[redacted]
Foreshore Section,
Department of Housing, Planning and Local Government
Newtown Road
Wexford
Y35 AP90

Your Ref: FS007029

Our Ref: 003534955-01

24 March 2020

FS007029 Foreshore Licence Consultation Public Submissions

Dear [redacted]

Thank you for passing on the public submissions in response to Foreshore Licence application, ref FS007029.

As set out in the Foreshore Licence application documentation, innogy Renewables Ireland are seeking the licence to undertake site investigation and environmental surveys to inform the preliminary design of a proposed wind farm array and ancillary infrastructure in the vicinity of the Kish and Bray Banks. The information collected will also be used to update the Environmental Impact Assessment Report (EIAR) and Natura Impact Statement (NIS) which will be submitted in support of an updated development consent application for the proposed offshore wind farm.

A number of the public submissions do not appear to recognise that the licence application is solely for the purposes of the completion of site investigation and environmental surveys and that the application is not for permission to construct or operate a wind farm. Nevertheless, whilst some of the issues raised are outside of the scope of the licence application we have endeavoured to address same in a meaningful way.

It is innogy's intention to deliver a comprehensive stakeholder and community engagement programme later this year as part of our preparation activities associated with an updated development consent application. During this consultation programme we will be inviting input from interested parties in relation to the design and environmental assessment of the proposed offshore wind farm.

Ten submissions were received during the consultation period. For each submission we have reviewed the content of same and endeavoured to identify the key issues contained therein. Our response to each of the key issues continued within the submissions are set out overleaf.

Yours Sincerely,

[redacted]

[redacted]

[redacted] MANAGER

innogy Response to FS007029 Foreshore Licence Consultation Public Submissions

Submission 1: Email to DHPLG dated 18 October 2019

Scallop dredge on east side of the Bray Banks:

innogy are aware that scallop dredging occurs in the vicinity of the proposed development and will continue to engage with fishermen as we progress the Environmental Impact Assessment and wind farm design to mitigate any significant effects upon the sector. The comments raised in Submission 1 relate to the wind farm itself and not to the proposed surveys, which are the subject of this Foreshore Licence application.

Submission 2: Email to DHPLG dated 18 October 2019

Visual effects of proposed wind farm:

The visual impact of the proposed wind farm will be fully assessed and presented within the Environmental Impact Assessment Report (EIAR) for the proposed wind farm development when an updated development consent application is submitted for the project. The timing of the submission of this updated development consent application is currently uncertain due to the planned change in the consenting framework as envisaged in the General Scheme of the Marine Planning and Development Management Bill.

Marine surveys which are planned or in progress will provide additional data to update and confirm our understanding of the baseline environmental conditions. Obtaining this data will enable us to provide a robust assessment of potential effects of the construction and operation of the wind farm upon marine species and habitats as it progresses through its current project planning phase. The comments raised in Submission 2 relate to the wind farm itself and not the proposed surveys, which are the subject of this Foreshore Licence application.

Submission 3: Letter to DHPLG from Dun Laoghaire Harbour Representative Group dated 18 October 2019

Effects upon Dun Laoghaire Harbour

innogy have been engaging with Dun Laoghaire County Council as a key stakeholder in our proposed development and are aware of the plans being considered for Dun Laoghaire harbour. We also acknowledge the importance of Dun Laoghaire Harbour for tourism and recreation and will undertake an assessment of the likely effects of the wind farm and associated infrastructure upon recreation, tourism and the wider economy as part of an updated environmental impact assessment being prepared to support and updated

development consent application. This assessment will be presented within the environmental impact assessment report (EIAR) for the proposed wind farm project.

Submission 4: Letter to DHPLG from Save Our Seafront

We welcome Save our Seafronts support for renewable energy and we share their desire to see effective policies and plans in place that will enable Ireland to work towards achieving its renewable energy targets.

The following points raised relate to the proposed works which are the subject of the Foreshore Licence Application.

- Consultation with relevant ports, marinas and yacht clubs and relevant local authorities:

In the case of users of the marine space, we would anticipate that in the event of successfully being granted a Foreshore Licence for the purpose of the completion of the intended survey and prior to the commencement of surveys, there would be a number of conditions included such as:

> *Advance notification to the relevant Port Authority and Harbour Companies prior to the commencement of the survey works and ongoing liaison with these entities during the survey works;*
>
> *Publication of a marine notice (including through the Maritime Safety Directorate) providing a general description of the survey works and approximately dates of commencement and completion;*

The planned surveys will predominantly occur in the sub-tidal area and will be undertaken from a marine vessel. However, in the case of the topographical and ecological surveys undertaken in the intertidal area these will be conducted on foot. The proposed geotechnical work in the intertidal area may require a tracked vehicle to access the beach. For safety and security, a temporary perimeter will be set up around each sampling for the duration of that activity. Works will be clearly sign-posted and duration and disturbance will be kept to a minimum. We will engage with the relevant local authorities (Dun Laoghaire Rathdown County Council and Dublin City Council) to agree access routes and timing of the works.

- Ecological effects:

The assessment of effects upon spawning and nursery grounds of fish species, as set out in the documentation accompanying the Foreshore Licence application, concludes there will be no adverse impact, due to the extent of the area of spawning and nursery activity and the limited spatial and temporal extent of the proposed surveys.

Annex E to the Planning Report, submitted in support of the Foreshore Licence application follows the requirements of the European Commission Methodological Guidance on the provision of Article 6(3) and 6(4) of the 'Habitats' Directive 92/43/EEC (EC, 2001), Planning and Development Act 2000, as amended and the Department of Environment, Heritage and Local Government; 'Appropriate Assessment of Plans and Projects in Ireland: Guidance for Planning Authorities', the European Communities (Birds and Natural Habitats) Regulations 2011 the November 2018 EU guidance on Managing Natura 2000. The Annex sets out the staged process which has been followed.

Stage 1 is a screening exercise which includes an assessment of the likely significance of the effects **in the absence of mitigation measures** intended to avoid or reduce the harmful effects of the proposed development on European sites. Sites for which the screening process cannot objectively conclude that there will be no likely significant effects without mitigation in place are carried forward to stage 2. The screening process for the proposed surveys concluded that without mitigation in place significant effects on South Dublin Bay and River Tolka Estuary SPA, North Bull Island SPA, South Dublin Bay SAC, Rockabill to Dalkey Island SAC and North Dublin Bay SAC could not be excluded.

In Stage 2 mitigation measures are applied and a further assessment undertaken to determine whether, with mitigations in place, harmful effects on the European Sites in question may occur. Detail of the mitigation measures are set out in pp94-95 of Annex E to the Planning Report. They include adherence to the Department of Arts, Heritage and the Gaeltacht Guidance to Manage the Risk to Marine Mammals from Man Made Sound in Irish Waters (DAHG, 2014) in addition to other measures which have been committed to, in consultation with National Parks and Wildlife Service (NPWS). The Natura Impact Statement (NIS) concludes that the proposed surveys, both alone and in combination with other projects and plans, with mitigation measures in place will have no adverse effects on the site's conservation objectives and integrity.

It is for the competent authority, i.e. the Minister for Housing Planning and Local Government to conduct an Appropriate Assessment and consider whether the proposed development, either alone or in combination with other plans or projects, in view of best scientific knowledge, will adversely affect the integrity of any European site.

This submission also raises a number of points in relation to the location of the proposed wind farm, the suitability of constructing a wind farm upon sandbanks, consideration of alternative locations and the height of wind turbines to be installed. These matters do not relate to the site investigation works which are the subject of the Foreshore Licence application and consultation process.

The proposed turbine array area is shown as "OWF Lease Application Area" in the Planning Report, Annex B, Foreshore Licence Map 1. The number, size and exact location of turbines within this area is still to be determined. The further site investigations and environmental surveys to which the Foreshore Licence application relates will inform the consideration of alternative technology considerations, alternative foundation options and alternative project layout configurations. and foundation options.

Submission 5: Letter to DHPLG from Coastal Concern Alliance

The matters raised in the submission from Coastal Concern Alliance relate to the proposed wind farm in the location of the Kish and Bray Banks and not to the survey activity which is the subject of the Foreshore Licence application. We are currently undertaking a range of activities to enable us to update the design of the proposed wind farm to incorporate the latest and emerging technology.

It is innogy's intention to deliver a comprehensive stakeholder and community engagement programme later this year as part of our preparation activities associated with an updated development consent application. During this consultation programme we will be inviting input from interested parties in relation to the design and environmental assessment of the proposed offshore wind farm.

Submission 6: Letter to DHPLG

The matters raised in this submission relate to the proposed construction of a wind farm and not to the surveys which are the subject of the Foreshore Licence application to which the consultation relates. We note the comments made.

It is innogy's intention to deliver a comprehensive stakeholder and community engagement programme later this year as part of our preparation activities associated with an updated development consent application. During this consultation programme we will be inviting input from interested parties in relation to the design and environmental assessment of the proposed offshore wind farm.

Submission 7: Letter to DHPLG

This submission questions whether the technique of vibrorcoring will produce low frequency vibrations and sediment plumes which will have an effect on marine species. The vibrocores which are proposed are of small diameter, up to 150 mm and to a shallow depth, up to 6m. The expected duration of the coring operation at each location is less than 1 minute. The vibration effectively liquifies the sediment in immediate contact with the core barrel. The equipment is designed to ensure the integrity of the sample and

therefore to minimise the extent of sediment disturbance. No significant effects on marine species or habitats are likely to occur due to the scale and nature of the survey technique proposed.

The intertidal cone penetration tests are not expected to release sediment into the water column as these will be conducted during low tide. innogy have committed to reinstatement of habitat in the intertidal area following completion of the works and as a consequence the volume of sediment which may become suspended on the incoming tide will be minimal. The benthic grab samples are shallow, approximately 20cm deep, and have the potential to release small volumes of sediment into the water column which would disperse rapidly. Sampling will be preceded by drop down video survey to identify and avoid, if present, impacts upon any sensitive ecological features. Micro-siting of sampling locations will also be implemented should this be considered be appropriate.

The Appropriate Assessment Screening and Natura Impact Statement, Annex E of the Planning Report acknowledges the importance of the Rockabill to Dalkey SAC to harbour porpoise throughout the annual cycle. In the absence of complete data on foraging behaviour and site fidelity of individuals and groups the assessment takes the precautionary approach of assuming that the entire area is of high importance at all times of the year. On this basis it was considered prudent to implement the relevant specific mitigation measures as recommended by the Department of Arts, Heritage and the Gaeltacht (now known as the Department of Culture, Heritage and the Gaeltacht.

The soft-start procedure, which forms part of the mitigation required in the Department of Arts, Heritage and the Gaeltacht Guidance to Manage the Risk to Marine Mammals from Man-made Sound in Irish Waters (DAHG, 2014) allows time for any animal that may be close to the sound source to move away as the sound grows louder. This reduces the likelihood of exposure to higher sound levels. Marine Mammal Observers are engaged to monitor an exclusion zone around the acoustic source array as an additional precautionary measure. This further reduces the risk of potential physical harm to marine life.

innogy are supportive of and fully engaged with the Marine Spatial Planning process. innogy expect at some stage in the future to submit an updated application for development consent for the construction and operation of an offshore wind farm. The timing of the submission of this updated development consent application is currently uncertain due to the planned change in the consenting framework as envisaged in the General Scheme of the Marine Planning and Development Management Bill.

Submissions 8 – 10 Email to DHPLG from Augustus Cullen Law, Solicitors dated 11th and 12th November 2019.

Augustus Cullen Law represent a number of clients including a group referred to as "East Coast Fishers".

innogy recognise the importance of having an effective working relationship with the fishery industry. innogy have a Fisheries Liaison Officer (FLO) in place who has spent a considerable amount of time identifying and engaging with individual fishermen who regularly fishing in the area where the Dublin Array offshore windfarm is proposed. The FLO briefed a meeting of the South East Regional Inshore Fisheries Forum (RIFF) in July 2019 in relation to the proposed Dublin Array project. All of the fishermen who the FLO was able to identify through quayside visits and local enquiries were invited to a consultation meeting in Dun Laoghaire and Wicklow in October 2019. innogy advised at these meetings that we are committed to an ongoing programme of engagement with the fishery industry and that meetings of a similar nature would be held at a frequency to be agreed with the attendees when considered beneficial to all parties. At the time of writing this response another series of meetings are being scheduled to update the local fishery industry on progress and developments since the October 2019 meetings.

The numbered paragraphs below cross-reference with the numbering within the submissions 8 to 10.

1. Innogy have referred in the current Foreshore Licence application to the Foreshore Lease applications submitted in 2006 under the Foreshore Act 1933 as amended, to provide context and an update on the plans for the project. It is not accepted that there is any lack of detail in the current application.

It is important to note the distinction between this application (for a licence to allow for specific survey works to be undertaken) and the earlier applications for a foreshore lease (which would allow construction and operation of the wind farm).

Subject to the necessary legislative provisions being finalised and commenced, innogy expect at some stage in the future to submit an updated application for development consent under the Marine Planning and Development Management Bill for the construction and operation of an offshore wind farm. It is anticipated that in preparing the updated development consent application documents (which include the preparation of an updated Environmental Impact Assessment Report and Natura Impact Statement) that a programme of consultation will be completed with local and national stakeholders. A public consultation programme to update interested parties and the general public in relation to the Dublin Array project is currently being planned for later this year.

2. Numerous studies of the behavioural effects on fish to exposure to seismic sources are reported in literature, these are either conducted in laboratories or on caged individuals and some on unrestrained fish. The nature and extent of behavioural response observed is species dependent but observed effects range from startle response, which involves a contraction of the muscles on one side of the fish's body to form a C-shape, usually pointing away from the sound source to changes in schooling pattern, swim depth or speed. Evidence suggests behavioural change is short term with captive fish observed returning to their pre-exposure behaviour and position within 31 min after the final air gun signal (Fewtrell and McCauley 2012)[1]. The impact upon fish populations are therefore not considered to be significant due to the short-term nature and limited spatial extent of the behavioural effect.

innogy have committed to the implementation of the relevant recommendations as set out in the publication by the Department of Arts, Heritage and the Gaeltacht *Guidance to Manage the Risk to Marine Mammals from Man-made Sound in Irish Waters* (DAHG, 2014).. This guidance, although focussed on mitigation for marine mammal species includes detailed ramp-up procedures which will benefit a wider range of species that are able to detect underwater sound pressure.

In preparing the Foreshore Licence application, innogy implemented a conservative worst case scenario philosophy. We continue to refine our proposed survey approach and have already taken steps to reduce the sound output of the surveys for example by proposing different sub bottom profiling equipment in different areas of the site dependent upon the depth of data required. Deep geological cross-sections to approximately 60m are required only within the proposed wind turbine array area whereas within the cable corridor shallow penetration is sufficient and equipment with lower energy and sound pressure levels will therefore be used. We will also seek, where possible, to minimise the spatial extent and duration of the survey coverage within the export cable search corridor limiting same to the emerging preferred routes identified at that time, as opposed to the entire survey area as defined by the overall boundary indicated in Foreshore Licence Map 1. By minimising the spatial extent of the survey corridors, in the event that a subsequent review of the survey data indicates the presence of features, including natural geology, archaeological or ecological features, which would not be compatible with cable installation, it may be necessary to supplement the data with a subsequent targeted geophysical survey campaign for alternative cable routing options whilst ensuring that we remain within the original geophysical survey boundary defined within the Foreshore Licence application.

3. The vibrocores which are proposed are of small diameter, up to 150 mm and to a shallow depth, up to 6m. The expected duration of the coring operation at each location is less than 1 minute. The low

[1] Fewtrell, J.L.,McCauley, R.D., 2012. Impact of air gun noise on the behaviour of marine fish and squid. Mar. Pollut. Bull. 64, 984–993.

frequency noise associated with vibrocoring is of a sound level similar to that of a ships engine. No significant effects on marine species or habitats are likely to occur due to the low level of sound energy and very short duration of this activity.

4. Prior to deployment of the buoy mounted equipment marking, lighting and other navigational safety requirements will be agreed with the Department of Transport, Tourism and Sport (DTTS), Marine Survey Office and Commissioners of Irish Lights. Lighting and marking will be compliant with International Association of Aids to Navigation (IALA) requirements. As stated, in Section 7 of the Planning Report, Consent in the form of Statutory Sanction under section 653 (2) of the Merchant Shipping Act 1894 will be required and an application will be made once a Contractor has been appointed for the supply and installation of the required equipment and the exact details of that equipment are confirmed.

Marine Notices will be published through DTTS which will provide installation vessel and contact details together with timing of the deployment and location of fixed monitoring equipment.

5. A Fisheries Liaison Officer (FLO) was appointed to support the Dublin Array project in May 2019. The FLO has been actively engaging with individual fishermen from east coast harbours since June 2019 both face to face and by telephone. He also provided information to a meeting of the South East Regional Inshore Fisheries Forum (RIFF) in July 2019 and has offered the same to the North East Regional Inshore Fisheries Forum. The FLO has distributed his contact details and welcomes contact from the fishing industry in relation to any aspect of the project. innogy intend to maintain engagement with the fishing community both through the FLO and at regular group meetings for the duration of the project.

Information on the outline plans and programme for the wider wind farm development and on plans for survey activities, including works which are the subject of the Foreshore Licence application, have been communicated through the FLO who has also provided feedback from the fishing industry to innogy. We therefore strongly disagree that engagement with the fishing industry had not taken place prior to submission.

The first formal group meetings attended by innogy staff and the fishing industry occurred on the 28th and 29th of October, these were primarily planned to discuss the process of Environmental Impact Assessment with regard to the wind farm development, specifically the data sources which inform the understanding of the commercial fisheries baseline but also provided an opportunity to continue discussion regarding the proposed survey activities and wider wind farm development process. Further meetings are currently being planned where innogy will provide the latest information on the updating the of the design and

Environmental Impact Assessment (incorporating a Commercial Fisheries Impact Assessment) for the wind farm project.

6. In addition to the fishery industry engagement as described above, innogy continue to engage in periodic consultation with such navigational stakeholders as Dublin Port Company, Commissioners for Irish Lights and the Marine Survey Office.

7. innogy acknowledge the use of the area as a whelk fishery. Although there is little information on the effect of noise on shellfish species, the absence of gas-filled cavities such as those possessed by marine mammals and finfish, means that there is no mechanism for marine invertebrates to detect pressure changes associated with sound waves. However, whelk in common with some other invertebrates may be able to detect particle motion associated with sound waves due to the presence of a structure called a statocyst which along with associated neurological hairs may play a role in orientation. There are few studies which investigate the effects of particle motion, however there are a number of ecological field studies which compare mortality of a range on invertebrates, including scallop, lobster and clam at sites where seismic survey occurs compared to sites where it does not. These conclude that there is no evidence of increased mortality due to exposure to seismic surveys. (Parry et al., 2002[2]; Harrington et al., 2010[3]; Payne et al., 2007[4]; Day et al.,2016a[5]; La Bella et al., 1996[6]).

A number of robust studies of catch rates and abundance of shellfish species are also reported in scientific literature, which show no significant differences between sites where seismic activity occurred and those where it did not (Wardle et al., 2001[7]; Parry et al., 2002; Christian et al., 2003[8]; Parry and Gason, 2006[9]; Courtenay et al., 2009[10])

8. Please refer to responses to points 1 – 7 above.

2 Parry, G.D., Heislers, S.,Werner, G.F., Asplin,M.D., Gason, A., 2002. Assessment of Environmental Effects of Seismic Testing on Scallop Fisheries in Bass Strait. Marine and Freshwater Resources Institute (Report No. 50).
3 Harrington, J.J., McAllister, J., Semmens, J.M., 2010. Assessing the Short-Term Impact of Seismic Surveys on Adult Commercial Scallops (Pecten fumatus) in Bass Strait. Tasmanian Aquaculture and Fisheries Institute, University of Tasmania.
4 Payne, J.F., Andrews, C.A., Fancey, L.L., Cook, A.L., Christian, J.R., 2007. Pilot study on the effects of seismic air gun noise on lobster (Homarus americanus). Can. Tech. Rep. Fish. Aquat. Sci. (No. 2712).
5 Day, R.D., McCauley, R., Fitzgibbon, Q.P., Semmens, J.M., 2016a. Assessing the Impact of Marine Seismic Surveys on Southeast Australian Scallop and Lobster Fisheries. (FRDC Report 2012/008) University of Tasmania, Hobart.
6La Bella, G., Cannata, S., Froglia, C., Ratti, S., Rivas, G., 1996. First assessment of effects of air-gun seismic shooting on marine resources in the central Adriatic Sea. International Conference on Health, Safety and Environment in Oil and Gas Exploration and Production, pp. 227–238.
7 Wardle, C.S., Carter, T.J., Urquhart, G.G., Johnstone, A.D.F., Ziolkowski, A.M., Hampson, G., Mackie, D., 2001. Effects of seismic air guns on marine fish. Cont. Shelf Res.1, 1005–1027.
8 Christian, J.R., Mathieu, A., Thompson, D.H.,White, D., Buchanan, R.A., 2003. Effect of Seismic Energy on SnowCrab (Chionoecetes opilio). Environmental Funds Project No. 144. Fisheries and Oceans Canada. Calgary (106p).
9 The effect of seismic surveys on catch rates of rock lobsters in western Victoria, Australia, GD Parry and A Gason, 2005.
10 Courtenay, S.C., Boudreau, M., Lee, K., 2009. Potential Impacts of Seismic Energy on Snow Crab: An Update on the September 2004 Peer Review. Fisheries and Oceans Canada, Moncton.

9. innogy have committed to working with individual fishermen to obtain their co-operation with the objective of ensuring that survey activities can be completed safely and without damage to fishing gear, survey equipment or vessels.

The programme of commencement and delivery of survey activities is subject to a positive decision on the Foreshore Licence application and the availability of surveys vessels equipment and personnel. Once there is certainty on these factors our objective is to work with the fishery industry to develop and implement a survey programme which minimises the risk of any such losses through effective planning and coordination of the survey process.

10. Please refer to response to points 5 and 6 above.

11. innogy acknowledge the concern expressed by members of the fishing industry with regard to the seismic survey which is proposed. Seismic survey is a general term which is used to describe a wide range of techniques. The surveys that are proposed are similar in nature and intensity to those undertaken in the area by the INSS/INFOMAR project which included Sub Bottom Profiling (seismic techniques) during 2003, 2008, 2009, 2010 and 2012 in the same general area. As stated in response to point 7 above significant effects upon whelk and consequently upon the commercial whelk fishery are not anticipated.

12. The information presented by Augustus Cullen Solicitors as being from a 'fishing report' prepared by innogy is data from a presentation made to the fishing industry by our Commercial Fisheries Specialist in October 2019 in Dun Laoghaire and Wicklow. In addition to providing the attendees with a general update on the project, one of the objectives of the meeting was to gain feedback and comments from attendees on their perception of the accuracy of the publicly available data including EU Data Collection Framework (DCF) database, EU Market Observatory for Fisheries and Aquaculture (EUMOFA) database, Marine Institute, Fishing Atlas and State of Stocks and Sea Fisheries Protection Authority (SFPA) fish landings data from 2009 to 2017 for Howth and Dun Laoghaire ports.

Discussion with the attendees at these meetings identified supplementary sources of data to capture catches from <10 m vessels. This information is held by other fishery industry sources and innogy have been actively seeking this data, which when sourced will be provided to the members of the fishery industry with whom we have engaged to date, or other interested persons and will be reported in the Environmental Impact Assessment Report is intended to be submitted as part of any future development consent application for the proposed offshore wind farm.

It should be noted that there is no anticipated effect on the whelk fishery as a result of the proposed site investigation and surveys which are the subject of the Foreshore Licence application. The estimate of the size and value of the industry does not alter that conclusion.

13. No reference is provided to the source of the international evidence that is quoted in these submissions nor its direct applicability to the surveys which are the subject matter of the Foreshore Licence application. It is not therefore possible to assess the scientific robustness of the studies, the species in question nor the nature of the seismic source. It should be noted that Sub Bottom Profiling includes a range of techniques of different sound frequencies and intensities. Water depth, seabed bathymetry, water temperature and salinity all influence the extent to which sound propagates in the marine environment and the effects vary dependent on the species which is under consideration. Our response to item 7 above provides specific published academic references which assess these impacts and conclude in those studies that there is no evidence of increased mortality due to exposure to seismic surveys and no significant difference in catch rates between sites where seismic activity occurred and those where it did not.