

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

LICENCE TO CONSTRUCT, ALTER OR IMPROVE WORKS IN THE SCOTTISH MARINE AREA

Licence Number: **MS-00009834**

The Scottish Ministers (hereinafter referred to as "the Licensing Authority") hereby grant a marine licence authorising:

Forthwind Limited
The Boathouse Hawkcraig
Aberdour
Burntisland
Fife
KY3 0TZ

to construct, alter or improve works as described in Part 2. The licence is subject to the conditions set out, or referred to, in Part 3.

The licence is valid from **15 March 2023** until **31 October 2049** or until the Works have been decommissioned in accordance with an approved Decommissioning Programme prior to this date and for which a separate marine licence is required.

Signed:
Gayle Holland

For and on behalf of the Licensing Authority

Date of issue: 14 March 2023

1. PART 1 - GENERAL

1.1 Interpretation

In the licence, terms are as defined in Section 1, 64 and 157 of the Marine (Scotland) Act 2010, and

1. **“CAA”** means Civil Aviation Authority;
2. **“CaP”** means Cable Plan;
3. **“CEMP”** means Construction Environmental Management Plan;
4. **“Commencement of the Licensed Activity”** means the date on which the first vehicle or vessel arrives on the site to begin carrying on any activities in connection with the Licensed Activity;
5. **“Completion of the Licensed Activity”** means the date on which the Licensed Activity has been installed in full, or the Licensed Activity has been deemed complete by the Licensing Authority, whichever occurs first;
6. **“CoP”** means Construction Programme;
7. **“Decommissioning Programme”** means the programme for decommissioning the Works, to be submitted by the Licensee to the Licensing Authority under section 105(2) of the Energy Act 2004;
8. **“EcoW”** means Environmental Clerk of Works;
9. **“EMF”** means Electromagnetic Fields;
10. **“F-Gas Regulation”** means Regulation No 517/2014 of the European Parliament and of the Council of 16 April 2014 on Fluorinated Greenhouse Gases;
11. **“Final Commissioning of the Works”** means the date on which all the Works have been used to supply electricity on a commercial basis to the National Grid, or such earlier date as the Licensing Authority deem the Works to be fully commissioned;
12. **“FLO”** means Fisheries Liaison Officer;
13. **“FMMS”** means Fisheries Management and Mitigation Strategy;
14. **“FTCFWG”** means Forth and Tay Commercial Fisheries Working Group;
15. **“HAT”** means Highest Astronomical Tide;
16. **“HES”** means Historic Environment Scotland;
17. **“IALA”** means International Association of Marine Aids to Navigation and Lighthouse Authorities;
18. **“km”** means kilometres;
19. **“LAT”** means Lowest Astronomical Tide;
20. **“Licensed Activity”** means any activity or activities listed in section 21 of the 2010 Act which is or are authorised under the licence;
21. **“Licensee”** means Forthwind Limited (Company Number SC470580) having its registered office at The Boathouse, Hawkcraig, Aberdour, Burntisland, Fife, KY3 0TZ;
22. **“Licensing Authority”** means the Scottish Ministers;
23. **“LMP”** means Lighting and Marking Plan;
24. **“m”** means metres;
25. **“MCA”** means Maritime and Coastguard Agency;
26. **“Mean High Water Springs”** means any area submerged at mean high water spring tide;
27. **“MGN”** means Marine Guidance Note;
28. **“MMO”** means Marine Mammal Observer;
29. **“MOD”** means Ministry of Defence;
30. **“NLB”** means Northern Lighthouse Board;
31. **“NSP”** means Navigational Safety Plan;
32. **“OMP”** means Operation and Maintenance Programme;
33. **“PAD”** means Protocol for Archaeological Discoveries;
34. **“PEMP”** means Project Environment Monitoring Plan;
35. **“RYA”** means Royal Yachting Association Scotland;
36. **“ScotMER”** means Scottish Marine Energy Research;
37. **“SFF”** means Scottish Fishermen’s Federation;
38. **“the Reports”** means vessel reports detailing the operators, vessels and vehicles engaging in the Licensed Activity;
39. **“the Works”** means the works as described in Part 2 of this licence;
40. **“the 2010 Act”** means the Marine (Scotland) Act 2010;
41. **“TPC”** or **“TPV”** means Third Party Certification or Third Party Verification;

42. “UKHO” means United Kingdom Hydrographic Office;
43. “VMP” means Vessel Management Plan;
44. “WSI” means Written Scheme of Investigation;
45. “WTG” means Wind Turbine Generator.

All geographical co-ordinates contained within the licence are in World Geodetic System 84 (“WGS84”) format (latitude and longitude degrees and minutes to three decimal places) unless otherwise stated.

1.2 Contacts

All correspondence or communications relating to the licence should be addressed to:

Marine Scotland
Licensing Operations Team
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB
Email: MS.MarineRenewables@gov.scot

1.3 Other authorisations and consents

The Licensee is deemed to have satisfied itself that there are no barriers or restrictions, legal or otherwise, to the carrying on of the Licensed Activity in connection with the Licensed Activity. The issuing of the licence does not absolve the Licensee from obtaining such other authorisations and consents, which may be required under statute.

1.4 Variation, suspension, revocation and transfer

Under section 30 (1) of the 2010 Act, the Licensing Authority may by notice vary, suspend or revoke the licence granted by them if it appears to the Licensing Authority that there has been a breach of any of its provisions or for any such other reason that appears to be relevant to the Licensing Authority under section 30(2) or (3) of the 2010 Act. Under the 2010 Act, variations, suspensions, revocations and transfers of licences are subject to the procedures set out in section 31 of the Act.

Under section 30 (7) of the 2010 Act, on an application made by a licensee, the Licensing Authority may vary a licence if satisfied that the variation being applied for is not material.

Under section 30 (8) of the 2010 Act, on an application made by the licensee, the Licensing Authority may transfer the licence from the Licensee to another person.

1.5 Breach of requirement for, or conditions of, licence

Under section 39 of the 2010 Act it is an offence to carry on a Licensable Marine Activity (as defined in the 2010 Act) without a marine licence and it is also an offence to fail to comply with any condition of a marine licence.

1.6 Defences: actions taken in an emergency

Under section 40 of the 2010 Act it is a defence for a person charged with an offence under section 39(1) of the 2010 Act in relation to any activity to prove that: (a) the activity was carried out for the purpose of saving life, or for the purpose of securing the safety of a vessel, aircraft or marine structure ('force majeure'); and (b) that the person took steps within a reasonable time to inform the Licensing Authority of the matters set out in section 40(2) of the 2010 Act.

1.7 Offences relating to information

Under section 42 of the 2010 Act it is an offence for a person to make a statement which is false or misleading in a material way, knowing the statement to be false or misleading or being reckless as to whether the statement is false or misleading, or to intentionally fail to disclose any material information for the purpose of procuring the issue, variation or transfer of a marine licence or for the purpose of complying with, or purporting to comply with, any obligation imposed by either Part 4 of the 2010 Act or the provisions of this licence.

1.8 Appeals

Under Regulation 3(1) of the Marine Licensing Appeals (Scotland) Regulations 2011 a person who has applied for a marine licence may by summary application appeal to a sheriff against a decision taken by the Licensing Authority under section 29(1) of the 2010 Act.

2. PART 2 – PARTICULARS

2.1 Agent

As per Licensee.

2.2 Location of the Licensed Activity

The project includes the marine elements (which are all elements of the project other than the onshore infrastructure) of the Works to, to be sited within the Scottish marine area, approximately 1.5 kilometres ("km") from the Fife coastline, off Methil, within the area bounded by joining the following points:

56° 10.383' N 03° 01.333' W
56° 09.883' N 03° 00.167' W
56° 09.867' N 03° 00.167' W
56° 09.750' N 03° 00.517' W
56° 09.667' N 03° 00.651' W
56° 09.667' N 03° 00.667' W
56° 09.751' N 03° 00.533' W
56° 09.883' N 03° 00.183' W

56° 10.367' N 03° 01.333' W

Wind Turbine Generator (“WTG”) located at the point: 56° 09.875' N 03° 00.177' W (subject to 100 metres (“m”) micro-siting around the centre point of the WTG)

Meteorological Mast (“metmast”) located at the point: 56° 09.670' N 03° 00.653' W (subject to 100m micro-siting around the centre point of the metmast)

The total area within the Works site boundary is 9,639 square metres. The location and boundary of the Works are shown in Annex One.

2.3 Description of the Works

The construction of:

1. A single three-bladed horizontal axis WTG with:
 - (a) A maximum hub height of 156 metres (“m”) above Highest Astronomical Tide (“HAT”);
 - (b) A maximum height to blade tip of up to 280m above HAT;
 - (c) A maximum rotor diameter of 255m;
 - (d) A minimum blade tip clearance of 25m above HAT;
 - (e) A blade width of up to 5.8m;
2. A metmast with a height of 160m above HAT;
3. Foundation for the WTG (either a jacket with a maximum of 4 pin piles or a monopile);
4. Foundation for the metmast (monopile);
5. Approximately 625m of communications cable between the turbine and the metmast;
6. Approximately 625m of power cable between the turbine and the metmast;
7. A subsea export cable running from the WTG to shore, approximately 1.5 km;
8. Scour and cable protection,

(referred to in this licence as “the Works”).

The Works are to be as described in the application dated 29 April 2022 (as updated on 12 May 2022) and correspondence submitted in support of the application (“the Application”).

2.4 Descriptions of the materials to be used during the Works

This licence authorises the use of the undernoted construction materials required in connection with the Licensed Activity, subject to the indicative amounts as specified below:

Steel/iron – 5888 tonnes
Concrete – 874 cubic metres
Stone/rock/gravel – 1,297 cubic metres
Concrete bags/mattresses – 34,034 cubic metres

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Cable – 2,425 metres

Composite materials – 190 tonnes

Copper – 30 tonnes

Aluminium – 21.6 tonnes

Wood – 11.6 tonnes

Polymers – 4.5 tonnes

2.5 Contractor and Vessel Details

To be confirmed.

3. PART 3 – CONDITIONS

3.1 General Conditions

3.1.1 The Licensee must only construct the Works in accordance with this licence, the Application and any plans or programmes approved by the Licensing Authority unless otherwise authorised by the Licensing Authority.

3.1.2 The Licensee must maintain the Works in accordance with this licence, the Application and any plans or programmes approved by the Licensing Authority unless otherwise authorised by the Licensing Authority.

3.1.3 All conditions attached to the licence bind any person who for the time being owns, occupies or enjoys any use of the Works, whether or not the licence has been transferred to that person.

3.1.4 Only the materials listed in Part 2 of the licence may be used during the execution of the Licensed Activity.

3.1.5 All materials, substances and objects used during the execution of the Licensed Activity must be inert and must not contain toxic elements which may be harmful to the marine environment, the living resources which it supports or human health.

3.1.6 The Licensee must ensure that the Licensed Activity does not encroach on any recognised anchorage, either charted or noted in nautical publications, within the licensed area as described in Part 2 of the Licence.

3.1.7 Where any damage, destruction or decay is caused to the Works, the Licensee must notify the Licensing Authority, Maritime and Coastguard Agency (“MCA”), Northern Lighthouse Board (“NLB”), Kingfisher Information Services of Seafish and the UK Hydrographic Officer, in writing, of such damage, destruction or decay as soon as reasonably practicable but no later than 24 hours after becoming aware of any such damage, destruction or decay. The Licensee must carry out any remedial action as required by the Licensing Authority, following consultation with the MCA, NLB or any such advisors as required by the Licensing Authority.

The Licensee must remove the materials, from below the level of Mean High Water Springs, or make such alterations as advised by the Licensing Authority, at timescales to be determined by the Licensing Authority at any time it is considered necessary or advisable for the safety of navigation, and not replace those materials without further approval by the Licensing Authority. The Licensee shall be liable for any expense incurred.

3.1.8 If governmental assistance is required (including UK governmental assistance or the assistance of any UK devolved government) to deal with any emergency arising from:

- a) the failure to mark and light the Works as required by the licence;
- b) the maintenance of the Works; or
- c) the drifting or wreck of the Works, to include the broadcast of navigational warnings

then the Licensee is liable for any expenses incurred in securing such assistance.

3.1.9 The Licensee must take all measures which are technically and economically feasible to minimise leakage of fluorinated greenhouse gases. Where leakage of fluorinated greenhouse gases is detected, the Licensee must ensure that the equipment is repaired without undue delay.

The Licensee must ensure that all equipment to be utilised in the Licensed Activity that contains fluorinated greenhouse gases in quantities of five tonnes or more of CO₂ equivalent and not contained in foams is checked for leakage in accordance with Article 4 of the F-Gas Regulation. Records of these checks must be kept in accordance with Article 6 of the F-Gas Regulation. These records must be submitted to the Licensing Authority annually and immediately in the event of discovery of leakage.

Where the equipment is subject to checks for leakage under Article 4(1) of the F-Gas Regulation and leakage in the equipment has been repaired, the Licensee must ensure that the equipment is checked by a suitably certified person

within one calendar month after the repair to verify that the repair has been effective. In such event, the Licensing Authority must be informed of the date of discovery, date of repair and date of inspection.

3.1.10 The Licensee must seek prior written approval from the Licensing Authority for any chemicals in an open system which are to be utilised in the construction, operation and maintenance of the Licensed Activity. Requests for approval must be submitted in writing to the Licensing Authority no later than one month prior to its intended use or such other period as agreed by the Licensing Authority. The Licensee must ensure that no chemicals are used in an open system without the prior written approval of the Licensing Authority.

If the proposed chemical is on the Offshore Chemical Notification Scheme list, the approval request must include the chemical name, volume or quantity to be used, the Offshore Chemical Notification Scheme list grouping or rank and the proposed frequency of use.

If the proposed chemical is not on the Offshore Chemical Notification Scheme list, the approval request must include details of chemicals to be used, including safety data sheet, depth and current at the site of the Works, quantities or volumes and the proposed frequency of use.

The Licensee must notify the Licensing Authority of the types of chemicals to be used in a closed containment system prior to use.

The Licensee should take all practicable steps to avoid leakages from a closed containment system into the Scottish marine area. Any such leakages must be reported to the Licensing Authority as soon as practicable.

3.1.11 The Licensee must submit all reports and notifications to the Licensing Authority, in writing, as are required under this licence within the time periods specified in this licence. Where there may be a delay in the submission of the reports or notifications to the Licensing Authority, the Licensee must advise the Licensing Authority of this fact as soon as is practicable and no later than the time by which those reports or notifications ought to have been submitted to the Licensing Authority under the terms of this licence.

The reports must include executive summaries, assessments and conclusions and any data will, subject to any rules permitting non-disclosure, be made publicly available by the Licensing Authority or by any such party appointed at its discretion.

Reports prepared pursuant to another consent or licence relating to the Works by the Licensee or by a third party may also be used to satisfy the requirements of this licence.

Such reports will include, but not be limited to Marine Mammal Observer ("MMO") records and all appropriate reports stipulated within the Project Environment Monitoring Plan ("PEMP").

3.1.12 The Licensee must operate and maintain the Works in accordance with the approved Operation and Maintenance Programme ("OMP") (see condition 3.2.13). The Licensing Authority must be notified at least three calendar months, or such other period as agreed by the Licensing Authority in advance, of any maintenance of the Licensed Activity not included in the OMP and involving licensable marine activities not covered under this licence.

3.1.13 In the event of the Licensed Activity being discontinued the materials used under the authority of this licence must be removed to the satisfaction of the Licensing Authority.

3.1.14 The Licensee must ensure that the Works are maintained at all times in good repair.

3.1.15 The Licensee must ensure that the Licensed Activity is only carried out at the location of the Licensed Activity specified in Part 2 of this licence. The WTG and metmast must be constructed only at the locations specified in Part 2 of this licence.

3.1.16 No activity authorised under this licence may take place until a Decommissioning Programme ("DP"), as defined in any section 105 notice served by the appropriate Minister, has been approved under section 106 of the Energy Act 2004 by the appropriate Minister.

3.1.17 The Licensee must submit plans and the details and specifications of all studies and surveys that are required to be undertaken under this licence in relation to the Licensed Activity, in writing, to the Licensing Authority for its written approval. Commencement of the studies or surveys and implementation of plans must not occur until the Licensing Authority has given its written approval to the Licensee.

Plans or the specification of studies and surveys prepared pursuant to another consent or licence relating to the Licensed Activity by the Licensee or by a third party may also be used to satisfy the requirements of this licence.

Any updates or amendments made to the approved plans must be submitted, in writing, to the Licensing Authority for its prior written approval. The Works must, at all times, be constructed and operated in accordance with the approved plans.

3.1.18 Should the Licensee proceed to undertake the Licensed Activity under the authority of this licence, the Licensed Activity authorised under the previous marine licence in favour of Forthwind Ltd, dated 30 May 2019 (reference 05632/19/0) shall not be permitted.

3.1.19 The Licensee must ensure that any debris or waste materials arising during the course of the Licensed Activity are removed for disposal at an approved location above the tidal level of Mean High Water Springs.

3.1.20 The Licensee must ensure that copies of this licence are available for inspection by any authorised marine enforcement officer at:

- a) the premises of the Licensee;
- b) the premises of any agent acting on behalf of the Licensee; and
- c) the site of the Licensed Activity.

3.1.21 Any person authorised by the Licensing Authority must be permitted to inspect the Works at any reasonable time. The Licensee must, on being given reasonable notice by the Licensing Authority (of at least 72 hours), provide transportation to and from the site for any persons authorised by the Licensing Authority to inspect the site of the Works. The Licensee shall be liable for any expense incurred.

3.2 Prior to the Commencement of the Licensed Activity

3.2.1 The Licensee must, prior to and no less than one calendar month before the Commencement of the Licensed Activity, notify the Licensing Authority, in writing, of the proposed date of the Commencement of the Licensed Activity authorised under this licence.

3.2.2 The Licensee must ensure that at least five days prior to its engagement in the Licensed Activity, the name and function of any vessel (including the master's name, vessel type, vessel international maritime organisation number and vessel owner or operating company), agent, contractor or subcontractor appointed to engage in the Licensed Activity are fully detailed in contractor and vessel reports ("the Reports") which the Licensee must make available on its website: <https://forthwind.co.uk/>.

Any changes to the supplied detailed must be uploaded to the Reports and the Licensing Authority and Forth Ports Limited must be notified, in writing, prior to any vessel, agent, contractor or sub-contractor which has not yet been notified to the Licensing Authority engaging in the Licensed Activity.

Only those vessels, agents, contractors or sub-contractors detailed in the Reports are permitted to carry out any part of the Licensed Activity. Any vessels involved in drilling and deposit of drilling arisings must be notified to the Licensing Authority.

The Licensee must satisfy itself that any masters of vessels or vehicle operators, agents, contractors or sub-contractors are aware of the extent of the Licensed Activity and the conditions of this licence.

All masters of vessels or vehicle operators, agents, contractors and sub-contractors permitted to engage in the Licensed Activity must abide by the conditions of this licence.

The Licensee must give a copy of this licence, and any subsequent variations made to this licence in accordance with section 30 of the 2010 Act, to the masters of any vessels, vehicle operators, agents, contractors or sub-contractors permitted to engage in the Licensed Activity and must ensure that the licence and any such variations are read and understood by those persons.

3.2.3 The Licensee must complete and send a Marine Emergency Action Card for the Licensed Activity to oelo@mcga.gov.uk at least 10 working days prior to Commencement of the Licensed Activity.

3.2.4 The Licensee must contact the local statutory harbour authority, in this case Forth Ports Limited, prior to Commencement of the Licensed Activity to discuss the requirements for navigational warnings and a works licence.

The Licensee must ensure that a communications procedure is established and agreed with Forth Ports Limited prior to the Commencement of the Licensed Activity.

3.2.5 The Licensee must ensure that all personnel adhere to the Scottish Marine Wildlife Watching Code where appropriate during the Licensed Activity.

3.2.6 There must be no Commencement of the Licensed Activity until the Licensee has satisfied the Licensing Authority, by consultation with the MCA, that it has taken into account and adequately addressed all of the recommendations of the MCA in the current Marine Guidance Note ("MGN") 654, and its annexes, or any other relevant document which may supersede this guidance.

3.2.7 Prior to the Commencement of the Licensed Activity, the Licensee must appoint a MMO. When appointed, the MMO must, as a minimum, maintain a record of any sightings of marine mammals and maintain a record of the action taken to avoid any disturbance being caused to marine mammals during noisy activities.

The Licensee must ensure that all personnel adhere to the Scottish Marine Wildlife Watching Code where appropriate during all alteration and improvement activities authorised under this licence.

3.2.8 The Licensee must, no later than 10 days prior to Commencement of the Licensed Activity, notify the UK Hydrographic Office ("UKHO") at sdr@ukho.gov.uk, of the proposed Licensed Activity. The notification must include the start and end date of the Licensed Activity, a description of the Works, positions of the area of the Works (WGS84), and details of any marking arrangements. A copy of the notification must be sent to the Licensing Authority within 5 working days of the notification being sent.

The Licensee must ensure that local mariners and fishermen's organisations are made fully aware of the Works through a local notification. This must be issued at least 5 days before the Commencement of the Licensed Activity. Marine Scotland must be sent a copy of this notification within 24 hours of issue.

The Licensee must, no later than 7 days prior to the Commencement of the Licensed Activity, notify Zone4@hmcg.gov.uk and renewables@hmcg.gov.uk of the proposed Licensed Activity. A copy of the notification must be sent to the Licensing Authority within 5 working days of the notification being sent.

The Licensee must ensure that details of the Licensed Activity are promulgated in the Kingfisher Fortnightly Bulletin, no later than 7 days prior to the Commencement of the Licensed Activity to inform the Sea Fish Industry of the vessel routes, the timings and the location of the Licensed Activity and of the relevant operations.

3.2.9 The Licensee must, no later than 3 calendar months prior to the Commencement of the Licensed Activity, provide the Licensing Authority with Third Party Certification or Verification ("TPC" or "TPV") (or a suitable alternative as agreed in writing with the Licensing Authority) that covers the entirety of the Works for the lifespan of the Works.

In this condition, the term "lifespan" means the entire period that this licence remains in force.

The TPC or TPV should follow the guidance provided in the Offshore wind, wave and tidal energy applications: consenting and licensing manual <https://www.gov.scot/publications/marine-licensing-applications-and-guidance/> or any other relevant document which may supersede this. There must be no Commencement of the Licensed Activity unless the TPC or TPV is provided as described above unless otherwise agreed with the Licensing Authority.

3.2.10 The Licensee must, no later than six months prior to the Commencement of the Licensed Activity, submit a Construction Programme ("CoP"), in writing, to the Licensing Authority for their written approval. Commencement of the Licensed Activity cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with NatureScot, Civil Aviation Authority ("CAA"), MOD, Forth Ports Limited, and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

The CoP must set out;

- a. The proposed date for Commencement of the Licensed Activity;
- b. The proposed timings for mobilisation of plant and delivery of materials, including details of onshore lay-down areas;
- c. The proposed timings and sequencing of construction work for all elements of the Works infrastructure;
- d. Contingency planning for poor weather or other unforeseen delays; and
- e. The scheduled date for Final Commissioning of the Works.

The final CoP must be sent to City of Edinburgh Council, East Lothian Council, Fife Council, Forth Ports, MCA and NLB for information only.

3.2.11 The Licensee must, no later than six months prior to the Commencement of the Licensed Activity, submit an updated Construction Environmental Management Plan ("CEMP"), in writing, to the Licensing Authority for their written approval. Commencement of the Licensed Activity cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with NatureScot, Forth Ports Limited, MCA, NLB and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

The CEMP must include a construction method statement which adheres to the construction methods assessed in the Application and which includes, but is not limited to:

- a. Methods of construction as they relate to all aspects of the Works; and
- b. Details of the working areas and good working practices for constructing the Works.

The CEMP must be in accordance with the Application insofar as it relates to environmental management measures.

The CEMP must set out the roles, responsibilities and chain of command for the Licensee's personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Works.

The CEMP must include, but not be limited to, the following over-arching requirements for environmental management during construction and operation:

- a. Mitigation measures to prevent significant adverse impacts on the environment, as identified in the Application and pre-consent and pre-construction monitoring or data collection, including details of expected noise levels and any mitigation and monitoring to be employed during the installation of drilled piles;
- b. An updated Marine Mammal Observer Protocol;
- c. Marine Pollution Contingency Plan;
- d. An updated Biosecurity Management Plan; and
- e. A site waste management plan (dealing with all aspects of waste produced during the construction period), including details of contingency planning in the event of accidental release of materials which could cause harm to the environment. Wherever possible the waste hierarchy of reduce, reuse and recycle should be encouraged.

The CEMP must be informed, so far as is reasonably practicable, by the baseline monitoring or data collection undertaken as part of the Application and the PEMP. The CEMP must, so far as is reasonably practicable, be

consistent with the Vessel Management Plan (“VMP”), the Navigational Safety Plan (“NSP”), the Cable Plan (“CaP”) and the Lighting and Marking Plan (“LMP”).

The approved CEMP must be sent to City of Edinburgh Council, East Lothian Council and Fife Council for information only.

3.2.12 The Licensee must, no later than six months prior to the Commencement of the Licensed Activity, submit a VMP, in writing, to the Licensing Authority for their written approval. Commencement of the Licensed Activity cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with NatureScot, MCA, Forth Ports Limited, SFF and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

The VMP must include, but not be limited to, the following details:

- a. The number, types and specification of vessels required;
- b. How vessel management will be coordinated, particularly during construction but also during operation;
- c. Location of working port(s), the routes of passage, the frequency with which vessels will be required to transit between port(s) and the site and indicative vessel transit corridors proposed to be used during construction and operation of the Works.

The confirmed individual vessel details must be notified to the Licensing Authority in writing no later than 14 days prior to the Commencement of the Licensed Activity, and thereafter, any changes to the details supplied must be notified to the Licensing Authority, as soon as practicable, prior to any such change being implemented in the construction or operation of the Works.

Construction and vessel activity should be restricted during the wintering period from September to March. The VMP should refer to the Scottish Marine Wildlife Watching Code and Guide to Best Practice for Watching Marine Wildlife for guidance on how vessels should behave around aggregations of birds on the water.

The VMP must, so far as is reasonably practicable, be consistent with the CEMP, the Fisheries Management and Mitigation Strategy (“FMMS”), the PEMP, the NSP, and the LMP.

3.2.13 The Licensee must, no later than three months prior to the Final Commissioning of the Works, submit an OMP in writing, to the Licensing Authority for their written approval. Such approval may only be granted following consultation by the Licensing Authority with NatureScot, Forth Ports Limited, MCA, NLB, Fife Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

The OMP must set out the procedures and good working practices for operations and the maintenance of the WTG, metmast, substructures and cable network of the Works. Environmental sensitivities which may affect the timing of the operation and maintenance activities must be considered in the OMP.

The OMP must, so far as is reasonably practicable, be consistent with the CEMP, the PEMP, the VMP, the NSP, the CaP and the LMP.

The approved OMP must be sent to City of Edinburgh Council and East Lothian Council for information only.

3.2.14 The Licensee must, no later than six months prior to the Commencement of the Licensed Activity, submit a NSP, in writing, to the Licensing Authority for their written approval. Commencement of the Licensed Activity cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with MCA, NLB, Forth Ports Limited, RYA, SFF and any other navigational advisors or organisations as may be required at the discretion of the Licensing Authority.

The NSP must include, but not be limited to, the following issues:

- a. Navigational safety measures;

- b. Construction exclusion zones;
- c. Notice(s) to mariners and radio navigation warnings;
- d. Anchoring areas;
- e. Temporary construction lighting and marking;
- f. Buoyage.

3.2.15 The Licensee must, no later than six months prior to the Commencement of the Licensed Activity, submit an updated CaP, in writing, to the Licensing Authority for their written approval. Commencement of the Licensed Activity cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with NatureScot, MCA, SFF, Fife Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. The CaP must be in accordance with the Application.

The CaP must include, but not be limited to, the following:

- a) The location, duration and cable laying techniques for cables;
- b) The results of monitoring or data collection work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- c) Technical specification of the cables, including a desk based assessment of attenuation of electro-magnetic field strengths and shielding;
- d) A Cable Burial Risk Assessment to ascertain burial depths and where necessary alternative protection measures;
- e) Methodologies for post construction and operational surveys (e.g. over trawl) of the cables where mechanical protection of cables laid on the sea bed is deployed; and
- f) Methodologies for cable inspection with measures to address and report to the Licensing Authority any exposure of cables.

Any consented cable protection works must ensure existing and future safe navigation is not compromised. The Licensing Authority will accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum. Any greater reduction in depth must be agreed in writing by the Licensing Authority.

3.2.16 The Licensee must, no later than six months prior to the Commencement of the Licensed Activity, submit an updated LMP, in writing, to the Licensing Authority for their written approval. Commencement of the Licensed Activity cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with NatureScot, MCA, NLB, Forth Ports Limited, CAA, MOD, East Lothian Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

The LMP must provide that the Works be lit and marked in accordance with the current CAA and MOD aviation lighting policy and guidance that is in place as at the date of the Licensing Authority approval of the LMP, or any such other documents that may supersede this guidance prior to the approval of the LMP. Consideration should be given in the LMP to reducing the luminous intensity of aviation lighting in certain visibility conditions but only where this is in accordance with the current CAA and MOD aviation lighting policy and guidance that is in place. The LMP must define how the Works will be lit throughout its life to maintain civil and military aviation safety requirements as determined necessary for aviation safety by the MOD and, accordingly, must set out:

- a) details of any construction equipment and temporal structures with a total height of 50m or greater (above mean sea level) that will be deployed during the construction of the Works and details of any aviation warning lighting that they will be fitted with; and
- b) the locations and heights of the WTG and metmast featured in the Works identifying those that will be fitted with aviation warning lighting identifying the position of the lights on the WTG; the type(s) of lights that will be fitted and the performance specification(s) of the lighting type(s) to be used.

The LMP must also detail the navigational lighting requirements detailed in the International Association of Marine Aids to Navigation and Lighthouse Authorities ("IALA") G1162 Ed 1.0 or any other documents that may supersede this guidance prior to approval of the LMP.

The final approved LMP must be sent to City of Edinburgh Council and Fife Council for information only.

3.2.17 The Licensee must, no later than six months prior to the Commencement of the Licensed Activity, submit an updated PEMP, in writing, to the Licensing Authority for their written approval. Commencement of the Licensed Activity cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with NatureScot, RSPB and any other environmental advisors or organisations as required at the discretion of the Licensing Authority. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Licensee must monitor the environmental impacts of the Works. Monitoring is required throughout the lifespan of the Works where this is deemed necessary by the Licensing Authority. Lifespan in this context includes pre-construction, construction, operational and decommissioning phases.

The Licensing Authority must approve all initial methodologies for the above monitoring, in writing and, where appropriate, in consultation with NatureScot and any other environmental advisors or organisations as required at the discretion of the Licensing Authority.

Monitoring must be done in such a way so as to ensure that the data which is collected allows useful and valid comparisons between different phases of the Works. Monitoring may also serve the purpose of verifying key predictions in the Application. In the event that further potential adverse environmental effects are identified, for which no predictions were made in the Application, the Licensing Authority may require the Licensee to undertake additional monitoring.

The PEMP must cover the following matters:

- a) Pre-construction and post-construction monitoring or data collection for impact on birds, including monitoring of inshore wintering waterfowl and diver species and other seabird species;
- b) The participation by the Licensee to contribute to data collection or monitoring of wider strategic relevance, identified and agreed by the Licensing Authority; and
- c) Post-construction monitoring on Electromagnetic Fields ("EMF") produced by the constructed cables.

In relation to EMF, the Licensee must monitor and provide a report on the EMF produced by the works to the Licensing Authority. The Licensee must agree the methodologies and timescales for monitoring with the Licensing Authority prior to the Commencement of the Licensed Activity as part of wider strategic monitoring on EMF. Any agreement must be adhered to unless otherwise agreed and approved by the Licensing Authority.

Due consideration must be given to the Scottish Marine Energy Research ("ScotMER") programme, or any successor programme formed to facilitate these research interests.

Any pre-consent monitoring or data collection carried out by the Licensee to address any of the above issues may be used in part to discharge this condition subject to the written approval of the Licensing Authority.

The PEMP is a live document which will be regularly reviewed by the Licensing Authority, at timescales to be determined by them to identify the appropriateness of on-going monitoring. Following such reviews, the Licensing Authority may require the Licensee to amend the PEMP and submit such an amended PEMP, in writing, to the Licensing Authority, for their written approval. Such approval may only be granted following consultation with NatureScot and any other environmental, or such other advisors as may be required at the discretion of the Licensing Authority.

The Licensee must submit written reports and associated raw and processed data of such monitoring or data collection to the Licensing Authority at timescales to be determined by them. Consideration should be given to data storage, analysis and reporting and be to Marine Environmental Data and Information Network standards.

Subject to any legal restrictions regarding the treatment of the information, the Licensing Authority, or any such other party appointed at the Licensing Authority's discretion, may make the results publicly available.

The Licensing Authority may agree, in writing, that monitoring may be reduced or ceased before the end of the lifespan of the Works.

3.2.18 The Licensee must no later than six months prior to the Commencement of the Licensed Activity, submit an updated FMMS, in writing, to the Licensing Authority for their written approval, in consultation with SFF.

Commencement of the Licensed Activity cannot take place until such approval is granted. The FMMS must be defined and finalised in consultation with the Forth and Tay Commercial Fisheries Working Group (“FTCFWG”).

In order to inform the production of the FMMS, the Licensee must monitor or collect data as relevant and agreed with the Licensing Authority.

As part of any finalised FMMS, the Licensee must produce and implement a mitigation strategy for each commercial fishery that can prove to the Licensing Authority that they would be adversely affected by the Works. The Licensee and any contractors or sub-contractors working for the Licensee must implement the mitigation measures committed to be carried out by the Licensee within the FMMS. The Licensee must participate in and remain a member of the FTCFWG or any successor group formed to facilitate commercial fisheries dialogue.

3.2.19 Prior to the Commencement of the Licensed Activity, the Licensee must at its own expense, and with the approval of the Licensing Authority in consultation with NatureScot, appoint an independent Environmental Clerk of Works (“ECoW”). The ECoW must be appointed in time to review and approve the draft version of the first plan or programme submitted under this consent to the Licensing Authority, in sufficient time for any pre-construction monitoring requirements, and remain in post until a date agreed by the Licensing Authority. The terms of appointment must also be approved by the Licensing Authority in consultation with NatureScot.

The terms of the appointment must include, but not be limited to:

- a. Quality assurance of final draft versions of all plans and programmes required under this marine licence;
- b. Responsible for the monitoring and reporting of compliance with the marine licence conditions and the environmental mitigation measures for all wind farm infrastructure;
- c. Provision of on-going advice and guidance to the Licensee in relation to achieving compliance with marine licence conditions, including but not limited to the conditions relating to and the implementation of the CEMP, the PEMP, the CaP and the VMP;
- d. Provision of reports on point b & c above to the Licensing Authority at timescales to be determined by the Licensing Authority;
- e. Induction and toolbox talks to onsite construction teams on environmental policy and procedures, including temporary stops and keeping a record of these;
- f. Monitoring that the Works is being constructed in accordance with the plans and this marine licence, the Application and in compliance with all relevant regulations and legislation;
- g. Reviewing and reporting incidents/near misses and reporting any changes in procedures as a result to the Licensing Authority; and
- h. Agreement of a communication strategy with the Licensing Authority.

3.2.20 Prior to the Commencement of the Licensed Activity, a Fisheries Liaison Officer (“FLO”), must be appointed by the Licensee and approved, in writing, by the Licensing Authority, following consultation with SFF and the FTCFWG. The FLO must be appointed by the Licensee for the period from Commencement of the Licensed Activity until the Final Commissioning of the Works. The identity and credentials of the FLO must be included in the CEMP (referred to in condition 3.2.11. The FLO must establish and maintain effective communications between the Licensee, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Works, and ensure compliance with best practice guidelines whilst doing so.

The responsibilities of the FLO must include:

- a. Establishing and maintaining effective communications between the Licensee, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall Works and any amendments to the CEMP and site environmental procedures;

- b. The provision of information relating to the safe operation of fishing activity on the site of the Works; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

3.2.21 The Licensee must, no later than six months prior to the Commencement of the Licensed Activity, submit an updated Protocol for Archaeological Discoveries (“PAD”) and Written Scheme of Investigation (“WSI”) which sets out what the Licensee must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the Works, in writing, to the Licensing Authority for their written approval. Commencement of the Licensed Activity cannot take place until such approval is granted. Such approval may be given only following consultation by the Licensing Authority with Historic Environment Scotland (“HES”) and any such advisors as may be required at the discretion of the Licensing Authority. The reporting protocol must be implemented in full, at all times, by the Licensee.

The final PAD and WSI must be sent to Fife Council for information only.

3.3 During the Licensed Activity

3.3.1 Only those persons acting on behalf of, and authorised by, the agent or the Licensee shall undertake the Licensed Activity.

3.3.2 The Licensee must ensure that a copy of the licence is given to each contractor and sub-contractor employed to undertake the Licensed Activity.

3.3.3 The Licensee must notify the UK Hydrographic Office of the progress of the construction of the Works to facilitate the promulgation of maritime safety information and updating of admiralty charts and publications through the national Notice to Mariners system.

The Licensee must ensure that progress of the Licensed Activity is promulgated regularly in the Kingfisher Fortnightly Bulletin.

3.3.4 The Licensee must ensure the best method of practice is used to minimise re-suspension of sediment during the Licensed Activity.

3.3.5 The Licensee must ensure appropriate steps are taken to minimise damage to the seabed by the Licensed Activity.

3.3.6 If the Licensee becomes aware that an accidental deposit has occurred, the Licensee must notify the Licensing Authority as soon as practicable. The Licensee must undertake such survey as directed by the Licensing Authority to locate the materials. If the Licensing Authority is of the view that any accidental deposits have occurred and should be removed, then the substances, objects and/or materials must be removed by the Licensee as soon as is practicable and at the Licensee's expense.

3.3.7 The Licensee must ensure that if oil based drilling muds are utilised they must be contained within a zero discharge system. Any drill cuttings associated with the use of water-based drilling muds need not be removed from the seabed.

3.4 Upon Completion of the Licensed Activity

3.4.1 The Licensee must send notification to the Source Data Receipt team, UK Hydrographic Office, (email: sdr@ukho.gov.uk) no later than 10 working days after the Completion of the Licensed Activity. The information provided must include: latitude and longitude coordinates in WGS84 (ETRS89) datum of the Works, as installed, on and/or above the seabed, any changes to engineering drawings, post dredge surveys, and details of new or changed aids to navigation where applicable. A copy of the notification must be sent to the Licensing Authority within 5 working days of the notification being sent.

The Licensee must, following installation, notify the Kingfisher Information Service Offshore Renewables and Cable Awareness and the International Cable Protection Committee of the 'as laid' cable corridor and a 500m zone either side of it as a hazardous area for anchoring.

The Licensee must ensure the seabed is returned to the original profile, or as close as reasonably practicable, following the Completion of the Licensed Activity. The Licensee must complete post-installation hydrographic surveys of the site of the Works or subsections thereof, and periodic hydrographic surveys thereafter, to the IHO Order 1a survey standard as per the MCA's MGN 654 and supplementary updates. The data and a corresponding report of the survey findings must be supplied to the UK Hydrographic Office on completion of these surveys, with notification to the MCA hydrography manager and the Licensing Authority.

The Licensee must ensure that local mariners, fishermen's organisations and HM Coastguard, in this case the National Maritime Coastguard Centre, are made fully aware of the Completion of the Licensed Activity.

The Licensee must ensure that the Completion of the Licensed Activity is promulgated in the soonest Kingfisher Fortnightly Bulletin following Completion of the Licensed Activity to inform the commercial fishing industry.

The Licensee must ensure that the WTG and metmast are actively monitored throughout the lifetime of the Works. The Licensee must ensure that a contingency plan is in place to respond to any reported catastrophic failures which may result in the WTG, or part(s) thereof, breaking loose and becoming a buoyant hazard. This contingency plan should include the transmission of local radio navigation warnings.

The Licensee must not exhibit, alter or discontinue navigational lighting of the Licensed Activity without the statutory sanction of the Commissioners of Northern Lighthouses.

3.4.2 The Licensee must take all reasonable, appropriate and practicable steps at the end of the operational life of the Licensed Activity to restore the site of the Works to its original pre-construction condition, or to as close to its original condition as is reasonably practicable, in accordance with the PEMP and the DP and to the satisfaction of the Licensing Authority.

Should the Licensed Activity be discontinued prior to expiry date of the licence, the Licensee must inform the Licensing Authority in writing of the discontinuation of the Licensed Activity. A separate marine licence will be required for the removal of the Licensed Activity.

3.4.3 The Licensee must notify the Licensing Authority, in writing, of the date of the Completion of the Licensed Activity, no more than one calendar month following the Completion of the Licensed Activity.

3.4.4 The Licensee must, within one month of the Completion of the Licensed Activity, provide the coordinates accurate to three decimal places of minutes of arc for the WTG and metmast and position and maximum height of the WTG and metmast to the Defence Geographic Centre, MOD, and any other such advisers or organisations as may be required for nautical charting and aviation purposes.

3.4.5 The Licensee must, no later than one calendar month following the Completion of the Licensed Activity submit a report, in writing, to the Licensing Authority stating the date of Completion of the Licensed Activity, the nature and quantity of all substances and/or objects placed below Mean High Water Springs and all materials used in construction under the authority of this licence.

3.4.6 The Licensee must, within three months after the completion of the Licensed Activity, provide the following information to the Maritime and Coastguard Agency and the Licensing Authority:

- a) A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for the WTG and metmast. This should also be provided as a Geographic Information System shape file using WGS84 format; and
- b) A table or diagram of the dimensions of the WTG and metmast including - height to blade tip (measured above Lowest Astronomical Tide ("LAT")) to the highest point, height to hub (measured above LAT to the centreline of the generator shaft), rotor diameter and maximum rotation speed.

3.4.7 The Licensee must undertake and submit to the Licensing Authority, within eight weeks of the completion of the Licensed Activity, an assessment of any risks posed by the final sub-sea cable route, burial depths and un-trenched areas where mechanical and any other protection measures were used within the cable route, to the satisfaction of the Licensing Authority, the purpose of which is to ensure that the safety of navigation and other legitimate users of the sea is not compromised. Where the assessment identifies risks, the Licensee must submit a plan for addressing these to the Licensing Authority and ensure that the plan is fully implemented, subject to the approval of the Licensing Authority.

3.4.8 The Licensee must provide the Licensing Authority with the MMO records no later than two months following Completion of the Licensed Activity.

NOTES

1. You are deemed to have satisfied yourself that there are no barriers, legal or otherwise, to the carrying out of the Licensed Activity. The issue of this licence does not absolve the Licensee from obtaining such authorisations, consents etc which may be required under any other legislation.
2. In the event that the Licensee wishes any of the particulars set down in the Schedule to be altered, the Licensing Authority must be immediately notified of the alterations. It should be noted that changes can invalidate a licence, and that an application for a new licence may be necessary.

Annex One to Licence Number MS-00009834

Chart showing the location of the Licensed Activity

