

**Filling out this form:** You can either: - print this form and fill out the relevant fields using **block capitals** and in **black ink** or - fill out the relevant fields on screen, then click Print form. The form must then be signed and returned to the above address or sent by email.

## APPLICATION FOR A LICENCE TO UNDERTAKE MARINE ENERGY WORKS

**Construction of offshore wind-farms, sub-tidal power and other energy generation schemes including barrages, onshore/underground and sub-sea cables, sub stations, scour protection under The Marine and Coastal Access Act 2009.**

**Please read these notes together with the legislation under which this application is made.**

- The Marine Licensing Team (MLT) administers applications under Part 4 of the Marine and Coastal Access Act 2009 on behalf of the Welsh Ministers, as the Licensing Authority.
- In addition to a Marine Licence from the Welsh Government, you will also need; Section 36 consent from the Marine Management Organisation, under The Electricity Act 1989, if the output of your energy project is under 100MW. **Or** a Development Consent Order from the Infrastructure Planning Commission if your project is over 100MW.
- The completed application form, together with 13 copies, must each (both the original and the copies) be accompanied by a location plan, descriptive drawing(s) and any supporting environmental assessment. All should be submitted to the above address **at least 16 weeks before the licence is required**. Please note that should some of the material be protected by copyright you will be required to include additional copies of that material to facilitate the Marine Licensing Teams consultations (see question 6(b)). Where documents can be emailed or sent on CD we are happy to receive the additional **13 copies** in this format, we will always require **1 complete hard copy** for our records.
- Some projects may raise matters that require a significantly longer time for consideration. This is most likely to be the case for large projects where substantial volumes of material are to be deposited or excavated and those taking place adjacent to or within a marine conservation area or requiring an environmental statement under environmental impact assessment regulations. Applicants are advised to contact the MLT as early as possible during the planning stage in order to avoid delays in determining their application.
- **All activities need to comply with the Water Framework Directive (WFD). The framework and guidance can be found on the Natural Resources Wales website, <http://naturalresources.wales>. The results of your WFD assessment must be attached to your marine licence application.**
- Information should be provided about the anticipated duration of the entire project in respect of works below mean high water springs, together (where appropriate) with details of the planned phasing of the work for which consent is sought during the first year and each subsequent 12-month period. Further application may be necessary to renew a consent that is due to expire.

- A licence fee is payable in respect of an application. Details of fees can be found on our web pages. **Please note applications will not be processed without the correct relevant fee or invoicing details.**

Payments can be made via Cheque, BACS or credit/debit card.

Cheques should be crossed and made payable to **Natural Resources Wales**.

For BACS payments ensure you provide the reference number (not remittance number)

For credit/debit card payments please complete the CC1 form and submit with the application. The CC1 form can be found on our web pages

Further information on payment methods can be found on our web pages

- Please answer all the questions. If any information is not available at the time of application please indicate at the appropriate section, giving reasons in a covering letter, and submit the details separately as soon as possible. Any delay in forwarding details is likely to result in a delay in determining your application.

**It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.**

## Project Description and cost

### 1(a). Please provide a brief description of the project

Temporary deployment of a subsea gravity foundation wave energy converter (WEC), marine communications cable up to MHWS, Acoustic Doppler Current Profiler, Subsea Umbilical Termination Unit and navigational markers (if needed).

### 1(b). Please provide the estimated gross cost of the project (including materials and labour) for works that fall below Mean High Water Springs.

£8 million

## Applicant's details

### 2. Applicant for licence

Title  Initials  Surname

Trading Title (if appropriate)

Full postal address (including postcode)

Name of Contact (if different)

Position in company (if appropriate)

Telephone number (including area code)

Fax number  
(including area code)

Email address

madeline@bomborawave.com

Company registration  
number

10733443

**Details of any agent, contractor and/or vessel used to carry out the works**

**3 (a). Agent Details**

Title  Initials  Surname

Full postal address  
(including postcode)

Name of Contact  
(if different)

Position in company  
(if appropriate)

Telephone number  
(including area code)

Fax number  
(including area code)

Email address

Company registration  
Number

**3 (b). Contractor Details**

**3 (c). Vessel Details**

Operator

Name of vessel

3 (d). If the contractor or vessels are not known at application stage when do you expect to provide these details (please note these details will be required for the licence)

Marine contractor details are likely to be confirmed during the marine licence determination period.

**Duration of project**

4. Start date  Expected completion date

**Project Details**

5 (a). Type of works proposed (please tick all appropriate boxes)

**Energy generation**

- Windfarm
- Tidal power/Tidal barrier
- Anemometry mast

**Onshore works**

- Sub-station/Onshore cables\*

**Barrages and island**

- Barrage
- Artificial island
- Artificial reef
- Habitat creation/Replacement

**Cables**

- Subsea cable/overhead/onshore cable3

**Navigation works**

- Buoy/Navigation mark

**Scour protection**

- Gabion
- Rock placement
- Mattress
- Seabed investigation works

- Other

5 (b). **Please give full details below of the proposed project.** Where the project is expected to take longer than 12 months to complete, you should provide details of the work to be done during the first year and that planned for each subsequent 12-month period. **The method of construction should be described in the answer to question 6.**

The mWave Project entails the deployment and testing of a full-scale wave energy prototype device (75m by 15m by 7m high) which is to be deployed on the seabed off East Pickard Bay on the south side of the Angle Peninsula a depth of around 11m below chart datum (see Plan C). See accompanying plan with location of offshore works. The WEC has a gravity foundation which will settle into the sand. The device sits on the seabed and will have a minimum of 4.2m water clearance above it at MLWS.

In addition to the WEC, consent is being sought for an Acoustic Doppler Current Profiler to monitor currents and Subsea Umbilical Termination Unit and navigational markers (if required). Whilst a marine communication cable (approx. 1.4km subtidal and 50m intertidal) will be required for offshore testing, mWave will not be grid-connected. In addition to the temporary communications cable a temporary onshore control station will be required to enable testing. A separate planning application is being submitted to Pembrokeshire Coast National Park Authority for the works above MLW comprising the communication cable, termination box, anchor points and a control station. The testing of mWave will be for 6 - 12 months, with decommissioning thereafter. As such whilst all works should be complete within the first year, a consent period being sought is for up to 18 months, to allow for weather windows during the installation and decommissioning of the project.

An Environmental Statement has been prepared in support of the marine licence and onshore planning application along with a WFD and an HRA assessment. Full details of the project and its effects are provided therein.

5(c). **Please detail the location of the proposed construction project.** This should include either national grid references (NGR) or latitude and longitude coordinates to 2 decimal minutes) defining the extent of the project.

The offshore consented area for the WEC is centred on WGS84 Lat/Long: 51° 39.674'N 5° 5.083'W  
OSGB36 East/North: 186752 E, 200336 N.

The cable route runs from the WEC, westward and then inshore to make landfall at East Pickard Bay with the consented area and latitude and longitude of points around the consented area are provided on Plan C.

5(d). **The following must be provided with the completed application form:**

- (i) a suitably scaled extract of an Ordnance Survey Map (1:25,000 scale or larger) or Admiralty Chart which should be marked to indicate:
- the location of the project in relation to the surrounding area
  - the mean high water spring tide mark
  - any adjacent SAC, SSSI, SPA/Ramsar or similar conservation area boundary.

**Plan A - mWave and Designated Sites**

- (ii) construction plans and sections (showing work relative to tidal range) showing those proposed works below (seaward of) mean high water springs, which should give details of the materials to be used (for beach nourishment the quantity and source of material to be deposited is also required).

**Plan B.1 and B.2 - mWave and cable landfall in relation to tidal height**

- (iii) a descriptive schematic drawing and suitably scaled (for example 1:2,500 but not more than 1:10,000) location plan (either at A3 or A4 format) which show the full extent of the project in relation to the surrounding area.

## Plan C - mWave marine licence area

The applicant should note that these drawings/plans may be copied to others as part of the MLT's consultation procedures. If they are subject to copyright, it is the **responsibility of the applicant to obtain the necessary approvals to reproduce the documents and to submit up to 13 copies with the application.**

6. **Please provide a detailed method of construction, indicating any temporary structures, such as causeways, jetties, landing stages to be constructed below mean high water springs tide mark and the measures to be taken:**

- (a) to minimise any risk to the marine environment
- (b) prevent undue interference to others
- (c) mooring of barges, pontoons, transshipment vessels
- (d) maintain navigational safety, including marking and lighting of works.

Six moorings will be pre-installed a couple of days prior to the deployment and removed once the installation of the WEC is complete. No offshore site preparation works are required. The WEC will be towed to site on the surface using two multicat vessels one at each end. At the installation location, the two installation vessels will be secured using the pre-installed mooring system. A guard boat will be present during the installation process to ensure safety and monitor a 200m advisory clearance area. The device will be lowered to the seabed and it will settle into the sand. Ballast in the form of chain will be brought to site and placed in trays on the WEC. It is estimated the ballast will require 14 vessel trips over 5 days.

For cable laying, the cable will be laid on the seabed, initially starting from East Pickard Bay. The cable laying vessel will moor off the rocky bay and the cable will be winched onshore from a point above MHWS using had operated winches. Once the cable is secured onshore the cable laying vessel will move offshore placing the cable on the seabed to the WEC. Four rock bags will be used to secure the cable on the sandy substrate. The onshore cable will be laid on the surface of the intertidal area and then up the side of East Pickard Bay gully via a rock face. Prior to pulling the cable onshore metal clamps will be attached to the rock face at approximately 5m intervals. A plastic conduit will be held in place by these clamps and the cable will be threaded through the conduit to above MHWS and then onwards to the control station.

An assessment for the potential for scour formation around the WEC has been undertaken and, although scour protection is not anticipated to be required, an allowance of a 2m area around the edge of the WEC has been allowed for within the project. Scour protection would be in the form of rock bags each containing up to five tonnes of rock, with a diameter of up to 2m. Rock bags would be deployed around the device, this amount of scour protection would equate to 100 rock bags which is equivalent to 500 tonnes. It is estimated to take up to 10 vessel trips over a five day period to deploy this volume of rock. A full assessment of the potential effects of the project is provided in the Environmental Statement (ES) accompanying this application.

As the WEC sits on the seabed, with a minimum of 4.2m water clearance, the need for navigational markers will be discussed and agreed with Maritime Coast Guard Agency and Trinity House.

An Environmental Management Plan will be implemented as part of the project which will include a Marine Pollution Contingency Plan and an Invasive Non-Native Species Risk Assessment following NRW-PS template. A guard boat (RIB) will be on site to monitor an advisory 200m clearance area. A notice to mariners will be sought for the works. Full details of measures embedded in the project to minimise potential effects can be found in ES Chapter 2: Project Description, section 2.6.2.

Please continue on a separate sheet if necessary. Please tick this box if you have done this.

7 (a). **Description of materials to be deposited below mean high water spring (please tick all appropriate boxes).**

- |  |   |                                   |  |
|--|---|-----------------------------------|--|
| <input type="checkbox"/> Timber                      | <input type="checkbox"/> Iron/Steel       | <input type="checkbox"/> Concrete | <input type="checkbox"/> Sand              |
| <input type="checkbox"/> Silt                        | <input type="checkbox"/> Stone/Rock       | <input type="checkbox"/> Gravel   | <input type="checkbox"/> Plastic/Synthetic |
| <input type="checkbox"/> Biocides or other chemicals | <input checked="" type="checkbox"/> Other |                                   |  |

If other, please describe:

WEC 75m by 17m by 7m high, instrumentation (ADCP), connector (SUTU), and potentially approx 100 of 5 tonne rock bags for scour protection. Marine cable 150mm armoured cable, approx 1.4km subtidal secured by 4 of 2 tonne rock bags at approx. 200m intervals. 50m of cable in the intertidal area which will be fed through a plastic conduit attached to the rock face using clamps at approx 5m intervals.

7 (b). **Method of delivery of materials.** If sea delivery, please include details of the vessels to be used with a chart of the proposed route and any proposed transshipment area.

Materials will be brought to site by sea. The contractors for the various elements of the project are in the process of being confirmed and as such vessel details etc are not available at present.

7 (c). **Description of objects/materials to be removed from below mean high water springs.**

No materials are to be removed from below MHWS.

7 (d). **Method of removal.**

Not applicable.

7 (e). **For work involving salt marsh feeding, beach replenishment or land reclamation please provide the following information relating to the material to be deposited.**

(i) quantity (tonnes)

(ii) nature of material (sand, silt, gravel)

(iii) source (state location if sea dredged)

(iv) has the material been chemically analysed?

Yes

No

If yes, please include the analysis data with your application.

(v) particle size (including specific gravity)

8. **Will there be a need to make any temporary deposit of material below mean high water springs during the works?**

Yes

No

If yes, please explain why and give the coordinates of the proposed temporary deposit site.

9. Do you intend to apply for a licence to dispose at sea material dredged as part of the works

Yes  No

If yes, please indicate:

- (i) nature of material for disposal (sand, gravel)
- (ii) quantity of material disposal (tonnes)

10. Please detail below all consents you have applied for or received

Type of consent	Applied for	Not applied for	Reference number	Date of issue
i. MMO - Section 36 Electricity Act 1989 Consent (if output is under 100MW).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
ii. Infrastructure Planning Commission - Development Consent Order (if output is over 100MW).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
iii. Local planning authority (LPA) such as Town and Country Planning Act 1990	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PP-07907048	<input type="text"/>

Name and address of LPA for location of proposed works

Contact Nicola Gandy,  
 Pembrokeshire Coast National Park Authority, Llanion Park, Pembroke Dock,  
 Pembrokeshire, Wales, SA72 6DY

iv. Land owner such as The Crown Estate, Duchy of Cornwall	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
v. Local port or harbour authority such as a local work licence*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
iv. Environment Agency	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>
v. Other including Transport and Works Act Order, Electricity Act, approval to grant/loan sanction (please specify)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>

\*Consents/Licences should be obtained and a copy included with this application

11. Do you or (if appropriate) your client, have statutory powers to consent any aspect of the project? Yes  No

If yes, please give details below:

**12. Advertising and consultation**

12 (a). Have these works been advertised to the public? Yes  No

If yes, how and where?

No adverts have been placed at present although public exhibitions have been held.

12 (b). Have the public been invited to submit comments? Yes  No

If yes, to whom and by what closing date?

Comments were recorded at the public exhibitions in December 2018.

12 (c). Have any consultation meetings with the public been arranged? Yes  No

If yes, where and when are these to be held?

Public exhibitions were held in Castlemartin, Pembroke Dock, Dale and Angle in December 2018. Further public exhibitions are planned later in 2019, in combination with the Marine Energy Wales META project.

Please continue on a separate sheet if necessary. Please tick this box if you have done this.

**Conservation bodies**

13 (a). The consenting authorities have a duty to ensure that projects will not have significant adverse environmental impacts, particularly upon designated European sites of conservation importance, such as special areas of conservation (SAC), special protection areas (SPA), sites of special scientific interest (SSSI) or Ramsar sites and other areas listed under the Conservation of Habitats and Species Regulations 2017. If the applicant

(particularly if they have statutory powers for consenting aspects of these works) has been in consultation with the appropriate nature conservation body Natural Resources Wales (NRW), Natural England (NE) or Scottish Natural Heritage (SNH) (for oil and gas work in Scottish waters)) it is likely to hasten processing of the consents if copies of all such correspondence are submitted with the application.

Where the views of NRW, NE, or SNH are not known, the MLT will undertake consultation with the appropriate body about the application. Please provide copies of correspondence with NRW, NE or SNH or indicate below if no consultation has yet taken place.

Consultation was primarily undertaken through the Marine Energy Wales META Project, which this project was originally going to be consented within. A review of feedback from the consultation process has been provided in each of the technical assessment chapters of the Environmental Statement, along with how any comments raised have been addressed.

Please continue on a separate sheet if necessary. Please tick this box if you have done this.

13(b). Are any part of the proposed works located within the boundaries of a designated conservation area (SAC, SPA, SSSI or Ramsar sites) Yes  No

13 (c). If yes, which designated site (s) will the works fall within.

Pembrokeshire Marine/ Sir Benfro Forol SAC  
West Wales Marine/Gorllewin Cymru Forol SAC

13(d). Please provide a description of measures proposed to avoid any impacts on European sites of conservation importance.

Deployment site and cable route have been selected to minimise effects on ecology. WEC site is sandy area and cable route crosses rocky coastal area of low species diversity and abundance. No requirement for seabed preparation in advance of deployment - minimising impact on surrounding area. Cable laid on surface and not trenched offshore and in intertidal area, minimising impacts. Gravity foundation, simple installation, requires no moorings. Deployment of mWave on seabed with limited vessel activity during installation and operation - minimises potential for accidental pollution. No external moving parts which may cause impact to marine life (only the membranes at the top of the device inflating and deflating to move air within the device). Due to design (no moorings which create noise or cavitation noise due to mWave operating in air at subsonic speeds) noise levels are anticipated to be lower than conventional WEC. The marine section of EMP will include planning for accidental spills, including measures to reduce the risk of an incident. In addition to this it will include an Invasive Non Native Species (INNS) assessment using NRW-PS Biosecurity Risk Assessment.

Please continue on a separate sheet if necessary. Please tick this box if you have done this.

13 (e). If no, and the boundary of the nearest such site is within 2 km, please indicate approximate distance of the works from this boundary (in km).

14 (a). Have you considered the works under the Environmental Impact Assessment Directive (Directive 85/337/EEC - as amended) on the assessment of the effects of certain public and private projects on the environment? If so, do you consider the works to fall within:

Annex I  Annex III

14 (b). Have you applied for a screening or scoping opinion from the MLT under the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended)?

Yes  No

If **yes**, what is the reference?

14 (c). Has an environmental statement/assessment been undertaken to support any planning application in respect of the works, your own statutory powers (if applicable) or for any other reason?

Yes  No

If **yes**, is a copy of the assessment included with this application?

Yes  No

14 (d). Please provide an explanation if the assessment has been made and a copy is not available.

14 (e). Is the environmental assessment available for public inspection?

Yes  No

If **yes**, at what locations?

Pembrokeshire Coast National Park Authority, Llanion Park, Pembroke Dock, Pembrokeshire, Wales, SA72 6DY.  
Available on Bombora WavePower Website.  
(see Chapter 1: Introduction).

## Public Register

**Under section 101 of the Marine and Coastal Access Act 2009, all information contained within or provided in support of this application will be placed on the Public Register unless the Welsh Ministers approve the applicant's reasons for withholding all or part.**

15. Is there any information contained within or provided in support of this application that you consider should not be included on the Public Register on grounds that its disclosure:

15(a). Would be contrary to the interest of national security?

Yes  No

15(b). Would prejudice to an unreasonable degree your, or some other person's commercial interest or those of a third party?

Yes  No

If **yes** to either (a) or (b), please provide full justification as to why all or part of the information you have provided should be withheld.

## Application Fee

16(a). What are the corresponding fee band for this application? Band 2  Band 3

### 16(b) Band 2 Only

Projects are charged at a fixed fee of £1920. The application will not be processed until the correct fee has been provided.

Please provide the method of payment

Method	Yes (✓)	Reference Number
Cheque		
BACS (not remittance no.)		
World Pay (phone or CC1)		

Please attach CC1 Form with application. Can be found on our web pages

### 16(c) Band 3 Application only

Band 3 applications are charged at on hourly rate of £120 and are invoiced in arrears. Please complete the details below which will be required for invoicing.

Customer Name	Bombora Wavepower Europe Ltd
FAO	Accounts
Purchase order number	BWPE-644821891-362
Address for invoice	The Offices Cleddau Reach Pembroke Dock Wales, UK SA72 6UJ
Telephone Number	01646 233140
Email Address	Accounts@bomborawave.com

## Declaration

I declare that to the best of my knowledge and belief that the information given in this form

and related papers is true.

**Warning: It is an offence under the Marine and Coastal Access Act 2009 under which this application is made to fail to disclose information or to provide false or misleading information.**

Signature  M. H. Cowley  Date  11/06/19

Name (in capital letters)

Position in company (if appropriate)

Please check carefully the information you have given and that all the enclosures (including copies) have been included.

**For Official use only**

<b>File Reference</b>
<b>Foreshore plan number</b>
<b>Cheque number</b>
<b>Date received</b>
<b>Payee name</b>
<b>Amount Paid</b>
<b>Remittance slip number</b>