From: [Redacted]
Marine Scotland Licensing Operations Team
Marine Scotland
17 August 2018

Minister for Energy, Connectivity and the Islands

APPLICATION TO VARY ANNEX 2 OF THE LEVENMOUTH DEMONSTRATION TURBINE (FORMERLY KNOWN AS THE FIFE ENERGY PARK OFFSHORE DEMONSTRATION WIND TURBINE) SECTION 36 CONSENT UNDER SECTION 36C OF THE ELECTRICITY ACT 1989 (AS AMENDED) IN ACCORDANCE WITH THE ELECTRICITY GENERATING STATIONS (APPLICATIONS FOR VARIATION OF CONSENT) (SCOTLAND) REGULATIONS 2013 (AS AMENDED)

#### 1.1 Purpose

1.1.1 To seek your approval to grant an application to vary the existing consent for the Levenmouth Demonstration Turbine ("the Development"). This application to vary the consent was made by Arcus Consultancy Services Ltd ("Arcus") on the 8<sup>th</sup> February 2018 on behalf of Offshore Renewable Energy Catapult ("the Company") and relates to the consent granted on 3<sup>rd</sup> May 2013 and the varied consent granted on 23<sup>rd</sup> March 2016 under section 36 ("s.36") of the Electricity Act 1989 (as amended) ("the Electricity Act") for the construction and operation of an offshore generating station located adjacent to the Fife Energy Park ("FEP") in Methil, Fife.

#### 1.2 **Priority**

1.2.1 Routine.

#### 1.3 Nature of the Variation Sought

- 1.3.1 The variation application seeks to amend Annex 2 of the s.36 consent granted on 23<sup>rd</sup> March 2016 to allow the following variation:
- An extension of the operational life of the Development from five (5) to fifteen (15) years, i.e. an extension for ten (10) years.

The original text for the application for s.36 can be found on the Marine Scotland website (Decision Letter and Conditions under Fife Energy Park Offshore Demonstration Wind Turbine), and the proposed changes for the variation are shown in Annex C.

#### 1.4 Publication of Application and Consultation

- 1.4.1 The publicity requirements provided in the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) and the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 (as amended) ("the Variation Regulations") were met, with public notices of the variation application being placed on a website and in a local newspaper, the Edinburgh Gazette, a national newspaper, Lloyd's List and an appropriate fishing trade journal.
- 1.4.2 The Variation Regulations also require copies of the variation application to be served on the planning authorities, in this case East Lothian Council, Edinburgh City Council and Fife Council. These requirements have been met.
- 1.4.3 Marine Scotland Licensing Operations Team ("MS-LOT") on behalf of the Scottish Ministers, consulted a wide range of relevant organisations on the application and the Environmental Impact Assessment Report (hereafter referred to as the "EIA Update Report") including but not limited to: East Lothian Council, Edinburgh City Council, Fife Council, Scottish Natural Heritage ("SNH"), Scottish Environment Protection Agency ("SEPA"), Maritime and Coastguard Agency ("MCA"), Northern Lighthouse Board ("NLB") and Historic Environment Scotland ("HES").
- 1.4.4 The results of the consultation exercise and the supporting information submitted as part of the application and the key considerations in relation to the determination of this proposal are set out in Annex A and Annex B.
- 1.4.5 Scottish Ministers received no representations from members of the public in relation to this application. No statutory consultees other than East Lothian Council objected to the variation. Comments have been raised by some consultees and these have been considered and addressed. These are set out in Annex B and C.

#### 1.5 **Appropriate Assessment**

1.5.1 As the proposed changes may have a significant effect on European offshore marine sites or European protected sites, an appropriate assessment ("AA"), as required under the Conservation of Habitats and Species Regulations 2017 ("2017 Habitats Regulations"), was undertaken. The AA updated the original AA (completed in January 2013) to consider the proposed changes and concluded that the changes would not adversely affect the integrity of any European offshore marine site or European protected site (see Annex D).

#### 1.6 Environmental Impact Assessment

1.6.1 It was considered that there may be a difference in likely significant effects on the environment compared with those described in the original environmental statement (submitted in July 2012). Therefore in accordance with The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) ("the EIA Regulations"), the Company was required to submit a new Environmental Impact Assessment ("EIA").

#### 1.7 Recommendation

Having taken into account the statutory and non-statutory consultation responses, and being satisfied that all legislative requirements have been met, MS-LOT recommends that you determine that it is appropriate not to cause a public inquiry or any other hearing to be held.

In addition, MS-LOT recommends that you agree to vary the wording of Annex 2, Part 1, Condition 1 and as a result of the comments received from consultees, also agree to vary the wording of Annex 2, Part 1, Conditions 7 and 13 of the Levenmouth Demonstration Turbine section 36 consent in terms of section 36C of the Electricity Act 1989 (as amended) and the Electricity Generating Stations (Application for Variation of Consent) (Scotland) Regulations 2013 (as amended).

A draft decision letter is attached at Annex C.

In tandem with the consultation on the section 36 consent variation application (as permitted by section 35(1)(c) of the Marine (Scotland) Act 2010), MS-LOT has consulted on a marine licence application, submitted on 8<sup>th</sup> February 2018 for the Development, concerning the deposit and operation of the associated infrastructure. If consent is granted for this variation application, the Scottish Ministers will issue the marine licence.

#### 1.8 **Publicity**

1.8.1 In order for the determination process to be fully open and transparent, MS-LOT recommends that this submission is published on the Marine Scotland Licensing page of the Scotlish Government website, alongside the key documentation relating to the application.

#### 1.9 List of Annexes

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			For Information		
Copy List:	For Action	For Comment	Portfolio Interest	Consist Interest	General Awaren ess
Cabinet Secretary for			Х		
Finance, Economy and Fair					
Work					
Cabinet Secretary for the			Χ		
Rural Economy					
Cabinet Secretary for			Χ		
Environment, Climate					
Change and Land Reform					
Minister for Rural Affairs			Χ		
and the Natural					
Environment					
DO E	•	•	•	•	

DG Economy

Director of Marine Scotland, Marine Scotland

Helena Gray, Marine Scotland

Ian Davies Marine Scotland

Zoe Crutchfield, Marine Scotland

Gayle Holland, Marine Scotland

Mark Christie, Marine Scotland

Michael Bland, Marine Scotland

Nicola Bain, Marine Scotland

Phil Gilmour, Marine Scotland

Jared Wilson, Marine Scotland

Neal Rafferty, Energy Directorate

David Stevenson, Energy Directorate

Debbi Ramsay, Energy Directorate

Joanna Dingwall, SGLD

Kenneth Hannaway, SGLD

Fiona McClean, SGLD

Callum McCaig, Special Advisor

Communications - Economy

Communications - Rural Economy and Environment

Communications - Marine Scotland

#### Annex A - Legislative Requirements

#### 2 ANNEX A - Legislative Requirements

#### 2.1 Legislative Background

- 2.1.1 Section 36C of the Electricity Act (as amended) ("the Electricity Act"), has since 1st December 2013, enabled persons who are entitled to the benefit of a s.36 consent to apply to the appropriate authority (in Scotland this is the Scottish Ministers) for a variation of such s.36 consents. The procedure is set out in the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 (as amended) ("the Variation Regulations"). The Variation Regulations provide for a consistent and transparent process for making, publicising, and the consideration of applications to vary s.36 consents.
- 2.1.2 The variation process is designed to apply to projects that have been consented to under s.36, where the operator wishes to carry out development or operation or any other aspects of its proposals as set out in the s.36 consent in a way that is inconsistent with the existing s.36 consent. Scottish Government guidance on s.36 consent variations considers that the process is not intended as a way of authorising any change in a developer's plans that would result in development that would be fundamentally different in terms of character, scale or environmental impact from what is authorised by the existing consent.
- 2.1.3 Under section 36C(4) of the Electricity Act the Scottish Ministers may make variations to consents as appear to them to be appropriate, having regard in particular to the applicant's reasons for seeking the variation, the variations proposed and any objections made to the proposed variations, the views of consultees and the outcome of any public inquiry.

#### 2.2 **Environmental Impact Assessment**

- 2.2.1 The process to vary s.36 consents is primarily governed by the Variation Regulations. The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) ("the EIA Regulations") amend the Variation Regulations and provide that an EIA is required in relation to variation applications where the proposed changes are likely to have significant effects on the environment.
- 2.2.2 A screening opinion was issued in March 2017 advising that the proposed changes were considered appropriate to consider as a variation application and that an EIA would be required.
- 2.2.3 A request for a scoping opinion was received in April 2017, therefore the EIA Regulations apply but under transitional arrangements.
- 2.2.4 Officials consider that an Environmental Impact Assessment Report ("EIA Report") to support a variation application can take the form of the original Environmental Statement ("ES") or EIA Report (which supported the original s.36 consent application) supplemented by a supporting statement

#### Annex A - Legislative Requirements

that details the environmental effects resulting from the variations being sought.

The present application for varying the s.36 consent was accompanied by an EIA Update Report and the original 2012 ES and 2013 addendum. The Company, in order to update the original ES, detailed the main aspects in which the environmental effects of the proposed development would differ as a result of the variation in accordance with the EIA Regulations. The factors which were scoped into the EIA Report were as follows:

- Seascape, landscape and visual;
- Noise;
- Ornithology;
- Socio-economics; and
- Climate change and carbon balance.
  - 2.2.5 MS-LOT is content that the Company has suitably addressed, within the variation documentation, how effects differ from the original ES, and which are required to be assessed under the EIA Regulations.

### 2.3 Habitat Regulations Appraisal ("HRA") and Appropriate Assessment ("AA")

- 2.3.1 Regulation 63(1) of the Conservation of Habitats and Species Regulations 2017 ("2017 Habitats Regulations") requires that:
  - "(1) Before deciding to undertake, or give any consent, permission or other authorisation for, a relevant plan or project, a competent authority must make an appropriate assessment of the implications of the plan or project for the site in view of that site's conservation objectives.
  - (2) In paragraph (1), a "relevant plan or project" is a plan or project which—
  - (a) is to be carried out on or in any part of the waters or on or in any part of the seabed or subsoil comprising the offshore marine area, or on or in relation to an offshore marine installation;
  - (b) is likely to have a significant effect on a European offshore marine site or a European site (either alone or in combination with other plans or projects); and
  - (c) is not directly connected with or necessary to the management of the site."
- 2.3.2 This assessment is required to be undertaken under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive") under a process referred to as a Habitats Regulations Appraisal ("HRA").
- 2.3.3 The proposed changes extend the operational life of the turbine from five to fifteen years. As part of the application, the Company also submitted further information to update the HRA. An AA was undertaken in regard to

#### Annex A – Legislative Requirements

the Development which updated the original AA. The AA concluded that the proposed variation would not adversely affect the integrity of any European offshore marine site or European protected site (Annex D – Appropriate Assessment).

#### 2.4 Marine Licence Application

2.4.1 In tandem with the consultation on the s.36 consent variation application (as permitted by section 35(1)(c) of the Marine (Scotland) Act 2010), MS-LOT has consulted on a marine licence application, submitted on 8<sup>th</sup> February 2018 for the Development, concerning the deposit and operation of the associated infrastructure.

#### 2.5 Summary and conclusions

2.5.1 MS-LOT considers that the legislative requirements set out above have been complied with throughout the process of determining the s.36 consent variation application.

#### 3 ANNEX B Consultation exercise

#### 3.1 Background information

- 3.1.1 Offshore Renewable Energy Catapult ("the Company") currently holds the section 36 ("s.36") consent which was originally granted by the Scottish Ministers to Scottish Enterprise ("SE") on 3<sup>rd</sup> May 2013 under s.36 of the Electricity Act 1989 (as amended). This s.36 consent was for construction and operation of an offshore generating station known as Fife Energy Park Offshore Demonstration Wind Turbine in Fife Energy Park, Methil (central latitude and longitude co-ordinates: 56°10.422'N 003°01.157'W (WGS84)), for a total installed capacity of 7 MW. This consent was assigned from SE to Samsung Heavy Industries UK ("Samsung") in June 2013.
- 3.1.2 On 3<sup>rd</sup> October 2014, Samsung submitted a variation application for its s.36 consent. In November 2014, Samsung assigned the s.36 consent to the Company. The Company renamed the project from Fife Energy Park Offshore Demonstration Wind Turbine to Levenmouth Demonstration Turbine ("the Development").
- 3.1.3 The Company received the variation to the s.36 consent for the Development, which Samsung had originally applied for, on 23<sup>rd</sup> March 2016. As it had been reported that under certain wind directions and speeds, noise due to the operation of the turbine was greater than the limits detailed in the original s.36 consent, this variation was to ensure that the noise limits of the Development relate not only to the noise of the turbine, but also directly to the background noise levels in the area, at the time of any noise compliance monitoring, rather than the tabulated limits as detailed within Annex 3, Condition 13 of the original s.36 consent.
- 3.1.4 On 8<sup>th</sup> February 2018, Arcus, on behalf of the Company, submitted a variation application to the Scottish Ministers under section 36C(1) of the Electricity Act 1989 (Variation of Section 36 Consents) in accordance with the Electricity Generating Stations (Applications for Variation of Consent (Scotland) Regulations 2013 (as amended) ("the Variation Regulations"), seeking to extend its s.36 consent from five to fifteen years, together with a request to consider a marine licence application under Part 4, Marine (Scotland) Act 2010 for continued operation and deposit of the Development. A variation screening request had been submitted by the Company in January 2017 and MS-LOT issued its screening opinion in March 2017. The Company then submitted a variation scoping report in April 2017 with MS-LOT issuing the subsequent scoping opinion in July 2017.

#### 3.2 Application – Supporting information

- 3.2.1 The following documents were submitted by the Company to support its application to vary the s.36 consent granted for the Development. These documents were issued for consultation on 20<sup>th</sup> February 2018.
- An Environmental Impact Assessment Report ("EIA Update Report") (including Habitats Regulations Appraisal ("HRA"))

- A Viewpoint pack
- A Pre-Application Consultation ("PAC") Report
- The 2012 ES and 2013 Addendum
- A Planning Statement
- Figures and Appendices
- Non-Technical Summary ("NTS")
- A Marine Licence Application
  - 3.2.2 Full details of the consultation undertaken as part of the process are set out below.

#### 3.3 Environmental Impact Assessment ("EIA")

- 3.3.1 The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) ("EIA Regulations") require an EIA to be carried out for applications for EIA development. A screening opinion was issued in January 2017 which identified the proposed Development as an EIA development and hence one which would require an EIA Report. The EIA Update Report describes the assessments undertaken, including cumulative effects, environmental impacts, proposed mitigation and residual effects associated with the Development.
- 3.3.2 In respect of variation applications, the EIA Regulations provide that a variation application relates to EIA development if the proposed variation is likely to have significant effects on the environment. The Company, in order to update the original ES, detailed the main aspects in which the environmental effects of the proposed development would differ as a result of the variation, in accordance with the EIA Regulations.
- 3.3.3 The key changes and likely significant effects of the Development on a range of receptors, as identified by the Company following the screening and scoping processes, and relevant to the variation application, were on the following receptors:
  - · Seascape, landscape and visual impact assessment
  - Noise
  - Ornithology
  - Socio-economics
  - Carbon balance and climate change
- 3.3.4 As the proposed changes were related to a time extension only, only changes to the above receptors were considered. Receptors such as ecology; water resources and coastal hydrology; cultural heritage; tourism, land use and commercial fisheries; navigation; telecommunications; shadow flicker; access and traffic; human health; and health and safety have not changed and therefore the previous assessment process remains valid.

3.3.5 MS-LOT is content that the Company has suitably addressed, within the variation documentation, how effects differ from the original ES, and which are required to be assessed under the EIA Regulations.

# 3.4 Habitat Regulations Appraisal ("HRA") and Appropriate Assessment ("AA")

3.4.1 The proposed changes extend the operational life of the turbine from five to fifteen years. As part of the application, the Company also submitted further information to update the HRA. This assessment is required to be undertaken under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive") under the HRA process. An AA was undertaken in regard to the Development which updated the original AA. The AA concluded that the proposed variation would not adversely affect the integrity of any European offshore marine site or European protected site (Annex D – Appropriate Assessment).

#### 3.5 **Publication of Application and Consultation**

- 3.5.1 In accordance with the Variation Regulations, the Company placed public notices in the East Fife Mail for two weeks and for one week each in the Scotsman, Edinburgh Gazette, Lloyd's List and the Fishing News. These public notices were combined with the public notice requirements required under the EIA Regulations.
- 3.5.2 MS-LOT also instructed the Company to make the variation application available at the same locations where the original application, addendum and original variation had been available previously.
- 3.5.3 The same onshore planning authorities were to be served with a copy of the variation as those who were served a copy of the original application. These were East Lothian Council, Edinburgh City Council and Fife Council.
- 3.5.4 The original s.36 consent decision letter was placed on the Marine Scotland website alongside the new supporting information in relation to the variation. Marine Scotland Licensing Operations Team ("MS-LOT") consulted a wide range of relevant organisations on the application and EIA Update Report including East Lothian Council, Edinburgh City Council, Fife Council, Scottish Natural Heritage ("SNH"), Scottish Environment Protection Agency ("SEPA"), the Maritime and Coastguard Agency ("MCA"), Historic Environment Scotland ("HES"), and the Northern Lighthouse Board ("NLB").
- 3.5.5 Officials confirm that the requirements of the Variation Regulations in terms of consultation and public notices have been met.

#### 3.6 Summary of consultation exercise

- 3.6.1 Full details of the consultation undertaken as part of the process is set out below. Five consultees had no comments, and nineteen did not respond to the consultation invitation.
- 3.6.2 Statutory consultees and local authorities, other than East Lothian Council, did not raise objections, however, some comments have been submitted. In section 3.7 and 3.8, a summary of comments from statutory consultees and local authorities is presented and details on how the Company has addressed these comments.
- 3.6.3 Comments raised by other consultees are summarised in section 3.9 including the actions undertaken by the Company to resolve the issues. In section 3.10, responses by other consultees are depicted.
- 3.6.4 Scottish Ministers received no representations from members of the public in relation to this application.
- 3.6.5 The full consultation responses are available to view on the <u>Fife Energy</u>

  <u>Park Offshore Demonstration Wind Turbine</u> section of the Scottish Government webpage.

#### 3.7 Summary of responses from statutory consultees

- 3.7.1 **Historic Environment Scotland ("HES")** was content and had no comments other than advice should also be sought from Fife Council's archaeology and conservation advisors for matters including unscheduled archaeology and category B and C-listed buildings.
- 3.7.2 Fife Council confirmed in a follow up email of 16<sup>th</sup> May 2018 that its archaeologist and environment, coastal protection, and environmental health colleagues had been consulted on the application and had no comments to make.
- 3.7.3 Maritime and Coastguard Agency ("MCA") considered it unlikely that the variation to extend the operational phase of the Development will have significant effects on navigational safety but did request that a consent condition advising that an Emergency Response Cooperation Plan ("ERCoP") must receive written approval in accordance with the MCA recommendations contained within MGN543 "Offshore Renewable Energy Installations (OREIs) Guidance on UK Navigational Practice, Safety and Emergency Response Issues".
- 3.7.4 The Company replied that the guidance note referenced is not mandatory and is more relevant to schemes not yet constructed and that as the turbine is already operational therefore the aspect of the requested condition relating to prior to commencement is not relevant.
- 3.7.5 The Company also suggested that should MS-LOT include the additional licence condition this should be re-worded to focus only on operational and decommissioning emergencies as an ERCoP was previously submitted and approved for construction of the turbine.

- 3.7.6 **Northern Lighthouse Board ("NLB)** had no objection to the extension of this consent, to expire in 2029 rather than 2019.
- 3.7.7 **Scottish Environment Protection Agency ("SEPA")** advised that it had no comments to make.
- 3.7.8 **Scottish Natural Heritage ("SNH")** considered that the operation of the Development can continue without serious adverse effects on natural heritage interests. SNH advised that its advice has been informed by the nature of the variation, the fact that the turbine is already constructed and operating and the assessments within the EIA Update Report.
- 3.7.9 SNH noted that the ornithology assessment considers the effects of the Development alone and in-combination regarding the qualifying interests of the Forth Islands Special Protection Area ("SPA"), the Firth of Forth SPA and the Outer Firth of Forth and St Andrews Bay Complex proposed SPA ("pSPA"). The EIA Update Report correctly identifies that the key potential impact is displacement of wintering sea ducks during operation of the Development. SNH agreed with the conclusion that the Development will not have an adverse effect on site integrity for these Natura sites both alone and in combination with relevant consented projects.
- 3.7.10 SNH also advised that future monitoring requirements for the proposal should be agreed with Marine Scotland and key stakeholders, taking into account of the proximity of the relevant projects, overlapping designations and receptor pathways to inform consent conditions.
- 3.7.11 Finally, SNH noted the work undertaken and presented in the EIA Update Report on seascape/landscape and visual assessment. As this turbine is already built and operating, SNH agreed with the conclusion reached and has no additional comments to make.

The Company agreed that future monitoring requirements for the proposal should be agreed with Marine Scotland and key stakeholders.

#### 3.8 Summary of responses from local authorities

- 3.8.1 **East Lothian Council** objected based on a lack of information on the potential for cumulative visual impact and advised that if further cumulative information is provided, it would withdraw its objection provided the information does not show that there are cumulative adverse visual effects.
- 3.8.2 In its response to the original application in 2012, East Lothian Council were concerned that the turbine would become a new focal point in views over the Forth towards the Lomonds, though East Lothian Council advised in their current response that the Development does not appear to form a focal point.
- 3.8.3 East Lothian Council also advised that while it agreed that the EIA Update Report has identified the visual impact from Gullane to have minor/moderate effect rather than the previous negligible effect, it disagreed

- with the assessment for other East Lothian viewpoints as being of a negligible level of change as the turbine creates a small/very small level of change which although not significant, is not negligible.
- 3.8.4 East Lothian Council also advised that the baseline since construction of the Development has changed. East Lothian Council advised that although of similar height and rotor diameter, the Forthwind Ltd ("FW") wind turbine generators ("WTG")'s are designed differently to the Development and is likely to create a discord of turbine types within views from East Lothian. East Lothian Council was not consulted on the application for the two Forthwind Ltd turbines and therefore did not provide comments at the consenting stage for that application. East Lothian Council also advised that consent for the FW turbines would overlap with the extension of time applied for by the Development by over seven years.
- 3.8.5 MS-LOT note that Forthwind Ltd ("FW") were granted s.36 consent in 2016 for two wind turbine generators ("WTG")'s in close proximity to the Development, with a further seven having gone through the Scoping process in 2017, though this project is not yet built. There is a potential for cumulative noise impacts between FW and the Development which has been addressed through conditions on both consents.
- 3.8.6 MS-LOT replied to East Lothian Council on 24<sup>th</sup> April 2018 advising that as neither Edinburgh City Council, Fife Council or SNH had raised any issue with cumulative visual impact, and East Lothian Council had not raised these issues during the scoping exercise for the Development, then additional information would not be requested from the Company and that East Lothian Council's objection would be maintained. MS-LOT do not consider that there is sufficient information on the larger seven turbine FW proposal to include it in a meaningful cumulative assessment. If an application is forthcoming then that project will be required to consider the cumulative effects with the Development.
- 3.8.7 Edinburgh City Council did not raise any objection to the application to extend the life of the Development as any environmental effects arising from the Development are already in existence, and the variation would simply extend the duration, rather than introduce any new effects. In assessing the consented development no significant adverse landscape and visual effects were predicted on Edinburgh City's backdrop of the Firth of Forth, from Calton Hill within the World Heritage Site. As the variation makes no change to the built development this view still stands.
- 3.8.8 **Fife Council** had no adverse comment to make on the proposal. One of Fife Council's local members offered general support for the proposal, whilst Fife Council's economic development section commented that both the turbine and the Company has become integral to the Energy Park Fife offering future opportunities at the Park.

#### 3.9 Other Consultees

- 3.9.1 **Ministry of Defence ("MoD")** raised no objections but advised that if the application is altered in any way it must be consulted again as even the slightest change could unacceptably affect it.
- 3.9.2 Forthwind Ltd ("FW") were granted s.36 consent in 2016 for a two WTG development ("FW consent") in close proximity to the Development. Scoping has been completed for an additional seven WTGs for a total of nine WTGs ("FW Array"). There has been the potential for cumulative noise impacts between FW and the Company and this has been addressed by conditions relating to cumulative noise on both the FW consent and the current s.36 consent held by the Company. FW, in their response, advised that it had requested that it's s.36 condition for the FW consent relating to noise be closed out some time ago, as the FW construction timeline no longer overlaps with the current consented operational lifetime of the Development. FW advised that this may have a material impact on the argument put forth by the Development with regards to the cumulative noise impact. FW advised that until it understands the outcome of its proposed s.36 application to Marine Scotland it retains the right to comment on the Development.
- 3.9.3 The Company responded by advising that despite its repeated requests for noise data for the FW Array, FW had been unable to provide this. Previously published EIA data for the Forthwind consent had been considered in the cumulative assessment, but the lack of robust data has prevented analysis of cumulative effects relating to the potential future FW Array. This approach is in line with best practice, which requires the cumulative noise assessment to include consented and in planning development (i.e. developments for which an application has been submitted). Therefore, in line with good practice, the Forthwind Array will be required to consider the Development at such a time as its application is submitted
- 3.9.4 Marine Scotland is satisfied that the original noise condition imposed on the FW consent to deal with the cumulative impact between the Company and FW should now apply to the Development (if the Forthwind array is to be built under its current consent). Condition 13 has been varied to reflect this.
- 3.9.5 Scottish Fishermen's Federation ("SFF") had no comments.
- 3.9.6 **National Air Traffic Service ("NATS")** had no objection to the extension.
- 3.9.7 **RYA Scotland ("RYA")** had no comment to make on this application.
- 3.9.8 Transport Scotland ("TS") advised it had no objection.
- 3.9.9 Whale and Dolphin Conservation ("WDC") had no comments on the variation application.
- 3.10 Summary of other consultees responses

3.10.1 The following consultees did not respond to the consultation and therefore nil returns have been assumed:

Atkins, BT Radio Network Protection, Civil Aviation Authority, Chamber of Shipping, Crown Estate, Fisheries Management Scotland, Joint Radio Company, Marine Safety Forum, Marine Scotland Compliance, Ports & Harbours, RSPB Scotland, Scottish Canoe Association, Scottish Fishermen's Organisation, Scottish Wildlife Trust, Telecommunications Association of UK Water Industry, Fishermens Mutual Association (Pittenweem) Ltd, Salmon Creel Fishermen's Federation, Cockenzie & Port Seton Fisherman's Association, Salmon Net Fishing Association of Scotland

#### 3.11 Consideration of the Application

- 3.11.1 The Scottish Ministers will exercise judgment on two distinct questions in order to determine whether any variation sought is "appropriate":
  - (a) whether the change proposed to the generating stations (or proposed generating stations) concerned is of a kind that it would be reasonable to authorise by means of the variation procedure (regardless of its merits in planning / energy policy terms);
  - (b) if the answer to question (a) is positive, whether (from a planning/energy policy point of view) the variation should in fact be made, thereby authorising whatever development the making of the variation will permit to be carried out.

On the first question, officials consider that you can be satisfied that, in this circumstance, the changes proposed are reasonable to be authorised by means of the variation procedure.

As for the second question, there are to be no changes to any of the physical or built aspects of the Development, the only change being the extension of consent validity. Continued operation of the Development shall contribute towards implementation of legally binding climate change targets and the move towards a low carbon economy and increased focus on energy security. Economic benefits associated with the Development include product testing, training and development of the offshore wind industry, removal of barriers in UK industrialisation of offshore wind, increased local industry and academic collaboration, significantly progressing integrated systems technology for offshore wind, facilitating growth and development of the industry, developing industry process, workforce skills and industry culture in the Fife area; and raising the profile of Fife at an international level.

The variation proposed in the application does not fundamentally alter the character or scale of the Development.

#### 3.12 Conclusion

- 3.12.1 You can be satisfied that the regulatory requirements regarding consultation and public engagement have been met and the responses received taken into consideration.
- 3.12.2 Where matters have not been fully resolved, conditions have been included in the decision notice at Annex C to ensure appropriate action is taken post consent, should the variation be granted.

#### 3.13 Recommendation

3.13.1 Having taken into account the statutory and non-statutory consultation responses, and objection received, and being satisfied that all legislative requirements have been met, MS-LOT recommends that you determine that it is appropriate not to cause a public inquiry or any other hearing to be held, and to agree to vary the wording of Annex 2, Part 1, Condition 1 of the Levenmouth Demonstration Turbine s.36 consent, in terms of section 36C of the Electricity Act 1989 (as amended) and the Variation Regulations. A draft decision letter is attached at Annex C.

#### **Definitions**

In this consent:

"AA" means Appropriate Assessment

"Arcus" means Arcus Consultancy Services Ltd

"the Birds Directive" means Council Directive 2009/147/EC on the conservation of wild birds

"Commencement of the Development" means the date on which the first construction activity occurs in accordance with the Environmental Statement submitted by the Company on 30 July 2012.

"the Company" means Offshore Renewable Energy Catapult, Offshore House, Albert Street, Blyth, Northumberland, NE24 1LZ

"CPT" means Cone Penetration Tests

"the Development" means the Levenmouth Demonstration Turbine (formerly known as Fife Energy Park Offshore Demonstration Wind Turbine)

"dSPA" means draft Special Protection Area

"the Electricity Act" means the Electricity Act 1989 (as amended)

"the EIA Regulations" means The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended)

"EIA" means Environmental Impact Assessment

"EIA Report" means Environmental Impact Assessment Report

"EIA Update Report" means the Application and Environmental Impact Assessment Report submitted in support of the variation application submitted on 8<sup>th</sup> February 2018

"ERCoP" means Emergency Response Cooperation Plan

"FEP" means the Fife Energy Park, Methil, Fife

"Final Commissioning of the turbine" means the date on which the first wind turbine generator constructed forming the Development has supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Development to be complete.

"FW" means Forthwind Ltd

"FW consent" means Forthwind Ltd's s.36 consent of 2016

"FW Array" means Forthwind Ltd's proposed additional seven turbine array, in tandem with the FW consent for a total of nine WTGs.

"Habitats Directive" means Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora as amended.

"2017 Habitats Regulations" means the Conservation of Habitats and Species Regulations 2017

"HRA" means Habitat Regulations Appraisal

"HES" means Historic Environment Scotland ("HES")

"MCA" means the Maritime and Coastguard Agency

"MHWS" means Mean High Water Springs

"MW" means megawatt

"MS-LOT" means Marine Scotland Licensing Operations Team

"NTS" means Non-Technical Summary

"NLB" means the Northern Lighthouse Board

"PAC" means Pre-Application Consultation Report

"Samsung" means Samsung Heavy Industries UK

"SE" means Scottish Enterprise

"SAC" means Special Area of Conservation

"SPA" means Special Protection Area

"SNCB" means statutory nature conservation bodies

"pSPA" means proposed Special Protection Area

"the Regulations" means Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)

"SEPA" means the Scottish Environment Protection Agency.

"SNH" means Scottish Natural Heritage.

"s.36" means section 36 of the Electricity Act 1989 (as amended)

"the Variation Regulations" means the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 (as amended)

"WTG" means wind turbine generator

#### 4 ANNEX C Draft Decision Notice and Proposed Variation

### marinescotland

MS.MarineRenewables@gov.scot



Mr Graeme Campbell
Head of Assets & Projects
Offshore Renewable Energy Catapult
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Blyth
Northumberland
NE24 1LZ

XX August 2018

Dear Mr Campbell,

APPLICATION UNDER SECTION 36C OF THE ELECTRICITY ACT 1989 TO VARY THE CONSENT GRANTED UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 (AS AMENDED) ON 23<sup>rd</sup> MARCH 2016 TO OPERATE THE LEVENMOUTH DEMONSTRATION TURBINE (FORMERLY KNOWN AS THE FIFE ENERGY PARK OFFSHORE DEMONSTRATION WIND TURBINE), FIFE ENERGY PARK

I refer to the variation application made by Arcus Consultancy Services Ltd ("Arcus") on behalf of the Offshore Renewable Energy Catapult ("the Company") (on the 8<sup>th</sup> February 2018) for:

a) variation under Section 36C of the Electricity Act 1989 (as amended) to the consent granted under section 36 ("s.36") of the Electricity Act 1989 (as amended) ("the Electricity Act") on 3<sup>rd</sup> May 2013 and the varied consent granted on 23<sup>rd</sup> March 2016 for construction and operation of the Levenmouth Demonstration Turbine (formerly known as The Fife Energy Park Offshore Demonstration Wind Turbine) ("the Development").

This letter contains the Scottish Ministers' decision to grant the application and to vary the s.36 consent.

#### 1. Nature of the Variation Sought

- 1.1. The variation application seeks to amend Condition 1 of the s.36 consent granted on 23<sup>rd</sup> March 2016 to allow the following variation in the Levenmouth Demonstration Turbine ("the Development"):
  - Vary Annex 2, Part 1, Condition 1 of the Levenmouth Demonstration Turbine s.36 consent to allow an extension of the operational life of the Development from five (5) to fifteen (15) years, i.e. an extension for ten (10) years.

#### 2. Environmental Impacts

- 2.1. The Scottish Ministers are satisfied with the supporting information provided, that include details in support of the Environmental Impact Assessment ("EIA") and an updated Habitats Regulations Appraisal ("HRA") to inform the Appropriate Assessment ("AA"). Since the proposed variation, to change the duration of the consent, may result in changes to the environmental effects of the Development, Scottish Ministers have considered regulation 63 of the Conservation of Habitats and Species Regulations 2017 ("2017 Habitats Regulations"), the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 (as amended) ("the Variation Regulations"), and the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ("the EIA Regulations"). In addition, in accordance with the EIA Regulations, the Environmental Statement ("ES") was updated.
- 2.2. The Scottish Ministers consider that the proposed changes are not likely to have a significant adverse effect on the environment. This decision is based on significant effects resulting from the variation of the consent for the development being addressed through the consultation process submitted to support the variation application. The AA concluded that the proposed variation would not adversely affect the integrity of any European offshore marine sites or European protected sites.

#### 3. Consultation

- 3.1. The Variation Regulations set out that an applicant must publish the application on a website, serve a copy of the variation application on any planning authority and advertise by public notices in specified publications as set out in regulation 4 of the Variation Regulations. These requirements have been met. Public notices were placed in the East Fife Mail for two weeks and for one week each in the Edinburgh Gazette, the Scotsman, Lloyd's List and the Fishing News.
- 3.2. Marine Scotland Licensing Operations Team ("MS-LOT") on behalf of the Scottish Ministers, consulted a wide range of relevant organisations on the application and EIA Update Report ("EIA Update Report") including; Scottish Natural Heritage ("SNH"), Scottish Environment Protection Agency ("SEPA"), the Maritime and Coastguard Agency ("MCA"), Historic Environment Scotland

- ("HES"), and the Northern Lighthouse Board ("NLB"). MS-LOT also consulted East Lothian Council, Edinburgh City Council and Fife Council.
- 3.3. East Lothian Council submitted an objection concerning cumulative visual impact particularly in relation to the visual impact the Development will have in combination with the Forthwind ("FW") consented project ("FW consent") (s.36 consent was granted in 2016 for two wind turbine generators ("WTG")'s) and the proposed extension FW Array ("FW Array") (an additional seven WTGs) and the perceived lack of information to assess this. In its response, East Lothian Council requested that further cumulative information should be provided to address this. Scottish Ministers are treating this objection as maintained, however neither Fife Council, Edinburgh City Council or SNH raised this as an issue. Furthermore the Forthwind consent and onshore Methil dock turbine have been included in photomontages (figure 5.6a of the variation application documents). The Company assessed the cumulative effects as being not significant. Scottish Ministers do not consider that there is sufficient information on the Forthwind Array proposal (which has completed scoping) to include it in a meaningful cumulative assessment. If an application is forthcoming then that project will be required to consider the cumulative effects with the Development.

#### 4. Consultation responses

### 4.1 Summary of responses from statutory consultees

- 4.1.1 Historic Environment Scotland ("HES") was content and had no other comments other than to recommend that advice should also be sought from Fife Council's archaeology and conservation advisors for matters including unscheduled archaeology and category B and C-listed buildings. Fife Council confirmed in a follow up email of 16 May 2018 that its archaeologist and environment, coastal protection, and environmental health colleagues had been consulted on the application and had no comments to make.
- 4.1.2 Maritime and Coastguard Agency ("MCA") Maritime and Coastguard Agency ("MCA") considered it unlikely that the variation to extend the operational phase of the Development would have significant effects on navigational safety but did request that a consent condition advising that an Emergency Response Cooperation Plan ("ERCoP") must receive written approval in accordance with the MCA recommendations contained within MGN543 "Offshore Renewable Energy Installations (OREIs) Guidance on UK Navigational Practice, Safety and Emergency Response Issues".
- 4.1.3 The Company replied that the guidance note referenced is not mandatory and is more relevant to schemes not yet constructed and that as the turbine is already operational therefore the aspect of the requested condition relating to prior to commencement is not relevant.

The Company also suggested that should MS-LOT include the additional licence condition this should be re-worded to focus only on operational and

decommissioning emergencies as an ERCoP was previously submitted and approved for construction of the turbine.

- 4.1.4 **Northern Lighthouse Board ("NLB)** had no objection to the extension of this consent, to expire in 2029 rather than 2019.
- 4.1.5 **Scottish Environment Protection Agency ("SEPA")** advised that it had no comments to make.
- 4.1.6 Scottish Natural Heritage ("SNH") considered that the operation of the Development can continue without serious adverse effects on natural heritage interests. SNH advised that its advice has been informed by the nature of the variation (an extension in operational lifespan from fife to fifteen years) the fact that the turbine is already constructed and operating and the assessments within the EIA Update Report.
- 4.1.7 SNH noted that the ornithology assessment considers the effects of the Development alone and in-combination on the qualifying interests of the Forth Islands Special Protection Area ("SPA"), the Firth of Forth SPA and the Outer Firth of Forth and St Andrews Bay Complex proposed SPA ("pSPA"). The EIA Update Report correctly identifies that the key potential impact is displacement of wintering sea ducks during operation of the Development. SNH agreed with the conclusion that the project will not have an adverse effect on site integrity for these Natura sites both alone and incombination with relevant consented projects.
- 4.1.8 SNH also advised that future monitoring requirements for the proposal should be agreed with Marine Scotland and key stakeholders, taking into account of the proximity of the relevant projects, overlapping designations and receptor pathways to inform consent conditions.
- 4.1.9 Finally, SNH noted the work undertaken and presented in the EIA Update Report on seascape/landscape and visual assessment. As this turbine is already built and operating, SNH agreed with the conclusion reached and have no additional comments to make.
- 4.1.10 The Company agreed that future monitoring requirements for the proposal should be agreed with Marine Scotland and key stakeholders.

#### 4.2 Summary of responses from local authorities

- 4.2.1 East Lothian Council objected based on a lack of information on the potential for cumulative visual impact and advised that if further cumulative information is provided, it would withdraw its objection provided the information does not show that there are cumulative adverse visual effects.
- 4.2.2 In its response to the original application in 2012, East Lothian Council were concerned that the turbine would become a new focal point in views over the Forth towards the Lomonds, though East Lothian Council advised

- in their current response that the Development does not appear to form a focal point.
- 4.2.3 East Lothian Council also advised that while it agreed that the EIA Update Report has identified the visual impact from Gullane to have minor/moderate effect rather than the previous negligible effect, it disagreed with the assessment for other East Lothian viewpoints as being of a negligible level of change as the turbine creates a small/very small level of change which although not significant, is not negligible.
- 4.2.4 East Lothian Council also advised that the baseline since construction of the Development has changed. East Lothian Council advised that although of similar height and rotor diameter, the Forthwind Ltd ("FW") wind turbine generators ("WTG")'s are designed differently to the Development and is likely to create a discord of turbine types within views from East Lothian. East Lothian Council was not consulted on the application for the two Forthwind Ltd turbines and therefore did not provide comments at the consenting stage for that application. East Lothian Council also advised that consent for the FW turbines would overlap with the extension of time applied for by the Development by over seven years.
- 4.2.5 MS-LOT note that Forthwind Ltd ("FW") were granted s.36 consent in 2016 for two wind turbine generators ("WTG")'s in close proximity to the Development, with a further seven having gone through the Scoping process in 2017, though this project is not yet built. There is a potential for cumulative noise impacts between FW and the Development which has been addressed through conditions on both consents.
- 4.2.6 MS-LOT replied to East Lothian Council on 24<sup>th</sup> April 2018 advising that as neither Edinburgh City Council, Fife Council or SNH had raised any issue with cumulative visual impact, and East Lothian Council had not raised these issues during the scoping exercise for the Development, then additional information would not be requested from the Company and that East Lothian Council's objection would be maintained. MS-LOT do not consider that there is sufficient information on the larger seven turbine FW proposal to include it in a meaningful cumulative assessment. If an application is forthcoming then that project will be required to consider the cumulative effects with the Development.
- 4.2.7 **Edinburgh City Council** did not raise any objection to the application to extend the life of the Development as any environmental effects arising from the Development are already in existence, and the variation would simply extend the duration, rather than introduce, any new effects. In assessing the consented development no significant adverse landscape and visual effects were predicted on Edinburgh City's backdrop of the Firth of Forth, from Calton Hill within the World Heritage Site. As the variation makes no change to the built development this view still stands
- 4.2.8 **Fife Council** had no adverse comment to make on the proposal. One of Fife Council's Local Members offered general support for the proposal,

whilst Fife Council's Economic Development section commented that both the turbine and OREC have become integral to the Energy Park Fife offering, and also to future opportunities at the Park.

#### 4.3 Other Consultees

- 4.3.1 **Ministry of Defence ("MoD")** raised no objections but advised that if the application is altered in any way they must be consulted again as even the slightest change could unacceptably affect it.
- 4.3.2 Forthwind Ltd ("FW") were granted s.36 consent in 2016 for a two WTG development ("FW consent") in close proximity to the Development. Scoping has been completed for an additional seven WTGs for a total of nine WTGs ("FW Array"). There has been the potential for cumulative noise impacts between FW and the Company and this has been addressed by conditions relating to cumulative noise on both the FW consent and the current s.36 consent held by the Company. FW, in their response, advised that it had requested that it's s.36 condition for the FW consent relating to noise be closed out some time ago, as the FW construction timeline no longer overlaps with the current consented operational lifetime of the Development. FW advised that this may have a material impact on the argument put forth by the Development with regards to the cumulative noise impact. FW advised that until it understands the outcome of its proposed s.36 application to Marine Scotland it retains the right to comment on the Development.
- 4.3.3 The Company responded by advising that despite its repeated requests for noise data for the FW Array, FW had been unable to provide this. Previously published EIA data for the Forthwind consent had been considered in the cumulative assessment, but the lack of robust data has prevented analysis of cumulative effects relating to the potential future FW Array. This approach is in line with best practice, which requires the cumulative noise assessment to include consented and in planning development (i.e. developments for which an application has been submitted). Therefore, in line with good practice, the Forthwind Array will be required to consider the Development at such a time as its application is submitted
- 4.3.4 Marine Scotland is satisfied that the original noise condition imposed on the FW consent to deal with the cumulative impact between the Company and FW should now apply to the Development (if the Forthwind array is to be built under its current consent). Condition 13 has been varied to reflect this.
- 4.3.5 **Scottish Fishermen's Federation ("SFF")** had no comments.
- 4.3.6 **National Air Traffic Service ("NATS")** had no objection to the extension.
- 4.3.7 **RYA Scotland ("RYA")** had no comment to make on this application.

- 4.3.8 Transport Scotland ("TS") advised that it had no objection.
- 4.3.9 **Whale and Dolphin Conservation ("WDC")** had no comments on the variation application.

#### 4.4 Summary of other consultees responses

4.4.1 The following consultees did not respond to the consultation and therefore nil returns have been assumed:

Atkins, BT Radio Network Protection, Civil Aviation Authority, Chamber of Shipping, Crown Estate, Fisheries Management Scotland, Joint Radio Company, Marine Safety Forum, Marine Scotland Compliance, Ports & Harbours, RSPB Scotland, Scottish Canoe Association, Scottish Fishermen's Organisation, Scottish Wildlife Trust, Telecommunications Association of UK Water Industry, Fishermens Mutual Association (Pittenweem) Ltd, Salmon Creel Fishermen's Federation, Cockenzie & Port Seton Fisherman's Association, Salmon Net Fishing Association of Scotland

#### 5. Public Representation

5.1. There were no representations made on the application to vary the s.36 consent from members of the public.

#### 6. Reasoned Conclusion

6.1. The Scottish Ministers consider that they have sufficient information to enable them to reasonably conclude that the changes proposed through the variation will not have significant effects on the environment. The Scottish Ministers are satisfied that the information which has informed this decision is relevant, appropriate and up to date.

# 7. Reasons and Considerations on which the Decision is Based and the Scottish Ministers' Determination

7.1. The Scottish Ministers have considered the application documentation and all responses from consultees. Having granted s.36 consent to the Development on 3<sup>rd</sup> May 2013 and s.36 variation consent on 18<sup>th</sup> March 2016 and set out their reasons for doing so in the decision letters associated with these consents, and being satisfied that the changes proposed in this variation application does not fundamentally alter the character or scale of the Development, the Scottish Ministers are supportive of the proposed variation on the basis that the Development contributes toward binding climate change targets and the move towards a low carbon economy. Economic benefits associated with the Development include product testing, training and development of the offshore wind industry, removal of barriers in UK industrialisation of offshore wind, increased local industry and academic collaboration, significantly progressing integrated systems technology for offshore wind, facilitating growth and development of the industry, developing

industry process, workforce skills and industry culture in the Fife area; and raising the profile of Fife at an international level.

7.2. The Scottish Ministers consider that the amended s.36 consent is both reasonable and enforceable.

Accordingly, the Scottish Ministers hereby vary the relevant s.36 consent as set out in the table below.

Annex or Condition	Amendment
In Annex 2, Part 1, Condition 1 of Levenmouth Demonstration Turbine s.36 Consent	In Annex 2, Part 1, Condition 1, substitute the period from the date the consent is granted until the Final Commissioning of the turbine from five years to fifteen years:  "The consent is for a period from the date the consent is granted until the date occurring 15 years after the Final Commissioning of the turbine. Written confirmation of the date of the Final Commissioning of the turbine must be provided by the Company to the Scottish Ministers, the Planning Authority and Scottish Natural Heritage no later than one calendar month after the Final Commissioning of the Development."
In Annex 2, Part 1, Condition 7	In Annex 2, Part 1, Condition 7, add "and variation application."  "The Development must be constructed and operated in accordance with the terms of the Application, the accompanying Environmental Statement, Addendum letter and variation application except in so far as amended by the terms of the Section 36 consent and any direction made by the Scottish Ministers."  In Annex 2, Part 1, Condition 13, add "If the Forthwind Ltd"
In Annex 2, Part 1, Condition 13	Development is built under authority of it's current consent, the Company must control power production to limit noise production so that the cumulative noise output of the two developments does not breach permitted limits."  "The operational noise of the turbine must not exceed the limits set out in Annex 3 of this consent at the stated times, wind speeds and locations. If the monitoring of the operational noise of the turbine through the Project Environmental Monitoring Plan (PEMP) shows that the noise of the turbine exceeds the noise limits as detailed in

Annex 3, the operation of the turbine must cease immediately until such time as the Company has satisfied the Scottish Ministers, in consultation with Fife Council, that adequate mitigation measures have been put in place. If the Forthwind Ltd Development is built under authority of its current consent, the Company must control power production to limit noise production so that the cumulative noise output of the two developments does not breach permitted limits."

- 7.3. For illustrative purposes a consolidated version of the relevant s.36 consent is attached with the variation shown in tracked changes for ease of reference. The previous variation changes granted in March 2016 are highlighted in purple.
- 7.4. Copies of this letter have been sent to the nearest onshore planning authorities; East Lothian Council, Edinburgh City Council and Fife Council. This letter has also been published on the MS-LOT website.
- 7.5. 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 variation of a s.36 consent.
- 7.6. Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

Yours sincerely

#### Nicola Bain,

Marine Renewables Group Leader
Marine Scotland Licensing Operations Team
A member of the staff of the Scottish Government

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MARINE SCOTLAND LICENSING OPERATIONS TEAM'S ("MS-LOT")
ASSESSMENT OF THE PROJECT'S IMPLICATIONS FOR
DESIGNATED SPECIAL PROTECTION AREAS AND PROPOSED
SPECIAL PROTECTION AREAS IN VIEW OF THE SITES'
CONSERVATION OBJECTIVES.

APPLICATION FOR A MARINE LICENCE UNDER MARINE (SCOTLAND) ACT 2010, PART 4 AND TO VARY AN EXISTING CONSENT UNDER 36C OF THE ELECTRICITY ACT 1989 FOR THE LEVENMOUTH DEMONSTRATION TURBINE

SITE DETAILS: FIFE ENERGY PARK, METHIL, FIFE

Name	Assessor or Approver	Date
[Redacted]	Assessor	24/07/2018
[Redacted]	Approver	17/08/2018

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MARINE SCOTLAND LICENSING OPERATIONS TEAM'S ("MS-LOT")
ASSESSMENT OF THE PROJECT'S IMPLICATIONS FOR DESIGNATED SPECIAL
PROTECTION AREAS AND PROPOSED SPECIAL PROTECTION AREAS IN
VIEW OF THE SITES' CONSERVATION OBJECTIVES.

APPLICATION FOR A MARINE LICENCE UNDER MARINE (SCOTLAND) ACT 2010, PART 4 AND TO VARY AN EXISTING CONSENT UNDER SECTION 36C OF THE ELECTRICITY ACT 1989 FOR THE LEVENMOUTH DEMONSTRATION TURBINE

#### **SECTION 1: BACKGROUND**

#### 1 Appropriate assessment ("AA") conclusion

a. This AA concludes that there will be no adverse effect on the integrity of the Firth of Forth Special Protection Area ("SPA") or the Outer Firth of Forth and St Andrews Bay Complex proposed Special Protection Area ("pSPA") from the Offshore Renewable Energy Catapult ("OREC") proposal, either alone, or in combination with other plans or projects.

#### 2. Introduction

- a. This is a record of the AA of the OREC proposal for a new marine licence for the operation of the existing Levenmouth Demonstration Turbine ("LDT") and the proposal to vary the existing consent granted under section 36 ("s.36") of the Electricity Act 1989 (as amended) to construct and operate the LDT (previously known as the Fife Energy Park Demonstration Wind Turbine) at Fife Energy Park, Methil.
- b. The assessment has been undertaken by MS-LOT. This assessment is required under Regulation 48 of the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) ("the Regulations"). This AA is in accordance with Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive") and Council Directive 2009/147/EC on the conservation of wild birds ("the Birds Directive"). MS-LOT, as the 'competent authority' under the Regulations, has to be satisfied that the project will not adversely affect the integrity of any European site (special areas of conservation ("SAC") and SPA) before it can grant consent for the project.
- c. A detailed AA has been undertaken and Scottish Natural Heritage ("SNH") has been consulted.

#### 3. Background to including assessment of new SPAs

- a. The Scottish Ministers, as a 'competent authority' under the Regulations, must be satisfied that the proposal will not adversely affect the integrity of any European site (SACs and SPAs, known as Natura sites) either alone or in combination with other plans or projects before authorisations can be given for the proposal.
- b. In Scotland, the Scottish Ministers are currently in the process of identifying a suite of new marine SPAs. In 2014, advice was received from the statutory nature conservation bodies ("SNCB") on the sites most suitable for designation and at this stage they became draft SPAs ("dSPA"). Once the Scottish Ministers have agreed the case for a dSPA to be the subject of a public consultation, the proposal is given the status of proposed SPA ("pSPA") and receives policy protection, which effectively puts such sites in the same position as designated sites, from that point forward until a decision on classification of the site is made. This policy protection for pSPA is provided by Scottish Planning Policy (paragraph 210), the UK Marine Policy Statement (paragraph 3.1.3) and Scotland's National Marine Plan (paragraph 4.45).
- c. It is not a legal requirement under the Habitats Directive or relevant domestic regulations for this assessment to assess the implications of the proposal on the pSPA. The assessment includes an assessment of implications upon those sites in accordance with domestic policy. The Scottish Ministers are also required to consider article 4(4) of the Birds Directive in respect of the pSPA. The considerations under article 4(4) of the Birds Directive are separate and distinct to the considerations which must be assessed under this Habitats Directive assessment but they are, nevertheless, set out within this assessment (see paragraphs 9.7 and 9.8).
- d. In accordance with regulation 50 of the Regulations the Scottish Ministers will, as soon as reasonably practicable following the formal designation of the pSPA, review their decisions if the proposal is authorised. This will include a supplementary AA being undertaken concerning the implications of the proposal on the sites as designated (as they are currently pSPA their conservation objectives are currently in draft form, their conservation objectives are finalised at the point the sites are designated).

#### 4. Details of proposed operation

- a. The LDT consists of a single 7 megawatt ("MW") demonstration turbine and associated infrastructure and is located off the East Fife coast at the Fife Energy Park, Methil. The original application for the construction and operation of the LDT was submitted to the Scottish Ministers in July 2012 and was supported by an Environmental Statement ("2012 ES") together with a subsequent addendum. An AA in respect of the application was completed in January 2013 ("2013 AA"). The s.36 consent for the construction, operation and, if required, removal and replacement of the turbine, was subsequently granted by the Scottish Ministers on 3 May 2013. The s.36 consent was varied on 18 March 2016, in relation to noise limits on the operational WTG, but the conclusions of the 2013 AA remained unaltered.
- b. On <u>8 February 2018</u>, OREC submitted an application to vary the existing s.36 consent, to extend the operational life of the LDT by 10 years, and for a new marine licence in relation to the continued operation of the LDT for the same time period. The s.36 variation and new marine licence would increase the operational phase of the LDT from 5 years, to 15 years. <u>An Environmental Impact Assessment ("EIA") update report</u> ("the EIA Update Report") was submitted in support of the application, however, there are no proposed changes to the built or physical aspects associated with the LDT arising from this variation request.
- c. The LDT has already been installed and commissioned and, therefore, the potential effects arising from construction are not considered within this AA. This AA is limited to the assessment of impacts arising from the increased operational phase of the LDT.

#### 5. Consultation

a. SNH were consulted on 20 February 2018 and provided its response on 27 March 2018, advising that an AA was required.

#### 6. Main points raised during consultation

- a. The EIA Update Report identified that the key potential impact from the proposal was the displacement of the wintering sea ducks and therefore there would be a likely significant effect ("LSE") on the qualifying interests of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA.
- b. The EIA Update Report screened out the potential barrier effects of the LDT, as the proposal relates to a single turbine isolated from other proposed or

existing turbines in the wider area. The EIA Update Report concluded that, as birds are extremely unlikely to need to take active deviation from flight routes, there would not be any material energetic consequences affecting their productivity or survival.

- c. In addition, the EIA Update Report identified that the results of the monitoring studies from the first three years of operation of the LDT indicated that the conclusions of the 2012 ES were correct, in that the potential effects of collision risk to any of the qualifying interests would be negligible, irrespective of the length of the operational phase of the LDT. On this basis the potential effects of collision risk were screened out.
- d. SNH advised that it agreed with the conclusions of the EIA Update Report.

#### **SECTION 2: INFORMATION ON NATURA SITES**

- 7. Background information and qualifying interests for the relevant Natura sites
- a. This section provides links to the SNH Interactive ("SNHi") website where the background information on the site being considered in this assessment is available. The qualifying interests for the site are listed as are the conservation objectives.

#### Table 1 Name of Natura site affected and current status

#### SPA:

Firth of Forth SPA

http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa code=8499

#### pSPA:

Outer Firth of Forth and St Andrews Bay Complex pSPA <a href="http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa">http://gateway.snh.gov.uk/sitelink/siteinfo.jsp?pa</a> code=10478

#### **Table 2 European qualifying interests**

#### Firth of Forth SPA

- Bar-tailed godwit (Limosa lapponica), non-breeding;
- Common scoter\* (Melanitta nigra), non-breeding;
- Cormorant \* (Phalacrocorax carbo), non-breeding;

- Curlew \* (Numenius arquata), non-breeding;
- Dunlin \* (Calidris alpina alpine), non-breeding;
- Eider\* (Somateria mollissima), non-breeding;
- Golden plover (Pluvialis apricaria), non-breeding;
- Goldeneye \* (Bucephala clangula), non-breeding;
- Great crested grebe\* (Podiceps cristatus), non-breeding;
- Grey plover\* (Pluvialis squatarola), non-breeding;
- Knot (Calidris canutus), non-breeding;
- Lapwing\*(Vanellus vanellus), non-breeding;
- Long-tailed duck\* (Clangula hyemalis), non-breeding;
- Mallard \* (Anas platyrhnchos), non-breeding;
- Oystercatcher\* (Haematopus ostralegus), non-breeding;
- Pink-footed goose (Anser brachyrhynchus), non-breeding;
- Red-breasted merganser\* (Mergus serrator), non-breeding;
- Redshank (Tringa totanus), non-breeding;
- Red-throated diver (Gavia stellata), non-breeding;
- Ringed plover\* (Charadrius hiaticula), non-breeding;
- Sandwich tern (Sterna sandvicensis), passage
- Scaup\* (Aythya marila), non-breeding;
- Shelduck (Tadorna tadorna), non-breeding;
- Slavonian grebe (Podiceps auritus), non-breeding;
- Turnstone (Arenaria interpres), non-breeding;
- Velvet scoter\* (Melanitta fusca), non-breeding;
- Wigeon\* (Anas penelope), non-breeding; and
- Waterfowl assemblage, non-breeding.

#### Outer Firth of Forth and St Andrews Bay Complex pSPA

- Red-throated diver (Gavia stellata), non-breeding;
- Little gull (Hydrocoloeus minutus), non-breeding;
- Common tern (Sterna hirundo), breeding;
- Gannet (Morus bassanus), breeding;
- Arctic tern (Sterna paradisaea), breeding;
- Guillemot (*Uria aalge*), breeding and non-breeding;
- Slavonian grebe (Podiceps auritus), non-breeding;
- Eider (Somateria mollissima), non-breeding;
- Long-tailed duck (Clangula hyemalis), non-breeding;
- Common scoter (Melanitta nigra), non-breeding;
- Velvet scoter (Melanitta fusca), non-breeding;
- Goldeneye (Bucephala clangula), non-breeding;
- Red-breasted merganser (Mergus serrator), non-breeding;
- Manx shearwater (Puffinus puffinus), breeding;
- Razorbill (Alca torda), non-breeding;
- Puffin (Fratercula arctica), breeding
- Black-headed gull (Chroicocephalus ridibundus), non-breeding;
- Common gull (Larus canus), non-breeding;
- Herring gull (Larus argentatus), breeding and non-breeding;

<sup>\*</sup>indicated assemblage qualifier only

- Kittiwake (Rissa tridactyla), breeding and non-breeding;
- Shag (Phalacrocorax aristotelis), breeding and non-breeding;
- · Seabird assemblage, breeding; and
- Waterfowl assemblage, non-breeding.

#### **Table 3 Conservation objectives**

#### Firth of Forth SPA

To avoid deterioration of the habitats of the qualifying species (listed above) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- 1. Population of the species as a viable component of the site;
- 2. Distribution of the species within site;
- 3. Distribution and extent of habitats supporting the species;
- 4. Structure, function and supporting processes of habitats supporting the species; and
- 5. No significant disturbance of the species.

#### Outer Firth of Forth and St Andrews Bay Complex pSPA (Draft Conservation Objectives)

The following conservation objectives are still in draft form and have not yet been agreed.

To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, subject to natural change, thus ensuring that the integrity of the site is maintained in the long-term and it continues to make an appropriate contribution to achieving the aims of the Birds Directive for each of the qualifying species.

This contribution will be achieved through delivering the following objectives for each of the site's qualifying features:

- a. Avoid significant mortality, injury and disturbance of the qualifying features, so that the distribution of the species and ability to use the site are maintained in the long-term;
- b. To maintain the habitats and food resources of the qualifying features in favourable condition.

# SECTION 3: ASSESSMENT IN RELATION TO REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &C.) REGULATIONS 1994

#### 8. Requirement for appropriate assessment

a. Is the operation directly connected with or necessary to conservation management of the site?

The operation is not directly connected with or necessary to conservation management of the site.

b. Is the operation likely to have a significant effect on the qualifying interest?

In its response dated 23 March 2018, SNH advised that the proposal would have a LSE on the wintering sea duck qualifying interests of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA, as identified in the EIA Update Report.

The EIA Update Report identified LSE on the following qualifying interests of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA as a result of displacement:

- Eider (non-breeding)
- Red-breasted merganser (non-breeding)
- Red-throated diver (non-breeding)

MS-LOT agrees with the advice provided by SNH and have undertaken an AA for these qualifying interests of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA.

- 9. Appropriate assessment of the implications for the site in view of the site's conservation objectives
- a. The EIA Update Report considered the displacement effects of the proposal on the qualifying interests (detailed below) of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA. These considerations included the monitoring studies undertaken during the baseline period, pre-commissioning phase and first three years of operation of the existing LDT.

Eider (non-breeding)

b. The outputs of the monitoring studies demonstrated a slight reduction in the number of eider occupying the area, but not a total displacement within 500 metres of the LDT. The EIA Update Report concluded that the population level impacts resulting from displacement of this species would, therefore, not result in an adverse effect on site integrity for the Firth of Forth SPA or Outer Firth of Forth and St Andrews Bay Complex pSPA.

Red-breasted merganser (non-breeding)

c. The outputs of the monitoring studies demonstrated that the LDT has not resulted in total displacement of this qualifying interest within 500 metres of the LDT. The outputs have however demonstrated that there may be a reduction of up to 75% in the number of red-breasted merganser occupying the area and/or the frequency of use of the area. The EIA Update Report however concluded that the population level impacts arising from the displacement of this species would not result in adverse effects on site integrity for the Firth of Forth SPA or Outer Firth of Forth and St Andrews Bay Complex pSPA.

## Red-throated diver (non-breeding)

- d. The outputs of the monitoring studies demonstrated a reduction in the number of red-throated diver occupying the area in excess of 50% when compared to the baseline figures, but not total displacement within 500 metres of the LDT. The EIA Update Report therefore concluded that the population level impacts arising from the displacement of these species would not result in adverse effects on site integrity for the Firth of Forth SPA or Outer Firth of Forth and St Andrews Bay Complex pSPA.
- e. SNH concluded that the proposal will not adversely affect the site integrity of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA for the following reasons;
  - The nature of the variation (the request for an extension to the operational lifespan from five years to fifteen years);
  - Construction works for the turbine are completed and the turbine is already operational; and
  - The assessments contained within the EIA Update Report.
- f. MS-LOT concurs with the conclusions of SNH, that there will no adverse effect on the site integrity of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA from the OREC proposal in isolation.
- g. As detailed in paragraph 3.3, as the Outer Firth of Forth and St Andrews Bay Complex pSPA has not yet been designated, it also falls within the regime governed by the first sentence of Article 4(4) of the Birds Directive as follows;
  - "In respect of the protection areas referred to in paragraphs 1 and 2, Member States shall take appropriate steps to avoid pollution or deterioration of

habitats or any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article. Outside these protection areas, Member States shall also strive to avoid pollution or deterioration of habitats."

h. MS-LOT has considered the information contained within the OREC proposal and the advice provided by SNH and concludes that the works will not cause pollution or deterioration of habitats and any disturbance will be negligible.

#### 10. In-combination assessment

- a. The EIA Update Report concluded that the effects of the LDT both alone, and in-combination with other projects within the region, would not have an adverse effect on the site integrity of the Firth of Forth SPA or Outer Firth of Forth and St Andrews Bay Complex pSPA.
- b. In its advice, dated 23 March 2018, SNH also advised that there would not be an adverse effect on the site integrity of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA in-combination with relevant consented projects.
- c. MS-LOT has carried out an in-combination assessment to ascertain whether the OREC proposal will have a cumulative effect with other plans or projects which in combination would have the potential to affect the qualifying interests of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA.
- d. MS-LOT is aware of the following activities which currently have a marine licence and/or s.36 consent and LSE was identified on the qualifying interests of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA. The in-combination effects of these plans and proposals on the protected sites are considered below.
- e. Forthwind Offshore Development Methil
- i. The current licence and s.36 consent in respect of this project, is for the construction and operation of the Forthwind Offshore Wind Demonstration Project ("Forthwind"), approximately 1.5 km from the coast of Methil, Fife. The Forthwind development consists of 2, two-bladed lattice structure WTGs, associated infrastructure, 2 electricity offshore export cables with an overall project footprint of 37,400 m2. The WTG parameters are as follows;

- 1. Maximum hub height 121 metres (measured from LAT)
- 2. Generating capacity of up to 9 MW per turbine
- 3. Maximum rotor diameter of 155 m.
- 4. 3 pin piled foundations per turbine
- ii. Construction has not yet commenced but is anticipated to take place over a 3 to 6 month period, followed by testing and commissioning before becoming operational.
- iii. A full project description can be found <u>here</u>. At present, the timescales for commencement of construction activities are unclear and the current marine licence expires on 12 September 2037.
- iv. Consideration of the relevant qualifying interests in the Forthwind <u>AA</u> is detailed below.

## Red-breasted merganser (wintering)

- v. The Forthwind AA considered the monitoring survey results from the first three years of the operation of the OREC LDT, which concluded that the species are present in low numbers in the near-shore area post-construction. This was considered further in the context of the small scale of the Forthwind development footprint relative to the large extent of alternative foraging habitat. On this basis the Forthwind AA concluded that there would be no adverse effect on the site integrity of the Firth of Forth SPA.
- vi. The Forthwind AA also concluded that there would no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA, as any displacement due to the physical presence of both developments would be over a limited area and would not impact the population viability of the species.

### Red-throated diver (wintering)

vii. The construction works of the Forthwind development are of short duration (8 weeks) and planned out with the main wintering period for this species, therefore it was considered the proposal would only affect relatively small numbers of this species. In addition, given the small scale of the Forthwind development footprint, relative to the large extent of alternative foraging habitat. The Forthwind AA concluded that there would be no adverse effect on the site integrity of the Firth of Forth SPA with respect to this qualifying interest.

viii. The Forthwind AA also concluded that there would no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA in respect of this qualifying interest, due to the results of the displacement matrix, which demonstrated that there would be no impact on the population viability of this species.

### Common eider (wintering)

- ix. The Forthwind AA considered the monitoring survey results from the first three years of the operation of the OREC LDT, which demonstrated that densities of this qualifying interest have remained high. The AA for the Forthwind proposal concluded on this basis that there would be no adverse effect on the site integrity of the Firth of Forth SPA with respect of this qualifying interest
- x. The AA for the Forthwind proposal also concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA in respect of this qualifying interest, as there would be no impact on the population viability of this species.

# Forthwind and OREC Proposal – In combination assessment conclusion

- xi. Based on the outputs of the LDT post-construction monitoring, MS-LOT concludes that, notwithstanding the proposed increase to the operational phase of the LDT, there will no adverse effect on site integrity on the Outer Firth of Forth and St Andrews Bay Complex pSPA or the Firth of Forth SPA in combination with the OREC proposal.
  - f. Dundee City Council Rock Armour Revetment Replacement at the Esplanade, Broughty Ferry
  - 1.1.1 The works comprise placement of two stretches of rock armour (200m and 352m long) along the esplanade, Broughty Ferry, Dundee. The construction consists of rock armour grading from 5kg to 1.5 tonnes. The licence remains valid until October 2018.
  - 1.1.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA. Given the localised nature of the Dundee City Council works, MS-LOT concludes that there will be no cumulative impact with the OREC proposal on the Outer Firth of Forth and St Andrews Bay Complex pSPA.
  - g. Kincardine Bridge Maintenance Works

- 1.1.3 The current licence is for activities including viaduct waterproofing, concrete repairs and maritime navigation lighting. The AA completed identified that noise and vibration arising from the works could cause disturbance/displacement to the qualifying interests of the Firth of Forth SPA. The licence is valid for 4 years, until April 2019, however, works may only be undertaken during March and April each year, at the end of each wintering season, when birds are present in relatively small numbers, to ensure no adverse effect on the site integrity of the Firth of Forth SPA.
- 1.1.4 Given the limited overlap with the wintering season for the Kincardine Bridge Maintenance Works, MS-LOT concludes that there will be no cumulative impact on the relevant qualifying species with the OREC proposal on the Firth of Forth SPA.
- 1.2 Aberdeen Harbour Expansion Project (Construction, Capital Dredging and Sea Disposal)
- 1.2.1 Aberdeen Harbour Board proposes to develop a new harbour facility at Nigg Bay, Aberdeen, approximately 0.8km south of the existing harbour in Aberdeen City centre. The works include the construction of two breakwaters, quaysides and associated infrastructure, as well as a large-scale capital dredge and sea disposal operation. Works commenced in late 2016 and are scheduled to take place over a 3-year period. Dredging operations are expected to last until September 2019 when the dredging licence expires. Blasting operations are expected to commence in August 2018 for a maximum of 7 consecutive months. Aberdeen Harbour Board are no longer undertaking any impact piling and will be using rotary piling, which is thought to produce less noise.
- 1.2.2 Full details of the project can be found in the documentation <u>here</u>.
- 1.2.3 The AA for this project concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA or the Firth of Forth SPA provided that the conditions set out in the AA are complied with. MS-LOT concludes that provided Aberdeen Harbour Board comply with the conditions of their AA there will be no adverse effect on site integrity on the Firth of Forth SPA or Outer Firth of Forth and St Andrews Bay Complex pSPA in combination with the OREC proposal.
- 1.3 Historic Environment Scotland ("HES") Pier Repair Works at Inchcolm Island

- 1.3.1 Inchcolm Island is a small island in the Firth of Forth. The pier provides a berthing location for the ferry which is the only means of access to the island. New concrete will be overlaid on the existing lower pier and cracking on the high pier will be locally stitched and repointed. The horizontal quay slab will also be replaced to provide a safe surface for passengers to disembark. All quay furniture will be removed and replaced or renewed on a like for like basis. The licence is valid for a period of six months, until the end of March 2019, however, it is anticipated that works will take place within a maximum 8 week window within this timeframe.
- 1.3.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA due to the short duration of the works, location of the works at an existing pier, the availability of extensive areas of supporting habitats and the ability of marine birds to move away from the repair works.
- 1.3.3 Given the short duration of the HES works, MS-LOT concludes that there will be no cumulative impact with the OREC proposal on the Outer Firth of Forth and St Andrews Bay Complex pSPA.
- 1.4 Forth Road Bridge Maintenance Works
- 1.4.1 Bridge maintenance works, incorporating various schemes as outlined in the supporting information submitted to MS-LOT as part of the marine licence application. The programme of works is scheduled for an initial period of 5 years, with the option for 5 additional 1 year extensions and is currently anticipated to conclude by October 2020.
- 1.4.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Firth of Forth SPA due to the extensive alternative areas of habitat available for wintering birds. SNH advised that population, displacement and disturbance effects would be minor, temporary and very limited in area. Given the predicted LSE for both sites and the availability of large areas of habitat for the relevant qualifying interests, MS-LOT concludes there will be no cumulative impact with the OREC proposal on the Firth of Forth SPA.
- 1.5 Inch Cape Offshore Limited Sediment Sampling
- 1.5.1 Sediment sampling works within the Inch Cape Offshore Wind Farm Development Area and Offshore Export Cable Corridor within the Firth of Forth as follows:

- Up to 110 boreholes (composite, sampling only and Piezo Cone Penetration Tests) undertaken within the Development Area;
- Up to 110 co-located vibrocores and Cone Penetration Tests ("CPT") undertaken within the Development Area; and
- Up to 100 co-located vibrocores and CPT, undertaken within along the nominal centreline of the Offshore Export Cable Corridor.
- 1.5.2 The works will be conducted during a 14 month window (between July 2018 and August 2019) and are anticipated to take approximately 200 days, although this could increase to 275 days. Of the works to be undertaken, it is estimated that no more than 20 days of work will be carried out within the Outer Firth of Forth and St Andrews Bay Complex pSPA boundary.
- 1.5.3 The AA concluded that there would be no significant adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA as a result of these works. Given the limited duration of the ICOL works within the pSPA, MS-LOT concludes that there will be adverse effect on the site integrity of the Outer Firth of Forth and St Andrews Bay Complex pSPA in combination with the OREC proposal.

# **Dredging Operations**

- 1.6 <u>Dysart Sailing Club Dysart Harbour</u>
- 1.6.1 Maintenance dredge and sea disposal on the foreshore below Mean High Water Springs ("MHWS") in area to the west of the harbour. Dredging will take place annually over 3-5 days for a period of 3 years and a quantity of 1,200 wet tonnes of material will be removed each year. Dredging and disposal operations will be limited to winter and spring months and limited to the navigable channel between the harbour entrance and inner basin.
- 1.6.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Firth of Forth SPA. MS-LOT concludes that due to the small scale and localised nature of the Dysart Sailing Club proposal there will be no cumulative impact with the OREC proposal on the Firth of Forth SPA.
- 1.7 Forth Ports Limited Rosyth and Leith Docks
- 1.7.1 Maintenance dredge and sea disposal at the Leith and Rosyth docks and approaches. The Leith works comprise of maintenance dredging of the docks and approach channel consisting of 100,000m³ of spoil per year and disposal at Narrow Deep B spoil ground for a period of 3 years. The Rosyth works comprise of maintenance dredging of the docks and approach channel

- consisting of 400,000m<sup>3</sup> of spoil per year and disposal at the Oxcars spoil ground for a period of 3 years.
- 1.7.2 A combined AA was undertaken for these activities due to the close proximity, complete overlap of active licence period and potentially affected Natura sites. The AA concluded that there would be no adverse effect on the site integrity of the Firth of Forth SPA or Outer Firth of Forth and St Andrews Bay Complex pSPA. Due to the distance between the dredging and disposal operations and the OREC proposal, MS-LOT does not consider that there will a cumulative adverse effect in combination with the OREC proposal.

## 1.8 Forth Ports Limited - Newhaven Harbour

- 1.8.1 Maintenance dredge and sea disposal activities at Newhaven Harbour, Firth of Forth. The licence is valid for a period of 3 years, until June 2019 and will consist of up to 27,000 tonnes of dredged material being deposited annually.
- 1.8.2 An AA was conducted for a previous proposal to conduct capital dredging and sea disposal activities. This AA concluded that there would be no adverse effect on the site integrity of the Firth of Forth SPA due to the small scale of the works and the location of the works relative to the SPA (only the outer edge of the western seawall is adjacent to the SPA). SNH subsequently advised in May 2015 that the conclusions of the capital dredging AA could be carried forward to the maintenance dredge works as the maintenance dredging and disposal raised no other significant natural heritage issues. MS-LOT concludes that, due to the small scale nature and the availability of large alternative areas of habitat within the SPA, there will be no adverse effect in combination with the OREC proposal on the Firth of Forth SPA.

### 1.9 Fife Council – Pittenweem Harbour

- 1.9.1 Maintenance dredging of Pittenweem Harbour and sea disposal of the dredge material at the Anstruther disposal site. The licence is active for a period of 1 year, until June 2019, however, it is anticipated that operations will only take place during a 6 week window between June to July 2018. A total of 14,000 wet tonnes will be dredged from three areas and disposed of at the Anstruther disposal site.
- 1.9.2 The AA for this project concluded that there would be no adverse effect on the site integrity of the Outer Firth and St Andrews Bay Complex pSPA. MS-LOT concludes that due to the small scale nature and short dredge window

for the Fife Council proposal, there will not be an adverse effect incombination with the OREC proposal on the Outer Firth and St Andrews Bay pSPA.

## h. MS-LOT Conclusion

1.9.3 MS-LOT concludes that the OREC proposal will not adversely affect the site integrity of the Firth of Forth SPA and Outer Firth of Forth and St Andrews Bay Complex pSPA either in isolation or in combination with the other plans or projects detailed above.

# **SECTION 4: CONDITIONS**

## 11. No conditions required.

No conditions are relied upon in reaching a conclusion of no adverse effect on site integrity.

#### Annex 1

COPY OF THE ORIGINAL DECISION LETTER ISSUED ON 3 May 2013, BUT WITH TRACKED CHANGES SHOWING CONSOLIDATED VERSION OF THE CONSENT – IE. WITH VARIATIONS TO THE CONSENT SHOWING

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Bellshill

The Scottish Government Riaghaltas na h-Alba



Our Ref: 022/OW/SEM - 10

3<sup>rd</sup> May 2013

Dear Mr Garry

CONSENT FOR THE CONSTRUCTION AND OPERATION OF THE FIFE ENERGY PARK OFFSHORE DEMONSTRATION WIND TURBINE ON THE NORTHERN SHORE OF THE FIRTH OF FORTH AT THE FIFE ENERGY PARK, METHIL.

## **The Application**

I refer to the application made by Scottish Enterprise ("the Company"), received 30<sup>th</sup> July 2012 for:

consent under Section 36 of the Electricity Act 1989 ("the Electricity Act") for the construction and operation of a demonstrator wind turbine on the northern shore of the Firth of Forth at Methil in Fife, with a generation capacity of up to 7 MW. The consent is for construction, operation and testing of turbines for a **maximum of 5 years** following commissioning of the original turbine.

At this time, the Company also applied for two Marine Licences under Part 4 of the Marine (Scotland) Act 2010. These applications are being considered and determinations will be issued in due course.

In this letter, "the Development" means the proposed wind turbine demonstrator 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 such 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 representations to be made to the application. Under Schedule 8 the Scottish

Ministers must serve notice of application for consent upon any relevant Planning Authority. Fife Council is the '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.

A portion of the foundations of the proposed Development would be above the Mean Low Water Mark of ordinary spring tides, therefore the statutory control of this part of the project would be under the Town and Country Planning (Scotland) Act 1997. Fife Council, as the relevant Planning Authority, has not objected to the Application. 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 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 to the Electricity Act 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.

## 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 Scottish Natural Heritage (SNH), SEPA, the Planning Authority 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 has also consulted a wide range of relevant organisations including colleagues within the Scottish Government on the Application and on the Environmental 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 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 the consultation response received from SNH. The Appropriate Assessment will be published and available on the Marine Scotland's Licensing Operations Team 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 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 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 offshore wind 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 3.3.19 and 3.3.22 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. In addition to high level policy documents regarding the Scottish Government's policy on renewables (2020 Renewable Route

Map for Scotland - Update (published 30 Oct 2012) and Scotland's Offshore Wind Route Map 2010), the Scotlish 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 Authority, 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, 145, 146, 147 and 148. NPF2 provides strong support for the offshore wind sector in Scotland and specifically identifies the Fife Energy Park at Methil which demonstrates the potential for adapting coastal facilities created to support the oil and gas industry to new uses related to the development of renewable energy.

### The Fife Structure Plan 2006-2026

The Fife Structure Plan is the major policy document concerning land use planning across Fife. One of the Plan's development strategies is growing Fife's economy and its population. South Fife is identified as a strategic concentration of business activity. It is envisaged that Fife will play a key role in developing the knowledge economy links based upon business research, especially in the energy sector. The Plan states that a lead is being established with the pursuit of the Fife Energy Park at Methil with a focus on growth. Scottish Ministers consider that the Development would be in accordance with the Structure Plan and its policies on growing the economy.

### The Mid Fife Local Plan

The strategy of the Mid Fife Local Plan is to complement that of the Structure Plan establishing a detailed, site specific framework of polices and proposals for land use and other related matters.

The Local Plan recognises the Energy Park at Methil as a major development within the region. It suggests that it will provide a strong sector focused employment site capable of attracting high quality renewable manufacturers from across the world. The Plan suggests the development of environmental industries and green power technologies will be a major source of new employment in Mid-Fife over the coming years. As such, Scottish Ministers consider that the proposal complies with the Local Plan.

## Fife Supplementary Planning Guidance Wind Energy

Scottish Ministers have considered the terms of Fife Council's Supplementary Planning Guidance (SPG) on wind energy.

The SPG recognises the importance of demonstrator turbines to the offshore wind industry around the United Kingdom. It suggests that locating demonstrator sites in Fife would help promote the offshore wind industry in the area and allow Fife to develop strong relationships with turbine manufacturers to help attract future investment. Proposals for demonstrator turbines would be assessed in the same way as normal wind turbines; against the criteria in Fife's other Development Plan policies.

Policy R3 of the SPG states that Fife Council will support offshore renewable energy development provided that it does not have a significant adverse effect on local maritime activities, including shipping, fishing, leisure sailing, diving, on the natural environment including marine habitats and birds, on pipelines, on research activities and on the historic marine environment.

Scottish Ministers consider that the Development complies with the SPG.

## **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.

Notifications were sent to Fife Council as the nearest onshore Planning Authority, as well as to the City of Edinburgh Council and East Lothian Council. Notifications were also sent to Scottish Natural Heritage and the Scottish Environment Protection Agency.

The Company notified the Scottish Ministers that due to progressions in engineering design, they were amending the pile size and hence the size of the borehole. This increased the size of the boreholes to up to 3 metres in diameter and up to 37 metres in depth to allow for the installation of a pile of up to 2.7 metres in diameter and 37 metres in depth. There was no change to the installation method or construction timescale as stated within the Company's Environmental Statement. As this increase in size was within the Environmental Statement's design envelope, Scottish Ministers did not request a Supplementary Environmental Statement from the Company;

however they notified all of the Consultees to the changes and instructed the Company to place advertisements in the local press to notify the public.

## **Representations and Objections**

A formal consultation process was undertaken by the Scottish Ministers. The consultation upon the section 36 application and Environmental Statement, along with the Marine Licence applications was conducted in August/September 2012, and a second consultation, which related to a minor amendment to the Application, was conducted in March/April 2013.

The public consultation generated five valid responses in total with three objecting to the Development and two not providing a definitive view. One of the objections was received from Largo Area Community Council.

The main views contained within the representations related to the potential noise and visual impact of the Development. Beyond these, issues such as the suitability of the location of the site and the cost of construction were raised.

### **Material Considerations**

In light of all the representations 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:

- The proposed location of the Development
- Cumulative impacts
- The visual impacts of the Development
- Operational Noise
- Shadow flicker
- Archaeology and Cultural Heritage
- Climate change and carbon balance
- Contribution to local and national economic development
- Impacts on fishing activity
- Impacts on birds
- Impacts on marine mammals
- Impacts on the environment
- Impacts on water and coastal hydrology
- Impacts on recreation and tourism
- Impacts on shipping and navigational safety
- Impacts on aviation
- Impacts on communications

### **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.

Fife Council, as the relevant planning authority did not object to the Application.

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) Inappropriate siting;
- (ii) Size of the turbine;
- (iii) Operational Noise;
- (iv) Visual impact;
- (v) No identified developer for the demonstrator project;
- (vi) No prospect of employment in the area.

# **Inappropriate Siting**

The site at Methil was chosen for this test facility Development for reasons such as its existing infrastructure, marine environment and meteorological conditions. There is also an existing consent granted by the Scottish Ministers for a similar scheme at the site. The test site will provide easy access to the installed turbine to allow it to be monitored for certification, and for improvements to be made in turbine design and reliability. This will, in turn, provide increased certainty in the delivery of the energy generated from these turbines when they are installed in an offshore environment.

Demonstrator turbines sites are vital to the development of the Offshore Wind industry around the United Kingdom. In order for a wind farm developer to secure funding for a site they must be able to prove the reliability and performance of the turbines they may use. Demonstrator sites allow manufacturers to test, optimise and prove the performance of their turbines before large scale production.

Locating the test turbine just offshore from the Fife Energy Park provides a close approximation of the required marine conditions to test the machines whilst allowing the access for testing monitoring and maintenance.

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

### Size of the turbine

The turbine to be installed on the site is a single, three bladed demonstration wind turbine with an installed capacity of up to 7 MW. The turbine tower is up to 110 metres tall, from Mean Sea Level (MSL) including the base jacket. The turbine has a maximum rotor diameter of 172 metres, giving a maximum level from the MSL to turbine tip of up to 196 metres. The size and capacity of this turbine is larger than most onshore turbines. However, the size is typical of an offshore turbine.

The Scottish Ministers consider that they have enough information on the size of the turbine, and its potential impacts to make a decision on this matter and do not consider it appropriate to cause a public inquiry to be held to further investigate this.

## **Operational Noise**

Concerns were raised from four of the five respondents regarding the potential noise from the Development. Fife Council also raised concerns regarding construction and operational noise.

Scottish Ministers have considered the Application and accompanying documents and all relevant responses from Consultees. Scottish Ministers consider they have enough information to make an informed decision on the Application without the need for a public inquiry.

### Visual impact

Adverse visual impact of the Development in its proposed location was raised in the outstanding objections to the Development. The Company have indicated that the turbine will have a significant effect on a number of visual receptors in the area. These effects are considered to be negative, as they will not result in any benefit to the landscape or view.

Scottish Natural Heritage have stated that as the proposal is for a demonstration turbine, and is operational for five years, its landscape and visual impacts will be more temporary than those of a commercial wind farm. Consequently they do not object to the proposal on landscape and visual grounds.

The Scottish Ministers agree with this and consider they have enough information to make an informed decision on the Application without the need for a public inquiry.

### No identified developer for the demonstrator project

The Scottish Government, last year, announced that Samsung Heavy Industries chose Methil as the test site for their 7MW turbine.

The Scottish Ministers consider they have enough information to make an informed decision on the Application without the need for a public inquiry.

## No prospect of employment for the area

It is estimated that the Development may directly create a small number of job opportunities in the areas of project management, legal and accountancy services, in addition to generating opportunities for potentially up to 60 local workers to establish site facilities, office, workshop and grid connection cabling and buildings during the estimated four month development and construction period.

For the supply of different components of the turbines, which is a significant part of the project, there may be opportunity for numerous companies to supply parts and materials that will be utilised within the turbine. Owing to the nature of the project requirements, local and regional businesses are also well positioned to be suppliers for the project which will be advantageous to the process of tendering for contractors. Examples of direct opportunities for local and regional contractors and companies include supplying various building materials (e.g. fencing, concrete, cement, stone, etc.) and mechanical, electrical and supervisory services.

The Scottish Ministers consider that they have enough information 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) an inquiry into the issues raised by the objectors would not be likely to provide any further factual information to assist Ministers in determining the Application; and
- (3) 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, Addendum letter, and the representations received from the consultative bodies, namely SNH and SEPA, and from Fife Council.

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 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 to the Electricity Act 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 under the Electricity Act 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 it is considered that the proposal is likely to have a significant effect on the site, then the competent authority must undertake an Appropriate Assessment (AA) of its implications for the site in view of the site's conservation objectives.

With regards to the Development, SNH advise that the turbine could have a significant effect upon the qualifying interests of two Special Protection Areas (SPAs) and one Special Areas of Conservation (SAC). As the recognised competent authority under European legislation, Scottish Ministers have considered the relevant information and undertaken an AA. The AA 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 any consent. The changes to the Development brought about by the Addendum did not necessitate a revision to the Appropriate Assessment.

### The Scottish Ministers' consideration of the Application

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

# **Location of Development**

The site at Methil was chosen for this test facility Development for reasons such as its existing infrastructure, marine environment and meteorological conditions. The test site will provide easy access to the installed turbine to allow it to be monitored for certification, and for improvements to be made in turbine design and reliability. This will, in turn, provide increased certainty in the delivery of the energy generated from these turbines when they are installed in an offshore environment.

Locating the test turbine just offshore from the Fife Energy Park provides a close approximation of the required marine conditions to test the machines whilst allowing the access for testing monitoring and maintenance.

## Landscape and Visual

Scottish Natural Heritage (Scottish Ministers statutory advisors on visual impacts on designated landscape features) was consulted and did not object to the proposed Development on the grounds of visual impacts. This conclusion was reached due to the fact that the proposal is for a demonstration turbine and only operational for up to five years, therefore its landscape and visual impact will be temporary in comparison to a commercial wind farm. SNH were also satisfied that the Company had extended the Zone of Theoretical Visibility (ZTV) in the Seascape, Landscape and Visual Impact Assessment to included visuals from the Lothian coastline.

Fife Council supports the general principal of the proposal and highlighted to Marine Scotland in their response to the Environmental Statement consultation that they had a number of areas of concern. These related to factors which could have significant negative effect upon residential amenity and to the visual and landscape impact in the local area. Fife Council's Supplementary Planning Guidance on Wind Energy concludes there is some capacity for single turbines of 100+ metres in height to be built in the Fife landscape. This turbine is new technology which is planned to be utilised for the emerging offshore wind farm developments. Testing and proving of innovative technologies such as larger capacity (7MW) turbines will result in fewer turbines being installed in larger wind farm developments.

Edinburgh City Council was consulted and raised no objections and agreed with the Environmental Impact Assessment's findings that no significant adverse landscape and visual effects were predicted on Edinburgh City's backdrop of the Firth of Forth, from Calton Hill within the World Heritage Site.

East Lothian Council was consulted and did not object to the proposal, recognising the need for the facility and the short time period for which consent is sought. The Council recommended that in order to minimise and mitigate the visual impact of the project, expert opinion should be sought to select the most appropriate colouration and lighting of the turbine for the Firth of Forth area. Consequently the opinion of the Civil Aviation Authority, Defence Infrastructure Organisation and Northern Lighthouse Board has been sought for the marking and lighting of the turbine.

## **Ecology and Ornithology**

SNH was consulted and considered that the deployment and operation of the demonstrator turbine and associated infrastructure, including the periodical replacement of the turbine, can be implemented without serious adverse effects on natural heritage. SNH recommended that in any consent, an appropriate, detailed and agreed Project Environmental Monitoring Programme and Construction Method Statement be put in place to minimise any potential impacts.

Otters are not known to inhabit the site of the proposed Development. To be certain a condition of consent will be imposed on the Company to carry out a pre-construction otter survey to confirm no otters use the site.

SNH advised the nearest known seal haul-out site is sufficiently far away from the proposed development for disturbance impacts at the haul-out site to not be of any concern.

Considering the proposed small-scale and limited duration of the Development and the chosen option to drill and grout the pile foundations, SNH advised that there would be no significant disturbance to cetaceans provided mitigation measures were followed. Use of a Marine Mammal Observer (MMO) prior to and during noisy activities will be enforced through the inclusion of appropriate conditions. If adopted, an application for a European Protected Species Licence will not be required.

SNH consider that if appropriate mitigation measures are undertaken then the proposal shall not adversely affect the Favourable Conservation Status of qualifying features of the one SAC and two SPAs relevant to the proposed development. Owing to the view of SNH that the proposal is likely to have a significant effect on the qualifying interests of the Firth of Forth SPA, Forth Islands SPA, and Firth of Tay & Eden Estuary SAC, the Scottish Ministers, as "the competent authority" in terms of the Habitats Directive and Habitats Regulations carried out an Appropriate Assessment. The Scottish Ministers ascertained with sufficient confidence that the proposed Development will not have an adverse impact on the integrity of these SPAs and SAC, therefore it was concluded that impacts on site integrity could be avoided.

RSPB Scotland was consulted and had no comments to make given the low collision risk figures they calculated and the relatively short period of time that the turbine will be operational for (a maximum of 5 years after commissioning). The low collision risk figures calculated for breeding populations of fulmar, shag, cormorant, kittiwake, sandwich tern and common tern equates to negligible change when applied to the Forth Islands SPA populations.

SNH was consulted on Benthic ecology and consider that the proposed site of the Development is unlikely to host any benthic features that are of particular value or aren't widely available in surrounding areas. SNH advised that none of the habitats notified as part of the Firth of Forth SSSI are present at the Development site. This was confirmed by a pre-construction benthic survey carried out for the construction of the Development's associated offshore Met Mast under a separate Marine Licence application.

Marine Scotland Science was consulted and had no comments to make on Benthic Ecology. Marine Scotland Science agreed with the findings of the associated Met Mast pre-construction benthic survey, that there are no species or habitats to be found that have any value in the area of the proposed Development.

# **Cumulative Impact**

### Landscape and Visual

As the turbine is a demonstration turbine, only operational for a maximum of five years, any potential cumulative impact will be temporary in nature. The Development will have limited capacity for additional cumulative effects as the addition of this single turbine Development will not significantly increase the local wind farm influence.

## Ecology and Ornithology

The Scottish Ministers are in agreement with SNH that any potential cumulative, and in combination, effects will not adversely affect the integrity of the one SAC and two SPAs relevant to the proposed development. This is due to the localised, modest and time-limited nature of potential impacts associated with this proposal and current knowledge of other developments likely to occur during the life-time of the Development.

### Water Resources and Coastal Hydrology

The Scottish Environment Protection Agency (SEPA) was consulted and raised no objection to the proposed Development.

Marine Scotland Science had no comments to make on coastal processes associated with the proposed Development.

SNH concluded that any impacts upon Coastal Processes would be highly localised, time-limited and unimportant considering the site is already a highly altered area of coastline.

### Archaeology and Cultural Heritage

Historic Scotland was consulted and raised no objection to the proposed Development.

## Operational Noise

Through a condition imposed by Scottish Ministers in the consent, the Company must monitor the operational noise of the turbine. If the operational noise should exceed the acceptable levels set by Fife Council, the operator of the turbine must cease its operation until such time as adequate mitigation measures have been put in place. Fife Council will use ETSU-R-97 standards on noise levels until such time a new updated standard is available.

### Shadow Flicker

Through the inclusion of a condition within the consent, the Company will require to monitor and respond to incidents of unacceptable levels of shadow flicker by use of appropriate mitigation.

## Aviation and Telecommunications

The Civil Aviation Authority (CAA) was consulted and the Company and operator of the turbine must adhere to aviation industry standards and procedures by the inclusion of conditions to the consent.

The National Air Traffic Service (NATS) was consulted and raised no safeguarding objection to the Development.

The Defence Infrastructure Organisation was consulted and raised no objection to the proposed Development. Requests for appropriate lighting of the structure and notices to update flying charts will be met by conditions included in the consent.

BT Network Radio Protection was consulted but submitted a nil return.

The Joint Radio Company considered the Application with respect to radio link infrastructure operated by Scottish Power and Scotia Gas Networks. No problems are foreseen by it based upon known interference scenarios on the data provided in the Environmental Statement.

## Navigation

The Maritime and Coastguard Agency (MCA) was consulted and raised no significant concerns as the Development is unlikely to have an adverse impact on safety of navigation. Standard consent conditions provided by the MCA will form part of the consent for the Development.

The Northern Lighthouse Board (NLB) was consulted and requested that standard conditions form part of the consent for the Development.

Royal Yachting Association (Scotland) was consulted and raised no objection to the proposed Development as there is not expected to be any adverse impacts upon navigation.

## Socio-economics, Recreation & Tourism, Land-Use and Commercial Fishing

Due to the relatively short term lifespan of the project the Socio-economics and Land Use factors whilst important were not raised as particular concerns. The potential of the project in terms of inward investment and also the relatively short time period for which consent is sought is considered to outweigh any negative impacts on these considerations. Locating this demonstrator facility in Fife will help to promote the offshore wind industry in the area. It will allow Fife to develop strong relationships with turbine manufacturers and help attract future investment.

The surrounding land is brownfield, and as such, is part of Fife Council's regeneration objectives. Fife Council endorses the regeneration of the area, calling it the 'Fife Energy Park'. The park includes the Fife Renewables Innovation Centre which has exceeded its occupancy targets by 18% with 38% of units leased against a target of 20% by March 2013.

Royal Yachting Association (Scotland) was consulted for recreational sailing purposes and raised no objection to the proposed Development.

The Scottish Canoe Association was consulted but no response was received.

The Scottish Ministers note that attitudes of tourists towards wind farms have been assessed in many studies. The results of stated preference studies have found that generally the majority of tourists were positive towards wind farms. Omnibus Research, commissioned by Visit Scotland in 2011, found that 80% of the survey respondents stated that a wind farm would not affect their decision to visit an area.

Marine Scotland Science was consulted on commercial fisheries and they had no comments to make on the proposed development due to the low fishing effort in the area. Marine Scotland Compliance was also consulted and no response was received.

The Scottish Fishermans Federation and the Scottish Fisherman's Organisation were also consulted and no responses received.

## Climate and Carbon Balance, Healthy and Safety and Traffic Management

Due to the nature of the test facility, and the unknown performance data for the new turbine designs it is not possible to predict the exact amount of energy which will be produced by the Development over its lifespan and therefore a calculation of the displacement of CO<sup>2</sup> cannot be made. It can, however, be stated that any energy generated from the site will result in the displacement of CO<sup>2</sup> generated from non-renewable sources and that the aim of the project, to further the development of the UK offshore wind industry, will contribute to the reduction of CO<sup>2</sup> emissions from UK power generation in the long term.

The Health and Safety Executive was consulted and had no comments on the Environmental Statement. The Health and Safety Executive's principle concerns are the health and safety of people affected by work activities. The Company will be responsible for managing the site in compliance with all relevant Health and Safety Regulations.

Transport Scotland was consulted and had no comment to make as the proposed Development is likely to cause minimal environmental impact upon the trunk road network. JMP Consultants Ltd shared the views of Transport Scotland that the information provided within the Environmental Statement on the traffic associated with the proposed development will have no significant impact on the trunk road network and its adjacent receptors in terms of Noise and Air Quality.

### Consideration of other material issues

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

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 have been adequately addressed by means of the Environmental Statement and the Scottish Ministers have judged that the likely environmental impacts of the Development 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 five public representations received.

The 7 MW Development 35 metres off the coast of Fife has the potential to annually generate renewable electricity equivalent to the demand from approximately 3,400 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 in the generation of electricity in many types of renewables, a balanced electricity mix is required to support the 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 and national economic development priorities.

## **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 1 turbine with a permitted capacity of up to 7 megawatts (as described in **ANNEX 1**).

The Scottish Ministers direct that this consent is to lapse on the expiry of a period of 2 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 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 one or more newspapers circulating in the locality of the Development.

In reaching their Decision they have had regard to all objections and relevant considerations and, subject to the conditions included in 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 Fife Council. This letter has also been published on the Marine Scotland 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 the judicial review process can be found at Chapter 58 of the Court of Session rules on the website of the Scottish Courts –

http://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 3<sup>rd</sup> May 2013

#### Annex 1

## **DESCRIPTION OF THE DEVELOPMENT**

The consent covers the construction and operation of the Fife Energy Park Offshore Demonstration Wind Turbine situated approximately 35 metres offshore from Mean High Water Springs (MHWS). It should be noted that consent is for the construction and operation and, if appropriate, removal and replacement of the turbine for a **maximum of 5 years** after commissioning of the original turbine. If during this timescale testing is completed on the original turbine, it will be removed and replaced with a new turbine (within the same design parameters and subject to the original section 36 consent, and all of the conditions attached thereon) for testing. Only one turbine will ever be installed at any one time. The section 36 consent will cover the construction, operation and removal of all turbines tested at the site.

The principal components of the Scheme comprise of the following:

- A single, three bladed demonstration wind turbine with an installed capacity
  of up to 7 MW. The turbine tower is up to 110 m tall, from Mean Sea Level
  (MSL) including the base jacket. The turbine has a maximum rotor diameter
  of 172 m, giving a maximum level from the MSL to turbine tip of up to 196
  m;
- A personnel bridge connection between the Fife Energy Park (FEP) and turbine tower;
- Construction of an onshore crane pad and Control compound on the FEP (which is subject to Town and Country Planning legislation, application for which has been made to Fife Council and not, therefore, covered by the section 36 consent); and
- Offshore cabling.

#### Annex 2

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

#### Part 1

### **Conditions of Section 36 Consent**

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

1. The consent is for a period from the date the consent is granted until the date occurring 5 years after the Final Commissioning of the turbine. Written confirmation of the date of the Final Commissioning of the turbine must be provided by the Company to the Scottish Ministers, the Planning Authority and Scottish Natural Heritage no later than one calendar month after the Final Commissioning of the Development.

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

1. The consent is for a period from the date the consent is granted until the date occurring 15 years after the Final Commissioning of the turbine. Written confirmation of the date of the Final Commissioning of the turbine must be provided by the Company to the Scottish Ministers, the Planning Authority and Scottish Natural Heritage no later than one calendar month after the Final Commissioning of the Development.

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

2. The Commencement of the Development must be a date no later than 2 years from the date the consent is granted, or such other date from the date of the granting of the consent as the Scottish Ministers may hereafter direct in writing.

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

3. Commencement of the Development must not proceed until after the Company has submitted to the Secretary of State a decommissioning programme in compliance with a notice served upon the Company by the Secretary of State following consultation with the Scottish Ministers, pursuant to Sections 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.

4. In the event that for a continuous period of 12 months or more the wind turbine installed fails to produce electricity on a commercial basis to the National Grid,

then unless otherwise agreed in writing by the Scottish Ministers and after consultation with any advisors as required at the discretion of the Scottish Ministers, the wind turbine, associated foundations and fitments shall be deemed by the Scottish Ministers to cease to be required. If so deemed, the wind turbine and its ancillary equipment must be dismantled and removed from the Site by the Company within the period of 12 months from the date of the decision to deem the wind turbine as ceasing to be required 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 Scottish Ministers.

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

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.

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.

7. The Development must be constructed and operated in accordance with the terms of the Application, the accompanying Environmental Statement Addendum letter and variation application except in so far as amended by the terms of the Section 36 consent and any direction made by the Scottish Ministers.

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

8. Prior to the Commencement of Development a Construction Method Statement (CMS) must be submitted by the Company to the Scottish Ministers and approved, in writing by the Scottish Ministers, following consultation with the Planning Authority, Scottish Natural Heritage, the Scottish Environment Protection Agency, 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 not be limited to, information on the following matters:

- a. Commencement dates:
- b. Working methods including the scope, frequency and hours of operations;
- c. Methods of installation;
- d. Pollution prevention measures including contingency plans; and

The Scottish Ministers must be notified of any proposed turbine exchange three months prior to the commencement of such works. This notification must include a revised CMS detailing methods for the exchange of turbines.

**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.

9. No work shall commence on the Development until the Scottish Ministers, following consultation with the Maritime and Coastguard Agency (MCA), has specified in writing that they are satisfied that the Company has taken into account and adequately addressed all of the MCA recommendations in the current Marine Guidance Note "Offshore Renewable Energy Installations - Guidance on UK Navigational Practice Safety and Emergency Response Issues" and annexes that may be appropriate to the Development, or any other relevant equivalent document which may, from time to time, supersede said Guidance.

Reason: To minimise the impact of the development on navigational interests.

10. The turbine must be fitted with a 2000 candela omni-directional red light at the highest practicable point and the turbine must be painted yellow up to 15 metres above the highest astronomical tide. The remaining parts of the structure above this point (rotor blades, nacelle and supporting mast) are to be painted entirely white, unless otherwise agreed in writing by the Scottish Ministers

**Reason:** To minimise risk to marine and air traffic by ensuring high visibility of turbine.

11. No later than three months prior to the Commencement of Development an appropriately targeted Project Environmental Monitoring Programme (PEMP) must be submitted to, and approved by, the Scottish Ministers in consultation with the Planning Authority, SNH, and any other ecological advisors, or such other advisors as required at the discretion of the Scottish Ministers. The PEMP must set out the specific monitoring and mitigation measures required to be undertaken by the Company associated with construction and operational noise, marine mammals, birds, basking sharks, migratory fish, shellfish and seals. The PEMP must also set out the requirements for monitoring and, where appropriate, the agreed mitigation of the potential impacts of the turbine

onshore, namely – construction and operational noise, shadow flicker, television reception and ice build-up. The Company must, when directed by the Scottish Ministers, provide the data received, and information regarding mitigation measures, under the PEMP to the Scottish Ministers.

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

12. The Project Environmental Monitoring Programme (PEMP) is a living document that is reviewed and updated by the Company as and when data from the demonstrator turbine is analysed. A copy of the updated PEMP must be submitted to, and approved by, the Scottish Ministers, with the first copy being submitted to the Scottish Ministers for approval no later than one year after the final commissioning of the turbine and thereafter on an annual basis, until the Development is decommissioned.

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

13. The operational noise of the turbine must not exceed the limits set out in the first table in Annex 3 to this consent at the stated times, wind speeds and locations. If the monitoring of the operational noise through the Project Environmental Monitoring Programme (PEMP) shows that the noise of the turbine exceeds those limits, at those times, wind speeds and locations, then the operation of the turbine must cease immediately until such time as the Company has satisfied the Scottish Ministers, in consultation with Fife Council, that adequate mitigation measures have been put in place.

### Reason: To minimise the impact of the Development.

13. The operational noise of the turbine must not exceed the limits set out in Annex 3 of this consent at the stated times, wind speeds and locations. If the monitoring of the operational noise of the turbine through the Project Environmental Monitoring Plan (PEMP) shows that the noise of the turbine exceeds the noise limits as detailed in Annex 3, the operation of the turbine must cease immediately until such time as the Company has satisfied the Scottish Ministers, in consultation with Fife Council, that adequate mitigation measures have been put in place. If the Forthwind Ltd Development is built under authority of their current consent, the Company must control power production to limit noise production so that the cumulative noise output of the two developments does not breach permitted limits.

## **Reason:** To minimise the impact of the Development.

14. Prior to the Commencement of the Development, a Construction Noise Management Plan must be submitted to, and approved by, the Scottish Ministers, in consultation with any such advisors from Fife Council, as

identified at the discretion of the Scottish Ministers.

The Company must implement the approved Construction Noise Management Plan in full, unless otherwise agreed in writing by the Scottish Ministers.

**Reason:** To ensure the proper environmental control in respect of noise, and to safeguard the amenities of the nearest residential properties.

15. Within 12 months of the Final Commissioning of the turbine, any claim by any individual person regarding television picture loss or interference at their house, business premises or other building, which they claim is attributable to the operation of the turbine must be investigated by a qualified engineer appointed by the Scottish Ministers in consultation with the Planning Authority. The Company is liable for any reasonable expenses incurred by any investigation. The results of the investigation must be submitted to the Scottish Ministers. Should any impairment to the television signal be attributable to the Development, the Company must remedy such impairment as soon as practicable to provide that the standard of reception at the affected property is equivalent to the baseline TV reception.

## **Reason:** For the protection of the local amenity.

16. Three months prior to the Commencement of the Development a preconstruction otter survey must be undertaken by a suitably qualified ecologist. The survey must include the Development footprint (i.e. access roads, turbine location, temporary construction areas etc.) and an appropriate buffer (maximum 500 metres) around each of these. In the event that an otter is (or otters are) observed or signs of breeding or resting otter (or otters) be discovered during construction works then works within 100 metres radius of the site of the observation or signs must cease until a survey determines whether there is a holt. If a holt is discovered, construction cannot resume unless suitable mitigation measures have been agreed by SNH and carried out by the Company.

**Reason:** In the interest of the protection of species of European importance.

17. The works must be maintained by the Company at all times in good repair.

**Reason:** To ensure the works do not become a risk to Navigation.

- **18.** At a time to be agreed by the Scottish Ministers, in consultation with the Civil Aviation Authority (CAA), the following information must be provided by the Company to the CAA for aviation charting purposes:
  - a. Precise location of the turbine;
  - b. Maximum blade tip height;
  - c. Construction start and end dates;

- d. Confirmation the turbine is lit in accordance with Article 220; and
- e. Confirmation that the colour of the turbine is as directed.

Reason: In the interests of aviation safety.

#### **Definitions**

In this consent:

"the Application" means the Application and Environmental Statement submitted to the Scottish Ministers by the Company on 30 July 2012.

"Article 220" means Article 220 of The Air Navigation Order 2009.

"Background Noise" means the ambient noise level (measured as LA90,10min) present in the environment (i.e. in the absence of noise generated by the wind turbine).

"Commencement of the Development" means the date on which the first construction activity occurs in accordance with the Environmental Statement submitted by the Company on 30 July 2012.

"the Company" means Scottish Enterprise, New Lanarkshire House, Strathclyde Business Park, ML4 3AD.

"the Development" means the Fife Energy Park Offshore Demonstration Wind Turbine (FEPODWT), Methil, Fife,

"Environmental Statement" means the Environmental Statement submitted to the Scottish Ministers by the Company on 30 July 2012 as part of the Application as defined above.

"Final Commissioning of the turbine" means the date on which the first wind turbine generator constructed forming the Development has supplied electricity on a commercial basis to the National Grid, or such earlier date as the Scottish Ministers deem the Development to be complete.

"Habitats Directive" means Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora as amended.

"Planning Authority" means Fife Council.

"SEPA" means the Scottish Environment Protection Agency.

"Site" means the area of land outlined in red on Figure 1.2, attached to this consent.

"SNH" means Scottish Natural Heritage.

## Annex 3

## FIFE COUNCIL RECOMMENDED CONDITION ON NOISE LEVELS

At standardised 10 m wind speeds not exceeding 12 ms<sup>-1</sup>, the rating level of noise emissions (measured as LA90,10 min) from the wind turbine, when measured at any dwelling in existence prior to the installation of the Development or at any dwelling which has been given planning permission prior to such installation, shall not exceed:

- The greater of 35 dB(A) or 5 dB above the prevailing background noise (LA90,10 min) between the hours of 07:00-23:00; and

   (a)
- The greater of 43 dB(A) or 5 dB above the prevailing background noise (LA90,10 min) between the hours of 23:00-07:00.

Noise monitoring for compliance purposes must be undertaken by the Company in the event of a reasonable complaint of noise due to the operation of the wind turbine either from a member of the public, or in the event of the Local Authority having reasonable and justifiable grounds for believing that the wind turbine is likely to be in breach of noise limits.

Measurements should be undertaken following the methodology described in Section 4.6.4 of the Project Environmental Monitoring Programme and in accordance with the Guidance Notes attached to this consent.

#### THE GUIDANCE NOTES

The following paragraphs are based upon steps 2-6 specified in Section 2 of the Supplementary Guidance Notes to the Planning Obligation contained within pages 102 et seq of "The Assessment and Rating of Noise from Wind Farms, ETSU-R-97" published by ETSU for the Department of Trade and Industry. It has been adapted in the light of experience of actual compliance measurements.

#### NOTE 1

Values of the  $L_{A90,10min}$  noise statistic should be measured at the affected property using a sound level meter of at least IEC 651 Type 1 quality. This should be fitted with a ½" diameter microphone and calibrated in accordance with the procedure specified in BS 4142: 1990. The microphone should be mounted on a tripod at 1.2 - 1.5 m above ground level, fitted with a two layer windshield wind shield or suitable equivalent, and placed in the vicinity of, and external to, the property. The intention is that, as far as possible, the measurements should be made in "free-field" conditions. To achieve this, the microphone should be placed at least 3.5m away from the building facade or any reflecting surface except the ground.

The L<sub>A90,10min</sub> measurements should be synchronised with measurements of the 10-minute average wind speed and with operational data from the turbine control systems of the wind farm or farms.

The wind speed and wind direction and a note of all 10 minute periods when one or more of the turbines was not operating normally should be provided to the consultant to enable an analysis to take place.

The precise definition of "normal operation" should be agreed in writing with the local authority prior to the commencement of the development on the basis of data available

but should generally be taken to mean when the turbine power output is not significantly different from the reference power curve using the nacelle anemometer.

In the interests of commercial confidentiality no information is required to be provided for individual turbines or on the nature of any abnormality or for any period during which noise monitoring is not taking place.

#### NOTE 2

The noise measurements should be made over a period of time sufficient to provide not less than 100 valid data points. Measurements should also be made over a sufficient period to provide valid data points throughout the range of wind speeds considered by the local authority to be most critical. Valid data points are those that remain after the following data have been excluded:

- All periods during rainfall
- All periods during which wind direction is more than 45 degrees from every line from each of the turbines and the measurement position.
- All periods during which turbine operation was not normal.

A least squares, "best fit" curve should be fitted to the data points.

#### NOTE 3

Where, in the opinion of the Local Authority, the noise immission contains a tonal component, the following rating procedure should be used. This is based on the repeated application of a tonal assessment methodology.

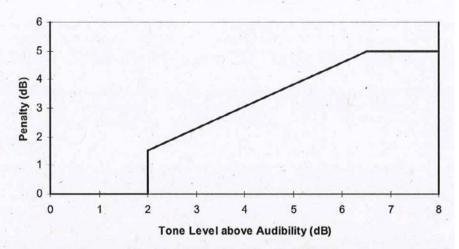
For each 10-minute interval for which  $L_{A90,10min}$  data have been obtained, a tonal assessment is performed on noise immission during 2-minutes of the 10-minute period. The 2-minute periods should be regularly spaced at 10-minute intervals provided that uninterrupted clean data are obtained.

For each of the 2-minute samples the margin above or below the audibility criterion of the tone level difference,  $\Delta L_{tm}$ , is calculated by comparison with the audibility criterion given in Section 2.1 on page 104 et seq of ETSU-R-97.

The margin above audibility is plotted against wind speed for each of the 2-minute samples. For samples for which the tones were inaudible or no tone was identified, substitute a value of zero audibility.

A linear regression is then performed to establish the margin above audibility at the assessed wind speed. If there is no apparent trend with wind speed then a simple arithmetic average will suffice.

The tonal penalty is derived from the margin above audibility of the tone according to the figure below.



The rating level at each wind speed is the arithmetic sum of the wind farm noise level, as determined from the best fit curve described in Note 2, and the penalty for tonal noise.

The rating level shall be determined for each wind speed. If the values lie below the maximum values of turbine noise indicated by the tables in the conditions then no further action is required.

#### NOTE 4

If the rating level is above the limit, a correction for the influence of background noise should be made. This may be achieved by repeating the steps in Note 2, with the wind farm switched off, and determining the background noise at the assessed wind speed,  $L_b$ . The wind farm noise at this speed,  $L_w$ , is then calculated as follows where La is the measured level with turbines running but without the addition of any tonal penalty:

$$L_{W} = 10\log\left(10\frac{L_{a}}{10} - 10\frac{L_{b}}{10}\right)$$

The Rating level is re-calculated by adding the tonal penalty (if any) to the wind farm noise. If the rating level lies below the values indicated from the tables in the conditions then no further action is required.