

Offshore Wind Grid Development Consultation

Energy Division

Department of Communications, Climate Action and Environment

29-31 Adelaide Road

Dublin 2

D02 X285

Re: Consultation to Inform a Grid Development Policy for Offshore Wind in Ireland and Offshore Wind Consultation

A Chara,

On my own behalf and on behalf of Wild Ireland Defence clg of which I am a Director, I wish to make the following combined submissions to both Consultations designed to inform:

- (a) Grid Development Policy for Offshore Wind in Ireland and
- (b) Offshore Wind in Ireland

1. In the context of Ireland's abysmal failure to as yet designate a minimum of 10% of its Offshore Territory as MPA's (Marine Protected Areas) in breach of what is required of Ireland pursuant to Sustainable Development Goal No 14 of the UN Environment Programme and in fundamental breach of Ireland's Commitments under the Habitat's Directive of the EU it is almost laughable for the State to be developing a Grid Development Policy in support of Offshore Wind Projects that are currently undergoing the Legislative Consent procedure pursuant to the Foreshore Act 1933, as amended, and/or that are planned and/or in the pipeline in Ireland in circumstances where the existing Foreshore Acts constitute a Legislative mess that is utterly incapable of constituting an appropriate or coherent framework for the development of either Offshore Wind or the connection of Offshore Wind Projects with Ireland's Electricity grid and with a comprehensive Legislative Framework sitting on the back-burner since referral to the Law Reform Commission in 2013/4 and awaiting the introduction before the Houses of the Oireachtas of the Marine Planning and Development Management Bill (MPDM) ever since its publication by Minister Murphy in 2019.

2. It is hardly surprising but, for all that shocking to discover that neither of the Documents published on the Department Website in connection with these Consultations makes mention of the highly probable and devastatingly adverse impacts on Spawning and Juvenile Fish Stocks in Ireland's Offshore resulting from Wind Energy Developments and their associated Connections to the terrestrial Grid in circumstances where the health of all such Fish Stocks is the responsibility of the European Union.
3. Arising out of 2 above, I strongly suggest to the relevant Minister in the new Government that he initiate a Consultation with Coastal and Fishing Communities scattered all along our Coastline and with Representative Bodies in the Fishing Industry prior to making any Decisions on these Consultations.
4. In circumstances where the North West Waters Advisory Council of the European Union is currently discussing, considering and preparing a Referral to ICES (International Council for the Exploration of the Sea) in Copenhagen on the issue of the impacts of Seismic Airgun Surveys (sometimes known as Seismic Blasting) on Fish Populations for purposes of ICES initiating a Consultation and preparing an Assessment on the known devastating impacts and affects of Seismic Airgun Surveys in the development of Offshore Wind Energy, I again humbly request that the relevant Minister await the Publication of that ICES Report prior to making any Decision on these Consultations.
5. In the context of the deploying and use of **Seismic Airgun technology in the planning of Offshore Wind Energy** projects it is relevant to note that **Weilgart (2013)** stated that 37 marine species have been shown to be affected by seismic airgun noise. These impacts range from behavioural changes such as decreased foraging, avoidance of the noise and changes in vocalizations, displacement from important habitats, stress, decreased egg viability and growth, decreased catch rates, hearing impairment, massive injuries and even death by drowning or stranding. **Seismic airgun noise must be considered a serious marine pollutant.**
6. Moreover, a paper by **McCauley et al (2017)** states that the significance and implications of potential large scale modifications of plankton community structure and abundance due to **Seismic Survey** operations has **enormous ramifications for larval recruitment processes, all higher order predators and ocean health in general**. They conclude that there is an urgent need **to conduct further study to mitigate, model and understand potential impacts on plankton and the marine ecosystems and to prioritise development and testing of alternative seismic sources**.
7. **EFFECTS ON PLANKTON**
 Phytoplankton and their grazers – zooplankton - underpin ocean productivity and any impacts on plankton by human activity sources, have enormous implications for ocean ecosystem structure and health. In addition, a significant component of zooplankton communities comprise the larval stages of many commercial fish species. Healthy populations of fish, top predators and marine mammals are not possible without viable planktonic communities.
 McCauley et al (2017) state that no published studies have been conducted on seismic impacts on plankton. These authors present evidence that suggest seismic surveys cause significant mortality to zooplankton populations. Experimental air gun signal exposure decreased zooplankton abundance when compared with controls and caused a 2 to 3 fold increase in dead adult and larval zooplankton. Impacts were observed out to the maximum 1.2 km range sampled, which was more than two orders of magnitude greater than the previously assumed impact range of 10 m. Although no adult krill were present, all larval krill were killed after air gun passage. These authors concluded that there is

significant and unacknowledged potential for ocean ecosystem function and productivity to be negatively impacted by present seismic technology.

McCauley et al (2017) state that we cannot fully understand the impacts of seismic surveys on higher order fauna or on the marine ecosystem without knowledge of how organisms at the base of the food chain respond.

8. There is no doubt but that the Fisheries Directorate of the European Union should be consulted on the Issues the subject matter of these (joined) Consultations prior to Ireland embarking on any decision-making process on either of these Consultations.
 9. One further and very significant issue arises in the context of Offshore Wind Energy and that is the issue of the significant Adverse Impacts of Pile Driving in the construction of Offshore Wind Farms whether that Pile Driving be in the context of fixed Wind Pylons with foundations into the sea-floor or in the context of so-called Floating Wind Platforms which are anchored by means of Stays that are drilled into the sea floor and stabilized by means of Piles. There is significant literature describing these adverse impacts in American Waters and in the Arctic and I draw your attention to a Publication of the **U.S. Department of the Interior Bureau of Ocean Energy Management** from 2012 prepared by Normandeau Associates Inc. on *“Effects of Noise on Fish, Fisheries, and Invertebrates in the U.S. Atlantic and Arctic from Energy Industry Sound-Generating Activities. A Workshop Report for the U.S. Dept. of the Interior, Bureau of Ocean Energy Management.”*
- *The highlighted references at 5, 6, 7 and 8 above are derived from a Paper entitled: **A review of some key literature on the Impacts of Seismic Surveys on Marine Fauna by The Irish Fisheries Science Research Partnership (IFSRP) at the 48th Meeting of the IFSRP on 22nd February 2018***

Arising out of the foregoing, I urge the relevant Minister to postpone any further consideration on these associated Consultations pending Consultation to be initiated with Fishing Communities all along our Coastline and with all 4 Fish Producer Organizations

IS&WFPO - Castletownbere

KFO - Killybegs

IFPO – Dun Laoghaire

IS&EFPO – Kilmore Quay

Moreover, any such Consultation should be informed by Consultation with ICES in Copenhagen and with the Fisheries & Environment Directorate of the EU.

Finally, I urge the responsible Minister and the Government to suspend consideration of all Applications made for Foreshore Licenses for Offshore Wind Energy Projects, whether preliminary to the actual Wind Energy Projects themselves or construction and/or deployment of the actual Projects pending the wide Consultation suggested by me above and pending receipt of Advice both from ICES and from the DG Fisheries of the EU.

Yours faithfully