decisions as required.

Environmental Impact Assessment (EIA) Regulations

The submitted application is for site investigations only. The environmental effects of the proposed activities have been considered by the retained environmental consultants. Their report forms part of the basis of this assessment and is considered robust and comprehensive. Prospective environmental effects have been considered as has the received third party submissions. With respect to uses specified under the EIA directive. A number of boreholes are proposed as part of this activity to ascertain the soil conditions in the survey area. The proposed project is for site surveying including boreholes to test the suitability of the sub sea bed conditions. This activity which is to ascertain soil stability does not fall within the classes defined under Annex I or Annex II of the EIA Directive and it is concluded based on the referred to report and the developments outlined in the Annex's of the EIA directive that an EIAR is not required.

Article 6(3) of Directive (92/43/EEC) (as amended) (Habitats Directive)

Following a review of the proposed project, the IEC completed a **Screening for Appropriate Assessment** which concluded that a Stage 2 Appropriate Assessment was required as the project, individually or in combination with other plans or projects, is likely to have a significant effect on European sites.

Having considered the application and the IEC Screening for Appropriate Assessment report which was accepted by Marine Advisor (Environment), the Screening for Appropriate Assessment and its conclusions is agreed with.

As a result of the outcome of the Screening for Appropriate Assessment, Arup carried out a review of the applicant's Stage 2 Appropriate Assessment. They concluded that the proposed development, individually or in-combination with other plans or projects, will not adversely affect the integrity of European sites outlined in the report in view of the said sites' conservation objectives.

With respect to the environmental considerations and observations raised as part of the public consultation process these have been considered as part of the environmental reports prepared by the IEC and recommended by the Marine adviser (Envir). These reports form part of the overall assessment of this application. The responses to these submission is agreed and forms the considered response to issues raised by third parties in respect of environmental issues. Having considered the application, the submissions from the public and prescribed bodies' consultations and the IEC's assessment and endorsement of the Screening for Appropriate Assessment and Stage 2 Appropriate Assessment, this assessment report supports and adopts the Marine Advisors (Recommending Officers) Appropriate Assessment Conclusion Statement and

Determination. The Consent Authority (DHLGH) must publish this Appropriate Assessment Conclusion Statement and Determination as part of their obligations under the Directive.

Article 12 of the Habitats Directive (92/43/EEC) affords strict protection to those species listed in Annex IV, wherever they occur. Therefore a risk assessment to Annex IV species from a project must take place prior to commencement of works. Such a risk assessment has been undertaken for this project under the title of “Annex IV Risk Assessment”. This identifies underwater noise as the primary risk to cetaceans, all species of which are considered Annex IV species. Mitigation for this is strict adherence to NPWS (2014) Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters.

The distribution of the Annex IV European Otter overlaps with the landfall sites of the proposed cable routes. Surveys to establish the presence of otters prior to the commencement of works will ensure that, if necessary mitigation measures are in place to protect this spec

The MLVC accepts and adopts this conclusion.

7.0 Estate Management

All foreshore is presumed state owned unless proven otherwise. In this case there are no known established claims of private ownership of the foreshore at this location and no claims of private ownership were raised during the application and public consultation process; therefore, the foreshore the subject of this application is state owned. Accordingly Section 3 of the Foreshore Act applies for the proposed site investigation. The licence area for this proposed site investigation application is shown on the map submitted by the applicant.

This map should be attached to any licence issued. The applicant shall use that part of the foreshore, the subject matter of the application for the purposes as outlined in the application and for no other purposes whatsoever. Where relevant the foreshore and adjacent seashore area shall be restored to its original condition on completion of the works to the satisfaction of the Department of Housing, Local Government and Heritage.

National Marine Planning Framework.

Section 74 of the Planning and Development (Amendment) Act 2018 sets out that “A public body shall adopt such measures as (a) are consistent with its functions, and (b) necessary to secure the objectives of the National Marine Planning Framework”. In this context, “functions” includes the giving of any consent or approval, or the grant or issue of licences, certificates or other like documents, under any enactment for the purposes of any such development or activity, or any such proposed development or activity as well as the regulation of any such development or activity. The National Marine Planning Framework (NMPF) is a national plan for Ireland’s marine area including the Foreshore. It sets out, over a 20-year horizon, how we want to use, protect and enjoy our marine area. The NMPF sits at the top of the hierarchy of plans and sectoral policies for the marine area and provides a coherent framework in which those sectoral policies and objectives can be realised. All decisions on individual applications determined under the Foreshore Act, must secure and be consistent with the objectives of the plan, similar to the way that terrestrial plans form part of the decision-making tool-kit in the on-land planning process. NMPF objectives are supported by specific policies that articulate factors that can form part of objective consideration.

Having reviewed and assessed this application against the objectives of the NMPF, the MLVC is satisfied the proposed activity does not act significantly against any objective within the NMPF Furthermore, the project is aligned and secures key sectoral/activity objectives set out in Section 13 of the NMPF under Energy-Offshore Renewable. Accordingly, RWE Renewables Ireland

Limited's proposed site investigations is aligned with and secures the relevant objectives set out in the NMPF

8.0 Public Interest

Section 2 and 3 of the 1933 Foreshore Act, as amended, states that a lease or licence of state foreshore may be granted "If, in the opinion of the Minister, it is in the public interest". As foreshore is a finite and valuable national resource and public amenity, it is important that each plan and project is fully assessed to ensure, that if consented to, it is a sustainable and proper use of that finite and valuable resource. In assisting the Minister to establish if a particular plan or project is in the public interest, it is considered that while taking note that the state owned foreshore is finite resource which must be utilised sustainably, the proposed project is in the Public Interest, as it supports Government policy to support the development of off shore wind power which will allow for increased sustainable energy supply not only environmentally but also from a security point of view.

9.0 MLVC Conclusions

This application is for the carrying out of site survey work to inform future development of off shore wind array. It is considered that this site surveying activity is required to inform an application for an off shore wind array, in the general area outlined on the submitted maps. It is further noted that this proposed array is a project that satisfies the definition of relevant maritime usage under the Maritime Area Planning Act and its progression through the various consenting process has been accorded a high priority.

Submissions by the public and the prescribed bodies have been considered and responded to by way of proposed conditions in Section 10. In particular the issues raised through submissions have been considered both as part of this report but also as part of the environmental assessment reports, all of which form the overall assessment of this proposed application.

In response to the public submissions issues relating to wild life have been considered as a part of the appropriate assessment and mitigation measures proposed which will form conditions attached. In relation to matters raised relating to visual amenity and interaction with the local community. These are legitimate concerns but are considered to relate to a development proposal for an off shore wind development. This is not what is proposed as part of this application. Instead the matter at hand relates to surveying work which will inform the appropriateness or not of proceeding with a proposed future development. The work is both temporally and physically temporary. A future proposed development if it comes to pass will be the subject of a separate assessment process which will include public participation and would include as part of its assessment consider the matters raised.

With respect to the concerns raised with respect to fisheries the application was referred to the relevant prescribed bodies. With respect to timing of surveys in respect of fish migration these will be conditioned, as recommended. The balancing of various activities, some well established such as fishing is necessary. The carrying out of survey work is considered to be reasonable in view of national considerations but the timing of and duration of these survey works needs to take cognisance of other marine users. It is considered in view of this that a condition be placed on any approval requiring a fisheries liaison officer to be retained by the developer and shall undertake detailed co-ordination with local fishing interests.

With respect to safe navigation marine notices shall be published. In view of the activities proposed they are not considered to pose a threat to safe navigation subject to compliance with the relevant conditions set out below.

Significant appropriate consideration has been given to environmental matters by Independent Environmental Consultants which is reflected in this report. The supporting environmental reports formed part of this assessment. Given the existence of other licences in this general area, it is considered prudent in the interests of mitigating the possible cumulative environmental effects that the applicant be required, in the event of a licence being granted, to coordinate with other licence holders that overlap with the survey area as submitted to ensure that no temporal overlap between two or more projects occurs. It is considered that this requirement shall form part of the notification condition.

The development of off shore wind developments is an important element of Government energy policy which has been further enunciated in the recently published energy security framework. It is both necessary and appropriate that surveying work be undertaken so as to site future proposed wind arrays in locations that is geotechnical safe. This application is such an activity and is considered to be necessary and appropriate.

It is concluded that taking account of the totality of the documentation on file and subject to compliance with the specific conditions set out below, the proposed works would will not adversely affect Fishing, Navigation or the Environment and is in the Public Interest.

Therefore, the MLVC recommend that the Minister issues a Foreshore Licence for the proposed geotechnical site investigation activities as set out in the application, subject to the conditions set out below.

The MLVC also recommends that the Minister:

- 1) makes a finding that that the proposed site investigation activities, individually or in-combination with other plans or projects, will not adversely affect the integrity of European sites outlined in the report in view of the said sites' conservation objectives, and
- 2) adopts the findings of the risk assessment to Annex IV species that has been carried out.

10.0 PROPOSED CONDITIONS

Site Specific Conditions consolidated:

1. The Licensee shall use that part of the foreshore, the subject matter of this licence for the purposes as outlined in the application and for no other purposes whatsoever.
2. The works shall be located as outlined on Map entitled 'Foreshore Licence Map' dated 30/9/2021 Rev 7.
3. Subsequent to the Date of Execution, the licensee shall notify the Department of Housing, Local Government and Heritage at least 14 calendar days in advance of the commencement of any works on the foreshore.
4. Each year, the licensee shall submit a revised Programme of Works setting out the works planned for the coming calendar year and the programme for the overall completion of the works associated with the licence.

5. During the course of the works the licensee shall ensure that existing public access arrangements are maintained, where possible, and all necessary precautions are put in place to protect the public in accordance with relevant Health and Safety Legislation.
6. On completion of the works, the surrounding foreshore shall be returned to its natural state to the satisfaction of the Department of Housing, Local Government and Heritage.
7. The licensee shall ensure that contractors, and their subcontractors, are made aware of all conditions and project specific requirements and they are required to have briefings on these to ensure all parties are fully aware of these requirements.
8. The licensee shall ensure that the mitigation measures set out in Natura Impact Statement of September 2021 shall be carried out in full
9. In addition to strict adherence to the DAHG guidance (2014) during the Harbour porpoise calving season, from May to September inclusive, sound-producing activity shall not commence until at least 45 minutes have elapsed with no marine mammals detected with the Monitored Zone by the MMO.
10. The inter-tidal and sub-tidal geotechnical sampling locations will be selected after review of the geophysical and environmental data obtained from surveys completed under licence FS007029 has been reviewed for the presence of potential ecological features such as geogenic reef.
11. To prevent damage to saltmarsh and mudflats and sandflats not covered by seawater at low tide qualifying interests (South Dublin SAC), all access to the Poolbeg intertidal area by track machine will be supervised by an ecologist to ensure these sensitive areas are avoided.
12. The Licensee shall ensure that the Operations, survey and associated works within the intertidal area falling within the boundaries of the South Dublin Bay and River Tolka Estuary SPA (IE004024) take place outside the period September to March inclusive.
13. At intertidal locations:
 - An ecologist is to be employed to ensure disturbance 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 depart, without provocation;
 - Drift lines in close proximity to the proposed route would contain the highest proportion of potential food source for bird species. If present, these will be avoided by machinery and personnel;
 - If for any reason access by sea to the near-shore or intertidal sample locations is not possible, any temporary access arrangements or structures that are put in place to allow machinery access to the beach area will be prepared in consultation with an ecologist and the site should be fully reinstated post works;
 - Reinstatement of the intertidal habitat will be carried out to pre-survey conditions. Spoil from boreholes to be contained and removed off site. If the boreholes are close to the HDD cable route, the boreholes are to be filled with grout to prevent weakness during drilling operations during construction.
 - An appropriately qualified ecologist to carry out an otter survey up to 100m seaward of the high water mark prior to commencement of work in the intertidal. Mitigation measures should include the provision of protection zones of 30m around otter holt or couch and 150m around natal dens. Vegetation cover around holts to remain undisturbed. Potential harmful machinery to be made safe or cordoned off at the end of the working day.
14. The licensee shall liaise with the Department and use their best endeavours to liaise with the holders of Foreshore licences for other surveys and site investigations to be undertaken in the vicinity of the Foreshore licence area specified in this application.

15. The licensee shall ensure that vessels used in the survey vessels are free of invasive marine species on their hulls and in their ballast water. Method statement to that effect should be submitted to the competent authority.
16. The licensee shall ensure that appropriate methods of operation are adopted in order to ensure that no spillages of fuel, hydrocarbons, cement or other hazardous substance occur to the foreshore or surface waters during the site investigation and a register/log shall be maintained with regular observations for the presence/absence of oil/water pollution in the vicinity of the works. In the unlikely event of a spill occurring all relevant statutory bodies, including BIM and the SFPA Howth office, shall be notified immediately
17. The following drawings shall be attached to and referenced in the licence:
 - (a) FS007188 Foreshore Licence Site Investigation Area Map
 - (b) FS007188 Annex B – Drawings showing activity locations
18. The Licensee shall contact the Sea Fisheries Protection Agency to seek advice regarding the timing of the survey works to avoid clashing with spawning periods of commercial fish in the area.
19. At least one month in advance of commencement of the works, the licensee shall contact the Department of Transport to arrange the publication of a Marine Notice detailing the proposed works and any associated hazards to navigation arising for the duration of the licence period.
20. At least one month in advance of commencement of the works, the licensee shall liaise with Dublin Port Company and the Dublin Harbour Master to arrange for a local Marine Notice to be published for the information of all local maritime users detailing the proposed works and any associated hazards to navigation arising for the duration of the licence period.
21. At least one month in advance of commencement of each stage of the site investigations, the Licensee shall notify Wicklow County Council's Marine Office at Wicklow Harbour Office.
22. At least one month in advance of commencement of the works, the Licensee shall notify Wicklow County Council's Marine Officer with regarding the publication of local marine notices. The local marine notice shall give a general description of operations, commencement dates and planned completion dates.
23. At least one month in advance of commencement of the works, the Licensee shall employ a Fisheries Liaison Officer. The Fisheries Liaison Officer shall liaise with the commercial fishing industry including the producer organisations, the South East and North East Regional Inshore Fishermen's Forums, and the two major processors that purchase fisheries products in the area, Sofrimar Ltd. and Errigal Bay, and provide details of the proposed site investigations.
24. At least one month in advance of commencement of the works, the Licensee shall contact sea and shore angling operators and local sea and shore angling clubs and provide details of the works.
25. At least one month in advance of commencement of the works, a marine pollution response plan with capability for fast mobilisation shall also be prepared in advance of the commencement of the works and make it available on request.
26. Archaeology and Cultural Heritage: At least one month in advance of commencement of the works
 - a. A copy of the Dublin Array Offshore Wind Farm EIAR Protocol for Archaeological Discoveries shall be supplied to the National Service for review and agreement.
 - b. 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.

- c. 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.
 - d. 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.
 - e. 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.
27. The mitigation measures proposed in the application documents, the Supporting Information Report and its annexes, Annex C: Environmental Impact Screening and Environmental Report, Annex F: Applicant's Natura Impact Statement, FS007188 Applicants response to IEC request for clarification 090922 and Appropriate Assessment RWE Renewables Ireland, Site Investigations for the proposed Dublin Array Offshore Wind Farm (FS007188) Report to Department of Housing, Local Government and Heritage shall be implemented in full.
- 28.
- a. The licensee shall implement the mitigation measures proposed in Supporting Information Report Annex D: Marine Archaeology Assessment, as modified by Appendix A – Clarifications and additional information - Marine Archaeological Assessment, Annex D.
 - b. The results of all site investigation 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 site investigation 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
 - c. 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/intertidal zone is expected the licensee will consult with National Monuments Service, a dive/intertidal survey accompanied by a metal detection survey will be carried out as directed by the National Monuments Service Acts 1930-2014.
29. The Licensee shall comply the recommendations in Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (NPWS, 2014) to ameliorate potential interaction with marine mammals.
30. Soft-start and ramp-up procedures shall be employed for any sound-generating surveys – both on a day-to-day basis and on re-start after any stoppages within any day, whereby sound energy input to the marine environment is gradually or incrementally increased from levels unlikely to cause significant behavioural impact on fish or marine mammals to the full output necessary for completion of the activities.
31. The lighting requirements of the fixed metocean monitoring equipment shall be discussed and agreed with the Marine Survey Office and the Commissioners for Irish Lights.
32. No more than one month following completion of the installation, information of the positions of the moored static acoustic monitoring devices and the FLiDaR and wave and current measuring buoy shall be provided to the United Kingdom Hydrographic Office for inclusion on navigational charts.

33. On completion of the works, the surrounding foreshore shall be returned to its natural state to the satisfaction of the Department of Housing, Local Government and Heritage.
34. The licensee shall ensure that its contractors, and their subcontractors, navigating around the coast of Ireland to exercise the greatest care to avoid damage to existing Aids to Navigation. Any works adjacent to existing Aids to Navigation should ensure a wide berth, paying particular attention to the strength of wind and tide.

Note for applicant: It is a matter for the applicant to satisfy themselves that they have other appropriate regulatory consents that may be needed including Dumping at Sea permit required from the Environmental Protection Agency (EPA) and Annex IV Derogation Licence application which must be submitted to and determined by NPWS. Details available at <https://www.npws.ie/licensesandconsents/disturbance/application-for-derogation-licence>

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