

[Redacted]

From: [Redacted]
Sent: 05 December 2018 11:32
To: MS Marine Renewables; [Redacted]
Cc: [Redacted]
Subject: RE: 06818 - Orbital O2 - EMEC Fall of Warness site, berth 5 - Consultation response required by Friday 30 November - NIL RETURN ASSUMED

Dear [Redacted]

Thank you for the opportunity to comment on the potential impact of the above proposed works on the safety of navigation.

The Marine Licence application and supporting documentation have been considered by Navigation Safety Branch. On this occasion, the Maritime and Coastguard Agency (MCA) has no objection to consent being granted provided all maritime safety legislation is followed and the conditions/advisories below are applied:

Conditions:

1. The Licencee must ensure that local mariners and fishermen's organisations are made fully aware of the activity through local notices to mariners.
2. The Licencee must ensure that HM Coastguard, in this case nmoccontroller@hmcg.gov.uk, The National Maritime Operations Centre is made aware of the works prior to commencement.
3. The Licencee must notify the UK Hydrographic Office to permit the promulgation of maritime safety information and updating of nautical charts and publications through the national Notice to Mariners system.

In addition, the following advice should be provided to the applicant to facilitate the proposed works:

Advisories:

4. The Consent Holder should ensure suitable bunding, storage facilities are employed to prevent the release of fuel oils, lubricating fluids associated with the plant and equipment into the marine environment.
5. No radio beacon or radar beacon operating in the Marine frequency bands shall be installed or used on the works without prior written approval by OFCOM.
6. Any jack up barges / vessels utilised during the works, when jacked up, should exhibit signals in accordance with the UK Standard Marking Schedule for Offshore Installations.
7. If in the opinion of the Secretary of State the assistance of a Government Department, including the broadcast of navigational warnings, is required in connection with the works or to deal with any emergency arising from the failure to mark and light the works as required by the consent or to maintain the works in good order or from the drifting or wreck of the works, the owner of the works shall be liable for any expense incurred in securing such assistance.

In addition, we welcome the use of MGN 543 with regards to the Navigation Risk Assessment, and we note that the HSE and MCA guidance on mooring arrangements will be adhered to. I have not seen the Third Party Mooring Verification as yet.

Consideration will need to be given to the implications of the site size and location on SAR resources and Emergency Response Co-operation Plans (ERCOP) for both construction and operation phases. Any additional Search and Rescue requirements, as per MGN 543 Annex 5, will be discussed and agreed with MCA and recorded in a SAR checklist.

We would also expect the developers to liaise with the relevant MCA Marine Office with regards to the appropriate towage, safety, survey and inspection requirements for the vessels undertaking the operation.

If you require any further information please let me know.

Many thanks

[Redacted]



[Redacted]

Offshore Renewables Advisor

Navigation Safety Branch, Bay 2/25

Maritime & Coastguard Agency

Spring Place, 105 Commercial Road, Southampton, SO15 1EG

[Redacted]

[Redacted]

Please note I currently work Tuesdays, Wednesdays and Thursdays.

[Redacted]

[Redacted]

From: [Redacted]

Sent: 02 November 2018 11:10

To: marineenergy@snh.gov.uk; navigation; navigationsafety@mcga.gov.uk; Planning.Dingwall@sepa.org.uk; renewables@sff.co.uk; hmconsultations@hes.scot

Cc: [Redacted]

Subject: 06818 - Orbital O2 - EMEC Fall of Warness site, berth 5 - Consultation response required by Friday 30 November

Dear Sir/Madam

**MARINE (SCOTLAND) ACT 2010
SECTION 105 OF THE ENERGY ACT 2004**

APPLICATION FOR:

A MARINE LICENCE UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 AND SECTION 105 OF THE ENERGY ACT 2004 FOR MARINE RENEWABLES CONSTRUCTION, OPERATION, DEPOSIT AND DECOMMISSIONING OF SUBSTANCES OR OBJECTS IN TEST BERTH 5, AT THE FALL OF WARNESS TIDAL TEST SITE, EUROPEAN MARINE ENERGY CENTRE (EMEC), ORKNEY.

On the 14th October 2018 Orbital Marine Power Ltd, on behalf of Orbital Marine Power (Orkney) plc, applied to the Scottish Ministers for a marine licence for the construction, operation, deposit and decommissioning of substances or objects, namely Orbital O2, a tidal energy device at Test Berth 5, at the Fall Of Warness Tidal Test Site, European Marine Energy Centre (EMEC), Orkney. Please note Scotrenewables Tidal Power Ltd has been rebranded as Orbital Marine Power Ltd and the Orbital O2 device was previously known as the SR2-2000 device.

Please note the EMEC Section 36 consent envelope specifies a minimum clearance of 2.5 m from the rotor tips to the water surface. When the Orbital O2 device is non-operational (for transport or in order to access nacelles for maintenance), the device falls 0.2 m short of this requirement. MS-LOT are content this does not breach EMEC's section 36 consent envelope because when the Orbital O2 device is operational the minimum clearance is 3.2 m. If you require any further information please do not hesitate to contact me.

If you wish to submit any representations in response to the consultation regarding the above application please ensure they are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot no later than **Friday 30th November**. If you are unable to meet this deadline please contact MS-LOT on receipt of this e-mail. If you have not responded by the above date, MS-LOT will assume a 'nil return'.

Marine Scotland Licensing Operations Team ("MS-LOT") will make your representations publicly available. Personal information (such as names, signatures, home and email addresses) will be redacted before the representations are made public. If you have any queries or concerns about how your personal data will be handled please visit the MS-LOT [website](#) or contact MS-LOT at MS.MarineRenewables@gov.scot.

If you have any queries please do not hesitate to contact [MS-LOT](#).

Yours faithfully,
[Redacted]

Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

Direct Line: [Redacted]
S/B: +44 (0)131 2442500
Email: [Redacted]
Website: <http://www.gov.scot/Topics/marine/Licensing/marine>

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Northern Lighthouse Board

Your Ref: MSL 06818
Our Ref: AL/OPS/ML/O8_01_285

84 George Street
Edinburgh EH2 3DA
Switchboard: 0131 473 3100
Fax: 0131 220 2093
Website: www.nlb.org.uk
Email: enquiries@nlb.org.uk



[Redacted]

Marine Licensing Casework Officer
Marine Scotland – Marine Planning & Policy
Scottish Government
Marine Laboratory
375 Victoria Road
ABERDEEN
AB11 9DB

6 October 2018

Dear [Redacted]

MARINE (SCOTLAND) ACT 2010 & SECTION 105 OF THE ENERGY ACT 2004

MARINE LICENCE UNDER PART 4 OF THE MARINE (SCOTLAND) ACT 2010 AND SECTION 105 OF THE ENERGY ACT 2004 FOR MARINE RENEWABLES CONSTRUCTION, OPERATION, DEPOSIT AND DECOMMISSIONING OF SUBSTANCES OR OBJECTS IN TEST BERTH 5, AT THE FALL OF WARNESS TIDAL TEST SITE, EUROPEAN MARINE ENERGY CENTRE (EMEC), ORKNEY.

Thank you for your email correspondence dated 2nd November 2018 regarding the application submitted by Orbital Marine Power Ltd, for the construction, operation, deposit and decommissioning of the Orbital O2 tidal energy device, at Test Berth 5, Fall of Warness tidal Energy Test Site, Orkney. It is noted that Orbital Marine Power Ltd was formally known as Scotrenewables Tidal Power Ltd, and the Orbital O2 device was the SR2-2000.

Northern Lighthouse Board has no objection to the deployment, and welcome the inclusion of the lighting and marking, and reporting requirements within the Project Information Document. For clarity, these requirements are included below.

- Device to be predominantly yellow in colour, with 2 lit yellow poles fitted with radar reflectors, one mounted at either end of the device. The lights should display a character of flash yellow every three seconds (Fl. Y. 3s) with a nominal range of 3 miles and be synchronised.
- Fitted with an Aid to Navigation (Message Type 21) Automatic Identification System. A radio licence will be required from OFCOM to establish this AtoN.
- Orbital Marine Power Ltd and/or EMEC Ltd to liaise with all local marine stakeholders during the installation to ensure the promulgation of Notice to Mariners regarding the timeframe and nature of works
- UK Hydrographic Office are provided with all relevant details, including 'as laid' positions, of all infrastructure to ensure updates are applied to appropriate navigational charts.

For the safety of all

Certified to: ISO 9001:2000 · The International Safety Management Code (ISM) ·

- The Statutory Sanction of the Commissioners of Northern Lighthouse already exists for this device. However, the alteration to include the addition of the AIS AtoN, and the change to operator details, will require a submission for alteration. This form can be downloaded from the NLB website: <https://www.nlb.org.uk/InformationCentre/WorkingForUs/Documents/Form-Application-for-Statutory-Sanction-Exhibit/>

Yours sincerely
[Redacted]

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Our ref: PCS/162107
Your ref: 06818

If telephoning ask for:
[Redacted]

28 November 2018

[Redacted]

Marine Scotland
Marine Laboratory
PO Box 101
375 Victoria Road
Aberdeen
AB11 9DB

By email only to: MS.MarineRenewables@gov.scot

Dear [Redacted]

**Marine Licence Under Part 4 Of The Marine (Scotland) Act 2010 and Section 105 Of
The Energy Act 2004
Installation, Operation, Maintenance and Decommissioning of the Orbital O2 2 MW
floating tidal energy generator
Berth 5, European Marine Energy Centre, Fall of Warness, Orkney**

Thank you for your consultation email which SEPA received on 05 November 2018.

Advice for the determining authority

We do not provide site specific advice on Marine Licence consultations. Instead, please refer to our standing advice on marine consultations within guidance document [SEPA standing advice for The Department of Energy and Climate Change and Marine Scotland on marine consultations](#).

If, after consulting this guidance, you still require our comment on some site specific issue which is not adequately dealt with by the standing advice, then we would welcome the opportunity to be re-consulted. Please note that the site specific issue on which you are seeking our advice must be clearly indicated in the body of the consultation email or letter.

Further information on our consultation arrangements generally can be found in [How and when to consult SEPA](#).

If you have any queries relating to this letter, please contact me by telephone on 01224 266656 or email at planning.aberdeen@sepa.org.uk.

Yours sincerely

[Redacted]

Planning Service

ECopy to: [Redacted]

Not copied to Orbital Marine Power (Orkney) plc as email address redacted

Disclaimer

This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at this time. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning or similar application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application or similar application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. For planning applications, if you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found on our [website planning pages](#).

[Redacted]

From: [Redacted]
Sent: 20 November 2018 09:23
To: [Redacted]
Cc: MS Marine Renewables
Subject: RE: 06818 - Orbital O2 - EMEC Fall of Warness site, berth 5 - Consultation response required by Friday 30 November

[Redacted]

The Scottish Fishermen's Federation is pleased to respond to this application on behalf of the 500 plus fishing vessels in membership of its constituent associations; The Anglo Scottish Fishermen's Association, Fife Fishermen's Association. Fishing Vessel Agents and Owners Association, Mallaig & North West Fishermen's Association, Orkney Fisheries Association, Scottish Pelagic Fishermen's Association, the Scottish White Fish Producer's Association and Shetland Fishermen's Association.

We are happy to support the work being supported at EMEC as long as it remains a centre for testing of new technologies, but are relying on Marine Scotland to ensure through their licencing and consent team to ensure that when this work finishes the sites are restored to their previous "clean" state.

This should mean that no new physical hazards are left in the seabed which could compromise safe fishing, nor chemical alterations to the composition of the grounds which could be harmful

Best regards, [Redacted]

From: [Redacted]
Sent: 02 November 2018 11:10
To: marineenergy@snh.gov.uk; navigation@nlb.org.uk; navigationsafety@mcga.gov.uk; Planning.Dingwall@sepa.org.uk; Renewables <Renewables@sff.co.uk>; hmconsultations@hes.scot
Cc: [Redacted]
Subject: 06818 - Orbital O2 - EMEC Fall of Warness site, berth 5 - Consultation response required by Friday 30 November

Dear Sir/Madam

**MARINE (SCOTLAND) ACT 2010
SECTION 105 OF THE ENERGY ACT 2004**

APPLICATION FOR:

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Please note the EMEC Section 36 consent envelope specifies a minimum clearance of 2.5 m from the rotor tips to the water surface. When the Orbital O2 device is non-operational (for transport or in order to access nacelles for maintenance), the device falls 0.2 m short of this requirement. MS-LOT are content this does not breach EMEC's

section 36 consent envelope because when the Orbital O2 device is operational the minimum clearance is 3.2 m. If you require any further information please do not hesitate to contact me.

If you wish to submit any representations in response to the consultation regarding the above application please ensure they are submitted to the Scottish Ministers, in writing, to MS.MarineRenewables@gov.scot no later than **Friday 30th November**. If you are unable to meet this deadline please contact MS-LOT on receipt of this e-mail. If you have not responded by the above date, MS-LOT will assume a 'nil return'.

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If you have any queries please do not hesitate to contact [MS-LOT](#).

Yours faithfully,
[Redacted]

Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

Direct Line: [Redacted]
S/B: +44 (0)131 2442500
Email: [Redacted]
Website: <http://www.gov.scot/Topics/marine/Licensing/marine>

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Marine Scotland
Marine Laboratory
P. O. Box 101
375 Victoria Road
Aberdeen
AB11 9DB

Your Ref:

Our Ref:
CNS/REN/TIDAL/EMEC
FALL OF
WARNESS/ORBITAL
MARINE POWER

By email only: ms.marinerenewables@gov.scot

Date: 23rd November 2018

Dear Sir / Madam,

SNH ADVICE ON THE MARINE LICENCE APPLICATION BY ORBITAL MARINE POWER LIMITED FOR THE DEPLOYMENT AT EMEC FALL OF WARNESS TIDAL TEST SITE

Thank you for your consultation on the 2nd November 2018 for the marine licence application by Orbital Marine Power Limited (formerly Scotrenewables Tidal Power Limited) for the deployment of the Orbital O2 tidal energy device at EMEC Fall of Warness tidal test site, Orkney.

Background

The marine licence application is for the installation, operation and decommissioning of the Orbital O2 tidal energy device, which has a generating capacity of 2MW and is composed of 2 rotors. The device will maintain its position at berth 5 at the EMEC Fall of Warness test site by using a four-point mooring configuration with gravity-based anchors. The application is for a licence until the 31st December 2039.

Advice

We consider that the Orbital O2 tidal energy device can be installed, operated and decommissioned without significant impacts to natural heritage interests.

The Orbital O2 device falls within the project envelope for the site-wide Section 36 licence granted to EMEC for the Fall of Warness test site which is the basis of the Environmental Appraisal for this application (EMEC Fall of Warness Test Site Environmental Appraisal, 2014). In particular, we agree with MS-LOT that the minimum clearance of 2.5m from rotor tips to the water surface, as specified in the EMEC Section 36 consent, has not been breached.

We advise that an EPS / basking shark licence will be required for this project due to potential disturbance during installation, operation and decommissioning. However, any disturbance to cetaceans/basking sharks is unlikely to be significant. As such, we consider that the proposal will not be detrimental to the maintenance of the populations of any cetaceans in their natural range and will not have a negative impact on the conservation status of basking sharks.



INVESTOR IN PEOPLE

Orbital O2 Environmental Monitoring Programme

The Environmental Monitoring Programme (EMP) details the potential environmental impacts, and the proposed mitigation and monitoring relating to each potential impact pathway. We welcome the EMP, and provide the following advice:

1. The link to the Scottish Marine Wildlife Watching Code needs updating to <https://www.nature.scot/professional-advice/land-and-sea-management/managing-coasts-and-seas/scottish-marine-wildlife-watching-code>.
2. We welcome the opportunity to provide further advice on the methodology for acoustic monitoring. This methodology should be agreed with MS and SNH prior to installation, and the EMP updated.
3. In addition to the guidance stated in section 5.5 – Biofouling and non-native species - SNH guidance on preventing the introduction of non-native species can be found at <https://www.nature.scot/sites/default/files/2017-06/A1294630.pdf>
4. Collision risk is a key concern with regard to operational tidal energy devices. Although some monitoring data has been collected at a number of tidal sites, there remains a high level of uncertainty regarding the significance of this impact mechanism, and further monitoring is required to address this. We welcome the use of underwater cameras to monitor marine wildlife behaviour in close proximity to the operational rotors of the Orbital O2, and are happy to provide further advice on determining a suitable sampling regime. We advise that further consideration is given to where the cameras are located in order to cover the both rotor swept areas, and how the large volumes of video data are data analysed, managed and stored.
5. We note that further funding is required to enable the use of hydrophone clusters and/or multi-beam sonar/echosounder to monitor the near-field behaviour of marine mammals. As no single approach has yet been identified that is capable of detecting all potential collisions or near misses, we encourage combinations of existing techniques and / or piloting of innovative new approaches.
6. Work undertaken with the SR2000 device on the use of strain gauges and accelerometers has shown that they are not considered viable for collision detection in this instance. Although this is unfortunate, it is also useful to know and allows the developer to focus on other methods of collision detection. We are aware of research being undertaken at the University of Aberdeen on the use of strain gauges for collision detection, which may allow this technology to be used in the future.
7. We note the proposed reporting schedule for the EMP, and that reporting frequency will be agreed with MS and SNH during the operational phase of the deployment.

We hope this advice is of assistance. If further information or advice is required please contact [Redacted] in the first instance.

Yours sincerely

[Redacted]

Policy & Advice Officer – Marine Renewables



HISTORIC
ENVIRONMENT
SCOTLAND

ÀRAINNEACHD
EACHDRAIDHEIL
ALBA

By email to:
MS.MarineRenewables@gov.scot

Longmore House
Salisbury Place
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EH9 1SH

Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

[Redacted]

Our ref: AMA/16/31/53
Our case ID: 300030951
Your Ref: 06818

24 December 2018

Dear Sir/Madam

[Marine \(Scotland\) Act 2010](#)
[06818 – Orbital O2 EMEC Fall of Warness Tidal Test Site](#)

Thank you for your email consultation of 2 November requesting our comments on this Marine License application.

I can confirm we have no comments to make on the proposal.

Yours faithfully

Historic Environment Scotland