MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

LICENCE FOR MARINE RENEWABLES CONSTRUCTION, OPERATION AND DEPOSIT OF SUBSTANCES OR OBJECTS IN THE SCOTTISH MARINE AREA

Licence Number: 06685/19/0

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

Laminaria NV
Wetenschapspark 1
8400 Oostende
Belgium

Under the Marine (Scotland) Act 2010,

1) To deposit any substance or object (except for dredge spoil) within the Scottish marine area, either in the sea or on or under the seabed;

2) To deposit any substance or object (except for dredge spoil) in the sea or on or under the seabed from a vessel which was loaded with the substance or object either in Scotland or in the Scottish marine area;

3) To construct any works within the Scottish marine area either in or over the sea, or under the seabed;

4) To remove any works within the Scottish marine area either in or over the sea, or under the seabed;

required in the execution of the Works (including construction, operation and maintenance) described in Part 2 of the Schedule attached to this licence. The issue of this licence is subject to conditions as set out in Part 3 of the Schedule.

This licence remains in force from 5 April 2019 to 31 December 2019 or until the Works have been decommissioned in accordance with an approved Decommissioning Programme prior to this date.

Signed: [Redacted]

Jessica Drew
For and on behalf of the Licensing Authority

Date of issue: 5 April 2019
1. PART 1 – GENERAL

1.1 Interpretation

In this licence, unless otherwise stated, terms are as defined in sections 1, 64 and 157 of the Marine (Scotland) Act 2010, and,

a) “the 2010 Act” means the Marine (Scotland) Act 2010;
b) “the Application” means the marine licence application and supporting information submitted to the Licensing Authority by The European Marine Energy Centre Limited, on behalf of Laminaria NV, on 16th April 2018 and the subsequent marine licence variation request submitted on the 4th September 2018;
c) “Commencement of the Works” means the date on which the first vessel arrives on the Site to begin carrying on any Licensed Activity in connection with the construction of the Works, as described in Part 2 of this licence;
d) “Completion of the Works” means the date on which the Works have been constructed (installed), or the Works have been deemed complete by the Licensing Authority, whichever occurs first;
e) “CMS” means construction method statement;
f) “Decommissioning of the Works” means the removal of the Works from the seabed, demolition of the Works and/or dismantling of the Works;
g) “Decommissioning Programme” means the programme for decommissioning the Works, under section 105(2) of the Energy Act 2004 (as amended);
h) “DP” means Decommissioning Programme
i) “EMEC” means European Marine Energy Centre;
k) “IALA” means International Association of Marine Aids to Navigation and Lighthouse Authorities;
l) “Licensable Marine Activity” means any activity listed in section 21 of the 2010 Act;
m) “Licensed Activities” means any activity or activities listed in section 21 of the 2010 Act which is, or are authorised under this licence;
n) “the Licensee” means Laminaria NV (Company Registration Number BE0840310406) and having its registered office at Wetenschapspark 1, 8400 Oostende, Belgium;
o) “MCA” means Maritime Coastguard Agency;
p) “MHWS” means mean high water springs;
q) “NLB” means the Northern Lighthouse Board;
r) “OCNS list” means the definitive ranked list of registered products held by the Offshore Chemical Notification Scheme, as assessed for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002 (as amended);
s) “OSPAR” means the Convention for the Protection of the Marine Environment of the North-East Atlantic;
t) “the Site” means the project location outlined in Figure 1 contained in Part 4 of this licence;
u) TPC” or “TPV” means Third Party Certification or Verification;
v) “UKHO” means the UK Hydrographic Office; and
w) “the Works” means the installation, operation and maintenance of the Laminaria Wave Energy Converter.

All geographical co-ordinates contained within this licence are in latitude and longitude format WGS84.
1.2 Contacts

All correspondence or communications relating to this 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 themselves that there are no barriers or restrictions, legal or otherwise, to the carrying on of the Licensed Activities in connection with the Works. The issuing of this 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 of the 2010 Act the Licensing Authority may by notice vary, suspend or revoke this licence granted by them if it appears to the Licensing Authority that there has been a breach of any of the provisions of this licence 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 section 30(7) of the 2010 Act, the Licensing Authority may on an application made by the Licensee, vary this licence if satisfied that the variation being applied for is not material.

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

Under the 2010 Act variations, suspensions, revocations and transfers of licences are subject to the procedure set out in section 31 of the 2010 Act.

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 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, 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 the sheriff of any sheriffdom against a decision taken by the Scottish Ministers under section 29(1) of the 2010 Act.
2. PART 2 – THE WORKS

2.1 Title of the Works

The title of the Works to which this licence relates is the Laminaria Wave Energy Converter ("Laminaria WEC").

2.2 Description of the Works

Construction, operation and maintenance of a wave energy converter, known as the Laminaria WEC, with a maximum generating capacity of up to 200 kW.

These works will comprise of the following components:

- Laminaria WEC (main floater); and
- The anchoring system.

2.3 Location of the Works

Test berth 1 within the EMEC tidal test facility at the Billia Croo wave energy test site located west of the Orkney Islands, within the area bounded by joining the following points:

Billia Croo Berth 1 location:

<table>
<thead>
<tr>
<th>Latitudinal</th>
<th>Longitudinal</th>
</tr>
</thead>
<tbody>
<tr>
<td>58° 59.174’ N</td>
<td>003° 23.672’ W</td>
</tr>
<tr>
<td>58° 59.086’ N</td>
<td>003° 23.299’ W</td>
</tr>
<tr>
<td>58° 58.879’ N</td>
<td>003° 23.166’ W</td>
</tr>
<tr>
<td>58° 58.667’ N</td>
<td>003° 23.452’ W</td>
</tr>
<tr>
<td>58° 58.664’ N</td>
<td>003° 23.898’ W</td>
</tr>
<tr>
<td>58° 58.861’ N</td>
<td>003° 24.194’ W</td>
</tr>
<tr>
<td>58° 59.087’ N</td>
<td>003° 24.065’ W</td>
</tr>
</tbody>
</table>

As per project location detailed in Part 4, Figure 1.

2.4 Deposits

This licence authorises the deposit of the undernoted substances and objects required in connection with the Works, subject to the maximum amounts as specified below:

**PERMANENT DEPOSITS**

<table>
<thead>
<tr>
<th>Components</th>
<th>Materials to be used</th>
<th>Approx. weight / volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laminaria WEC (main floater)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mooring line</td>
<td>Steel wire rope in rubber matrix</td>
<td>4 x 200 kg</td>
</tr>
<tr>
<td>Sheaves</td>
<td>Ertalyte (PET-P)</td>
<td>8 x 200 kg</td>
</tr>
<tr>
<td>Sheaves</td>
<td>Nylacast Oillon</td>
<td>8 x 200 kg</td>
</tr>
<tr>
<td>Wet bearings</td>
<td>Feroform T14 by Tenmat</td>
<td>8 x 8.5 kg</td>
</tr>
<tr>
<td>Pulley bracket</td>
<td>Steel</td>
<td>8 x 420 kg</td>
</tr>
<tr>
<td>Drum</td>
<td>Super duplex stainless steel</td>
<td>2 x 1300 kg</td>
</tr>
<tr>
<td>Main shaft</td>
<td>Super duplex stainless steel</td>
<td>2 x 2100 kg</td>
</tr>
<tr>
<td>Main hull</td>
<td>Steel s355</td>
<td>250 tonnes</td>
</tr>
<tr>
<td>Paint</td>
<td>Hempadure Multi-Strength 45703</td>
<td>170 L</td>
</tr>
<tr>
<td>Umbilical electrical cable</td>
<td>Rubber and copper</td>
<td>4000 kg, 150 m</td>
</tr>
<tr>
<td>Roller bearings</td>
<td>Steel</td>
<td>4 x 150 kg</td>
</tr>
<tr>
<td>Gearbox</td>
<td>Steel</td>
<td>4 x 2.5 tonnes</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Gearbox and rollerbearing oil</td>
<td>Offshore Environmental Oils HDEO EP</td>
<td>4000L</td>
</tr>
<tr>
<td>Gearbox and rollerbearing oil</td>
<td>Offshore Environmental Oils EO220</td>
<td>4000L</td>
</tr>
<tr>
<td>Generator</td>
<td>Steel, copper, magnets</td>
<td>2 X 800 kg</td>
</tr>
<tr>
<td>Electric induction motors</td>
<td>Steel, copper</td>
<td>2 X 600 kg</td>
</tr>
<tr>
<td><strong>The anchoring system</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure</td>
<td>Concrete</td>
<td>1000 m³</td>
</tr>
</tbody>
</table>

TEMPORARY DEPOSITS

Vessel anchors 4 tonnes

2.5 **Names(s) and address(es) of any other agents, contractors or sub-contractors acting on behalf of the licensee**

See condition 3.1.3
3. **PART 3 – CONDITIONS**

3.1 **General Conditions**

3.1.1 **Compliance with the Application and approved plans**

The Licensee must at all times construct, operate and maintain the Works in accordance with this Licence, the Application and supporting documents submitted by the Company on 16th April 2018 and the subsequent marine licence variation request submitted on the 4th September 2018.

**Reason:** To ensure compliance with the marine licence, the Application for the marine licence and supporting documents.

3.1.2 **Licence conditions binding other parties**

All conditions attached to this licence bind any person who for the time being owns, occupies or enjoys any use of the Works for which this licence has been granted in relation to those Licensed Activities authorised under Item 5 in section 21(1) of the 2010 Act whether or not this licence has been transferred to that person.

**Reason:** To safeguard the obligations of the licence, in accordance with s.29(5) of the Marine (Scotland) Act 2010.

3.1.3 **Vessels, vehicles agents, contractors and sub-contractors**

The licensee must provide, as soon as is reasonably practicable prior to the Licensed Activities commencing, the name and function of any agent, contractor or sub-contractor appointed to undertake the Licensed Activities.

Any changes to the supplied details must be notified to the Licensing Authority, in writing, prior to any agent, contractor or sub-contractor undertaking any Licensed Activity.

The Licensee must ensure that only those agents, contractors or sub-contractors notified to the Licensing Authority are permitted to undertake the licensed activities.

The Licensee must give a copy of this licence and any subsequent variations that have been made to this licence in accordance with section 30 of the 2010 Act to any agent, contractor or sub-contractor appointed to carry out any part, or all, of the Licensed Activities. The Licensee must satisfy themselves that any such agent, contractor or sub-contractor is aware of the extent of the works for which this licence has been granted, the activity which is licensed and the terms of the conditions attached to this licence.

**Reason:** To ensure all parties involved in the Works are aware of the licence and its conditions to reduce the risk of a breach of the licence, in accordance with s.39(1)(b) of the 2010 Act.

3.1.4 **Force Majeure**

Should the Licensee or any of their agents, contractors or sub-contractors, by any reason of force majeure deposit anywhere in the marine environment any substance or object, then the Licensee must notify the Licensing Authority of the full details of the circumstances of the deposit within 48 hours of the incident occurring (failing which as soon as reasonably practicable after that period of 48 hours has elapsed).
Force majeure may be deemed to apply when, due to stress of weather or any other cause, the master of a vessel or vehicle operator determines that it is necessary to deposit the substance or object other than at the Site because the safety of human life or, as the case may be, the vessel, vehicle or marine structure is threatened. Under Annex II, Article 7 of the OSPAR, the Licensing Authority is obliged to immediately report force majeure incidents to the OSPAR Commission.

**Reason:** To provide a defence for the Master to protect himself and his crew in bad weather conditions, in accordance with s.29(2)(a) of the 2010 Act.

### 3.1.5 Material alterations to the Application

The Licensee must, where any information upon which the granting of this licence was based has after the granting of the licence altered in any material respect, notify the Licensing Authority of this fact, in writing, as soon as is practicable.

**Reason:** To ensure that the Works are carried out in accordance with the Application.

### 3.1.6 Submission of plans and specification of studies and surveys to the Licensing Authority

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 Works, in writing, to the Licensing Authority for their 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 Works by the Licensee or by a third party may also be used to satisfy the requirements of this licence.

**Reason:** To ensure that the Licensing Authority is kept informed of the progress of the Works, in accordance with s.29(3)(a) of the 2010 Act.

### 3.1.7 Submission of reports and notifications to the Licensing Authority

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 it would appear to the Licensee that there may be a delay in the submission of the reports or notifications to the Licensing Authority, then 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 their 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.

**Reason:** To ensure that all reports and notifications are submitted within a reasonable timescale after the licence is granted, in accordance with s.29(3)(c) of the 2010 Act.
3.1.8 Chemical usage

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 Works. 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 OCNS list, the approval request must include the chemical name, volume or quantity to be used, the OCNS list grouping or rank and the proposed frequency of use.

If the proposed chemical is not on the OCNS list, the approval request must include details of chemical to be used, including safety data sheet, depth and current at the Site, 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.

**Reason:** To minimise the environmental impact in the event of a release through the use of authorised chemicals in the interest of protecting the environment, in accordance with s.29(2)(b) of the 2010 Act.

3.1.9 Fluorinated greenhouse gases

The Licensee must ensure that all equipment to be utilised in the Works which contains fluorinated greenhouse gases (hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and other greenhouse gases that contain fluorine, listed in Annex I of Regulation No 517/2014 of the European Parliament and of the Council of 16 April 2014 on Fluorinated Greenhouse Gases ("F-Gas Regulation") or mixtures containing any of those substances) must take precautions to prevent the unintentional release ("leakage") of those gases. 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 Works that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO\(_2\) equivalent or more 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.

**Reason:** To ensure compliance of the Works with the F-Gas Regulation and the Fluorinated Greenhouse Gases Regulations 2015, in accordance with s.29(2)(b) of the 2010 Act.

### 3.1.10 Environmental protection

The Licensee must ensure that all reasonable, appropriate and practicable steps are taken at all times to avoid or minimise any damage to the Scottish marine area caused as a result of the undertaking of the Licensed Activities.

The Licensee must ensure that all personnel adhere to the Scottish Marine Wildlife Watching Code where appropriate during all construction (installation), operation and maintenance activities authorised under this licence.

The Licensee must ensure that any debris or waste material placed below MHWS during the construction of the Works are removed from the Site, unless agreed otherwise by the Licensing Authority, as soon as is reasonably practicable, for disposal at a location above the MHWS level, approved by the Scottish Environment Protection Agency or such other relevant authority if disposal is to take place outwith Scotland.

The Licensee must ensure that, where practicable, all substances and objects deposited during the Works are inert (or appropriately coated or protected so as to be rendered inert) and do not contain toxic elements which may be harmful to the marine environment, the living resources which it supports or human health.

The Licensee must ensure that the risk of transferring marine non-native species to and from the Site is kept to a minimum by ensuring appropriate bio-fouling management practices are implemented during the construction (installation), operation and maintenance of the Works.

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 situated within Site of the Works need not be removed from the seabed.

**Reason:** To ensure environmental impacts are minimised, in accordance with s.29(2)(b) of the 2010 Act.

### 3.1.11 Availability of the licence for inspection

The Licensee must ensure that copies of this licence and any subsequent amendments or variations are available for inspection at any reasonable time by any authorised by the Licensing Authority at:

a) the premises of the Licensee;
b) the premises of any agent, contractor or sub-contractor acting on behalf of the Licensee;
c) any onshore premises directly associated with the Works; and
d) aboard any vessels permitted to engage in the Works.

**Reason:** To ensure the licence is available for the purpose of inspection, in accordance with s.29(2)(b) of the 2010 Act.
3.1.12 Inspection of the Works

Any persons authorised by the Licensing Authority, must be permitted to inspect the Works. The Licensee must, as far as reasonably practicable, 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 Works.

Reason: To ensure access to the Site for the purpose of inspection, in accordance with s.29(2)(b) of the 2010 Act.

3.1.13 Emergencies

If the assistance of a Government Department (to include departments of Administrations other than the Scottish Government) is required to deal with any emergency arising from:

a) the failure to mark and light the Works as required by this 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.

Reason: To ensure licensee is aware of financial liabilities, in accordance with s.29(2)(b) of the 2010 Act.
3.2 Conditions specific to the Works

3.2.1 Conditions applicable to all phases of the Works

3.2.1.1 Incident Reporting

In the event of any breach of health and safety or environmental obligations relating to the Works during the period of this Licence, the Licensee must provide written notification of the nature and timing of the incident to the Licensing Authority within 24 hours of the incident occurring. Confirmation of remedial measures taken and/or to be taken to rectify the breach must be provided, in writing, to the Licensing Authority within a period of time to be agreed by the Licensing Authority.

**Reason:** To keep the Licensing Authority informed of any such incidents which may be in the public interest, in accordance with s.29(3)(c) of 2010 Act.

3.2.1.2 Bunding and storage facilities

The Licensee must ensure suitable bunding and storage facilities are employed to prevent the release of fuel oils and lubricating fluids associated with the plant and equipment into the marine environment.

**Reason:** To ensure pollution prevention is undertaken, in accordance with s.29(2)(b) of the 2010 Act.

3.2.1.3 Emergency Response Co-operation Plans

The Licensee must, in discussion with the MCA Search and Rescue Branch, complete an Emergency Response Co-operation Plans ("ERCoP") including a Navigational Risk Assessment ("NRA") for the construction and operation phases. The ERCoP must include full details for the construction and operation phases of the authorised scheme in accordance with MCA recommendations contained within Marine Guidance Notice ("MGN") 543 (or subsequent updates).

A copy of the final plan must be submitted to the Licensing Authority no later than 7 days, or at such a time as agreed with the Licensing Authority, prior to the Commencement of the Works.

**Reason:** To ensure the Licensing Authority is aware of the ERCoP, in accordance with s.29(3)(c) of the 2010 Act.
3.2.2  Prior to the Commencement of the Works

3.2.2.1 Commencement date of the Works

The Licensee must, prior to and no less than 7 days before the Commencement of the Works, notify the Licensing Authority, in writing, of the date of Commencement of the Works authorised under this Licence.

Reason: To inform the Licensing Authority of the commencement date of the Works, in accordance with s.29(3)(a) of the 2010 Act.

3.2.2.2 Noise Registry

The licensee must complete and submit a proposed activity form in the online Noise Registry for all aspects of the Works that will produce loud, low to medium frequency (10Hz-10kHz) impulsive noise no later than 7 days prior to commencement of the Works. If any aspects of the Works differ from the proposed activity form in the online Noise Registry, the licensee must complete and submit a new Proposed Activity Form no later than 7 days prior to commencement of the Works.

Reason: To ensure compliance with reporting requirements on marine noise, in accordance with s.29(3)(c) of the 2010 Act.

3.2.2.3 Navigation and Charting

The Licensee must, no later than 7 days prior to Commencement of the Works, notify the UKHO of the proposed 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, no later than 7 days prior to Commencement of the Works, ensure that local mariners, fishermen’s organisations and HM Coastguard, in this case the National Maritime Operations Centre, are made fully aware of the Works through local Notice to Mariners or by any other appropriate means.

The Licensee must, no later than 7 days prior to the Commencement of the Works, complete an "Application for Statutory Sanction to Alter / Exhibit" form and submit this to the NLB for the necessary sanction to be granted.

During all phases of deployment the Licensee must ensure that adequate notice is given to the mariner in consultation with the Harbour Master of Orkney Island Council. Such Notices to Mariners or Local Radio Navigation Warnings must clearly state the nature and duration of the works.

The Licensee must notify local mariners, fishermen’s organisations and HM Coastguard, in this case the National Maritime Operations Centre (nmoccontroller@hmog.gov.uk), on a weekly basis of the progress of Construction of the Works through local Notice to Mariners or any other appropriate means.

Reason: To reduce the navigational risk to other legitimate users of the sea, in accordance with s.29(2)(b) of the 2010 Act.
3.2.2.4 Third Party Certification or Verification

The Licensee must no later than three calendar months (or such other period as agreed with the Licensing Authority) prior to the Commencement of the Works, provide the Licensing Authority with TPC or TPV (or a suitable alternative as agreed in writing with the Licensing Authority) for the lifespan of the Works.

**Reason:** To provide independent certification or verification of the technology, materials or equipment, in accordance with s.29(2)(b) of the 2010 Act.

3.2.2.5 Construction Method Statement

The Works must, at all times, be constructed in accordance with the approved construction method statement ("CMS") as submitted within the Application. Any updates or amendments made to the approved CMS must be submitted, in writing, to the Licensing Authority for their prior written approval.

**Reason:** To ensure that the Works are carried out in accordance with the Application, in accordance with s.29(2)(a) of the 2010 Act.
3.2.3 During the Construction of the Works

3.2.3.1 Transportation Audit Report

The Licensee must submit to the Licensing Authority a detailed TAR for each calendar month during the construction phase of the Works. The TAR must be submitted within 14 days of the end of each calendar month.

The TAR must include the nature and quantity of all substances and objects deposited and materials used in construction (as described in Part 2 of this licence) in that calendar month. Alterations and updates can be made in the following month’s TAR. Where appropriate, nil returns must be provided.

If the Licensee becomes aware of any substances, objects or materials on the TAR that are missing, or 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 substances, objects and materials. If the Licensing Authority is of the view that any accidental deposits have occurred and should be removed, then the materials must be removed by the Licensee as soon as is practicable and at the Licensee’s expense.

Reason: To confirm that the deposits made were in accordance with the Application documentation, and that any accidental deposits are recovered or charted appropriately in accordance with s.29(3)(c) of the 2010 Act.

3.2.3.2 Nature and quantity of substances and objects deposited and materials used in construction

The Licensee must, no later than one calendar month following the Completion of the Works submit a final audit report, in writing, to the Licensing Authority stating the nature and quantity of all substances, objects placed below MHWS and all materials used in construction within the Scottish marine area under the authority of this licence.

Reason: To confirm that the deposits made were in accordance with the Application documentation, in accordance with s.29(3)(c) of the 2010 Act.

3.2.3.3 Navigational Safety

The Licensee must notify the UKHO of the progress of the Works during construction (installation) to facilitate the promulgation of maritime safety information and updating of nautical charts and publications through the national Notice to Mariners system.

The Licensee must notify local mariners, fishermen’s organisations and HM Coastguard, in this case the National Maritime Operations Centre (nmoccontroller@hmco.gov.uk), on a weekly basis of the progress of Construction of the Works through local Notice to Mariners or any other appropriate means.

The Licensee must ensure that progress of the Works is promulgated regularly in the Kingfisher Fortnightly Bulletin to inform the Sea Fish Industry of the vessel routes, the timings and the location of the Works and of the relevant operations.

The Licensee must in the case of damage to, or destruction or decay of, the Works, notify the Licensing Authority, in writing, as soon as reasonably practicable, following such damage,
destruction or decay. The Licensee must carry out any remedial action as required by the Licensing Authority, and intimated to the Licensee in writing, which may include any requirement to display aids to navigation, following consultation with the MCA, the NLB or any such advisers as required by the Licensing Authority.

The Licensee must ensure that any vessels permitted to engage in the Works are marked in accordance with the International Rules for the Prevention of Collisions at Sea whilst under way, and in accordance with the UK Standard Marking Schedule for Offshore Installations if the vessel is secured to the seabed.

The Licensee must ensure that no radio beacon or radar beacon operating in the marine frequency bands is installed or used on the Works without the prior written approval of the Office of Communications ("OfCom").

The Licensee must ensure that navigable depth is not altered by more than 5% referenced to Chart Datum unless otherwise agreed, in writing, with the Licensing Authority in consultation with the MCA and NLB.

Reason: To reduce the navigational risk to other legitimate users of the sea, in accordance with s.29(2)(b) of the 2010 Act.

3.2.3.4 Markings, lighting and signals of the Works

The Licensee must ensure that the Works are marked and lit in accordance with the requirements of the MCA and NLB at all times and such markings and/or lighting must be continued unless and until such time as the Licensing Authority, by notice, relevantly varies this licence under section 30(3)(c) of the 2010 Act.

The Licensee must not display any marks and lights additional to those required by virtue of this licence without the written approval of the Licensing Authority following consultation with the NLB and the MCA.

The Licensee must ensure that the works are marked and lit in accordance with IALA Recommendation O-139.

The device must be painted yellow.

Recto-reflective tape/panels must be applied to the upper part of the device.

Reason: To ensure safe appropriate marking and lighting of the offshore Works, in accordance with s.29(2)(b) of the Marine (Scotland) Act 2010.
3.2.4 Conditions upon Completion of the Works

3.2.4.1 Date of Completion of the Works

The Licensee must, no later than 7 days following the Completion of the Works, notify the Licensing Authority, in writing, of the date of Completion of the Works.

**Reason:** To inform the Licensing Authority of the completion of the works, in accordance with s.29(3)(c) of the 2010 Act.

3.2.4.2 Restoration of the Site to its original condition

The Licensee must take all reasonable, appropriate and practicable steps to restore the Site to its original pre-construction condition, or to as close to its original condition as is reasonably practicable, in accordance with the Project Environmental Monitoring Plan as submitted within the Application (document titled 'Environmental Report and Project-specific Environmental Monitoring Plan') and the DP to the satisfaction of the Licensing Authority.

Should the Works be discontinued prior to expiry date of this marine licence, the Licensee must inform the Licencing Authority in writing of the discontinuation of the Works.

A separate marine licence will be required for the removal of Works.

**Reason:** To mitigate the effects of the activity on the Site, in accordance with s.29(3)(e) of the 2010 Act.

3.2.4.3 Nature and quantity of deposited substances and objects

The Licensee must, no later than 7 days following the Completion of the Works submit a final audit report, in writing, to the Licensing Authority stating the nature and quantity of all substances, objects placed below MHWS and all materials used in construction within the Scottish marine area under the authority of this licence.

**Reason:** To confirm that the deposits made were in accordance with the Application, in accordance with s.29(3)(c) of the Marine (Scotland) Act 2010.

3.2.4.4 Final Commissioning of the Works

The Licensee must, no more than 7 days following the Final Commissioning of the Works, notify the Licensing Authority, in writing, of the date of the Final Commissioning of the Works.

**Reason:** To inform the Licensing Authority of the Final Commissioning of the works, in accordance with s.29(3)(c) of the 2010 Act.

3.2.4.5 Noise Registry Close Out

The licensee must complete and submit a Close-out Report for all aspects of the Works that produced loud, low to medium frequency (10Hz-10kHz) impulsive noise in the online Marine Noise Registry no later than 12 weeks from the Completion of the Works.

**Reason:** To ensure compliance with reporting requirements on marine noise, in accordance with s.29(3)(c) of the 2010 Act.
3.2.4.6 Navigational Safety

The Licensee must notify the UKHO of the Completion of the Works to facilitate the promulgation of maritime safety information and updating nautical charts and publications through the national Notice to Mariners system.

The Licensee must ensure that local mariners, fishermen's organisations and HM coastguard, in this case the National Maritime Operations Centre (nmocontroller@hmcq.gov.uk), are made fully aware of the Completion of the Works.

The Licensee must ensure that the Completion of the Works is promulgated in the Kingfisher Fortnightly Bulletin to inform the Sea Fish Industry.

The Licensee must monitor the works, where any damage, destruction or decay is caused to the Works, notify the Licensing Authority, in writing, of such damage, destruction or decay as soon as reasonably practicable following such damage, destruction or decay. The Licensee must carry out any remedial action which the Licensing Authority advises the Licensee, in writing, as requiring to be taken, which may include a requirement to display aids to navigation, following consultation by the Licensing Authority with the MCA, the NLB or any such advisers as required.

The Licensee must ensure that no radio beacon or radar beacon operating in the marine frequency bands is installed or used on the Works without the prior written approval of the Office of Communications ("OfCom").

The Licensee must not exhibit, alter or discontinue navigational lighting of the Works without the Statutory Sanction of the Commissioners of Northern Lighthouses. An 'Application for Statutory Sanction to Exhibit/Discontinue' form must be completed by the Licensee as fully as possible and returned to the Northern Lighthouse Board via e-mail to navigation@nlb.org.uk for the necessary sanction to be granted prior to exhibiting, altering or discontinuing navigational lighting.

**Reason:** To reduce the navigational risk to other legitimate users of the sea, in accordance with s.29(2)(b) of the 2010 Act.

3.2.4.7 Operation and Maintenance of the Works

The Licensee must operate and maintain the Works in accordance with the Project information Summary document submitted within the Application.

The Licensing Authority must be notified at least 7 days in advance of any maintenance of the Works. In the event that these works are not covered by the licence and are considered by the Licensing Authority as being material and being licensable marine activities then the works will require a new Marine Licence.

**Reason:** To ensure compliance to prevent decay of the Works and to ensure that any maintenance work is carried out under an appropriate licence in accordance with s.29(3)(b) of the 2010 Act.

3.3 Decommissioning

There must be no commencement of the works unless a DP has been submitted to and approved in writing by the Licensing Authority. The DP must outline measures for the decommissioning of the Works, restoration of the sea bed and will include without limitation,
proposals for the removal of the Works, the management and timing of the works and, environmental management provisions.

The Works must be decommissioned in accordance with the approved DP, unless otherwise agreed in writing in advance with the Licensing Authority.

This licence does not permit the Decommissioning of the Works, for which a separate marine licence is required.

**Reason:** To ensure that decommissioning is carried out according to the approved Decommissioning Programme under an appropriate licence, in accordance with s.29(3)(d) of the 2010 Act
4. **PART 4 – PROJECT LOCATION**

Figure 1 – Laminaria WEC, located at test berth 1 within the European Marine Energy Centre (EMEC) tidal test facility at the Billia Croo wave energy test site located west of the Orkney Islands.