#### ANNEX D - DECISION LETTER AND CONDITIONS

## marine scotland

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Mr Dan Pearson Chief Executive Officer MeyGen Limited King's Scholars House 230 Vauxhall Bridge Road London SW1V 1AU





2013

Dear Mr Pearson,

CONSENT GRANTED BY THE SCOTTISH MINISTERS TO CONSTRUCT AND OPERATE THE MEYGEN TIDAL ENERGY PROJECT ELECTRICITY GENERATING STATION IN THE INNER SOUND, PENTLAND FIRTH

## The Application

I refer to the Application and the Supplementary Environmental Information Statement to the Application made by MeyGen Limited ('the Company') dated 13<sup>th</sup> July 2012 and 15<sup>th</sup> April 2013, respectively, for:

consent under section 36 of the Electricity Act 1989 ('the Electricity Act') for the construction and operation of Phase 1 of the MeyGen Tidal Energy electricity generating station located between the Island of Stroma and the Scottish mainland in the Inner Sound of the Pentland Firth approximately 3km north west of John o'Groats with a generation capacity of up to 86 MW.

At this time, the Company also applied for a Marine Licence under Part 4 of the Marine (Scotland) Act 2010. This has been considered alongside the Application under section 36 of the Electricity Act and will be determined in due course.

In this letter, 'the Development' means the proposed MeyGen Tidal Energy electricity generating station Phase 1 for which the Application is made and is described in **ANNEX 1** to this letter.

## STATUTORY AND REGULATORY FRAMEWORK

## **The Electricity Act 1989**

Consent under section 36 of the Electricity Act is required for any proposal to construct, extend or operate a generating station situated in the territorial sea with a permitted generation capacity in excess of 1 megawatt. A section 36 consent may include conditions as appearing to the Scottish Ministers to be appropriate.

Paragraph 3 of Schedule 9 to the Electricity Act places a duty on operators of generating stations to have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest. Operators of generating stations are statutorily obliged to do what they reasonably can to mitigate any effect the proposals may have on these features.

Paragraph 3 of Schedule 9 to the Electricity Act also provides that the Scottish Ministers must have regard to the desirability of these matters and the extent to which operators of generating stations have complied with their duty to mitigate the effects of the proposals. The Scottish Ministers must also avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.

Under section 36B of the Electricity Act the Scottish Ministers may not grant a consent in relation to any particular offshore generating station activities if they consider that interference with the use of recognised sea lanes essential to international navigation is likely to be caused by the carrying on of those activities or is likely to result from their having been carried on. The Scottish Ministers, when determining whether to give consent for any particular offshore generating activities, must have regard to the extent and nature of any obstruction or danger to navigation which, without amounting to interference with the use of such sea lanes, is likely to be caused by the carrying on of the activities, or is likely to result from their having been carried on. In determining this issue the Scottish Ministers must have regard to the likely overall effect of the activities in question and such other offshore generating activities which are either already subject to section 36 consent or activities for which it appears likely that such consents will be granted.

The Scottish Ministers are required to obtain the advice of the Scottish Environment Protection Agency ('SEPA') on matters relating to the protection of the water environment. SEPA's advice has been considered by the Scottish Ministers and due regard has been given to the Water Environment and Water Services (Scotland) Act 2003 and to the Water Environment (Controlled Activities) (Scotland) Regulations 2011.

Under Schedule 8 to the Electricity Act and the Electricity (Applications for Consent) Regulations 1990, notice of applications for section 36 consent must be published by the applicant in one or more local newspapers and in the Edinburgh Gazette to allow objections to be made to the application. Under Schedule 8 to the Electricity Act the Scottish Ministers must serve notice of application for consent upon any relevant

Planning Authority. As the Development is wholly offshore the closest planning authority is not a 'relevant Planning Authority' in terms of the Electricity Act.

The Scottish Ministers are satisfied that they have considered all the necessary tests set out within the Electricity Act when assessing the application and that all procedural requirements have been complied with.

Paragraph 2(2) of Schedule 8 to the Electricity Act provides that where a relevant Planning Authority notifies the Scottish Ministers that they object to an application for section 36 consent and where they do not withdraw their objection then the Scottish Ministers must cause a public inquiry to be held in respect of the application. In such circumstances before determining whether to give their consent the Scottish Ministers must consider the objections and the report of the person who held the public inquiry.

The location and extent of the proposed Development to which the Application relates being wholly offshore means that the Development is not within the area of any local planning authority. The Scottish Ministers are not, therefore, obliged under paragraph 2(2) of Schedule 8 to the Electricity Act to require a public inquiry to be held. The nearest local planning authorities did not object to the Application. If they had objected to the Application, and even then if they did not withdraw their objections, the Scottish Ministers would not have been statutorily obliged to hold a public inquiry.

The Scottish Ministers are, however, required under paragraph 3(2) of Schedule 8 to the Electricity Act to consider all objections received, together with all other material considerations, with a view to determining whether a public inquiry should be held in respect of the application. Paragraph 3(2) of Schedule 8 provides that if the Scottish Ministers think it appropriate to do so, they shall cause a public inquiry to be held, either in addition to or instead of any other hearing or opportunity of stating objections to the application.

## Integrated Coastal Zone Management

The UK Marine Policy Statement 2011 states that UK Administrations are committed to ensuring that coastal areas, and activities taking place within them, are managed in an integrated and holistic way in line with the principles of Integrated Coastal Zone Management ('ICZM'). ICZM is an EU led strategy delivered at a local level and deals with the coastal and marine environment in a sustainable way. ICZM seeks, over the long term, to balance environmental, economic, social, cultural and recreational objectives. The Scottish Ministers are satisfied that the proposal is in accordance with the aims of ICZM.

## Marine (Scotland) Act 2010 and the Climate Change (Scotland) Act 2009

The Marine (Scotland) Act 2010 regulates the territorial sea adjacent to Scotland for marine environment issues.

Subject to exemptions specified in subordinate legislation, under Part 4 of the Marine (Scotland) Act 2010 licensable marine activities may only be carried out in accordance with a marine licence granted by the Scottish Ministers.

Under Part 2 of the Marine (Scotland) Act 2010 the Scottish Ministers have general duties to carry out their functions in a way best calculated to achieve the sustainable development, including the protection and, where appropriate, the enhancement of the health of the area. The Scottish Ministers when exercising any function that affects the Scottish marine area under the Marine (Scotland) Act 2010, the Climate Change (Scotland) Act 2009 or any other enactment must act in a way best calculated to mitigate, and adapt to, climate change.

Also of relevance to the Application is that under the Climate Change (Scotland) Act 2009 annual targets have been agreed with relevant advisory bodies for the reduction in carbon emissions.

The Scottish Ministers are satisfied that in assessing the Application they have acted in accordance with their general duties.

## <u>Environmental Impact Assessment Directive and the Electricity Works</u> (Environmental Impact Assessment) (Scotland) Regulations 2000

The Environmental Impact Assessment Directive, which is targeted at projects which are likely to have significant effects on the environment, identifies projects which require an environmental impact assessment ('EIA') to be undertaken. The Company identified the proposed Development as one requiring an environmental statement in terms of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000.

The proposal for the Development has been publicised, to include making the environmental statement available to the public, in terms of those regulations. The Scottish Ministers are satisfied that an Environmental Statement has been produced and the applicable procedures regarding publicity and consultation all as laid down in those regulations have been followed.

The Scottish Ministers have, in compliance with those regulations consulted with SNH, SEPA, the planning authorities most local to the Development, and such other persons likely to be concerned by the proposed Development by reason of their specific environmental responsibilities on the terms of the environmental statement in accordance with the regulatory requirements. Marine Scotland have also consulted a wide range of relevant organisations including colleagues within the Scottish Government on the Application and on the environmental statement and as a result of the issues raised, upon the required supplementary environmental information statement.

The Scottish Ministers are satisfied that the regulatory requirements have been met.

They have taken into consideration the environmental information, including the Environmental Statement and Supplementary Environmental Information, and the representations received from the statutory consultative bodies.

## The Habitats Directive

The Habitats Directive on the conservation of natural habitats and wild fauna and flora has, in relation to the marine environment, been transposed into Scots law by the Conservation (Natural Habitats, & c.) Regulations 1994 ('the 1994 Regulations') and the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007.

The key mechanism for securing compliance with the Directive is the carrying out of an Article 6(3) Appropriate Assessment under regulation 48 of the 1994 Regulations. Developments in, or adjacent to protected sites, or in a location which has the potential to affect such a site, must undergo what is commonly referred to as a Habitats Regulations Appraisal. The appraisal involves two stages, and if the proposal is likely to have a significant effect on a protected site, then an Appropriate Assessment must be carried out.

The Scottish Ministers, as a competent authority under the Habitats Directive, have complied with their EU obligations in relation to the Development. They have, following the undertaking of an Appropriate Assessment, ascertained that the Development will not adversely affect the integrity of any European protected sites and have imposed conditions on the grant of the consent ensuring that this is the case. This is confirmed by consultation responses received from SNH and RSPB Scotland. The Appropriate Assessment will be published and available on the Marine Scotland's Licensing Operations Team's website.

## Applicable policies and guidance

#### Marine area

## The UK Marine Policy Statement 2011

The UK Marine Policy Statement 2011 prepared and adopted in accordance with Chapter 1 of Part 3 of the Marine and Coastal Access Act 2009 requires that when the Scottish Ministers take authorisation decisions that affect, or might affect, the marine area they must do so in accordance with the UK Marine Policy Statement 2011 ('the Statement').

The Statement which was jointly adopted by the UK Administrations sets out the overall objectives for marine decision making. It specifies issues that decision-makers need to consider when examining and determining applications for energy infrastructure at sea, namely— the national level of need for energy infrastructure as set out in the Scottish National Planning Framework; the positive wider environmental, societal and economic benefits of low carbon electricity generation; that renewable energy resources can only be developed where the resource exists and where economically feasible; and the potential impact of inward investment in tidal stream energy related manufacturing and deployment activity. The associated opportunities on the regeneration of local and national economies need also to be considered.

Chapter 3, paragraphs 3.3.1 to 3.3.6, 3.3.16 to 3.3.18 and 3.3.20 to 3.3.30 of the Statement are relevant and have been considered by the Scottish Ministers as part of the assessment of the Application.

The Scottish Ministers have had full regard to the Statement when assessing the Application. It is considered that the Development accords with the Statement.

## Terrestrial area

Existing terrestrial planning regimes generally extend to mean low water spring tides. The marine plan area boundaries extend up to the level of mean high water spring tides. The UK Marine Policy Statement clearly states that the new system of marine planning introduced across the UK will integrate with terrestrial planning. The Statement also makes it clear that the geographic overlap between the Marine Plan and existing plans will help organisations to work effectively together and to ensure that appropriate harmonisation of plans is achieved. The Scottish Ministers have, accordingly, had regard to the terms of relevant terrestrial planning policy documents and Plans when assessing the Application for the purpose of ensuring consistency in approach. In addition to high level policy documents regarding the Scottish Government's policy on renewables (2020 Renewable Routemap for Scotland - Update (published 30 Oct 2012) and Scotland's Marine Energy Action Plan 2012), the Scottish Ministers have had regard to the following documents.

## Scottish Planning Policy

Scottish Planning Policy sets out the Scottish Government's planning policy on renewable energy development. Whilst it makes clear that the criteria against which applications should be assessed will vary depending upon the scale of the development and its relationship to the characteristics of the surrounding area, it states that these are likely to include impacts on landscapes and the historic environment, ecology (including birds, mammals and fish), biodiversity and nature conservation; the water environment; communities; aviation; telecommunications; noise; shadow flicker and any cumulative impacts that are likely to arise. It also makes clear that the scope for the Development to contribute to national or local economic development should be a material consideration when considering an application.

The Scottish Ministers are satisfied that these matters have been addressed in full both within the Application and within the responses received to the consultation by the closest onshore Planning Authorities, SEPA, SNH and other relevant bodies.

## National Planning Framework 2

Scotland's National Planning Framework 2 ('NPF2') sets out strategic development priorities to support the Scottish Government's central purpose, namely sustainable economic growth. Relevant paragraphs to the Application are paragraphs 65, 144, 145, 146, 147, 149, and 215. NPF2 provides strong support for wave and tidal energy sectors in Scotland recognising the world class environment Scotland provides for these sectors and the potential these technologies have to make a major contribution in the longer term.

## The Highland – wide Local Development Plan April 2012

The purpose of the Highland – Wide Local Development Plan ('HWLDP') is to set out a balanced strategy to support the growth of all communities across the Highlands ensuring that development is directed to places with sufficient existing or planned infrastructure and facilities it support sustainable development. Relevant policies within this plan can be applied to the Development.

The Vision chapter of the HWLDP makes a commitment to ensuring that the development of renewable energy resources are managed effectively including guidance on where harnessing renewable sources is appropriate or not. There is also a commitment to provide new opportunities to encourage economic development and create new employment across the Highland area focusing on key sectors including renewable energy whilst at the same time improving the strategic infrastructure necessary to allow the economy to grow in the long term.

The HWLDP identifies the area around Ness of Quoys and Ness of Huna as potential offshore renewables bases in the Caithness and Sutherland Vision and Spatial Strategy. The area is also marked for grid reinforcement.

These areas were both identified by the Company as suitable locations for the onshore ancillary development related to the tidal array.

The Scottish Ministers have considered Policy 29, Design Quality and Place – Making, which states that new developments should be designed to make a positive contribution to the architectural and visual quality of the place in which it is located. Accordingly, applicants should demonstrate sensitivity and respect towards the local distinctiveness of the landscape, architecture, design and layouts in their final design.

The Scottish Ministers consider that the Development, accords with this policy.

The HWLDP supports the development of rural areas as this will help to maintain population, infrastructure and services though it is noted that development can have a significant impact upon the character of the landscape. Proposals should be sympathetic to this and the landscape should be a key consideration. Development proposals are to be assessed against Policy 36: Development In The Wider Countryside with marine renewable energy developments also assessed against renewable energy policies and the Highland Renewable Energy Strategy.

The Development is considered consistent with these policies.

Policy 57 Natural, Built and Cultural Heritage sets out the tests against which all development affects natural, cultural and built heritage features must be assessed. The HWLDP states that Appropriate Assessments may be required to be completed for proposed developments prior to determining planning applications.

In assessing the application, consideration has been given to sites of local and regional importance, national importance and international and it is considered that the Development accords with this policy

Policy 58 states that where there is good reason to believe that a protected species may be present on a site or affected by a proposed development, a survey will be undertaken to establish the presence of any such species and, if necessary, develop a mitigation plan to avoid or minimise any impacts on the species before determining the application.

It is considered that the Development accords with this policy as the Company has provided information on the presence of protected species at the Site within their Environmental Statement and supplementary environmental Information statement. Scottish natural heritage and other nature conservation bodies are of the opinion that the proposal is acceptable subject to mitigation measures in the form of conditions, the proposal is considered consistent with this policy.

Policy 61 Landscape directs that new developments should be designed to reflect the landscape characteristics and special qualities identified in the Landscape Character Assessment of the area in which they are proposed. This includes consideration of the appropriate scale, form, pattern and construction materials, as well as the potential cumulative effect of developments where this may be an issue. In assessing new developments, consideration should be given to Landscape Character Assessments, Landscape Capacity Studies and Supplementary guidance on Siting and Design and Sustainable Design in conjunction with any other relevant design guidance.

It is considered that the Development accords with this policy as the offshore element, to which this application relates, is wholly submerged below lowest astronomical tide and consequently there are no visual impacts from the Development. The onshore ancillary works will be considered under this policy by The Highland Council when determining the application for separate planning permission.

The HWLDP, Policy 67 Renewable Energy Developments, notes that the region has great potential for renewable energy production and can contribute towards meeting ambitious international, national and regional targets. The Planning Authority will support proposals where it can be satisfied that they are located, sited and designed such that they will not have a significant detrimental impact wither either individually or cumulatively with other developments on receptors including, but not limited to natural built and cultural heritage features, species and habitats, visual impact, tourism and recreation interests as well as traffic and transport interests.

The proposal accords with this Policy. The Development offers an opportunity for the region to contribute towards renewable energy targets. This can also bring further benefits tackling the effects of climate change, increasing energy security and contributing to the local and regional economies of the Highlands as stipulated in the HWLDP.

The Scottish Ministers consider that the Development complies with the HWLDP Plan.

## <u>Highland Coastal Development Strategy May 2010</u>

The main purpose of the Highland Coastal Development Strategy ('HCDS') is to set out a vision for the sustainable use and development of the coastal zone. It will inform marine and terrestrial planning policy development through the preparation of the HWLDP, and then subsequent Area Local Development Plans, Aquaculture Framework Plans and, in time, new Marine Regional Plans. Areas of isolated coast which have been identified through the coastal classification in this guidance, will have statutory development plan protection under a general policy in the HWLDP. The link to general policy has already been established in principle for parts of the Highland area through the Wester Ross Local Plan, West Highland and Islands Local Plan and the Sutherland Local Plan.

The HCSD notes that the Highlands and Islands contain arguably some of the world's best renewable energy resources in terms of wind, wave and tide and that work is underway to realise this potential bringing with it the reality of significant economic development for the Highland region.

Section 5.7 of the HCSD recognises that the north coast in particular has the greatest potential for marine renewable energy generation due to its exposure and strong tidal flows through the Pentland Firth.

The Development is considered consistent with this strategy.

## Highland Renewable Energy Strategy and Planning Guidelines May 2006

The Highland Renewable Energy Strategy and Planning Guidelines supplement the existing policies of The Highland Council and aim to provide guidance and direction for Planning Authority decisions and developers plans.

The document notes that tidal developments in larger tidal streams such as the Pentland Firth must carefully consider the potential for interactions with other sea users, fisheries and wildlife and develop acceptable development scenarios.

Within these guidelines, Strategic Topic E14 notes that The Highland Council support the full investigation and exploration of the potential for tidal energy production but recognises that there are significant gaps in knowledge that should be filled before large scale exploitation of tidal energy is supported. Nevertheless, the large amounts of energy that could be available mean that finding answers should be a key priority. In that regard, The Highland Council promote prototype deployments and follow on projects as technology develops.

The same Strategic Topic identifies the potential for tidal energy developments around the Highland coastline, particularly in the Pentland Firth, suggesting a potential installed capacity target of 400MW by 2020. This proposal would provide a significant contribution towards meeting this target.

## **Consultation**

In accordance with statutory requirements, advertisements of the Application had to be placed in the local and national press. The Scottish Ministers note that these requirements have been met. Notice of the Application for section 36 consent is required to be served on any relevant planning authority under Schedule 8 to the Electricity Act.

Notification was therefore sent to The Highland Council, as the nearest onshore Planning Authority, as well as to Orkney Islands Council (the neighbouring Planning Authority), SNH, and SEPA.

## Representations and objections

A formal public consultation process was undertaken by the Scottish Ministers. The first, which related to the application for section 36 consent, the marine licence application, and the Environmental Statement, was commenced on 27<sup>th</sup> July 2012, and the second, which related to the submission of further information in the Supplementary Environmental Information Statement began on 26<sup>th</sup> April 2013.

A total of seventeen valid representations were received by Marine Scotland from members of the public. Of these, thirteen representations objected to the Development, two were in support of the project and two were deemed to be neutral.

All representations received were, with the exception of three objections, from members of the public who currently reside in the area local to the Development.

Members of the public who objected to the Development stated concerns regarding the visual impact of the onshore infrastructure which is not in keeping with the current landscape, noise and dust pollution from construction works, impact on wildlife and children, that the technology proposed is unproven and not yet developed as well as a belief that there had been a failure to meet the requirements of the Aarhus Convention.

Representations which noted support for the project were of the belief that the Development would offer local benefits such as the creation of jobs, economic opportunities for the area which are believed to be of importance with the decommissioning of the Dounreay nuclear power station. Other comments included a lack of a visual impact from the tidal turbines unlike equivalent wind turbines onshore.

Representations deemed to be neutral did not offer any support or objection to the Development however they stated that cetaceans should be adequately taken into account when considering the proposal.

Of the public representations made concerning the Application none were received from elected representatives.

Objections were received from, amongst others, SEPA, SNH, the Royal Society for the Protection of Birds, the Association of Salmon Fishery Boards ('ASFB'), the

Caithness District Salmon Fishery Board ('CDSFB'), Whale and Dolphin Conservation and the Scottish Fishermen's Federation.

Several respondents, including SEPA, SNH, the RSPB, the Scottish Fishermen's Federation and Whale and Dolphin Conservation, stated their willingness to withdraw their objections provided certain stated conditions were met. The ASFB and CDSFB did not explicitly remove their objections, however would only maintain it until adequate monitoring and mitigation strategies were put in place. These bodies used their responses to raise concerns or recommendations that they felt should be addressed. These included:

- The Development being limited to an initial maximum of 6 turbines and subsequent detailed monitoring undertaken to gain evidence to understand animal interaction with this initial stage before deployment of further stages. The development of management plans for the construction, operation and decommissioning of the Development agreed with appropriate parties prior to the Commencement of the Development, and adherence to these over its lifespan. These included a more detailed programme of works, site-specific environmental management document, vessel movement plan, an operations and maintenance programme and adoption of an iterative process for development of a decommissioning strategy.
- Great emphasis on monitoring by agreeing a detailed monitoring programme prior to the Commencement of the Development. This included suggestions for additional studies and provision of research and monitoring results to be made available.

SNH and a number of other consultees raised concerns about the proposal having the potential to impact upon a number of European protected areas, namely Special Protection Areas (SPAs) under the Wild Birds Directive and Special Areas of Conservation (SACs) under the Habitats Directive. SNH considered that the proposal is likely to have a significant effect on the qualifying interests of certain SPA and SAC sites. An appropriate assessment was undertaken by the Scottish Ministers, and reviewed by SNH, which concluded that impacts on the integrity of the protected sites would be avoided subject to appropriate conditions being included on any consent or licence.

All objections received from all statutory consultees to the Application have been withdrawn either by agreement or by the inclusion of conditions to the consent. No objections were received from the two closest onshore local authorities, The Highland Council and Orkney Islands Council.

Objections from members of the public are being maintained.

## Material considerations

In light of all the representations, objections and outstanding objections received by the Scottish Ministers in connection with the Application, they have carefully considered the issues and identified the following matters as material considerations, for the purposes of deciding whether it is appropriate to cause a public inquiry to be held or for making a decision on the Application for consent under section 36 of the Electricity Act –

- cumulative impacts;
- the proposed location of the Development;
- the impacts on quality of life;
- the impacts on recreation, and recreational tourism, in the area;
- the impacts on shipping and navigational safety;
- the impacts on fish;
- the impacts on cetaceans;
- the impacts on marine mammals;
- the impacts on birds;
- the impacts on coastal processes;
- the impacts on benthic ecology;
- the impacts on shellfish;
- development of the renewable energy sector.

## **Public Local Inquiry**

Paragraph 2(2) of Schedule 8 to the Electricity Act provides that where a relevant planning authority notifies the Scottish Ministers that they object to an application for section 36 consent and where they do not withdraw their objection then the Scottish Ministers must cause a public inquiry to be held in respect of the application. In such circumstances before determining whether to give their consent the Scottish Ministers must consider the objections and the report of the person who held the public inquiry.

The location and extent of the Development to which the Application relates being wholly offshore means that the Development is not within the area of any local planning authority. The Scottish Ministers are not, therefore, obliged under paragraph 2(2) of Schedule 8 to the Electricity Act to require a public inquiry to be held. The nearest local planning authority did not object to the Application. Even if they had objected to the Application, and even then if they did not withdraw their objection, the Scottish Ministers would not have been statutorily obliged to hold a public inquiry.

The Scottish Ministers are, however, required under paragraph 3(2) of Schedule 8 to the Electricity Act to consider all objections received, together with all other material considerations, with a view to determining whether a public inquiry should be held with respect to the Application. If the Scottish Ministers think it appropriate to do so, they shall cause a public inquiry to be held, either in addition to or instead of any other hearing or opportunity of stating objections to the Application.

The Scottish Ministers have received objections to the Development as outlined above. In addition, a number of other matters were raised which constitute material considerations the context of considering whether they should decide to hold a public inquiry into this case. In summary, and in no particular order, these objections related to the following issues:

- (i) disruption to quality of life due to onshore works;
- (ii) the impact on wildlife;
- (iii) that the technology is unproven and not yet developed; and
- (iv) failure to meet the requirements of the Aarhus convention.

## Disruption to quality of life due to onshore works

A number of respondents to the Application commented on the potential impact that the onshore works would have on their quality of life. These ranged from the visual impact of onshore development to the noise pollution and dust from construction and construction vehicles. The Scottish Ministers accept that there will be some noise as a result of the construction of the Development, however the Construction Method Statement which must be submitted to the Scottish Ministers before construction may begin requires mitigation measures to be in place, for example the consideration of the working methods, frequency and hours of operations. Regarding the visual impact of onshore ancillary buildings, this was considered fully as part of The Highland Council's determination of the Company's Town and Country Planning (Scotland) Act 1997 application. More details can be found on The Highland Council planning portal located at <a href="http://wam.highland.gov.uk/wam/">http://wam.highland.gov.uk/wam/</a> under planning references 12/02874/FUL and 12/02875/FUL.

The Scottish Ministers, therefore, consider that they have sufficient information available on the disruption to the quality of life of local residents to reach a conclusion on this matter, and do not consider that it is appropriate to cause a public inquiry to be held to further investigate this.

## The impact on wildlife

The impact on marine mammals and birds was raised in the outstanding objections to the Development. The Company in its Environmental Statement and Supplementary Environmental Information Statement assessed the potential impact of the Development on fauna and the Scottish Ministers consulted various nature conservation bodies including SNH, the RSPB and Whale and Dolphin Conservation on this assessment. None of these consultees objected to the Development so long as the consent was made subject to specified conditions. Such conditions have been included in this consent and Scottish Ministers, on the advice of these nature conservation bodies, have limited the first phase of the Development to the construction and operation of 6 turbines, the impacts of which will be monitored in full before the Scottish Ministers may agree to any further future stages of the Development being deployed.

The Scottish Ministers, therefore, consider that they have sufficient information available on the potential impacts on wildlife both now and in the future following such monitoring having been undertaken to reach a conclusion on this matter, and do not consider that it is appropriate to cause a public inquiry to be held to further investigate this.

## The technology is unproven and not yet developed

Concerns have been raised that tidal technology is in its infancy and is not yet sufficiently proven for a large scale development. As outlined in the paragraph above, the Scottish Ministers have consented the whole Development, but on the condition that only 6 turbines are installed under the first phase of the Development which must be monitored before any further deployment.

Tides are predictable because they are created by the gravitational pull of the moon and sun. Tidal stream resources are at their best when there is a good tidal range, and the speed of the current is amplified by the funnelling effect of the local coastline and seabed. Tidal devices work well in narrow straits and inlets, around headlands, and in channels between islands. The Pentland Firth has some of the most energetic tidal resources in the world.

Wave and tidal stream energy technology have the potential to play an important role in decarbonising our energy supply, increasing energy security and reducing our dependence on fossil fuels. The Carbon Trust has estimated that wave and tidal resources could provide 20 per cent of the UK's electricity if fully developed.

The Scottish Ministers do not consider it appropriate to cause a public inquiry to be held to further investigate this.

## Failure to meet the requirements of the Aarhus convention

Concerns were raised that due to the scale of the Development the proper assessments have not been undertaken in accordance with the Aarhus Convention. The Scottish Ministers consider that proper assessment has been undertaken for this Development and proper opportunity was afforded for consultation with stakeholders and members of the public. In the circumstances, the Scottish Ministers do not consider it appropriate to cause a public inquiry to be held, in addition to, or instead of, the opportunities that there have already been to give views on the Development.

The Scottish Ministers have fully and carefully considered the Application and accompanying documents and all relevant responses from Consultees, as well as all the third party representations that have been received. The Scottish Ministers have taken all material considerations into account. The Scottish Ministers consider that there are no significant issues which have not been adequately considered in the Environmental Statement, consultation responses and third party representations and that they have sufficient information to be able to make an informed decision on the Application without the need for a Public Inquiry.

## **Determination**

In the circumstances, the Scottish Ministers are satisfied that-

(1) they possess sufficient information upon which to determine the Application; and

(2) the objectors have been afforded every opportunity to provide information and to make representations.

Accordingly, having regard to all material considerations in this Application and the nature of the outstanding objections, the Scottish Ministers have decided that it is not appropriate to cause a public inquiry to be held.

## The Scottish Ministers' consideration of the environmental information

The Scottish Ministers are satisfied that an Environmental Statement has been produced in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 ("the 2000 Regulations") and the applicable procedures regarding publicity and consultation laid down in the 2000 Regulations have been followed.

The Scottish Ministers have taken into consideration the environmental information, including the Environmental Statement and Supplementary Environmental Information, and the representations received from the consultative bodies, namely SNH and SEPA, and from The Highland Council and Orkney Islands Council too.

In terms of paragraph 3(1)(a) of Schedule 9 to the Electricity Act, the Company, when formulating a proposal to construct the generating station, must have regard to the desirability of preserving natural beauty, of conserving flora, fauna, and geological or physiological features of special interest and of protecting sites, buildings and objects of architectural, historic, or archaeological interest. Paragraph 3(1)(b) of Schedule 9 to the Electricity Act requires the Company, when formulating such a proposal, to do what it reasonably can to mitigate the effects that the generating station would have on these features.

In considering the Application, the Scottish Ministers have had regard to the desirability of the matters mentioned in paragraph 3(1)(a) and the extent to which the Company has complied with the duty under paragraph 3(1)(b). The Scottish Ministers consider that the Company has fulfilled the requirements of Schedule 9 to the Electricity Act and, by virtue of the Scottish Ministers undertaking an appropriate assessment in terms of the Habitats Directive based on the evidence, the requirements of Schedule 9 are capable of being met.

## The Scottish Ministers' consideration of the possible effects on a European Site

When considering an application for section 36 consent which might affect a European protected site, the competent authority must first determine whether the Development is directly connected with or necessary for the beneficial conservation management of the site. If this is not the case, the competent authority must decide whether the Development is likely to have a significant effect on the site. Under the Habitats Directive, if the proposal is likely to have a significant effect, the competent authority must undertake an appropriate assessment of its implications for the site in view of the site's conservation objectives.

With regards to the Development, SNH advised that the Development could have a significant effect upon the qualifying interests of a number of sites – both Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). As the recognised competent authority under European legislation, Scottish Ministers have considered the relevant information and undertaken an Appropriate Assessment. The Appropriate Assessment concluded that the Development would not adversely affect the integrity of any of the designated sites if the mitigation measures outlined were implemented by means of enforceable conditions attached to the consent.

## THE SCOTTISH MINISTERS' CONSIDERATION OF THE APPLICATION

The Scottish Ministers' consideration of the Application and the material considerations mentioned above is set out below.

## Cumulative Impact

The issue of potential cumulative impact on landscape, visual amenity and natural heritage was considered by SNH. There are currently no other wave or tidal projects at application stage in the Pentland Firth and therefore there will be no other offshore renewable developments in this area undergoing construction at the same time as the Development. However, any future projects, including further phases to the MeyGen project not provided for under this consent may be required to consider incombination impacts with the Development. SNH did not raise any objection on the grounds of cumulative impacts and the Scottish Ministers accept this view.

## Proposed location of the Development

The proximity of the Development to the coastline is an important issue to be considered. The Scottish Ministers consider that the Company has carefully considered the location of the Development and selected the Inner Sound due to its many advantages. The Inner Sound of the Pentland Firth provides a high tidal resource with suitable bathymetry for turbine deployment. There are ecological sensitivities in the area, however these were identified through early consultation at the start of the project and potential impacts have been fully assessed. Navigation is also an issue in the Pentland Firth, however the Inner Sound is not a significant navigational route and is generally used by smaller, narrow draught, vessels such as recreational crafts including yachts. The Outer Sound (north of Stroma) is the designated navigation route through the Pentland Firth.

The Scottish Ministers accept that the location of the Development was fully considered both prior to, and during, the application process and are content to grant consent to the Development in its current location.

## Impacts on quality of life

Concerns were raised regarding the impact of construction and the noise made by construction components such as heavy duty vehicles and noise made by the drilling rig. The noise impacts on local residents have been assessed in the Company's Environmental Statement and estimates of potential noise levels have been provided. The Scottish Ministers have considered these impacts and have imposed

within the consent a condition for a Construction Method Statement to be produced by the Company. This will be formulated in liaison with bodies such as The Highland Council, SNH and SEPA. The Construction Method Statement will seek to reduce noise to a minimum using the best practicable means at all times in agreement with The Highland Council and it, together with the Environmental Statement, will also work to keep local residents and groups informed of the proposed working schedule including the times and duration of any abnormally noisy work that may cause concern. A noise monitoring procedure and schedule will also be prepared and agreed with The Highland Council prior to the commencement of works.

The Construction Method Statement will also consider and mitigate dust emissions through such measures as effective barriers around dusty activities and the use of hard standing on the site and wheel washes and the dampening down of the Site area during dusty activities.

It is the Scottish Ministers' planning judgment that, whilst accepting that there would be some adverse amenity impacts on local residents, these will be mitigated as far as possible to be within acceptable levels, and will only be temporary in nature. The Scottish Ministers are therefore content to grant consent to the Development in this regard.

## Impacts on recreation in the area

Concerns were raised by respondents such as the Caithness Kayak Club, the Pentland Canoe Club and Surfers Against Sewage that the proposal could impact upon recreational users including recreational tourists. Through discussions with the Kayak and Canoe clubs, effective mitigation measures have been agreed with the Company such as the reduction in size of safety zones. The Company has also agreed to include regular updates of information on the Development to relevant recreational clubs.

It is the Scottish Ministers' planning judgment that, whilst accepting that there would be some adverse recreational impacts resulting from the Development, it is in their view an appropriate judgment nevertheless to grant consent to the Development in its proposed location.

## Impacts on shipping and navigational safety

There were concerns that the location of the Development within the Inner Sound of the Pentland Firth could cause difficulties for the navigation of vessels in the general area of the tidal array.

The Chamber of Shipping is satisfied that the lowest astronomical tide surface clearance range of 8-12 metres and the under keel clearance afforded by this level is sufficient under all conditions for the regular running ferry *Pentalina*. The Chamber of Shipping did stress that timely information to mariners is crucial to avoid collision with vessels traversing the sound with 8 metre draughts. Detailed information will be disseminated via tools including Notices to Mariners and Navtex and the array will also be clearly marked. The Northern Lighthouse Board and the Maritime and Coastguard Agency raised similar concerns and Scottish Ministers have included

within the consent a condition that a Navigational Safety Plan, including the production of an Emergency Response Co-operation Plan ('ERCoP'), must be submitted by the Company, and agreed by the Scottish Ministers, prior to the Commencement of the Development.

The Scottish Ministers are satisfied that there are no concerns about navigational safety that would require consent to be withheld.

## Impacts on fish

Consultation responses from the Association of Salmon Fishery Boards and the Caithness District Salmon Fishery Board raised the importance of the location of the Development due to it being a primary migration route for salmon. The key issues identified by the Boards included the potential impacts associated with noise, electromagnetic fields, barrier effects and collision risk. Both Boards were concerned at the lack of biological information to make a wholly accurate assessment of possible impacts from the proposal and both requested monitoring and mitigation measures be put in place. A condition requiring a comprehensive monitoring programme has been included within the consent and Marine Scotland Science are undertaking strategic research on migratory fish as part of the research theme of "Diadromous Fish and Marine Renewable Energy Research". Outputs from this will be incorporated, where appropriate, into the monitoring and mitigation work undertaken on this Development.

Regarding commercial fishing activity, although the Scottish Fisherman's Federation ('SFF') initially objected to the Application, following discussions between the SFF and the Company, the SFF were content to remove their objection. The Company committed to develop and consult upon proposals including the use of safety zones, operation of guard vessels, charting and demarcation of the project and construction activity and promulgation of information relating to the Development to mariners.

The Scottish Ministers consider that, having taken account of the information provided by the Company and the responses of Fishery Boards, the impact on fishing activity is not likely to be so significant, in light of the mitigation measures proposed, that it would require consent to be withheld.

#### Impacts on cetaceans

Scottish Natural Heritage and Whale and Dolphin Conservation considered the Company's Environmental Statement and concluded that there was the potential for significant adverse impacts to cetaceans such as the harbour porpoise and the minke whale due to increased vessel activity and collision risk with the turbines. Although the current vessel traffic in the area is low, and may already be causing low level disturbance to some species, the additional vessels required for this Development are unlikely to significantly increase this disturbance. Any disturbance from vessels could be further reduced by developing a Vessel Management Plan which has been included as a condition to the consent by the Scottish Ministers. Regarding collision risk avoidance rates by cetacean species, given predicted avoidance rates, SNH conclude that the Development would avoid an adverse impact on favourable Conservation Status on the UK population level. The Company

will also be required to apply for a licence allowing the disturbance of European Protected Species.

The Scottish Ministers are therefore satisfied that, subject to the agreed mitigation measures as recommended by SNH, the potential impacts on cetaceans would be suitably mitigated. Consequently, the Scottish Ministers consider there are no concerns about impact on cetaceans aviation that would require consent to be withheld.

## Impacts on marine mammals

The Scottish Ministers note that techniques used in the construction of most offshore renewable energy installations have the potential to impact on marine mammals.

SNH and Whale and Dolphin Conservation advised that a key concern of theirs was the collision risk posed by the Development to both Harbour and Grey seals. SNH undertook further work to refine the approach and assessment of collision risk and considered that the potential collisions for Harbour seals for a six turbine deployment would avoid an adverse impact on the current Harbour seal population within the Orkney and North Coast Management Unit. Similarly, for Grey seals, the predicted collision risk for six turbines would also avoid an adverse impact upon the current grey seal population within the Orkney and North Coast Management Unit. SNH have recommended conditions be included in any section 36 consent to help minimise the potential impacts on these species.

The Scottish Ministers are satisfied that the adoption of appropriate marine mammal mitigation measures within any section 36 consent will ensure that there are no significant impacts to marine protected species. In light of these measures, the Scottish Ministers consider there are no concerns about impact on marine protected species that would require consent to be withheld.

## Impacts on birds

The RSPB and SNH expressed concerns about the potential impact of the Development on several bird species using the Inner Sound of the Pentland Firth. SNH identified Special Protected Areas where the Development was likely to have a significant effect on the qualifying interests. This required Marine Scotland to undertake an Appropriate Assessment in view of the conservation objectives. The Appropriate Assessment concluded that subject to certain conditions, including appropriate mitigation and monitoring, the Development could be implemented without adverse effects on site integrity. Such conditions have been included by the Scottish Ministers within the consent.

In light of the above, the Scottish Ministers consider that, while the Development would have an impact on birds, this would not be so significant that it would require consent to be withheld.

## Impacts on Coastal processes

SNH outlined concerns regarding the potential impact on the predicted changes to tidal flow due to operational turbines, and the potential impacts on surrounding benthic habitats. Additional information was supplied by the Company. SNH have concluded that it was reasonable to expect a large degree of stability within the whole sand feature in the locale of the Development over the medium and long term. Local changes will continue to occur, as they would without the array, but the feature as a whole is likely to be held in check in the medium and long term by the broader eddy. Marine Scotland Science ('MSS') agreed that any changes would be negligible.

The Scottish Ministers consider that, having taken account of the information provided by the Company and the responses of SNH and MSS, the impact on coastal processes is not likely to be so significant, in light of the mitigation measures proposed, that it would require consent to be withheld.

## Impacts on benthic ecology

SNH agreed with the conclusions within the Company's Environmental Statement that there will be significant adverse impacts to benthic habitats and species. SNH recommended that further information regarding cable protection, scour protection and antifouling of devices is provided within a Construction Method Statement, together with areas of kelp and its removal and management practices to avoid the introduction of non-native marine species.

The Construction Method Statement condition included by Scottish Ministers within the consent will address SNH's concerns in this regard.

The Scottish Ministers consider that, having taken account of the information provided by the Company and the response of SNH, the impact on benthic ecology is not likely to be so significant, in light of the mitigation measures proposed, that it would require consent to be withheld.

#### Impacts on shellfish

Regarding the impact of the Development on shellfish, SNH were in broad agreement with the conclusions of the Company's Environmental Statement which suggested there would be minimal impact on shellfish species due to the small area of impact and the shellfish recorded within the area being mobile. However SNH recommended that pre and post construction monitoring to validate the Environmental Statement conclusions be undertaken.

The Scottish Ministers have proposed such mitigation measures and so consider that the impact upon shellfish is not likely to be so significant that it would require consent to be withheld.

## Development of the marine renewable energy sector

The Scottish Government must ensure that the development of wave and tidal sectors are achieved in a sustainable manner in the seas around Scotland. The environmental aspects of marine renewable energy are a relatively new field but of increasing importance to both the UK and the devolved administration. With this in mind, Scottish Ministers have accepted the advice of the nature conservation consultees and limited the first stage of this project to six turbines. Stringent conditions for mitigation and monitoring have been included within this consent, and only following further natural heritage work will any further turbines be considered for deployment. These conditions will also ensure good practice is followed to help further inform, not only this site, but this emerging commercial scale tidal energy production sector.

The Scottish Ministers consider that, having taken account of the information provided by the Company and all of the information provided during the statutory consultations, there is no reason on the basis of the marine renewable energy sector being in its infancy that it would require consent to be withheld.

## Consideration of other material issues

The Scottish Ministers consider the following issues material to the merits of the section 36 consent application.

The Company has provided adequate environmental information for the Scottish Ministers to judge the impacts of the Development.

The Company has identified what can be done to mitigate the impact of the Development.

The matters specified in paragraph 3(2) of Schedule 9 to the Electricity Act 1989 have been adequately addressed by means of the Environmental Statement and Supplementary Environmental Information Statement. The Scottish Ministers have judged that, by staging the Development in the way provided in the consent, the likely environmental impacts are acceptable.

The Scottish Ministers are satisfied that the Development can be satisfactorily decommissioned and will take steps to ensure that any decommissioning programme required under the Energy Act 2004 is prepared in a timely fashion by imposing a condition requiring the submission of a draft decommissioning plan before construction of works can take place.

The Scottish Ministers have considered fully and carefully the Application and accompanying documents and all relevant responses from consultees and the 17 public representations received, 13 of which were objections to the tidal array, 2 were in support and 2 were neutral.

The 86 MW Development within the Inner Sound off the north coast could annually generate renewable electricity equivalent to the demand from approximately 42,000 homes. This increase in the amount of renewable energy produced in Scotland is

entirely consistent with the Scottish Government's policy on the promotion of renewable energy and its target for renewable sources to generate the equivalent of 100% of Scotland's annual electricity demand by 2020. Scotland requires a mix of energy infrastructure in order to achieve energy security at the same time as moving towards a low carbon economy. Due to the intermittent nature of renewables generation, a balanced electricity mix is required to support security of supply requirements. Scotland has the capability and the opportunity to generate a level of electricity from renewables by 2020 that would be the equivalent of 100% of Scotland's gross electricity consumption. This does not mean an energy mix where Scotland will be 100% reliable on renewables generation by 2020; but it supports Scotland's plan to remain a net exporter of electricity.

The Scottish Ministers aim to achieve a thriving renewables industry in Scotland, the focus being to enhance Scotland's manufacturing capacity, to develop new indigenous industries, and to provide significant export opportunities. The Scottish Ministers have considered material details of how this proposal can contribute to local or national economic development priorities.

Within their Environmental Statement, the Company state that the maximum total capital expenditure for the Development is estimated at £602 million. The Development could have the potential to generate a total of 1,720 jobs on a 'jobs/MW installed capacity' basis for the manufacturing, construction and installation phase only using the Scottish Government's Marine Energy Group recommendation of a 'marine industry standard' of 20 jobs created per MW. The Company estimates that there is a potential for a temporary Gross Value Added ('GVA') of £38.8 million.

The Development will lead to the creation of a number of both temporary and permanent jobs. The Company envisages that approximately 70 temporary jobs for onshore construction activities, approximately 50 temporary jobs for offshore construction activities and approximately 50 full time jobs for offshore operations and maintenance. It is envisaged that the number of jobs created for the decommissioning of the Development will be the same as those for construction.

The Development could also provide opportunities for the involvement of local, regional and Scottish suppliers in a range of activities, including research and development, design, project management, civil engineering, component fabrication/manufacture, installation and maintenance. The Development has the potential to generate positive spin-off effects in terms of the development of the renewables sector in Caithness and the Northern Isles as well as the Highlands, and more generally in Scotland.

## THE SCOTTISH MINISTERS' DETERMINATION

Subject to the conditions set out in **ANNEX 2** to this decision, the Scottish Ministers **GRANT CONSENT** under section 36 of the Electricity Act for the construction and operation of the Development, consisting of up to 61 turbines with a permitted capacity of up to 86 megawatts as described in **ANNEX 1** and shown on the figure in **ANNEX 3**.

However this consent is conditional upon the Company deploying the turbines in stages with Stage One of the Development being limited to a maximum of 6 turbines and with all Subsequent Stages of the Development being subject to the prior written approval of the Scottish Ministers. So as to avoid significant adverse impacts upon the environment full and detailed monitoring of all the turbines deployed under the consent is required thus ensuring that the approval by the Scottish Ministers of any Subsequent Stages of the Development is only done in the knowledge of the impact and the implications for the environment of the turbines.

At present the Scottish Ministers have no powers to grant deemed planning permission for any ancillary onshore development relating to the offshore electricity generating station.

The Scottish Ministers direct that this consent is to lapse on the expiry of a period of 5 years from the date of this direction if Commencement of the Development has not taken place within that period.

The Scottish Ministers direct that within 2 months of the date of this consent (and within 2 months of the Final Commissioning of Stage One of the Development and the Final Commissioning of all Subsequent Stages of the Development if there has been any variation on the original approved plan), the Company must provide a detailed plan showing the site boundary and all turbines in a format compatible with the Scottish Government's Spatial Data Management Environment ('SDME'), along with appropriate metadata to the Scottish Ministers.

The SDME is based around Oracle RDBMS and ESRI ArcSDE and all incoming data must be supplied in ESRI shapefile format. The SDME also contains a metadata recording system based on the ISO template within ESRI ArcCatalog (agreed standard used by the Scottish Government), all metadata should be provided in this format.

In accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended), the Company must publicise this determination for two successive weeks in the Edinburgh Gazette and in such newspapers as are likely to come to the attention of those likely to be affected by the proposed Development.

In reaching their decision they have had regard to all objections and relevant considerations and, subject to the conditions of this consent, are satisfied that it is appropriate for the Company to construct and operate the generating station in the manner as set out in the Application.

Copies of this letter and the consent have been sent to The Highland Council as the nearest onshore Planning Authority and Orkney Islands Council. This letter has also been published on the Marine Scotland's website.

The Scottish Ministers' decision is final, subject to the right of any aggrieved person to apply to the Court of Session for judicial review. Judicial review is the mechanism by which the Court of Session supervises the exercise of administrative functions, including how the Scottish Ministers exercise their statutory function to determine

Applications for consent. The rules relating to applications for judicial review can be found on the website of the Scottish Courts, at Chapter 58 – http://www.scotcourts.gov.uk/rules-and-practice/rules-of-court/court-of-session-rules

Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

Yours sincerely,

JAMES McKIE Leader Marine Scotland, Licensing Operations Team A member of the staff of the Scottish Ministers

# ANNEX 1 DESCRIPTION OF THE DEVELOPMENT

The Development, as shown in the Figure in ANNEX 3 to this consent, shall have a permitted generating capacity not exceeding 86 MW and shall comprise, subject to condition 2 in ANNEX 2 to this consent, a tidal-powered electricity generating station in the Inner Sound of the Pentland Firth, between the north coast of Scotland and the Island of Stroma including:

- 1. not 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;
- 2. all foundations and scour protection;
- 3. inter array cabling and export cables to the shore; and

all as specified in the Application, Environmental Statement and Supplementary Environmental Information Statement. The references in this consent shall be construed accordingly.

## ANNEX 2

## **CONDITIONS OF THE SECTION 36 CONSENT**

The consent granted under section 36 of the Electricity Act 1989 is subject to the following conditions:

## **Duration**

1. The consent is for a period from the date the consent is granted until the date occurring 25 years after the Final Commissioning of the Development or 1<sup>st</sup> January 2047, whichever of these two dates is earliest. Written confirmation of the dates of the Final Commissioning of Stage One, the Final Commissioning of each Subsequent Stage and the Final Commissioning of the Development must be provided by the Company to the Scottish Ministers, the Planning Authority and SNH no later than one month after the Final Commissioning of each stage and after the Final Commissioning of the Development.

**Reason:** To define the duration of the consent.

## <u>Implementation</u>

- **2.** The Development shall be implemented in a staged manner whereby:
  - a) The Company may proceed with Stage One of the Development where all necessary conditions which must, under this consent, be satisfied prior to the Commencement of the Development are so satisfied;
  - b) The Company may proceed with each Subsequent Stage of the Development only
    - i. upon satisfying the Scottish Ministers that all necessary conditions which must, under this consent, be satisfied prior to the Subsequent Stage of the Development have been complied with; and
    - ii. following application being made by the Company to the Scottish Ministers seeking their approval to proceed with such Subsequent Stage of the Development, the Scottish Ministers, having considered all relevant information provided to them in connection with the Development including information provided under this consent and following their consultation with SNH, the Scottish Environment Protection Agency, the Maritime and Coastguard Agency, the Planning Authority, Northern Lighthouse Board and any such other advisors as may be required at their discretion, are satisfied that the Subsequent Stage of the Development will have regard to the preservation of the environment and ecology and have provided their written approval to the Company.

Reason: To prevent significant adverse impacts to the environment (in particular harbour seals and Atlantic salmon) by providing for a staged deployment of the Development.

#### Commencement

3. The Commencement of the Development must be a date no later than 5 years from the date this consent is granted, or such other date from the date of the granting of this consent as the Scottish Ministers may hereafter direct in writing.

**Reason:** To ensure that the Commencement of the Development is undertaken within a reasonable timescale after consent is granted.

## **Environmental Protection**

4. In the event that any turbine installed and commissioned and forming part of the Development fails to produce electricity on a commercial basis to the National Grid for a continuous period of 24 months or more then the Scottish Ministers, unless otherwise agreed in writing by them after consultation with any advisors as may be required at the discretion of the Scottish Ministers, may determine that any such turbine must be removed from the Site by the Company within the period of 12 months from the date of their determination, and the Site must be fully reinstated by the Company to the specification and satisfaction of the Scottish Ministers after consultation with any advisors as may be required at the discretion of the Scottish Ministers.

**Reason:** To ensure that any redundant tidal turbine and ancillary equipment is removed from the Site, in the interests of safety, amenity and environmental protection.

## <u>Assignation</u>

5. The Company is not permitted to assign the consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant consent (with or without conditions) or refuse such authorisation as they may, in their own discretion, see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the foregoing procedure.

Reason: To safeguard the obligations of the consent if assigned to another company.

## **Health and Safety**

6. If any serious health and safety incident occurs on the Site requiring the Company to report it to the Health and Safety Executive then the Company must also notify the Scottish Ministers of the incident within 24 hours of the incident occurring.

**Reason:** To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.

## **Decommissioning**

7. Commencement of the Development must not proceed until after the Company has submitted to the Secretary of State a decommissioning programme for the whole Development in compliance with a notice served upon the Company by the Secretary of State following consultation with the Scottish Ministers, pursuant to section 105(2) and (5) of the Energy Act 2004.

Reason: To ensure that a decommissioning plan is submitted to the Secretary of State following consultation with the Scottish Ministers before any construction commences.

## **Development**

8. The Development must be constructed and operated in accordance with the terms of the Application and the accompanying Environmental Statement and Supplementary Environmental Information Statement, except in so far as amended by the terms of this consent and any direction made by the Scottish Ministers.

**Reason:** To ensure that the Development is carried out in accordance with the application documentation.

#### Construction

- 9. The Company must, prior to the Commencement of the Development, submit to the Scottish Ministers a Construction Method Statement ("CMS"), in writing, endorsed by the Ecological Clerk of Works, as referred to in Condition 10 of this consent, to the Scottish Ministers for their approval, following consultation with SNH, the Scottish Environment Protection Agency, the Maritime and Coastguard Agency, the Planning Authority, Northern Lighthouse Board, and any such other advisors as may be required at the discretion of the Scottish Ministers. Unless otherwise agreed in writing by the Scottish Ministers, construction of the Development must proceed in accordance with the approved CMS. The CMS must include, but is not limited to, the following information:
  - a) Commencement dates:
  - b) Working methods including the scope, frequency and hours of operations;
  - c) Duration and Phasing Information of key elements of construction, for example— turbine structures, foundations, turbine locations, inter-array cabling and land fall cabling;
  - d) Details of the location of the turbines, grid export cable(s), method of installation (including techniques and equipment) and depth of cable laying and cable landing sites;

- e) Details of mitigation measures to prevent adverse impacts to species and habitats during construction;
- Details of how all contractors and sub-contractors will be made aware of environmental sensitivities, what requirements they are expected to adhere to and how chains of command will work;
- g) Confirmation of reporting mechanisms used to provide Scottish Ministers and relevant consultees with regular updates on construction activity, including any environmental issues encountered and how these have been addressed;
- h) Vessel specification, routing, including location of vessel ports; and
- i) Pollution prevention measures including contingency plans.

The CMS must, so far as is reasonably practicable, be consistent with the Environmental Management Plan, the Project Environmental Monitoring Programme, the Vessel Management Plan and the Navigational Safety Plan.

**Reason:** To ensure the appropriate construction management of the Development, taking into account mitigation measures to protect the environment and other users of the marine area.

## **Environmental Protection**

- 10. The Company must, with the approval of the Scottish Ministers in consultation with SNH, appoint an Ecological Clerk of Works ("ECoW") prior to the Commencement of the Development. The term of appointment for the ECoW shall be the period from the Commencement of the Development until the Final Commissioning of Stage One of the Development and thereafter, for each Subsequent Stage of the Development, from the date an application for approval for a Subsequent Stage of the Development is submitted to the Scottish Ministers until the Final Commissioning of the Subsequent Stage of the Development or, as the case may be, until the Final Commissioning of the Development. The responsibilities of the ECoW must include, but not be limited to:
  - a) Quality assurance and approval of final draft version of all plans and programmes required under the consent;
  - b) Ensuring all works are carried out in accordance with the CMS, Environmental Management Plan, the Project Environmental Monitoring Programme, the Vessel Management Plan and the Navigational Safety Plan;
  - c) Monitoring compliance with the ecological mitigation works that have been approved in this consent;
  - d) Ensuring any protected species licenses are in place and providing advice and monitoring compliance with the licence conditions; and
  - e) Advising the Company on adequate protection of nature conservation interests on the Site.

**Reason:** In the interests of protecting the environment.

## **Environmental Management and Monitoring**

11. The Company must, no later than 3 months prior to the Commencement of the Development, submit in writing an Environmental Management Plan ("EMP") to the Scottish Ministers for their written approval, in consultation with SNH and any other ecological, or such other advisors as required at the discretion of the Scottish Ministers. The final draft of the EMP must have been approved by the ECoW prior to its submission to the Scottish Ministers.

The EMP (and, as the case may be, amended EMP) must detail measures that must be taken by the Company, through all stages of the Development, to prevent adverse impacts including, but not limited to, marine mammals, birds, fish and habitats as outlined in Chapter 25 of the Company's Environmental Statement. The EMP must take account of, and implement, recommendations where appropriate and reasonable from the CMS, the Operations & Maintenance Programme, the Vessel Management Plan and the Navigational Safety Plan, as well as any other recommendations within the Company's Environmental Statement.

The EMP must be regularly reviewed by the Scottish Ministers, at timescales to be determined by the Scottish Ministers, in consultation with SNH, the ECoW and any other ecological, or such other advisors as required at the discretion of the Scottish Ministers. Following such review the Scottish Ministers may, in consultation with SNH, the ECoW and any other ecological, or such other advisors as required at the discretion of the Scottish Ministers, require the Company to amend the EMP and submit such an amended Plan to them, in writing, for their approval. The Scottish Ministers may approve an amended Plan in consultation with SNH, the ECoW and any other ecological, or such other advisors as required at the discretion of the Scottish Ministers.

The EMP must, so far as is reasonably practicable, be consistent with any relevant monitoring requirements during construction taken from the Project Environmental Monitoring Programme.

The Environmental Management Plan must be implemented in full by the Company.

Reason: In the interests of protecting the environment.

#### **Environmental Management and Monitoring**

12. The Company must, no later than 3 months prior to the Commencement of the Development, submit a Project Environmental Monitoring Programme ("PEMP"), in writing, for the approval of the Scottish Ministers, in consultation with SNH and any other ecological, or such other advisors as required at the discretion of the Scottish Ministers. The PEMP must set out the measures of monitoring the environmental impacts of all stages of the Development, including the pre-construction, construction, and operational stages.

The PEMP must be regularly reviewed by the Scottish Ministers, at timescales to be determined by the Scottish Ministers, in consultation with SNH and the Advisory Group referred to in condition 13 of this consent. Following such review the Scottish Ministers may, in consultation with SNH and the Advisory Group, require the Company to amend the PEMP and submit such an amended Programme to them, in writing, for their approval, in consultation with SNH and any other ecological, or such other advisors as required at the discretion of the Scottish Ministers.

The monitoring set out in the PEMP or, as the case may be, an amended PEMP, (which must be agreed by the Scottish Ministers, in consultation with SNH and any other ecological, or such other advisors as required at the discretion of the Scottish Ministers), must be implemented by the Company. The Company must submit written reports of such monitoring to the Scottish Ministers at timescales to be determined by the Advisory Group. In particular, the following aspects should be considered and advice provided regarding the monitoring of the following aspects:

- a) Hydro dynamics / benthic surveys, export cable route and turbine locations and modelling to validate EIA predictions;
- b) Collision / encounter interactions with the tidal turbines for diving birds, marine mammals and fish of conservation concern;
- c) Disturbance and displacement of birds, marine mammals and basking sharks during construction and operation. This must also link to the species protection plan for seals at haul outs; and
- d) Migratory salmonids

Subject to any legal restrictions regarding the treatment of the information, the results must be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

**Reason:** To ensure that appropriate and effective monitoring of the impacts of the Development is undertaken.

## **Environmental Management and Monitoring**

13. The Scottish Ministers must, within 6 months of the date of the granting of the Section 36 consent, establish an Advisory Group to provide advice upon, and oversee, the EMP and the PEMP. Membership, terms of reference and functions of the Advisory Group are to be agreed by the Scottish Ministers in consultation with any such advisors at the discretion of the Scottish Ministers

**Reason:** To ensure effective research and monitoring is undertaken and to review the objectives, outputs and timescales of the monitoring programme.

## **Vessel Management**

14. The Company must, no less than 3 months prior to the Commencement of the Development, submit a Vessel Management Plan, in writing, to the Scottish Ministers for their written approval, in consultation with SNH and any such

other ecological or other advisors as may be required at the discretion of the Scottish Ministers. The Vessel Management Plan must include, but is not limited to, the following issues:

- a) Individual vessel details;
- b) Number of vessels;
- c) Whether ducted propellers will be in operation;
- d) How vessel management will be coordinated, particularly during construction but also during operation; and
- e) Location of working port(s), how often vessels will be required to transit between port(s) and the site and the routes used.

The Development must be constructed and operated in accordance with the Vessel Management Plan, and the Vessel Management Plan must, so far as is reasonably practicable, be consistent with the CMS, the EMP, the PEMP, the Operations and Maintenance Programme, and the Navigational Safety Plan.

**Reason:** To minimise the disturbance to seal haul outs, marine mammals and basking sharks as well as consideration of mitigation measures for cork screw injuries to seals.

## **Operations and Maintenance**

- 15. The Company must, prior to the Final Commissioning of Stage One of the Development, submit an Operations and Maintenance Programme, in writing, to the Scottish Ministers for their approval, in consultation with SNH and any other advisors as may be required at the discretion of Scottish Ministers. The Operations and Maintenance Programme must include, but is not limited to, the following issues:
  - a) Timing of Operations and Maintenance activities;
  - b) Operations and Maintenance vessel requirements and management;
  - c) All contractors roles and responsibilities during Operations and Maintenance; and
  - d) Maintenance plan for grid export cable(s) and landfall site.

The Development must be operated and maintained at all times in accordance with the Operations and Maintenance Programme.

**Reason:** To mitigate the impacts of operations and maintenance and to fully inform any mitigation and monitoring requirements for natural heritage interests.

## Marine Archaeology

16. The Company must, prior to the Commencement of the Development, submit a Reporting Protocol for the discovery of marine archaeology during construction, maintenance and monitoring, in writing, to the Scottish Ministers for their approval, in consultation with Historic Scotland. The Reporting Protocol must be implemented in full by the Company.

**Reason:** To ensure any accidental discovery of archaeological interest is properly and correctly reported.

## **Navigation**

- 17. The Company must, prior to the Commencement of the Development, submit a Navigational Safety Plan, in writing, to the Scottish Ministers for their written approval, in consultation with the Maritime and Coastguard Agency, the Northern Lighthouse Board, the Chamber of Shipping and any other navigational advisors, or such other advisors, as may be required at the discretion of the Scottish Ministers. The Navigational Safety Plan must include, but is not limited to, the following issues:
  - (a) Navigational safety measures;
  - (b) Emergency Response and Co-ordination Plan;
  - (c) Safety zones;
  - (d) Promulgation of information to mariners;
  - (e) Buoyage;
  - (f) Anchoring areas; and
  - (g) Lighting and marking of cable landfall site(s).

The Development must be constructed and operated in accordance with the Navigational Safety Plan at all times.

Reason: In the interests of safe navigation.

#### **Definitions**

In this consent -

"the Application" means the Application and Environmental Statement, and Supplementary Environmental Information Statement submitted by the Company on 13 July 2012 and 15 April 2013, respectively;

"Commencement of the Development" means the date on which the first vessel arrives on Site to begin construction;

"the Company" means MeyGen Limited, 27 Lauriston Street, Edinburgh, EH3 9DQ, Company Registration No. SC347501;

"the Development" means the MeyGen Tidal Energy electricity generating station Phase 1 within the Inner Sound in the Pentland Firth;

"Environmental Statement" means the Environmental Statement submitted by the Company on 13 July 2012 as part of the Application as defined above;

"Final Commissioning of Stage One of the Development" means the date on which the turbine generators forming Stage One of the Development have supplied electricity on a commercial basis to the National Grid or such earlier date as the Scottish Ministers deem the Final Commissioning of Stage One of the Development to be complete;

"Final Commissioning of each Subsequent Stage" means the date on which all turbine generators forming a Subsequent Stage of the Development have supplied electricity on a commercial basis to the National Grid or such earlier date as the Scottish Ministers deem that stage of the Development to be complete;

"Final Commissioning of the Development" means the date on which all turbine generators forming the Development have supplied electricity on a commercial basis to the National Grid or such earlier date as the Scottish Ministers deem the Development to be complete;

"Planning Authority" means The Highland Council;

"Site" means the area outlined in red as shown in the Figure in ANNEX 3 to this consent;

"SNH" means Scottish Natural Heritage;

"Stage One of the Development" means the construction and operation of up to the first 6 turbine generators and inter array and export cabling of the Development within the boundary as shown in the Figure in ANNEX 3 to this consent;

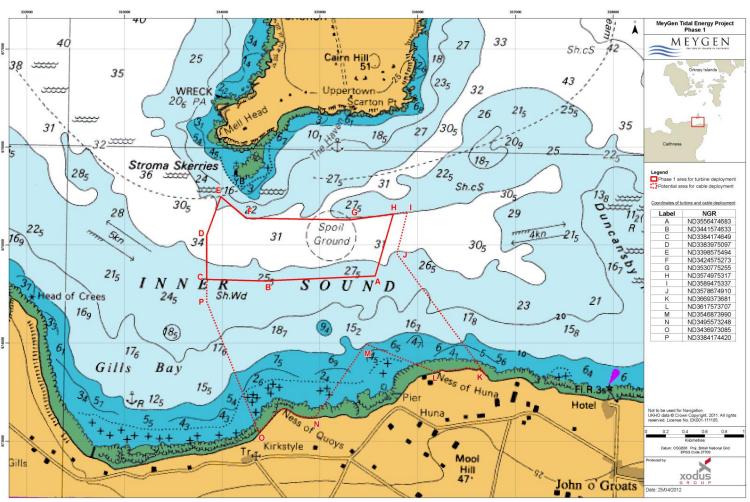
"Subsequent Stage of the Development" means the construction and operation of turbine generators and inter array and export cabling within the EIA boundary area

as shown in the Figure in ANNEX 3 to this consent and in respect of which this consent relates but not forming part of Stage One of the Development; and

"Supplementary Environmental Information Statement" means the Supplementary Environmental Information Statement to the Application and Environmental Statement submitted by the Company on 15 April 2013.

JAMES McKIE
LEADER, LICENSING OPERATIONS TEAM
A member of the staff of the Scottish Ministers

ANNEX 3
LOCATION OF PROJECT



Phase 1 area for turbine and potential cable deployment.