

## Marine Renewable Energy Projects in the Territorial Sea and UK Controlled Waters Adjacent to Scotland

### Marine (Scotland) Act 2010

**IMPORTANT:** Before completing this form, please read these notes carefully.

The following numbered paragraphs correspond to the questions on the application form and are intended to assist applicants in completing the form. These explanatory notes are specific to this application and so applicants are advised to read these in conjunction with the General Guidance document. If further clarification is needed please contact Marine Scotland Licensing Operations Team (MS-LOT) on 01224 295579 or email:

[MS.MarineLicensing@scotland.gsi.gov.uk](mailto:MS.MarineLicensing@scotland.gsi.gov.uk)

Please refer to the General Guidance for information regarding payment methods.

## Explanatory Notes

### 2. Applicant

The person, company or organisation making the application that will be named as the licensee on any licence issued.

### 3. Agent

Any person, company or organisation acting under contract (or other agreement) on behalf of any party listed in the answer to question 2, and having responsibility for the control, management or physical deposit of materials anywhere below the tidal limit of the mean high water springs (MHWS) (e.g. a consultancy company submitting the application or a contractor who will be carrying out the works.)

### 4. Duration of Project

Provide details of the proposed commencement and completion dates of the project. The start date will not normally be backdated, except in exceptional circumstances, since to commence a project for which a licence has not been obtained may constitute an offence resulting in appropriate legal action. A licence is normally valid for 1 calendar year or the duration of the project (whichever is longer). After this period, it may be necessary for licence holders to re-apply for a further licence to continue any ongoing work (i.e. the project will be reviewed to establish whether original details are being adhered to). Although Marine Scotland Licensing Operations Team (MS-LOT) will aim to write to licence holders one month before the expiry date of a licence, it is the licensee's responsibility to apply for any further licences or an extension prior to the expiry of the initial licence.

### 5. Description and Cost of the Proposed Project

- (a) This estimate should only cover work taking place below the tidal level of MHWS and should take into consideration the cost of materials, labour fees etc.
- (b) Where the project is expected to take longer than 12 consecutive months, this description must detail which elements are to be undertaken in the first 12 months, with an outline of the schedule for each further 12 month period (the method of work should be described in the answer to question 7). In the event that MS-LOT must undertake a wider consultation on your application this description may be used as a basis for informing other bodies as to the nature of the proposed work.
- (c) Best describe the type of work proposed. Where the project involves a number of elements, please complete all appropriate boxes.

### 6. Location of Project

Include a list of the National Grid References (NGR) or latitude and longitude co-ordinates of the boundary points of the proposed project. In some cases, (e.g. the laying of cables) it may only be practicable to supply NGR or latitude and longitude co-ordinates for the start and end points.

**NGR:** Should consist of two letters followed by 10 digits (e.g. TL6320031700) where the first 5 digits are the eastings (read from the south west corner of an Ordnance Survey map) and the last 5 digits are northings.

**Latitude & longitude:** For positions read from charts of 1:25,000 scale or smaller, the format should be, e.g. 55°55.55'N 2°22.22'W. The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the datum should be explicitly marked, e.g. 55°55'44"N 2°22'11"W. For positions read from larger scale charts, e.g. 1:10,000, three decimal places of minutes should be used, e.g. 55°55.444'N 2°22.222'W.

**It is important that the correct positions are included with this application, as any errors may result in the application being refused or delayed.**

To supplement the information given in section 6, the following must be provided with the completed application form:

- a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which should be marked to indicate:
  - the full extent of the project in relation to the surrounding area;
  - either NGR or latitude and longitude co-ordinates defining the area of operation.
  - the level of MHWS;
  - any adjacent Special Area of Conservation (SAC), Special Protection Area (SPA), Site of Special Scientific Interest (SSSI), Ramsar or similar conservation area boundary.

These drawings/plans may be copied to others as part of the MS-LOT consultation process. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

## 7. Method Statement

Please provide a full method statement, including details of any temporary structures/deposits that may be required below MHWS during the project, the ultimate fate of the structure and material used in its construction. Details of temporary structures will be included in any licence issued.

Proposed measures to ensure the marine environment is adequately safeguarded during the project should also be described, as should those taken to minimise any interference with other uses of the sea or foreshore.

## 8. Permanent (and Temporary) Deposits

- (a) Complete the appropriate box(es) to indicate all materials to be deposited below MHWS. If you propose using types of materials for which a specific box is not provided, please describe the nature of such material in the box marked "Other".
- (b) If any materials to be placed below MHWS are to be brought to the site by sea, give details of the material (e.g. clean rock, average particle size) the vessels to be used,

A chart should also be provided showing the proposed vessel route to the project site and details of any transshipment areas (i.e. where material may be off-loaded to smaller vessels/barges for transport inshore).

If temporary deposits are required, please provide details as with the permanent deposits above. The temporary deposit location details (NGR or Lat/Long) should be added to section 6 of the form, and the period of time the site will be used must be provided. If issuing a licence, MS-LOT will include on the document details of any area that has been approved as a temporary deposit site

## 9. Producer/Contractor

The person, company or organisation whose activities produce the material intended for deposit in the sea (e.g. the dredging or excavation contractor).

## 10. Holder

The person, company or organisation that will be in possession of the waste prior to its deposit in the sea. This will include those providing temporary storage facilities or transporting the material to the vessel for conveyance to the sea disposal site etc.

## 11. Agent

Any person, company or organisation acting under contract (or other agreement) on behalf of any party listed in the answer to sections 1, 9 or 10 and having responsibility for the control, management or deposit anywhere below the tidal limit of MHWS (e.g. a consultancy company submitting the application or a contractor who will be carrying out the operations).

## 12. Duration of Dredging/Drilling Operation

Provide details of the proposed commencement and completion dates of the operations. The start date will not normally be backdated, except in exceptional circumstances, since to commence a project for which a licence has not been obtained may constitute an offence resulting in appropriate legal action. A licence may be issued for up to 3 calendar years, although MS-LOT will aim to write to licence holders two months before the expiry date of a licence, it is the licensee's responsibility to apply for any further licences or an extension prior to the expiry of the initial licence.

## 13. Details of Dredging/Drilling and Disposal Vessel(s)

The name, operator and type of vessel, including the type of dredging/drilling plant (e.g. cutter-suction) should be entered. If vessel details are not available at the time of application, please indicate this on the form as these details will be required prior to licence issue.

## 14. Method Statement of Dredging/Drilling Operation

Provide a full method statement of the dredging/drilling operation. This should include details such as the rate of dredging/drilling, timing of the operation, order of the areas to be dredged/drilled and the precautions taken to protect both navigation and the environment.

## 15. Use of Explosives

Indicate whether explosives are to be used as part of the dredging operations. If yes, please indicate if a method statement has been provided with your application. If a method statement has been produced but is not available, please provide an explanation in the space provided.

## 16. Details of Areas to be Dredged/Drilled

This section requires data to be provided about the source area to be dredged and the type of material to be deposited.

**Name of Area** - An annotated chart/location plan (either at A3 or A4 format) of suitable scale (1:2,500 but no more than 1:10,000) should be provided, with each proposed dredge area marked and named. The chart/location plan should show the full extent of the project in relation to the surrounding area. These drawings/plans may be copied to others as part of MS-LOT consultation procedures. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

**Co-ordinates** - Include a list of the National Grid References (NGR) or latitude and longitude co-ordinates of the boundary points for the proposed dredge areas.

- **NGR:** Should consist of two letters followed by 10 digits (e.g. TL6320031700) where the first 5 digits are the eastings (read from the south west corner of an Ordnance Survey map) and the last 5 digits are northings.
- **Latitude & longitude:** For positions read from charts of 1:25,000 scale or smaller, the format should be, e.g. 55°55.55'N 2°22.22'W. The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the datum should be explicitly marked, e.g. 55°55'44"N 2°22'11"W. For positions read from larger scale charts, e.g. 1:10,000, three decimal

places of minutes should be used, e.g. 55°55.444'N 2°22.222'W.

**Nature of Dredge/Drill Area** - provide a description of the type of area to be dredged/drilled (e.g. river bed, sea, harbour, approach channel, estuary)

## 17. Details of Material to be Dredged/Drilled

Information is required for each of the areas listed in the answer to section 16. The applicant should indicate the following:

A pre-dredge survey and sediment chemical analysis report will be required by MS-LOT prior to the issue of a sea disposal licence. Please contact MS-LOT for details in relation to specific projects. In addition to those samples analysed by the applicant, sediment sub-samples must be submitted to MS-LOT as check monitoring may be required.

**Physical Composition of Material** - indicate the approximate proportions (by volume) of the different types of dredged materials which are expected to be removed from each area.

For the purposes of this application the following descriptions should be used:

Average particle size (Based on the Wentworth Table)		
Description	Lower range	Upper range
Boulders	256 mm+	
Cobbles	64 mm	256 mm
Pebbles	4mm	64 mm
Granules	2 mm	4mm
Sand	62 microns	2mm
Silt and clay		62 microns

**Depth of Material to be Removed** - indicate the maximum depth (in metres) below the current seabed level, to which it is expected dredging is to be carried out.

**Estimated Specific Gravity** - indicate the specific gravity of the material to be disposed.

**Quantity to be Dredged/Drilled per Year** - the amount of material to be dredged (per year) from each area. Indicate unit of measure, either in-situ cubic metres or metric tonnes.

## 18. Dredged/Drilled Material: Additional Information

**Contamination** - information should be given regarding contamination in any of the areas to be dredged/drilled e.g. waste discharges, man-made rubbish or industrial activity in close proximity.

**Type of dredger** - indicate the type of dredging plant to be used within each area.

**Beneficial uses** – include any intended beneficial use of material (details to be provided in the BPEO).

## 19. Details of Dredged/Drilled Material Quality

The applicant is required to have representative sediment samples analysed at a laboratory of choice. This is liable to extend the time required to consider your application **as no licence will be issued without provision of this chemistry data**. As part of the application consideration process, an assessment will be made of the

chemical and physical characteristics of the material to be deposited at sea and its potential effects upon the marine environment.

As part of the licence conditions, you may be required to take representative samples of the dredged/drilled material during the dredging/sea disposal operations for analysis by MS-LOT. In such cases, samples should be taken at specified locations and depths and placed in containers which will be provided. The samples should then be returned to MS-LOT at the Marine Laboratory Aberdeen. This process enables the UK to fulfil its obligations under international conventions.

## 20. Best Practicable Environmental Option (BPEO) Assessment

Under Part 4, Section 27(2) of the Marine (Scotland) Act 2010 (there is no equivalent provision under the Marine and Coastal Access Act 2009), the Licensing Authority has an obligation to consider the availability of practical alternatives when considering applications involving disposal of material at sea. In order for Marine Scotland to thoroughly assess the available alternative options and reach a properly considered decision, all sea disposal licence applications must be supported by a detailed assessment of the alternative options - a Best Practicable Environmental Option (BPEO) assessment. This should include a statement setting out the reasons which have led to the conclusion that deposit of the materials at sea is the BPEO. **Sea disposal applications will not be considered unless they are accompanied by a BPEO assessment.** All options in the BPEO should be explored fully (as per the guidance documents) otherwise your form and BPEO are liable to be returned to you thereby delaying processing of the application.

## 21. Sea Disposal Site Details

Provide details of the proposed sea disposal site for the dredged material and, if necessary, any alternative sea disposal site(s) considered. In determining whether to issue a licence, MS-LOT will take into account any site nominated by the applicant. However, should this site be unsuitable, the nearest suitable disposal site for the dredged material will be identified. Should you wish to establish a new site, please provide details in a covering letter with your application and MS-LOT will contact you to discuss your proposal before your application is determined. The cost of any site investigations to identify any new sea disposal site will normally be the responsibility of the applicant.

## 22. Other Consents

Detail all consents required for the proposed project and indicate those that you have applied for or received. In all cases the applicant must provide the name and address of the nearest Local Planning Authority for the location of the project.

## 23. Statutory Consenting Powers

Please describe in the answer to this question what (if any) statutory responsibilities you (or your client) have to consent any aspect of the project.

## 24. Advertising and Consultation

- (a) Confirm whether the proposed project has been advertised, and if so how and where?
- (b) Have the public been invited to comment on the proposed project? If so to whom and what was the closing date?
- (c) Have any consultation meetings been held with the public? If so where and when?

## 25. Consultation with Conservation Bodies

Consenting Authorities have a duty to ensure marine projects will not have a significant adverse environmental impact, particularly upon designated conservation areas (e.g. SSSI, SAC, SPA, Ramsar sites etc). All details of

consultations with conservation bodies (e.g. SNH, JNCC) should be given, particularly where the applicant has statutory powers for consenting aspects of the project

In addition, guidance can be obtained from [www.foodstandards.gov.uk/](http://www.foodstandards.gov.uk/) with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

## 26. Designated Conservation Areas

Indicate whether the proposed project is located within or close to the boundaries of a conservation area such as a SAC, SPA, SSSI or Ramsar site (further information can be found on the SNH SiteLink webpage <http://gateway.snh.gov.uk>).

## 27. Environmental Assessment

Under the Marine Works (EIA) Regulations 2007, there may be a requirement for certain projects to undergo an Environmental Impact Assessment (EIA) and produce an Environmental Statement (ES). If an EIA/ES is deemed necessary, MS-LOT cannot issue a marine Licence until the outcome of the EIA/ES has been determined. Please indicate whether any EIA has been carried out in respect of the proposed project, either under your own powers or as required by another authority. If such an assessment has been undertaken, please indicate if a copy has been provided with your application. If the statement/assessment has been completed but is not available, please provide an explanation in the space provided.

Additionally, please also give details regarding if and where a copy has been/is being made available for public inspection.

## Other Considerations

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage". Please ensure that you have:

- completed **all** applicable sections of the application form;
- signed and dated the declaration;
- provided the correct relevant documents, charts, and continuation sheets (where necessary); and
- enclosed the correct payment (together with the remittance slip) or paid by means of BACS (if appropriate).

**Otherwise your application may be delayed or returned to you.**

# Application for Marine Renewable Energy Projects in the Territorial Sea and UK Controlled Waters Adjacent to Scotland

(ML-003)

## Marine (Scotland) Act 2010

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

**Under Part 4, Section 54 of the Marine (Scotland) Act 2010 and 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. There is no national security grounds for application information not going on the Register under the 2010 Act. Under the 2009 Act, application information goes on the Register unless the Secretary of State determines that its disclosure in the Register would be contrary to the interests of national security.**

### Public Register

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 the grounds that its disclosure

(a) would be contrary to the interests of national security; or YES  NO

(b) would adversely affect the confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? 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.

n/a



## 1. Project Title and Payment Details

Please give a brief identifiable description, including the location, of the project.

The MeyGen Tidal Energy Project, Phase 1, located in the Inner Sound of the Pentland Firth

**Payment:** Enclosed payment  BACS  OR Invoice

## 2. Applicant Details

Title Mr Initials D Surname Pearson

Trading Title (if appropriate) MeyGen Limited

Address King's Scholars House, 230 Vauxhall Bridge Road, London, SW1V 1AU

Name of contact (if different) Mr E Rollings

Position within Company (if appropriate) Environment and Consents Manager

Telephone No. (inc. dialing code) +44 (0)20 7193 2170 Fax No. (inc. dialing code) n/a

Company Registration No. SC347501 Email ed.rollings@meygen.com

## 3. Agent Details (if any)

Title Initials Surname

Trading Title (if appropriate) This is currently unknown and will be supplied at a later date.

Address

Name of contact (if different)

Position within Company (if appropriate)

Telephone No. (inc. dialing code) Fax No. (inc. dialing code)

Company Registration No. Email

## 4. Duration of Project

Start date 2014

Expected completion date 2020

## 5. Description and Cost of the Proposed Project

### (a) Estimated gross cost of the works proposed seawards of the tidal limit of MHWS

The present estimate of the total works proposed seawards of the tidal limit of MHWS, which includes site design, turbine supply, horizontal direction drilling (which will be drilled from onshore) and installation, is: £325,000,000.

### (b) Give a detailed description of the proposed schedule of work.

The table below gives the proposed project schedule:

Year	Phase installed capacity (MW)	Total installed capacity (MW)	Maximum turbine number
Year 1	2 to 10MW	2 -10MW	10
Year 2	10 - 20MW (dependent on Y1)	12 - 30MW	20
Year 3	56 - 74MW	86MW	86

### (c) Types of Work Proposed

General Marine Project (e.g. wave, tidal device, monopile turbine)

86MW Tidal Array.

Moorings (e.g. private, commercial):

Each turbine will be supported on the seabed via a Turbine Support Structure (TSS). Three TSS options are currently being considered: 1. Gravity Base Structure; 2. Monopile; 3. Pinpile.

Dredging/Drilling Operations

There will be no dredging operations carried out. If a monopile or pin pile solution is used there will be a requirement to drill sockets into the seabed bedrock, into which the piles are inserted and fixed using high strength grout.

## 6. Location of Project (including any temporary deposit locations)

This should include either National Grid References (NGR) or Latitude and Longitude co-ordinates defining the extent of the project.

A list of NGRs has been supplied below. Please also see accompanying map "MEYGEN-Phase 1\_Marine Licence Redline\_UKHO\_1" for any further clarification.

A: ND3556474683  
B: ND3441574633  
C: ND3384174649  
D: ND3383975097

E: ND3398575494  
F: ND3424575273  
G: ND3530775255  
H: ND3574975317  
I: ND3589475337  
J: ND3578674910  
K: ND3669373681  
L: ND3617573707  
M: ND3546873990  
N: ND3495573248  
O: ND3436973085  
P: ND3384174420

## 7. Method Statement

A full description of the Project is provided in Chapter 5 (Project Description) of the Environmental Statement. A brief summary of this information is provided below.

The offshore components of the Project will comprise:

- (a) Up to a maximum of 86 fully submerged tidal turbines with a maximum aggregate installed capacity of 86 MW.
- (b) Turbine support structures (TSS) to secure the turbines to the seabed.
- (c) Export cables from the turbines to shore, routed through bores made by horizontal directional drilling (HDD).

The onshore components of the Project (not relevant to this application) will comprise:

- (a) A Power Conversion Centre (PCC) comprising up to three power conversion unit buildings housing equipment and plant necessary to enable power generated by the turbine array to be transmitted to the grid.
- (b) A Control Building which will house equipment to monitor and control tidal turbines.
- (c) A temporary Horizontal Directional Drilling (HDD) compound with access tracks.

### Turbine Overview

The Project proposes a maximum of 86 tidal turbines in the Inner Sound, but the actual number of turbines installed will depend on the rated capacity of the individual selected tidal technology.

Each turbine is fully submerged, seabed mounted and will consist of a rotor and a nacelle, which houses the mechanical and electrical equipment. Each turbine will be supported by a TSS.

The devices will be single rotor, horizontal axis turbines with a rotor diameter of between 16 and 20m.

### Turbine Support Structure Overview

Each turbine will be supported on the seabed via a TSS. There is as yet no single established TSS solution for tidal turbines in this kind of environment, so the three following TSS options are presently under consideration for the Project.

TSS Option 1: Gravity Based Structure (tripod). A GBS consists of a steel tripod with large steel weights on each of the three legs. The GBS will have a maximum footprint of 30m by 20m, and consist of approximately 1,350 tonnes of steel. Each component will weigh no more than 450 tonnes. The installation of the GBS requires the use of a Dynamic Positioning (DP) vessel, and requires no seabed preparation.

TSS Option 2: Drilled pin pile tripod. The main structure is a braced steel tripod, secured to the seabed with three small diameter pin piles. Installation is possible from a DP vessel using a subsea drilling technique. Three sockets are drilled into the rock, into which the piles are inserted and fixed using high strength grout. This technique will require the deposit of a subsea drilling rig on the seabed for the drilling operation.

TSS Option 3: Monopile. The main structure is a single pile. A single large diameter socket is drilled into the rock using a temporary subsea frame, into which the pile is inserted and fixed using high strength grout. Installation is possible from a DP vessel using a subsea drilling technique. This technique will require the deposit of a subsea drilling rig on the seabed for the drilling operation.

### **Export cables**

Each turbine will require a dedicated export cable to shore, with an external diameter of up to 120mm, including double armour. It is intended that these cables will be laid in groups of three to reduce marine operations and provide some mutual protection.

An alternative would be to use specially manufactured cables with multiple circuits that allow power from more than one turbine to be exported in a single cable. A three circuit cable and a five circuit cable will have a diameter of approximately 130mm and 250mm respectively.

Each export cable will have a wet mate connector on the offshore end. Either the wet mate will be connected to the TSS directly or much shorter jumper cables, of approximately 50m, will then run between the turbine base and the offshore cable wet mate connector.

The shore cables will be landed using Horizontal Directionally Drilled (HDD) bores.

The closest distance to shore at which the HDD bores will emerge at the seabed is 700m. The maximum distance from shore is 2,000m. The length of cable laid on the seabed is between 100m and 1,300m depending on the length of the HDD bore.

In the worst case scenario in which every turbine requires a single cable and a dedicated bore there will be 86 HDD bores required for the Project. The most likely scenario is that one bore will be sufficient for 3 cables resulting in 29 bores. The HDD bores will need to be spaced 5m apart to ensure integrity of the bores.

It may be necessary to use cable protection such as a cast iron split pipe.

### **Build out plans**

The Project is to be developed in phases. In year 1 the installed capacity will be between 2 to 10 MW and comprise a maximum of 10 turbines. In year 2 the phase installed capacity will be between 10 to 20 MW (dependent on year 1 installation) and will result in a maximum of 20 turbines in total. In year 3 the phase installed capacity will be between 56 to 74 MW (dependent on installation in previous years) and will result in a maximum of 86 MW in total.

The offshore installation work requires calm sea condition and will nominally be undertaken during Spring to early Autumn.

The intended installation sequence is as follows:

1. A DP installation vessel will install the rows of TSS's.
2. A DP vessel or a cable laying vessel will install the export cables along the line between the rows of TSS's. The same vessel will either connect the export cables to the TSS or a smaller vessel with a Remotely Operated Vehicle (ROV) will then install the short lengths of jumper cable between the TSS and the export cables.
3. A DP vessel or tug will install the turbines onto the TSS's.

During year 1 and 2 of installation there will not be more than one large DP vessel on site at any one time. During year 3 there may be the requirement for two DP vessels to conduct TSS installation.

## Environmental Impact Assessment Process

MeyGen have carried out a full Environmental Impact Assessment (EIA) for the project. This process identified the areas of the project where significant environmental effects may occur and outlined mitigation measures or management techniques aimed at reducing or offsetting these effects.

The EIA assessed the impact of the following:

- The installation and operation of up to 86 tidal turbines in the Inner Sound;
- The installation of cable connections between the tidal turbines and onshore infrastructure;
- Horizontal Directional Drilling (HDD) of the cable landfalls;
- Construction and operation of the onshore Power Conversation Centre (PCC);
- Connection of the Project to the grid; and,
- Decommissioning.

The Environmental Statement (ES) details the findings of the EIA process and provides explanations on how conclusions were reached. Where the EIA has identified potentially significant impacts that cannot be avoided, mitigation measures have been proposed. Such measures should remove, reduce or manage the effect to a point where the residual significance of that impact is reduced to an acceptable level. In some instance, mitigation has also been recommended in order to ensure impacts remain insignificant.

A full Environmental Management Plan (EMP) will be implemented in agreement with the relevant regulators following the successful award of project consents. The EMP will consist of a working document which details consent conditions, the commitments outlined in the ES and compliance monitoring requirements (i.e. monitoring required to assess the performance of mitigation measures). It will also highlight the parties responsible for the implementation of the contents of the EMP.

Impacts to shipping and navigation are considered in detail in the ES. Work included a Preliminary Hazard Analysis (PHA) as part of the Scoping exercise, a Navigational Risk Assessment (NRA), and the Navigation and Shipping chapter of the ES, which addressed all issues raised through the process.

Traffic will be monitored on AIS during construction and operation of the devices to assess the effect the Project has on passing traffic and the proportion of vessels that re-route either within the Inner Sound or via the Outer Sound. Any other changes in vessel behaviour compared to the baseline traffic data will be reviewed, e.g. transit times relevant to tide.

## 8. Permanent (and Temporary) Deposits

(a) Quantity of permanent (and temporary, where applicable) materials to be deposited below MHSW:

Type of Deposit	Nature of Deposit (P = Permanent, T = Temporary)	Deposit Quantity
Steel/Iron	(P) 140,180	Tonnes No. (if applicable)
Timber	0	m <sup>3</sup> /tonnes
Plastic/Synthetic	0	m <sup>2</sup>
Concrete	(P) 17,200 (estimated maximum)	m <sup>3</sup>
Silt	0	m <sup>3</sup>
Sand	0	m <sup>3</sup>
Stone/Rock/Gravel	0	Size range (mm) Total m <sup>3</sup>
Concrete bags/mattresses	0	No. Dimensions Total m <sup>3</sup>
Cable	(P) 111,800	Length (m)

Other (please describe below):

n/a

- (b) Method of delivery of material.  
(see Guidance Notes)

This information will be confirmed at a later date

*If necessary, please continue on a separate sheet and tick this box*



Address

Name of contact  
(if different)

Position within Company  
(if appropriate)

Telephone No.  
(inc. dialing code)

Fax No.  
(inc. dialing code)

Company Registration No.

Email

*If more than one 'Agent' please continue on a separate sheet and tick the box*

**12. Duration of Dredging/Drilling Operation**

When is it proposed to begin the dredging/drilling operation?

When are dredging/drilling and disposal operations expected to be completed?

**13. Details of Dredging/Drilling and Disposal Vessel(s)**

	Name of Vessel and Operator	Type of Vessel
(a)		
(b)		
(c)		
(d)		

**14. Method Statement for Dredging/Drilling Operation**



## 15. Use of Explosives

Will any part of the dredging operation involve the use of explosives?

YES  NO

If YES,

Has a method statement regarding the use of explosives been submitted with this application?

YES  NO

If a method statement is not being submitted, please provide an explanation as to why.

## 16. Details of Areas to be Dredged/Drilled

Dredge/Drill Areas	Name of Area to be Dredged/Drilled	Co-ordinates	Nature of Dredged/Drilled Area
A			
B			
C			
D			
E			

If necessary please continue on a separate sheet and tick this box

## 17. Details of Material to be Dredged/Drilled

For each of the areas at rows A –E above (plus any listed separately), provide the following information:

Dredge/Drill Areas	Estimated Specific Gravity	Physical Composition of Material	Depth of Material to be Removed (metres)	Quantity to be Dredged/Drilled per Year (either in-situ m <sup>3</sup> or metric tonnes)
A				
B				
C				
D				

E				

If necessary please continue on a separate sheet and tick this box

**18. Dredged/Drilled Material: Additional Information**

For each of the areas at rows A – E above (plus any listed separately), provide the following information:

Dredge/Drill Areas	Type of Contamination	Type of Dredger	Beneficial Uses
A			
B			
C			
D			
E			

If necessary please continue on a separate sheet and tick this box

**19. Details of Dredged Material Quality**

Has the dredged/drilled material been chemically analysed in the last 3 years? YES  NO

Can the samples be made available if required? YES  NO

If NO, when will they be available?

**20. Best Practicable Environmental Option (BPEO) Assessment**

Has an up to date BPEO assessment been included with your application? YES  NO

## 21. Sea Disposal Site Details

Name of Disposal Site (or Oslo Code)	Co-ordinates of Disposal Site

## 22. Other Consents

Provide details below of all consents you have applied for or received.

Type of Consent	(Tick appropriate box)		Reference No.	Date of Issue of Consent
	Applied for	Not Applied for		
1. Local Planning Authority (LPA) (e.g. Town and Country Planning Act)	✓			
Name and address of LPA for Location of proposed works:	The Highland Council ePlanning Centre Glenurquhart Road Inverness IV3 5NX			
2. Land Owner e.g. The Crown Estate	✓		Agreement for Lease (AfL) ref GMT/DRF/CEC 0002.20	AfL - October 2010
3. Local Port or Harbour Authority e.g. local work licence		✓		
4. Scottish Environment Protection Agency (SEPA)		✓		
5. Others	✓		009/TIDE/MGIS 1 – 6	Unknown at present

## 23. Statutory Consenting Powers

Do you, or (if appropriate) your client, have statutory powers to consent any aspect of this project?

No

## 24. Advertising and Consultation

Have these proposals been advertised to the public?

YES  NO

If YES, how and where?

The application has been advertised in the following publications:

1. Friday 27th July 2012 The John o' Groat's Journal
2. Friday 27th July 2012 The Edinburgh Gazette
3. Friday 27th July 2012 The Herald
4. Friday 3<sup>rd</sup> August 2012 The John o' Groat's Journal
5. Friday 3<sup>rd</sup> August 2012 The Edinburgh Gazette
6. Friday 3<sup>rd</sup> August 2012 The Herald

Have the public been invited to submit comments?  
If **YES**, to whom and by what closing date?

YES  NO

he public has until the 24 August 2012 to make representation on the proposal to Marine Scotland Licencing Operations Team at PO Box 101, 375 Victoria Road, Aberdeen. AB11 9DB or meymgenphaseone@scotland.gsi.gov.uk

Have any consultation meetings with the public been arranged?  
If **YES**, where and when are these to be held?

YES  NO

- Six public events have been held to date.
1. Caithness Horizons, Thurso, 30/06/2011
  2. Caithness Horizons, Thurso, 01/07/2011
  3. Mey Community Hall, Mey, 02/07/2011
  4. Mey Community Hall, Mey, 05/12/2011
  5. Mey Community Hall, Mey, 06/12/2011
  6. Canisbay Village Hall, Canisbay 20/06/2012

These events were advertised more than one week in advance on the local radio, in the local newspapers and with poster and postcard drops in the local area.

The public have also had the opportunity to feedback about the project throughout the project lifetime via the feedback form on the website: <http://www.meygen.com/the-project/faqs/ask-a-question/>

## 25. Consultation with Conservation Bodies

Provide details of any consultation with Conservations Bodies, and, if appropriate, include copies of any correspondence with your application.

Full details of the consultation carried out with Conservation Bodies and other relevant stakeholders can be found in Chapter 6 of the ES, or in the Pre-application Consultation Report prepared for the Onshore Planning Application. The consultation undertaken is summarised below.

In May 2011 MeyGen submitting a Scoping Report for the Project to Marine Scotland. As well as the statutory consultees, the Scoping Report was distributed to almost 100 other non-statutory bodies, approximately 17 of which were Conservation Bodies. A selection of the other Conservation Bodies consulted includes: SNH, SEPA, JNCC, Scottish Wildlife Trust, RSPB, Scottish Association for Marine Science, Whale and Dolphin Conservation Society, Marine Conservation Society, Historic Scotland, Rural Scotland, The National Trust for Scotland and Caithness Archaeology Trust.

## 26. Designated Conservation Areas

Are any parts of the proposed project located within the boundaries of a designated conservation area?

If yes, indicate approximate distance of the project from the boundary of the nearest conservation area(s)

SPA - 0 km

If appropriate, are any parts of the proposed dredging and/or deposit operations located within the boundaries of a designated conservation area?

If yes, indicate approximate distance of the operations from the boundary of the nearest conservation area(s)

n/a
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## 27. Environmental Assessment

Has an Environmental Impact Assessment (EIA)/Environmental Statement (ES) been undertaken to support any application in respect of the project, your own statutory powers (if applicable) or any other reason?

YES  NO

If **YES**, is a copy of the EIA/ES included with this application?

YES  NO

If the EIA/ES has been undertaken but has not been included with this application, please provide an explanation below.

n/a
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Is the EIA/ES available for public inspection?

YES  NO

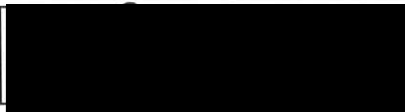
If **YES**, at what locations:

John o' Groats Post Office, John o' Groats, Wick. Caithness KW1 4YR Thurso Library, Davidson's Lane, Thurso, Caithness, KW14 7AF Scottish Government Library at Victoria Quay, Edinburgh, EH6 6QQ
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**Declaration**

I declare 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 Act under which this application is made to fail to disclose information or to provide false or misleading information.**

Signature 

Date 13/07/2012

Name in BLOCK LETTERS DANIEL PEARSON

Position within company (if appropriate) CEO

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

### Application Check List

- Completed application form **x 1**
- Project drawings **x 1**  
(or 7 paper copies if larger than A3 size and no electronic version is available)
- Method Statement **x 1**
- Maps/Charts **x 1**
- Additional environmental information, eg. Photographs, Environmental Impact Assessment etc (if required) **x 1**
- Payment (if paying by cheque)
