

T: +44 (0)1224 295579 F: +44 (0)1224 295524
E: MS.MarineLicensing@scotland.gsi.gov.uk

MARINE (SCOTLAND) ACT 2010

LICENCE FOR MARINE RENEWABLES CONSTRUCTION WORKS

Licence Number: 04577/14/0

Reference Number: FKB/Z259

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

MeyGen Limited
King's Scholars House
230 Vauxhall Bridge Road
London
SW1V 1AU

to deposit any substance or object (except for dredge spoil) in the sea or on or under the seabed within the Scottish marine area required in connection with the construction of the works described in Part 2 of the Schedule attached to this licence. The issue of this licence is subject to the conditions set out in Part 3 of the Schedule.

This licence remains in force from **31 January 2014** until **31 December 2020**.

Signed:



James C McKie

For and on behalf of the licensing authority

Date of issue: 31 January 2014

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 Application for a marine licence and Environmental Statement submitted by the licensee to the licensing authority on 19th July 2012 and the Supplementary Environmental Information Statement submitted by the licensee to the licensing authority on 15th April 2013;
- c) “authorised Enforcement Officer” means a marine enforcement officer;
- d) “commencement of the works” means the date on which the first vessel arrives on the site to begin construction;
- e) “commencement of the licensed activities” means the date on which such activities authorised by this licence, other than the activity as defined by the ‘commencement of the works’, commence;
- f) “completion of the works” means the date on which final commissioning of the works takes place;
- g) “Environmental Statement” means the Environmental Statement submitted by the licensee on 19th July 2012 as part of the Application as defined above;
- h) “final commissioning of the works” means the date on which all tidal turbine generators forming the works have supplied electricity on a commercial basis or such earlier date as the Scottish Ministers deem the works to be complete;
- i) “licensable marine activity” means any activity listed in items (1), (2), (5) and (6) of section 21(1) of the 2010 Act, and “licensed activity” is construed accordingly;
- j) “the licensee” means MeyGen Limited;
- k) “licensing authority” means the Scottish Ministers;
- l) “MHWS” is mean high water spring tide;
- m) “Notice to Mariners” means the updating of the United Kingdom Hydrographic Office series of Admiralty Charts and publication to ensure they are fully up to date for the latest navigational safety information;
- n) “section 36 consent” means the consent granted by the licensing authority to MeyGen Limited under section 36 of the Electricity Act 1989 to construct and operate the works, determined on the 13th September 2013;
- o) “the site” means the area of sea within which the works are to be constructed, as set out in Part 2 of the Schedule to this licence;
- p) “Supplementary Environmental Information Statement” means the Supplementary Environmental Information Statement to the Application and Environmental Statement submitted by the licensee to the licensing authority on 15th April 2013;
- q) “Third Party Verification” means a detailed report provided by an independent accredited agency of recognised standing and reputation which certifies the integrity of the structural design of the works and its foundations for the conditions expected at the site; and
- r) “the works” means the MeyGen Tidal Energy electricity generating station Phase 1 within the Inner Sound in the Pentland Firth, as described in paragraph 2.2 of this licence.

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

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

Tel: (01224) 295579
Fax: (01224) 295524
Email: ms.marinelicensing@scotland.gsi.gov.uk

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 out of the licensed operations. The issuing of the licence does not absolve the licensee from obtaining such other authorisations and consents etc. 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 the licence granted by them if it appears to the licensing authority that there has been a breach of any of the provisions of the licence or for any such other reason that appears to be relevant to the authority under section 30(2) or (3) of that Act.

The licensing authority may, under section 30 of the 2010 Act, on an application made by the licensee vary the licence if satisfied that the variation being applied for is not material.

The licensing authority may, under section 30 of the 2010 Act, on an application made by the licensee transfer this licence from the licensee to another person.

1.5 Breach of requirement for, or conditions of, the licence

Under section 39 of the 2010 Act it is an offence to carry on a licensable marine activity without a marine licence or 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 in relation to any activity to prove that the activity was carried out for the purpose of saving life or for the purposes of securing the safety of a vessel, aircraft or marine structure ('*force majeure*') and that the person took steps within a reasonable time to provide full details of the matter to the licensing authority as 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, either 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 by this licence.

2. PART 2 – THE WORKS

2.1 Title of the works

The title of the works to which this licence relates is 'The MeyGen Tidal Energy electricity generating station Phase 1'.

2.2 Description of the works

An offshore tidal stream electricity generating station located in the Inner Sound in the Pentland Firth, between the north coast of Scotland and the Island of Stroma, known as the MeyGen Tidal Energy electricity generating station Phase 1, comprising of no more than 61 three-bladed single rotor horizontal axis turbines (each with a rotor diameter of no less than 16 metres and no more than 20 metres), all foundations, scour protection and cables connecting the offshore site to a landfall location, all as described in the Application.

2.3 Location of the works

Inner Sound, Pentland Firth, between the north coast of Scotland and the Island of Stroma within the area bounded by joining the following points:

58° 39.31' N	003° 06.73' W	58° 39.27' N	003° 07.92' W
59° 39.28' N	003° 08.51' W	58° 39.52' N	003° 08.52' W
58° 39.73' N	003° 08.38' W	58° 39.62' N	003° 08.11' W
58° 39.62' N	003° 07.01' W	58° 39.65' N	003° 06.55' W
58° 39.67' N	003° 06.40' W	58° 39.44' N	003° 06.51' W
58° 38.78' N	003° 05.55' W	58° 38.79' N	003° 06.08' W
58° 38.94' N	003° 06.82' W	58° 38.53' N	003° 07.34' W
58° 38.44' N	003° 07.94' W	58° 39.15' N	003° 08.51' W

2.4 Deposits

The 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

Steel, 140180 tonnes
Concrete, 17200 m³
Cable, 111800 m

2.5 Persons responsible for the deposits of the substances or articles

The operators, vessels and vehicles permitted to engage in the licensable marine activity are:

Name of vessel or vehicle registration	Operator	Type(s)
To be confirmed (tbc)	tbc	tbc

2.6 Persons acting on behalf of the licensee

The name and address of any agent, contractor or sub-contractor appointed to carry out any part, or all, of the licensed activity:

To be confirmed.

3. PART 3 – CONDITIONS

3.1 General conditions

3.1.1 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 the licence has been transferred to that person.

3.1.2 Agents/contractors/sub-contractors

The licensee must give a copy of this licence and any subsequent variations that have been made to the 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 activity. 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 the licence.

3.1.3 Vessels

The licensee must notify the licensing authority, in writing, of any vessel being used to carry on any licensed activity under this licence on behalf of the licensee. Such notification must be received by the licensing authority no less than 72 hours before the commencement of the works. The notification must include the master's name, vessel type, vessel IMO number and vessel owner or operating company.

The licensee must ensure that a copy of this licence and any subsequent variations made to it in accordance with section 30 of the 2010 Act have been read and understood by the masters of any vessels being used to carry on any licensed activity under the licence, and that a copy of this licence is held on board any such vessel.

3.1.4 Force majeure

If by any reason of *force majeure* any substance or object is deposited other than at the site which is described in this licence, 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, vehicle or marine structure determines that it is necessary to deposit the substance or object other than at the specified 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 Convention for the Protection of the Marine Environment of the North-east Atlantic, the licensing authority is obliged to immediately report *force majeure* incidents to the Convention Commission.

3.1.5 Material alterations to the licence 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.

3.1.6 Submission of studies and surveys to the licensing authority

The licensee must submit the details and specifications of all studies and surveys, detailed in both this licence and the section 36 consent, that are required to be undertaken in relation to the works under the licence, in writing, to the licensing authority, no later than three months before the commencement of the works for their written approval. Commencement of the works must not occur until the licensing authority has given its written approval to the licensee of the details and specifications of the studies and surveys.

3.1.7 Submission of reports to the licensing authority

The licensee must submit all reports, studies and surveys to the licensing authority as are required under the licence within the time periods specified in the licence to allow the licensing authority to consider whether any consequential action may be required to be undertaken. Where it would appear to the licensee that there may be a delay in the submission of the reports, studies or surveys 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, studies or surveys ought to have been submitted to the licensing authority under the terms of the licence.

The reports, studies and surveys must include executive summaries, assessments and conclusions and any data must, subject to any rules permitting non-disclosure, be made publically available by the licensing authority or by any such party appointed at their discretion.

3.1.8 Chemical usage

All chemicals utilised in the drilling operations for the works must be selected from the List of Notified Chemicals assessed for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002 (this list can be viewed/downloaded at www.cefass.co.uk). In the event that any system other than a water-based mud is considered by the licensee for use in the drilling operation then the prior written approval of the licensing authority must be obtained before such use. The licensee must comply with the terms of the guidance as to the disposal of any material arising from that operation which will be given to the licensee by the licensing authority.

The licensee must ensure that any chemical agents placed within the void of any of the turbine bases including biocides and corrosion inhibitors etc. are selected from the List of Notified Chemicals. The use of any chemical not contained within this list will require prior consent from the licensing authority.

3.1.9 Environmental protection

The licensee must ensure that all reasonable, appropriate and practicable steps are taken at all times to minimise damage to the Scottish marine area caused by the licensed activity authorised under this licence.

The licensee must ensure that any debris or waste materials placed below the MHWS during the construction and operation of the works are removed from the site, as soon as is reasonably practicable, for disposal at a location above the MHWS approved by the Scottish Environment Protection Agency.

The licensee must ensure that all substances and objects deposited during the execution of the works are 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 invasive non-native species to and from the site is kept to a minimum by ensuring appropriate bio-fouling management practices are implemented during the works.

Any drill cuttings associated with the use of water-based drilling muds situated within the outer boundary of the works need not be removed from the seabed.

3.1.10 Availability of the licence for inspection

The licensee must ensure that copies of the licence are available for inspection by any authorised Enforcement Officer at:

- a) the premises of the licensee;
- b) the premises of any agent, contractor or sub-contractor acting on behalf of the licensee; and
- c) any onshore premises directly associated with the works.

3.1.11 Inspection of the works

Officers of HM Coastguard, or any other person authorised by the licensing authority to include an authorised Enforcement Officer, must be permitted to inspect the works at any reasonable time. The licensee must provide access, and if necessary appropriate transportation to the site or any other associated works or vessels to facilitate any inspection considered necessary by the licensing authority.

3.2 Conditions specific to the works

3.2.1 Prior to the commencement of the works

3.2.1.1 Shielding or burial of cables

The licensee must, no later than three months prior to the commencement of the works, provide the licensing authority for their written approval a report detailing current 'best practice' relating to the attenuation of field strengths of cables by shielding or burial designed to minimise effects on electro-sensitive and migratory fish species. Such 'best practice' guidance as is identified must be incorporated into the Construction Method Statement, in respect of which condition 9 of the section 36 consent relates.

3.2.1.2 Third Party Verification

The licensee must, no later than three months prior to the commencement of the works, provide the licensing authority with a covering certificate of Third Party Verification of the tidal turbines, sub-structures and all associated ancillary works. Commencement of the works must not occur until the licensing authority has been provided with the covering certificate detailing Third Party Verification.

3.2.1.3 Marine Pollution Contingency Plan

The licensee must, no later than three months prior to the commencement of the works, submit in writing to the licensing authority for their written approval, a Marine Pollution Contingency Plan (MPCP).

The MPCP must make provision in respect of spills and collision incidents occurring during the construction and operation of the works and where such spills or collisions occur then

the MPCP must be adhered to in full. The MPCP must take into account existing plans for all operations, including offshore installations that may have an influence on the MPCP. Practices used to refuel vessels at sea must conform to industry standards and to relevant legislation. The MPCP must set out how any oil leaks within the turbine nacelle are to be remedied and that such relevant repairs are required to be undertaken without undue delay.

Commencement of the works must not occur until the licensing authority has given its written approval to the MPCP.

3.2.1.4 Commencement date of licensed activities

The licensee must, prior to and no less than one month before the intended commencement of the works, notify the licensing authority, in writing, of the date of commencement of the works authorised under the licence and confirm the date no less than 24 hours before commencement of the works.

3.2.1.5 Ecological Clerk of Works

The licensee must ensure that a suitably qualified and experienced Ecological Clerk(s) of Works (ECoW) / Environmental Manager(s) is, or are, appointed prior to the commencement of the works primarily, but not exclusively, for environmental liaison to establish and maintain effective communications between the licensee, contractors, stakeholders, conservation groups and other users of the sea during the period in which licensed activities authorised under this licence are undertaken. Prior to the commencement of the works the licensee must notify the licensing authority in writing of the identity, contact details and qualifications of the appointed ECoW / Environmental Manager(s).

The licensee must ensure that the ECoW / Environmental Manager(s) environmental remit includes monitoring compliance with the commitments made by the licensee in the Environmental Statement, Supplementary Environmental Information Statement and all plans or programmes required under this licence or the section 36 consent.

3.2.1.6 Navigational safety

The licensee must, as soon as practicable prior to the commencement of the works, 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.

The licensee must, as soon as reasonably practicable, prior to commencement of the works, ensure that local mariners, fishermen's organisations and HM Coastguard, in this case Shetland Maritime Rescue Coordination Centre, are made fully aware of the activity through local Notice to Mariners or any other appropriate means.

The works must also be promulgated 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.

All navigational marking and lighting of the site or its associated marine infrastructure will require the Statutory Sanction of the Northern Lighthouse Board prior to deployment.

The licensee must prior to, and no later than one month before the commencement of the works, notify the Clyde Cruising Club to permit the updating of their Sailing Directions and Anchorages publications.

3.2.1.7 Monitoring of marine mammals

Prior to the commencement of the works the licensee must agree in writing the details of the appointment of a Marine Mammal Observer (MMO) with the licensing authority. 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. The licensee must provide the licensing authority with the MMO's records no later than six months following commencement of the works, and at six monthly intervals thereafter.

3.2.1.8 Cable Installation Plan

The licensee must submit a detailed Cable Installation Plan (CIP), including landfall works for the approval of the licensing authority in consultation with Scottish Natural Heritage, Scottish Environment Protection Agency, the Local Authorities and any other advisors as required by the licensing authority. The CIP must be submitted to the licensing authority at least three months prior to the commencement of the works. The CIP shall include:

- a) The use of geotechnical data to ascertain optimal cable burial depth along the length of the export cable (including works in the intertidal zone);
- b) The methods used for laying the cables minimising, where possible, the use of jetting in the intertidal area;
- c) Detail of cable burial depths;
- d) A burial risk assessment;
- e) The need, type, source quantity and installation method for any scour protection.

The CIP must be incorporated into the Construction Method Statement, in respect of which condition 9 of the section 36 consent relates. Cable installation must not take place until such time as the licensing authority has approved the CIP in writing.

3.2.1.9 Cable Protection Plan

In the event that cable protection is required the licensee must submit a Cable Protection Plan (CPP) for the approval of the licensing authority in consultation with Scottish Natural Heritage, Maritime and Coastguard Agency, Northern Lighthouse Board and any other advisors as required by the licensing authority. The CPP must be presented in conjunction with work undertaken to identify scour protection / armouring works required to protect the cable. The installation of any cable protection must not commence until the CPP has been agreed in writing by the licensing authority. The CPP must be incorporated into the Construction Method Statement, in respect of which condition 9 of the section 36 consent relates.

3.2.1.10 Pre construction survey

Prior to the commencement of the works, the licensee must undertake a side scan sonar survey in grid lines (within operational and safety constraints), across the area of the works to include the tidal array and cable route. The results of this survey must be made available to the licensing authority within 3 months of the completion of the survey, or as otherwise agreed in writing with the licensing authority, and will be used as the baseline survey should a further side scan sonar survey be necessary in accordance with condition 3.2.2.1.

3.2.2 During the works

3.2.2.1 Transportation audit sheet

The licensee must, on the first working day of the month, create, maintain and submit to the licensing authority a detailed transportation audit sheet for each month during which construction associated with the works takes place. The audit sheet must include information on the loading facility, vessels, equipment, shipment routes, schedules and all materials listed in the licence to be deposited (e.g. piles, pipelines, turbine components, chemicals). Where, following the submission of an audit sheet to the licensing authority, any alteration is made to the component parts of the sheet the licensee must notify the licensing authority of the alteration as soon as practicable following the making of the alteration.

If the licensee becomes aware of any materials on the audit sheet that are missing, or an accidental deposit, they shall contact the licensing authority as soon as practicable after becoming aware to advise the licensee on the appropriate remedial action. If the licensing authority is of the view that any accidental deposits associated with the construction works are present then the deposits must be removed by the licensee as soon as is practicable and at the licensee's expense.

3.2.2.2 Nature and quantity of deposited substances and objects

In addition to the audit sheets required to be submitted to the licensing authority under condition 3.2.2.2, the licensee must, following the commencement of the works, submit audit reports to the licensing authority stating the nature and quantity of all substances and objects deposited below MHWS under the authority of the licence. Such audit reports must be submitted by the licensee at six monthly intervals, with the first such report being required to be submitted on a date no later than six months following the commencement of the works.

3.2.2.3 Navigational safety

The licensee must ensure the UK Hydrographic Office is notified of the works to permit 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 Shetland Maritime Rescue Coordination Centre, of the progress of the works through local Notice to Mariners or any other appropriate means.

The licensee must ensure that the progress of the works are promulgated 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 ensure the Clyde Cruising Club is notified of the progress of the works to permit the updating of their Sailing Directions and Anchorages publications.

3.2.2.4 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 Northern Lighthouse Board at all times and such marking and/or lighting must be continued unless and until such time as the licensing authority, by notice, relevantly varies this licence under section 30 of the 2010 Act.

The licensee must ensure that no marks or lights, other than those required by virtue of this licence, may be displayed unless they have been approved, in writing, by the Northern Lighthouse Board and the licensing authority.

3.2.2.5 Radio beacon and radar beacon

The licensee must ensure that no radio beacon or radar beacon operating in the marine frequency bands may be installed or used on the works without the prior written approval of the licensing authority.

3.2.2.6 Emergencies

If the assistance of a Government Department (to include departments of Devolved Administrations) is required 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.

3.2.2.7 Ecological Clerk of Works

The Ecological Clerk(s) of Works (ECoW) / Environmental Manager(s) (in respect of which condition 3.2.1.5 relates) must provide regular (frequency to be agreed with the licensing authority) reports to the licensing authority as to the compliance with the commitments made by the licensee in the Environmental Statement, Supplementary Environmental Information Statement and the Project Environmental Monitoring Programme and all other plans and programmes provided by the section 36 consent to include the Vessel Management Plan and the Construction Method Statement.

3.2.3 Conditions upon completion of the works

3.2.3.1 Date of completion of the works

The licensee must no more than one month following the completion of the works notify the licensing authority, in writing, of the date of completion of the licensed activities.

3.2.3.2 Navigational safety

The licensee must notify the UK Hydrographic Office of the completion of the works to permit the promulgation of maritime safety information and updating of 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 Shetland Maritime Rescue Coordination Centre, are made fully aware of the completion of the works through local Notice to Mariners or any other appropriate means.

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 ensure the Clyde Cruising Club is notified of the completion of the works to permit the updating of their Sailing Directions and Anchorages publications.

3.2.3.3 Nature and quantity of deposited substances and objects

The licensee must, within 28 days of completion of the works or within 28 days of the date of expiry of the licence, whichever is the sooner, submit a written report to the licensing authority stating the nature and quantity of all substances and articles deposited below Mean High Water Springs under authority of this licence. Where appropriate, nil returns must be provided.

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 Northern Lighthouse Board at all times and such marking and/or lighting must be continued unless and until such time as the licensing authority, by notice, relevantly varies this licence under section 30 of the 2010 Act.

4. PART 4 – PROJECT LOCATION



