

Xodus House  
50 Huntly Street, Aberdeen  
AB10 1RS, UK

T ++44 (0)1224 628300  
F ++44 (0)1224 628333  
E [info@xodusgroup.com](mailto:info@xodusgroup.com)

[www.xodusgroup.com](http://www.xodusgroup.com)

18 February 2022

To whom it may concern,

I am writing to you on behalf of Offshore Wind Power Limited (OWPL) regarding our intention to conduct a geophysical survey of the West of Orkney Windfarm within the NI PO, and associated export cable corridor route options to Caithness and Orkney.

### **Survey Activities and Duration**

OWPL plan on undertaking survey activities in the area outlined in the map below (Figure 1) and potential cable landfall locations for a future windfarm development.

These activities will include use of the following survey kit at each of the surveyed areas:

- > Side-scan sonar - used to generate an accurate image of the seabed, which may include 3D imagery. An acoustic beam is used to obtain an accurate image of a narrow area of seabed to either side of the instrument by measuring the amplitude of back-scattered return signals.
- > Multi-beam echosounder - used to obtain detailed Three Dimensional (3D) maps of the seafloor which show water depths. A transducer emits a sound pulse vertically downwards towards the seafloor, and a receiver records the return of the pulse once it has been reflected off the seafloor.
- > Sub-bottom profiler - used to identify and characterise layers of sediment under the seafloor. A transducer emits a sound pulse vertically downwards towards the seafloor, and a receiver records the return of the pulse once it has been reflected off the seafloor. These devices can operate across a range of frequencies depending on the purpose of the survey.
- > 2D Ultra High-Resolution (2DUHR) seismic source and digital streamer - used to create a visual profile of the different sediment layers below the seabed. A controlled seismic source of energy is connected by high voltage cable to a sound source (boomer or sparker) that transfers the energy through the water to penetrate the seabed. Hydrophones record the energy reflected back.
- > Ultra-Short Baseline (USBL) positioning system - used to determine the position of subsea survey items, including ROVs, towed devices, grab samplers, etc. A USBL system consists of a transducer, which is mounted on the vessel and a transponder attached to the ROV. The transducer transmits acoustics through the water and the transponder sends a response which is detected by the transducer.
- > Magnetometer - used to detect any ferrous metal objects on the seabed, such as wrecks, UXO, or any other obstructions.
- > Sound Velocity Profiler (SVP) - to gather data on the marine environment and are used to measure the speed of sound within the water column to calibrate geophysical survey equipment. The SVP continuously emits high frequency pulses as it is lowered towards the seafloor in order to measure the speed of sound within the water column.





The survey window will commence in April 2022 and is expected to take up to 178 days to complete, including time for weather contingency. The estimated end date of operations is the 26th September 2022. The results of the survey works will be used to ascertain seabed characteristics within the survey areas, in order to inform development of export cable routes and to identify requirements for further surveys.

### **Survey Information**

This is a notification that a survey will take place from April 2022 to September 2022. These survey activities will allow fishing practices to continue during the survey period, with the only requested restriction being to provide a 500 m operational safety zone around the survey vessel. A Notice to Mariners (NTM) will be issued prior to the survey, providing full details of the vessel, timing, and contact procedures during the survey operations. Coordinates which outline the areas of requested clearance are also provided at the end of this letter as Appendix A.

If you have any questions or comments, please contact Xodus Group (contact details below).

### **Future Surveys**

Further survey and site investigations will include:

- > Further geophysical surveys, investigating nearshore areas (nearshore to the north Caithness coast and west Orkney coast), where potential export cable landfalls have been identified and an export cable corridor within Scapa Flow;
- > Geotechnical surveys of the QAA, export cable corridors and nearshore areas where potential export cable landfalls have been identified;
- > Environmental surveys involving benthic ecology grab samples and drop-down cameras

### **Contact Details**

If you require any additional information or would like to discuss the survey, please contact:

- > [OWPLfisheries@xodusgroup.com](mailto:OWPLfisheries@xodusgroup.com) or call +44 (0) 79266 418 820

Yours sincerely,



Gareth Jones

Femke de Boer





APPENDIX A – COORDINATES FOR SURVEY AREAS

Point no.	Decimal degrees WGS 84		Degrees minutes seconds WGS 84		Degrees decimal minutes WGS 84	
	Long	Lat	Long	Lat	Long	Lat
1	-3.353101918	58.96760016	3° 21' 11.167" W	58° 58' 3.361" N	3° 21.186' W	58° 58.056' N
2	-3.355688775	58.96491375	3° 21' 20.480" W	58° 57' 53.690" N	3° 21.341' W	58° 57.895' N
3	-3.35191106	58.96319638	3° 21' 6.880" W	58° 57' 47.507" N	3° 21.115' W	58° 57.792' N
4	-3.346314562	58.96431455	3° 20' 46.732" W	58° 57' 51.532" N	3° 20.779' W	58° 57.859' N
5	-3.333601072	58.9602975	3° 20' 0.964" W	58° 57' 37.071" N	3° 20.016' W	58° 57.618' N
6	-3.324997328	58.95303546	3° 19' 29.990" W	58° 57' 10.928" N	3° 19.500' W	58° 57.182" N
7	-3.319710187	58.95331322	3° 19' 10.957" W	58° 57' 11.928" N	3° 19.183' W	58° 57.199' N
8	-3.317188605	58.95034699	3° 19' 1.879" W	58° 57' 1.249" N	3° 19.031' W	58° 57.021' N
9	-3.315381197	58.94474732	3° 18' 55.372" W	58° 56' 41.090" N	3° 18.923' W	58° 56.685' N
10	-3.313962173	58.92914415	3° 18' 50.264" W	58° 55' 44.919" N	3° 18.838' W	58° 55.749' N
11	-3.315585995	58.92467477	3° 18' 56.110" W	58° 55' 28.829" N	3° 18.935' W	58° 55.480' N
12	-3.319327882	58.92055942	3° 19' 9.580" W	58° 55' 14.014" N	3° 19.160' W	58° 55.234" N
13	-3.324268417	58.91741078	3° 19' 27.366" W	58° 55' 2.679" N	3° 19.456' W	58° 55.045' N
14	-3.327940281	58.92205067	3° 19' 40.585" W	58° 55' 19.382" N	3° 19.676' W	58° 55.323" N
15	-3.325292849	58.92723507	3° 19' 31.054" W	58° 55' 38.046" N	3° 19.518' W	58° 55.634" N
16	-3.353653954	58.93195902	3° 21' 13.154" W	58° 55' 55.052" N	3° 21.219' W	58° 55.918" N
17	-3.387394195	58.9218187	3° 23' 14.619" W	58° 55' 18.547" N	3° 23.244' W	58° 55.309" N
18	-3.402447614	58.92218237	3° 24' 8.811" W	58° 55' 19.857" N	3° 24.147' W	58° 55.331" N
19	-3.410664333	58.91566843	3° 24' 38.392" W	58° 54' 56.406" N	3° 24.640' W	58° 54.940" N
20	-3.423145207	58.89746962	3° 25' 23.323" W	58° 53' 50.891" N	3° 25.389' W	58° 53.848" N



21	-3.449568075	58.88977998	3° 26' 58.445" W	58° 53' 23.208" N	3° 26.974" W	58° 53.387" N
22	-3.431488334	58.88662865	3° 25' 53.358" W	58° 53' 11.863" N	3° 25.889" W	58° 53.198" N
23	-3.435574578	58.87766632	3° 26' 8.068" W	58° 52' 39.599" N	3° 26.134" W	58° 52.660" N
24	-3.434503968	58.87137428	3° 26' 4.214" W	58° 52' 16.947" N	3° 26.070" W	58° 52.282" N
25	-3.403738842	58.86924043	3° 24' 13.460" W	58° 52' 9.266" N	3° 24.224" W	58° 52.154" N
26	-3.392025652	58.87080067	3° 23' 31.292" W	58° 52' 14.882" N	3° 23.522" W	58° 52.248" N
27	-3.377001929	58.86533352	3° 22' 37.207" W	58° 51' 55.201" N	3° 22.620" W	58° 51.920" N
28	-3.378618907	58.85973239	3° 22' 43.028" W	58° 51' 35.037" N	3° 22.717" W	58° 51.584" N
29	-3.374041858	58.84410084	3° 22' 26.551" W	58° 50' 38.763" N	3° 22.443" W	58° 50.646" N
30	-3.369928533	58.83754374	3° 22' 11.743" W	58° 50' 15.157" N	3° 22.196" W	58° 50.253" N
31	-3.36373823	58.83466755	3° 21' 49.458" W	58° 50' 4.803" N	3° 21.824" W	58° 50.080" N
32	-3.384388801	58.82152369	3° 23' 3.800" W	58° 49' 17.485" N	3° 23.063" W	58° 49.291" N
33	-3.396187924	58.81877883	3° 23' 46.277" W	58° 49' 7.604" N	3° 23.771" W	58° 49.127" N
34	-3.423379491	58.81694672	3° 25' 24.166" W	58° 49' 1.008" N	3° 25.403" W	58° 49.017" N
35	-3.460214853	58.81827954	3° 27' 36.773" W	58° 49' 5.806" N	3° 27.613" W	58° 49.097" N
36	-3.634695196	58.81672668	3° 38' 4.903" W	58° 49' 0.216" N	3° 38.082" W	58° 49.004" N
37	-3.709750722	58.8274492	3° 42' 35.103" W	58° 49' 38.817" N	3° 42.585" W	58° 49.647" N
38	-3.803188401	58.83154921	3° 48' 11.478" W	58° 49' 53.577" N	3° 48.191" W	58° 49.893" N
39	-3.666473983	58.72088128	3° 39' 59.306" W	58° 43' 15.173" N	3° 39.988" W	58° 43.253" N
40	-3.637692503	58.616655	3° 38' 15.693" W	58° 36' 59.958" N	3° 38.262" W	58° 36.999" N
41	-3.653312153	58.62059451	3° 39' 11.924" W	58° 37' 14.140" N	3° 39.199" W	58° 37.236" N
42	-3.66657911	58.61774185	3° 39' 59.685" W	58° 37' 3.871" N	3° 39.995" W	58° 37.065" N
43	-3.672662791	58.61372467	3° 40' 21.586" W	58° 36' 49.409" N	3° 40.360" W	58° 36.823" N



44	-3.672152085	58.60705934	3° 40' 19.748" W	58° 36' 25.414" N	3° 40.329' W	58° 36.424' N
45	-3.677420859	58.60877817	3° 40' 38.715" W	58° 36' 31.601" N	3° 40.645' W	58° 36.527' N
46	-3.696648562	58.60568167	3° 41' 47.935" W	58° 36' 20.454" N	3° 41.799' W	58° 36.341' N
47	-3.746635335	58.5820836	3° 44' 47.887" W	58° 34' 55.501" N	3° 44.798' W	58° 34.925' N
48	-3.77162883	58.57451432	3° 46' 17.864" W	58° 34' 28.252" N	3° 46.298' W	58° 34.471' N
49	-3.777281356	58.57006981	3° 46' 38.213" W	58° 34' 12.251" N	3° 46.637' W	58° 34.204' N
50	-3.777305213	58.57003096	3° 46' 38.299" W	58° 34' 12.111" N	3° 46.638' W	58° 34.202' N
51	-3.775200372	58.5657248	3° 46' 30.721" W	58° 33' 56.609" N	3° 46.512' W	58° 33.943' N
52	-3.780093689	58.563364	3° 46' 48.337" W	58° 33' 48.110" N	3° 46.806' W	58° 33.802' N
53	-3.787943504	58.56325912	3° 47' 16.597" W	58° 33' 47.733" N	3° 47.277' W	58° 33.796' N
54	-3.794111351	58.56610382	3° 47' 38.801" W	58° 33' 57.974" N	3° 47.647' W	58° 33.966' N
55	-3.794207905	58.571825	3° 47' 39.148" W	58° 34' 18.570" N	3° 47.652' W	58° 34.310' N
56	-3.800955126	58.57361882	3° 48' 3.438" W	58° 34' 25.028" N	3° 48.057' W	58° 34.417' N
57	-3.82322528	58.56714972	3° 49' 23.611" W	58° 34' 1.739" N	3° 49.394' W	58° 34.029' N
58	-3.828912598	58.56908288	3° 49' 44.085" W	58° 34' 8.698" N	3° 49.735' W	58° 34.145" N
59	-3.833528315	58.56740417	3° 50' 0.702" W	58° 34' 2.655" N	3° 50.012' W	58° 34.044" N
60	-3.840511712	58.56905844	3° 50' 25.842" W	58° 34' 8.610" N	3° 50.431' W	58° 34.144" N
61	-3.848038336	58.56477084	3° 50' 52.938" W	58° 33' 53.175" N	3° 50.882' W	58° 33.886" N
62	-3.856029934	58.56632494	3° 51' 21.708" W	58° 33' 58.770" N	3° 51.362' W	58° 33.979" N
63	-3.862435531	58.56320886	3° 51' 44.768" W	58° 33' 47.552" N	3° 51.746' W	58° 33.793" N
64	-3.894989217	58.56833396	3° 53' 41.961" W	58° 34' 6.002" N	3° 53.699' W	58° 34.100" N
65	-3.906860869	58.56440949	3° 54' 24.699" W	58° 33' 51.874" N	3° 54.412' W	58° 33.865" N
66	-3.906940552	58.56440463	3° 54' 24.986" W	58° 33' 51.857" N	3° 54.416' W	58° 33.864" N



67	-3.906518969	58.55939805	3° 54' 23.468" W	58° 33' 33.833" N	3° 54.391" W	58° 33.564" N
68	-3.9117504267	58.55901802	3° 55' 3.015" W	58° 33' 32.465" N	3° 55.050" W	58° 33.541" N
69	-3.9230115852	58.56663395	3° 55' 22.857" W	58° 33' 59.882" N	3° 55.381" W	58° 33.998" N
70	-3.934282662	58.57380884	3° 56' 3.418" W	58° 34' 25.712" N	3° 56.057" W	58° 34.429" N
71	-3.940133927	58.57199249	3° 56' 24.482" W	58° 34' 19.173" N	3° 56.408" W	58° 34.320" N
72	-3.943894677	58.56716228	3° 56' 38.021" W	58° 34' 1.784" N	3° 56.634" W	58° 34.030" N
73	-3.950207116	58.56835065	3° 57' 0.746" W	58° 34' 6.062" N	3° 57.012" W	58° 34.101" N
74	-3.950968611	58.57309506	3° 57' 3.487" W	58° 34' 23.142" N	3° 57.058" W	58° 34.386" N
75	-3.963144931	58.57086918	3° 57' 47.322" W	58° 34' 15.129" N	3° 57.789" W	58° 34.252" N
76	-3.966054395	58.60440319	3° 57' 57.796" W	58° 36' 15.851" N	3° 57.963" W	58° 36.264" N
77	-4.129171356	58.6560755	4° 7' 45.017" W	58° 39' 21.872" N	4° 7.750" W	58° 39.365" N
78	-4.134807285	58.65820023	4° 8' 5.306" W	58° 39' 29.521" N	4° 8.088" W	58° 39.492" N
79	-4.366674088	58.76520761	4° 22' 0.027" W	58° 45' 54.747" N	4° 22.000" W	58° 45.912" N
80	-4.501145968	58.76451849	4° 30' 4.125" W	58° 45' 52.267" N	4° 30.069" W	58° 45.871" N
81	-4.517984207	58.76672596	4° 31' 4.743" W	58° 46' 0.213" N	4° 31.079" W	58° 46.004" N
82	-4.53063639	58.77290631	4° 31' 50.291" W	58° 46' 22.463" N	4° 31.838" W	58° 46.374" N
83	-4.535962427	58.78247368	4° 32' 9.465" W	58° 46' 56.905" N	4° 32.158" W	58° 46.948" N
84	-4.535991178	58.81159138	4° 32' 9.570" W	58° 48' 41.729" N	4° 32.160" W	58° 48.695" N
85	-4.533396995	58.81842234	4° 32' 0.229" W	58° 49' 6.320" N	4° 32.004" W	58° 49.105" N
86	-4.522289745	58.82590901	4° 31' 20.243" W	58° 49' 33.272" N	4° 31.337" W	58° 49.555" N
87	-4.3996117912	58.87402124	4° 23' 58.624" W	58° 52' 26.476" N	4° 23.977" W	58° 52.441" N
88	-4.359968398	58.97468784	4° 21' 35.886" W	58° 58' 28.876" N	4° 21.598" W	58° 58.481" N
89	-4.419727863	59.0257866	4° 25' 11.020" W	59° 1' 32.832" N	4° 25.184" W	59° 1.547" N



90	-4.424183628	59.03185837	4° 25' 27.061" W	59° 1' 54.690" N	4° 25.451' W	59° 1.912' N
91	-4.422891463	59.04085485	4° 25' 22.409" W	59° 2' 27.077" N	4° 25.373' W	59° 2.451' N
92	-4.412065998	59.04892889	4° 24' 43.438" W	59° 2' 56.144" N	4° 24.724' W	59° 2.936' N
93	-4.288458754	59.101289	4° 17' 18.452" W	59° 6' 4.640" N	4° 17.308' W	59° 6.077' N
94	-4.274108332	59.10491389	4° 16' 26.790" W	59° 6' 17.690" N	4° 16.446' W	59° 6.295' N
95	-4.256577673	59.10465548	4° 15' 23.680" W	59° 6' 16.760" N	4° 15.395' W	59° 6.279' N
96	-4.245822727	59.10194851	4° 14' 44.962" W	59° 6' 7.015" N	4° 14.749' W	59° 6.117' N
97	-3.910364479	58.97590181	3° 54' 37.312" W	58° 58' 33.247" N	3° 54.622' W	58° 58.554' N
98	-3.386320002	58.96973466	3° 23' 10.752" W	58° 58' 11.045" N	3° 23.179' W	58° 58.184' N
99	-3.358414014	58.9687006	3° 21' 30.290" W	58° 58' 7.322" N	3° 21.505' W	58° 58.122' N
100	-3.353101918	58.96760016	3° 21' 11.167" W	58° 58' 3.361" N	3° 21.186' W	58° 58.056' N