From: Alan Keir Marine Scotland Licensing Operations Team Marine Scotland 18<sup>th</sup> March 2016

Minister for Business, Energy, and Tourism

APPLICATION TO VARY ANNEX 1, ANNEX 2 (CONDITION 7) AND ANNEX 3 OF THE NEART NA GAOITHE OFFSHORE WIND LIMITED SECTION 36 CONSENT 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.

#### Purpose

To seek your approval to grant an application to vary the existing consent for the Neart na Gaoithe Offshore Wind Farm ("NnGOWF") ("the Development"). This application was made by Mainstream Renewable Power Limited (16<sup>th</sup> July 2015), on behalf of Neart na Gaoithe Offshore Wind Limited ("NnGOWL") ("the Company"), and relates to the section 36 ("S36") consent for the construction and operation of the wind farm located offshore in the Firth of Forth.

#### Priority

Routine.

#### Nature of the Variation Sought

The variation application seeks to amend the S36 consent as necessary to make the following variation:

Vary Annex 1, Annex 2 (condition 7) and Annex 3 of the consent to allow:

- An increase in the maximum rated turbine capacity from 6 MW to 7 MW (the maximum generating capacity of the Development will continue to be limited to 450 MW);
- A change in maximum turbine hub heights from 107.5 m to 115 m above Lowest Astronomical Tide ("LAT"); and
- A change in maximum turbine platform height from 18 m to 21 m above LAT.

The original text for , Annex 2 (condition 7) and Annex 3 is shown in Appendix 1, and the proposed changes are shown in Appendix 2.

#### Publication of Application and Consultation

The Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 ("the Variation Regulations") set out that an applicant must publish a variation application relating to an offshore generating station on a website and advertise by public notices in specified publications as set out in Regulation 4 of the Variation Regulations, in Lloyd's List and in at least one appropriate fishing trade journal in circulation. The Variation Regulations also provide that the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 ("the EIA Regulations") apply in relation to a variation application as they apply in relation to an application for a S36 consent but with certain modifications as specified in the Variation Regulations. The legislation provides that a copy of a variation application shall be served on such Planning Authority or Authorities as the Scottish Ministers direct. In this case the Scottish Ministers directed that the same onshore Planning Authorities be served a copy of the variation as those who were served a copy of the original application. These were Angus Council ("AC"), Dundee City Council ("DCC"), East Lothian Council ("ELC"), Fife Council ("FC") and Scottish Borders Council ("SBC"). Officials confirm that these requirements have been met.

As the NnGOWF is an Environmental Impact Assessment ("EIA") development, the EIA Regulations, as modified by regulation 5 of the Variation Regulations, apply to this application. Officials confirm that the requirements of the EIA Regulations (as so modified) have been met.

Marine Scotland Licensing Operations Team ("MS-LOT") consulted a wide range of relevant organisations on the variation application and accompanying Supporting Statement including AC, DCC, ELC, FC and SBC, Scottish Natural Heritage ("SNH"), the Joint Nature Conservation Committee ("JNCC"), Scottish Environment Protection Agency ("SEPA") and several non-statutory consultees.

#### Representations

Scottish Ministers received no representations from members of the public in relation to this application, and none of the statutory consultees objected to the variation. An objection was however received from Royal Society for the Protection of Birds Scotland ("RSPB Scotland"). They maintained their objection from the original S36 application and cited further concerns around the methods used to estimate seabird impacts, and the validity of the original Habitats Regulations Appraisal being relied upon for the variation assessment.

#### Recommendation

Having taken into account the statutory and non-statutory consultation responses and objections received, and being satisfied that all legislative requirements have been met, MS-LOT is of the view that you should:

Determine that it is appropriate not to cause a public local inquiry or any other hearing to be held, and agree to vary the wording of Annex 1, Annex 2 (condition 7) and Annex 3 of the relevant NnGOWF section 36 consent, in terms of section 36C of the Electricity Act 1989 (as amended) and the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013.

A draft decision letter is attached at Annex C.

### List of Annexes

ANNEX A	REGULATORY REQUIREMENTS
ANNEX B	BACKGROUND INFORMATION AND ADVICE TO MINISTERS
ANNEX C	DRAFT VARIATION DECISION LETTER

#### Alan Keir

Marine Scotland Licensing Operations Team, Marine Planning and Policy. 18<sup>th</sup> March 2016

Copy List:		For	For Information		
		Comm	Portfolio	Constit	General
		ents	Interest	Interest	Awareness
Deputy First Minister and Cabinet Secretary			Х		
for Finance, Constitution and Economy		, A	^		
Cabinet Secretary for Rural Affairs, Food and			Y		
Environment			~		

DG Enterprise, Environment & Innovation Linda Rosborough - Marine Scotland David Palmer - Marine Scotland Jim McKie - Marine Scotland Karen Major - Marine Scotland Nicola Bain - Marine Scotland Joao Queiros - Marine Scotland Gayle Holland - Marine Scotland Phil Gilmour - Marine Scotland Mark Christie - Marine Scotland Ian Davies - Marine Scotland David Stevenson - Energy & Climate Change Alan Williams - SGLD Fiona McClean - SGLD Ian Vickerstaff - SGLD Simon Bonsall - Planning Chris Wilcock - Ports and Harbours Malcolm Fleming - Advisor Communications - Greener **Communications - Deputy First Minister** 

#### ANNEX A – REGULATORY REQUIREMENTS

#### Legislative Background

- Section 36C of the Electricity Act 1989 (as amended) ("the Electricity Act") has, since 1<sup>st</sup> December 2013, enabled applications to be made to the appropriate authority (in Scotland this is the Scottish Ministers) by persons who are entitled to the benefit of a section 36 ("S36") consent seeking the variation of such consents. The procedure is set out in the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 ("the Variation Regulations"). The Variation Regulations provide for a consistent and transparent process for making, publicising, and the consideration of applications to vary S36 consents.
- 2. The variation process is designed to apply to projects that have been consented under S36, where the operator wishes to carry out development or operation or any other aspects of their proposals as set out in the S36 consent in a way that is inconsistent with the existing S36 consent.
- 3. Under Section 36C(4) of the Electricity Act the Scottish Ministers may make such variations to such 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.

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

- 4. The process to vary a S36 consent is primarily governed by The Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 ("the Variation Regulations"). In cases where the proposed development amounts to Environmental Impact Assessment ("EIA") development, the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended) ("the EIA Regulations") also apply, as modified by regulation 5 of the Variation Regulations.
- 5. Officials consider that an environmental statement ("ES") to support a variation application can take the form of the original ES (which supported the original S36 application) supplemented by a supporting statement that details the environmental effects resulting from the variations being sought. The present application was accompanied by the original ES; the original Addendum of Supplementary Environmental Information; and a supporting EIA statement detailing the main respects in which the environmental effects of the proposed development would differ as a result of the variation.

#### Appropriate Assessment ("AA")

6. Regulation 61 (1) of The Conservation of Habitats and Species Regulations 2010 requires that "A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for a plan or project which –

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and
(b) is not directly connected with or necessary to the management of that site, must make an appropriate assessment of the implications for that site in view

of that site's conservation objectives.)

7. Officials considered that an Appropriate Assessment ("AA") was required. Although the worst case scenario had been considered in the Forth and Tay Regional AA completed in October 2014, officials completed a further AA in order (i) to ensure that the best available evidence was used (the British Trust for Ornithology Avoidance Rate Report which was not available in its final version for use in the Forth and Tay Regional AA) and (ii) to include additional projects in the in-combination assessment which have been consented since the Forth and Tay Regional AA had been undertaken.

#### **Notification Requirements**

8. For an application to vary a S36 consent, the notification requirements in the Variation Regulations apply as well as those in the EIA Regulations (as modified).

#### ANNEX B – BACKGROUND INFORMATION AND ADVICE TO MINISTERS

#### **Consented Development**

On 10<sup>th</sup> October 2014, consent was granted under section 36 ("S36") of the Electricity Act 1989 (as amended) ("the Electricity Act") by the Scottish Ministers to construct and operate a 450 megawatt ("MW") offshore wind farm in the Firth of Forth approximately 15.5 km to the East of Fife Ness. Construction has not yet started on the Neart na Gaoithe Offshore Wind Farm ("NnGOWF") ("the Development").

#### Variation Sought

The variation proposed is to:

Vary Annex 1, Annex 2 (condition 7) and Annex 3 of the consent to allow:

- An increase in the maximum rated turbine capacity from 6 MW to 7 MW (the maximum generating capacity of the Development will continue to be limited to 450 MW);
- A change in maximum turbine hub heights from 107.5 m to 115 m above Lowest Astronomical Tide ("LAT"); and
- A change in maximum turbine platform height from 18 m to 21 m above LAT.

#### Background to the Variation

In addition to being granted S36 consent, Neart na Gaoithe Offshore Wind Limited ("NnGOWL") ("the Company") has also been awarded a Contract for Difference ("CfD") through a competitive process. The CfD includes certain milestones and commits the project to a specific development programme. The Company is progressing with the project design work. In carrying out this work, a number of essential variations to the originally consented project parameters were identified.

The project parameters presented in the original application were based on technology commercially available at the time and to be deployed in line with the original project schedule. Due to unforeseen delays to the project, the commercially available technology has evolved to provide turbines directly linked to lowering the levelised cost of energy. The proposed variations will ensure that the NnGOWF project remains cost effective and will provide an opportunity to reduce the numbers of turbines to be constructed, potentially reducing the environmental effects of the project.

On 15<sup>th</sup> July 2015, Mainstream Renewable Power Limited, 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 ("the Variation Regulations"), seeking the variation of Annex 1, Annex 2 (condition 7) and Annex 3 of the NnGOWF S36 consent, to allow for the referred alterations to the project design.

#### Application – Supporting Information

To support the variation application, the Company submitted supporting environmental information alongside the collision risk modelling spreadsheets that were used to inform the collision risk on birds.

#### Appropriate Assessment ("AA")

The Appropriate Assessment ("AA") concluded that NnGOWF would not adversely affect the integrity of the Buchan Ness to Collieston Coast Special Protection Area ("SPA"), Fowlsheugh SPA, Forth Islands SPA, St Abb's Head to Fast Castle SPA, Moray Firth Special Area of Conservation ("SAC"), Firth of Tay and Eden Estuary SAC, Isle of May SAC, Berwickshire & North Northumberland Coast SAC, River South Esk SAC, River Tay SAC, River Dee SAC, River Teith SAC or River Tweed SAC, either alone or in-combination with the other Forth and Tay offshore wind farms (Inch Cape, Seagreen Alpha and Seagreen Bravo) (or where appropriate for consideration, other developments already licensed as detailed in the AA).

#### Notification and Consultation

The Scottish Ministers directed that the same onshore Planning Authorities be served a copy of the variation as those who were served a copy of the original application. These were Angus Council ("AC"), Dundee City Council ("DCC"), East Lothian Council ("ELC"), Fife Council ("FC") and Scottish Borders Council ("SBC"). Notifications were placed in accordance with the Variation Regulations with the advertisement by public notices in specified publications as set out in Regulation 4 of the Variation Regulations, in Lloyd's List and in at least one appropriate fishing trade journal in circulation. Subsequently, notifications were placed in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended) ("the EIA Regulations"). Public notices were placed in the Dundee Courier, East Lothian Courier, Edinburgh Gazette and Fishing News for two weeks, and for one week each in The Scotsman and Lloyds List.

The original S36 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 Supporting Statement including AC, DCC, ELC, FC and SBC, Scottish Natural Heritage ("SNH"), the Joint Nature Conservation Committee ("JNCC"), Scottish Environment Protection Agency ("SEPA") and non-statutory consultees.

Officials confirm that the requirements as required by the Variation Regulations have been met, as have the requirements as required by Regulation 9 of the principal EIA Regulations (as modified by the Variation Regulations).

#### Consultation Summary

Dundee City Council ("DCC") did not respond to the proposed variation.

The Maritime Coastguard Agency ("MCA") and Dunbar Fishermen's Association ("DFA") raised no objections to the proposed variation.

The following organisations had no comment to make on the proposed variation;

Scottish Borders Council ("SBC"), United Kingdom Chamber of Shipping ("UKCoS"), East Coast Inshore Fisheries Group ("ECIFG"), EDF Energy, Ports and Harbours, River Tweed Commission, and Royal Yachting Association ("RYA").

Bristow Helicopters Limited ("BHL") and British Telecom Radio Network Protection ("BT") were consulted on the application and returned a 'nil response'.

#### Statutory Consultees

**Angus Council ("AC")** did not object to the variation. AC raised potential issues with Cultural Heritage and Seascape, Landscape and Visual Impacts, in particular, issues with lighting for shipping and navigational purposes, having an impact on the night seascape and the Bell Rock Lighthouse. However, these impacts will not be any greater than the 'worst case scenario' presented with the original application by NnGOWF.

AC concluded that the impacts of the proposed variation, in terms of material considerations relevant to Angus Council administrative area, have already been considered within the design envelope in the Environmental Statement and do not raise any new or significant issues.

**Fife Council ("FC")** did not object to the variation. However, they considered that due to increasing uncertainty surrounding the ornithological assessments undertaken, it is not possible from the information provided to determine that there will be no adverse effect on the integrity of the Forth Islands SPA and highlighted that SNH specialists would need to advise and confirm this conclusion.

FC stated that previous responses to the offshore wind farm developments raising concerns regarding cumulative impact on bird species from European designated sites, in particular the Forth Islands SPA still stand.

FC is of the opinion that the proposed variations to the consented development do not alter the potential for the Development to impact on marine archaeological deposits in the form of shipwrecks or submerged palaeo-landscapes, nor does it cause additional archaeological impacts. FC also stated that an increase in the height of the turbines will have no increased detrimental visual impact on the category A listed Bell Rock Lighthouse.

NnGOWL, in a letter dated 11<sup>th</sup> December 2015, comment that the use of Option 3 of the Band model for collision risks was to show a direct comparison to the Appropriate Assessment prepared by MS-LOT in 2014. As the predicted collision rate for 64 turbines is less than that of 75, the worst case scenario remains unchanged. As such, the AA reaches the same conclusions as the AA completed in 2014 for the original NnGOWL S36 application. Option 1 was also used for kittiwakes

to show a comparison with the Addendum of Supplementary Information presented in 2013. As with the Option 3 model the predicted collision rates having fewer turbines was less and so the worst case scenario was no greater than those of the already consented project.

The Company also note that the JNCC and SNH had, in their consultation response, stated that a reduction in the number of turbines would result in a reduction in the potential impacts of collision rates and displacement of birds in the area.

In relation to new research on the flight heights of birds NnGOWL welcomes any new techniques, however, they do not consider the recent study to be sufficient evidence to require changes to be made to the current assessment methods. The extremely small sample size used in this study is also noted by the Company.

The Company respond to FC's concerns about the cumulative impact of the developments in the Forth and Tay area by stating that the reduced number of turbines will decrease the predicted impacts from those already consented. With regards to the Firth of Forth and Tay Bay Complex marine SPA there has yet to be consultation on this site and therefore it is not possible for the AA to consider potential effects on conservation objectives that have yet to be established. The company also highlighted the fact that the Statutory Nature Conservation Bodies ("SNCBs") (SNH and JNCC together) have reviewed the variation and have not raised objections surrounding the draft marine SPA.

**East Lothian Council ("ELC")** did not object to the variation. They raised concerns over the changes in the project and its impacts on the visibility of the Development from various points in their administrative area but noted that, given the distance from East Lothian, the changes were unlikely to be significant overall.

ELC highlighted some concerns regarding the final layout and number of turbines and, due to some sensitive views within East Lothian which are likely to be affected, requested to be consulted on the Design Statement to be submitted by the Company to the Scottish Ministers for approval.

ELC reiterated their concern about the lighting of the turbines, and requested this to be kept to a minimum and, where possible, infra-red lighting was used in preference to visible spectrum light.

NnGOWL in a letter dated 9<sup>th</sup> November 2015, responded to the increased hub height to 115m that it is being increased to the originally proposed height in the 2012 ES, before an Addendum in 2013 reduced it. The Visual Impact Assessment presented with the original application remains valid for the variation.

With regard to the final layout and plans, the Company, in line with the requirements of the S36 consent condition relating to the Design Statement ("DS") and Design Specification and Layout Plan ("DSLP") - showed their commitment to provide ELC with these plans.

The company respond to concerns over lighting and marking by stating navigational safety will be a priority when finalising the Lighting and Marking Plan ("LMP") and,

once again the commitment to share a copy of this plan once submitted to MS-LOT for approval with ELC.

**Scottish Environment Protection Agency ("SEPA")** raised no objections to the variation, they had no further comments to make and highlighted that all previous comments made to the original application remain applicable.

Scottish Natural Heritage ("SNH") and the Joint Nature Conservation Committee ("JNCC") raised no objections to the variation. They suggested comparing the changes to turbine parameters to a new study that reviews the sensitivity of parameters for collision risk modelling as this could also potentially reduce the predicted levels of seabird displacement as well as a reduction in collision risk.

They commented that no further assessment is required in relation to landscape and visual impact as the parameters of the 7 MW machine fall within the "worst case scenario" already assessed.

SNH and the JNCC also conclude, as there is no change to the maximum pile diameter for a 7 MW machine, and therefore no change to hammer energies to be used, no further assessment is required regarding marine mammals or fish impacts. Also noted is the potential for reduced impacts on predicted levels of seabird displacement due to a reduced number of turbines and lower collision risk.

#### Non-statutory Consultees

**Civil Aviation Authority ("CAA")** raised no objections to the variation. They did, however, request the S36 Variation Application be circulated to other relevant aviation stakeholders. The CAA also requested that the Defence Geographic Centre be informed of the turbine locations, lighting and maximum height of construction equipment and the estimated, then actual, dates of construction prior to the installation to be included in Aviation Charts for safety purposes. The company, in a letter addressed to the CAA, responded that MS-LOT had circulated the Application to all required stakeholders, including those with aviation interests.

Under condition 21 of the S36 consent the Company is required to notify the United Kingdom Hydrographic Office ("UKHO") of the Design Specification and Layout Plan ("DSLP") for inclusion on nautical and aviation charts. The company have added the Defence Geographic Centre to their commitments for the same purpose.

**Defence Infrastructure Organisation ("DIO")** did not object to the Variation. They highlighted that they wish the agreed conditions on the original consent to remain extant.

**Historic Scotland ("HS")** raised no objections to the variation, as they considered it unlikely that the proposed variation would result in increased impacts on the site or setting of terrestrial historic environment assets within HS's statutory remit. HS noted that no changes to the Written Scheme of Investigation and Protocol for Archaeological Discovery for the Development, as agreed with HS, are proposed. HS recommended if not already done so that consultation was carried out with the local authority's archaeological and conservation services.

Marine Scotland Science ("MSS") raised no objections to the variation.

As the proposed variation will not significantly affect the risk assessment with respect to diadromous fish, no comments were made in relation to this receptor.

MSS reviewed the information provided by NnGOWL and re-ran the collision estimates (Option 2 of the Band CRM i.e. the Basic model, Johnston et al 2014 flight height data, as per British Trust for Ornithology ("BTO") recommendations of December 2014) and using the additional wind turbine generators ("WTG") parameters and number provided by NnGOWL.

Using these revised parameters, the collision estimates of the Development for gannet and kittiwake compared to those estimated assuming the consented WTG parameters and number, would reduce by c. 75%. Displacement and barrier effects on all seabird species are also likely to be reduced via either the increased spacing of WTG across the site, or the reduced area over which WTG are distributed (either of which scenarios are possible from a reduction in number of WTG).

Therefore, MSS see no issues with the 64 x 7MW scenario presented by the Company from the perspective of impacts on bird interests as a move to fewer, larger WTGs would help mitigate potential bird effects.

National Air Traffic Services ("NATS") did not raise any objection to the variation.

**National Trust for Scotland ("NTS")** raised no objection to the variation however they did make several comments.

NTS believes there to be fundamental discrepancies that affect the conclusions of the predicted collision rates. They believe there is an inaccuracy in the information pertaining to the increased hub height of the turbines from 107.5 m to 115 m but not the overall height or the maximum and minimum tip heights. They also comment on a discrepancy between information provided in the Application and that in Appendix III where hub height is said to increase from 101.85 m to 107.5 m but the minimum tip height is different and the maximum tip height is not given.

NTS question the percentage decrease in predicted maximum annual collisions of gannets and kittiwakes that the proposed reduction in turbines would result in when the swept area per turbine remains the same and the speed of rotation is set to increase.

NTS also comment on the use of Band Option 3 for the modelling methods used to predict the impacts on the seabird populations as this method is not currently recommended by the SNCBs.

With regards to other consented developments in the Forth and Tay area, NTS would like to see the cumulative impacts of these developments on the seabird populations re-evaluated.

In a letter dated 15<sup>th</sup> November 2015, the Company addressed NTS comments, in response to the queries surrounding hub and tip heights, they stated that the impact assessment process is based on an upper and lower limit set on the design– this is known as a Design Envelope (or Rochdale Envelope), which requires a worst case scenario to be assessed.

NnGOWL also accepted that the Appendix III tables could have been clearer, but confirmed that the minimum hub height was used in the collision risk modelling as it gives the worst case scenario. The company clarified the figures in the tables for the band modelling, "Parameters and results for 75 x 6MW Scenario using Band Option 3", minimum rotor height is specified as 24.85m. This measurement is at the Highest Astronomical Tide (HAT). In the corresponding table presenting the Parameters and results for 64 x 7MW Scenario using Band Option 3 minimum rotor height is specified as 30.5m. This measurement is at the Lowest Astronomical Tide (LAT). The air gap is therefore comparable, however, the lack of definition as to the condition of the tide is confusing. LAT for both scenarios is 30.5m. Maximum tip height was not presented in the Appendix III tables as this value is not a factor considered in the Band Model used in collision risk modelling.

In response to the reduction in annual collision rates the Company stated that this was a result of a reduction in the number of turbines and the increase in hub height.

Use of Option 3 of the Band model for collision estimates for gannets and kittiwakes was to allow a direct comparison to the Appropriate Assessment prepared by MS-LOT in 2014. As the predicted collision rate for 64 turbines is less than that of 75, the worst case scenario remains unchanged. The AA also reaches the same conclusions as the AA completed in 2014.. Option 1 was also used to show a comparison with the Addendum of Supplementary Information presented in 2013. As with Option 3, the predicted collision rates were lower with less turbines and therefore, the worst case scenario was no greater than those previously assessed for the consented project.

The company also noted that SNH and the JNCC had stated that a reduction in the number of turbines would result in a reduced collision risk and could also reduce the predicted levels of seabird displacement.

NnGOWL confirmed that as the collision risk modelling for the variation showed a decrease in the estimated number of kittiwake and gannet collisions compared to the original consented project and in the AA prepared by Marine Scotland there was no requirement to re-evaluate the in-cumulative impact of all wind farms in the area.

**Northern Lighthouse Board ("NLB")** raised no objections to the variation. NLB did request that they are informed of any reduction in the number of turbines within the site and any change to the layout as a result of using the 7MW turbines. Marking and lighting requirements given previously in relation to the original application are still valid, although it will be necessary to confirm that any turbines previously identified as Significant Peripheral Structures ("SPSs") remain so, or others are identified as now being SPSs should the layout of the Development change and that no new navigation hazard might be created by any revised layout.

**Royal Society for the Protection of Birds ("RSPB")** objected to the variation on the grounds raised previously in their objection to the original application and due to additional points of concern. In summary, they are:

RSPB is of the opinion that the modelling methods used to predict the impacts on the seabird populations, particularly black legged kittiwake and northern gannet, are not those currently recommended by the Statutory Nature Conservation Bodies ("SNCBs").

The assessment supporting the original HRA is out of date and should not be used in the current assessment. An updated AA for the project and for the Forth and Tay regional area has been called for. RSPB also note recent research by Leeds University into the flight heights of gannets using data loggers gives different, higher, flight heights than previously observed and used in modelling.

That when using the best available science RSPB cannot conclude there will be no adverse effects on the relevant nearby SPAs either by the Development in isolation or in combination with other developments.

No consideration has been given to the potential impacts on the draft marine SPA network in the HRA.

NnGOWL in a letter dated 28<sup>th</sup> October 2015, stated that the use of Option 3 of the Band model for collision risks was to show a direct comparison to the Appropriate Assessment carried out by MS-LOT in 2014. As the predicted collision rate for 64 turbines is less than that of 75, the worst case scenario remains unchanged and the AA reaches the same conclusions. Option 1 was also used for kittiwakes to show a comparison with the Addendum of Supplementary Information presented in 2013. As with Option 3, the predicted collision rates were lower with less turbines and therefore, the worst case scenario was no greater than that of the already consented project.

The company also noted that SNH and the JNCC had stated that a reduction in the number of turbines would result in a reduced collision risk and could also reduce the predicted levels of seabird displacement.

As the predicted collision rate for 64 turbines is less than that of 75 the worst case scenario remains unchanged and the AA reaches the same conclusions. The AA addresses previous concerns raised by the RSPB regarding Acceptable Biological Change and the Company draws RSPB to this section of the document.

The Company respond to RSPB Scotland concerns about the cumulative impact of the developments in the Forth and Tay area by stating that the reduced number of turbines will decrease the predicted impacts from those already consented. With regards to the Firth of Forth and Tay Bay Complex marine SPA there has yet to be consultation on this site and therefore it is not possible for the AA to consider potential effects on conservation objectives that have yet to be established. NnGOWL replied that it was aware of the emerging research from Leeds University but this was yet to be published at the time of submitting the Variation Application.

While the Company welcomes any new techniques for considering key parameters such as flight height, they do not consider the recent study to be sufficient to require changes to be made to the current assessment methods. The Company also notes the extremely small sample size used in this study, which is considered insufficient to represent behaviour of a wider population. The use of pressure sensor tags rather than visual observations also differs from all other offshore wind developments to date and there is no evidence to demonstrate that the tags are any more accurate.

The Company also note that the recent study and paper by Cleasby et al. (2015b) was not designed to define definitive predictions for each study site, unlike the three years of site specific bird studies carried out on behalf of NnGOWL.

**Scottish Seabird Centre ("SSC")** raised no objections to the variation and welcomed the likely reduction in impacts that fewer turbines will make. However, they reiterated concerns about the impact the Development may have on the seabird populations in an area that is of international significance for its seabird colonies and where wildlife tourism has become established as an important factor in the local economy, delivering important socio-economic benefits.

SSC would like to see further seabird research to be undertaken to ensure that projected collision risks are more accurately assessed and minimised. Cumulative impacts of all the consented Forth and Tay wind farm projects should also be taken into account.

**Scottish Fishermen's Federation ("SFF")** raised no objections to the variation as long as existing licence conditions are met, on the grounds that the variation could result in fewer turbines.

**Transport Scotland ("TS")** raised no objections to the variation. TS considered it unlikely that there would be any significant traffic or associated environmental impacts associated with the construction and operational stages of the development that affects the A1 trunk road.

TS requested three conditions to be attached to any consent issued:

Condition 1: Development shall not commence until a Construction Traffic Management Plan has been approved in writing by the Consenting Authority in consultation with Transport Scotland. Thereafter, all construction traffic associated with the development shall conform to the requirements of the agreed plan.

Condition 2: The proposed route for any abnormal loads on the trunk road network must be approved by the trunk roads authority prior to the movement of any abnormal load. Any accommodation measures required including the removal of street furniture, junction widening, traffic management must similarly be approved.

Condition 3: Any additional signing or temporary traffic control measures deemed necessary due to the size or length of loads being delivered must be undertaken by

a recognised Quality Assured traffic management consultant, to be approved by the trunk road authority before delivery commences.

Under condition 22 of the S36 consent, the company is required to submit a Traffic and Transportation Plan to the Scottish Ministers for their approval, following consultation with transport Scotland.

#### Public Representations

There were no representations made on the Application from members of the public.

#### Consideration of the Application

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 station (or proposed generating station) 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, due to unforeseen circumstances between granting of the S36 in October 2014 and the potential build out date of the project there has been an advance in the commercial technologies available to NnGOWL and they are keen to utilise this. By increasing the turbine capacity this allows NnGOWL to use fewer, higher rated turbines in their plans and layout.

The variations proposed in the application do not fundamentally alter the character or scale of the Development whilst allowing a potential reduction of environmental impacts. This is due to the proposed reduction in turbine number and the slower turbine rotation speeds that come with using higher capacity turbines.

#### Public Local Inquiry ("PLI")

A key issue is whether it is appropriate to cause a public inquiry to be held, and whether the Scottish Ministers are capable of weighing up the various competing considerations and of properly taking account of the representations the various parties have made without an inquiry. Having had regard to details set out above, MS-LOT advise the Scottish Ministers are able to weigh up the various competing considerations and properly take account of the representations the various parties have made without the need for an inquiry.

The Scottish Ministers have sufficient evidence provided by the Applicant concerning the variation application, as well as representations from consultees.

In the circumstances, the Scottish Ministers can be satisfied that:

- 1. they possess sufficient information in order to determine the application; and
- an inquiry into the issues raised by consultees or members of the public would not be likely to provide any further factual information to assist the Scottish Ministers to resolve any issues raised by the application or to change their views on these matters,

and, accordingly, may conclude that it is not appropriate to cause an inquiry to be held into these matters. **MS-LOT recommends that you determine that it is not appropriate to cause a PLI to be held.** 

#### Recommendation

Given that the principle of the NnGOWF was established through the existing consent granted under the Electricity Act on 10<sup>th</sup> October 2014; that the matter to which the application for variation relates is appropriate to be considered under the section 36C process, officials recommend that consent be granted to the variation application.

A draft decision letter is attached at Annex C.

#### Appendix 1 - ORIGINAL ANNEX 1, ANNEX 2 (CONDITION 7) AND ANNEX 3

#### ANNEX 1

#### **Description Of The Development**

An offshore wind turbine generating station, located as shown in Figure 1 below, with a gross electrical output capacity of up to 450 MW comprising:

- 1. not more than 75 three-bladed horizontal axis wind turbines each with a maximum blade tip height of up to 197 metres and a maximum rated capacity of up to 6MW;
- 2. for each WTG, a jacket or gravity base foundation;
- 3. for each WTG, a transition piece (including access ladders / fences and landing platforms), turbine tower, blades and nacelle; and
- 4. inter array cabling between the turbines and the offshore substation platforms,

and, except to the extent modified by the foregoing, all as specified in the application letter and the project description contained in the accompanying Environmental Statement (Chapter 5 of the ES as supplemented by Technical Appendix 1 of the SEIS) but subject always to the conditions specified in **Annex 2** of this consent.

#### ANNEX 2

#### **Condition 7 of the Section 36 Consent**

The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the SEIS and Annex 1 of this letter, except in so far as amended by the terms of this section 36 consent.

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

#### ANNEX 3

#### **Definition of "the Application"**

"the Application" means the Application letters and Environmental Statement submitted to the Scottish Ministers, by the Company on 13<sup>th</sup> July 2012 and Supplementary Environmental Information Statement submitted to the Scottish Ministers by the Company on 15<sup>th</sup> April 2013 for consent under section 36 of the Electricity Act for the construction and operation of Neart na Gaoithe Offshore Wind Farm in the Firth of Forth with a maximum generating capacity of 450 megawatts;

# Appendix 2 - PROPOSED WORDING OF ANNEX 1, ANNEX 2 (CONDITION 7) AND ANNEX 3

#### ANNEX 1

#### **Description Of The Development**

An offshore wind turbine generating station, located as shown in Figure 1 below, with a gross electrical output capacity of up to 450 megawatts ("MW") comprising:

- 1. Not more than 75 three-bladed horizontal axis wind turbines each with a maximum blade tip height of up to 197 metres and a maximum rated capacity of up to 7MW;
- 2. For each WTG, a jacket or gravity base foundation;
- 3. For each WTG, a transition piece (including access ladders / fences and landing platforms), turbine tower, blades and nacelle; and
- 4. Inter array cabling between the turbines and the offshore substation platforms

and, except to the extent modified by the foregoing, all as specified in the application letter and the project description contained in the accompanying Environmental Statement ("ES") (Chapter 5 of the ES as supplemented by Technical Appendix 1 of the SEIS) and the Section 36 Consent Variation: Supporting Environmental Information but subject always to the conditions specified in **Annex 2** of this consent.

#### ANNEX 2

#### Condition 7 of the S36 Consent

The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying Environmental Statement ("ES"), the SEIS, the Section 36 ("S36") Consent Variation: Supporting Environmental Information and Annex 1 of this letter, except in so far as amended by the terms of this S36 consent.

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

#### ANNEX 3

#### Definition of "the Application"

"The Application" means the Application letters and Environmental Statement ("ES") submitted to the Scottish Ministers, by the Company on 13<sup>th</sup> July 2012 and Supplementary Environmental Information Statement submitted to the Scottish Ministers by the Company on 15<sup>th</sup> April 2013 for consent under section 36 ("S36") of the Electricity Act for the construction and operation of Neart na Gaoithe Offshore Wind Farm in the Firth of Forth with a maximum generating capacity of 450 megawatts ("MW") and the S36 Consent Variation: Supporting Environmental Information submitted to the Scottish Ministers by the Applicant under section 36C of the Electricity Act on 16<sup>th</sup> July 2015;

ANNEX C – DRAFT VARIATION DECISION LETTER

### marinescotland

T: +44 (0)1224 295579 E: MS.MarineRenewables@gov.scot

Mr David Sweenie Offshore Manager Scotland Mainstream Renewable Power Ltd. c/o Shepherd and Wedderburn 191 West George Street Glasgow G2 2LB



18<sup>th</sup> March 2016

Dear Mr Sweenie,

#### APPLICATION UNDER SECTION 36C OF THE ELECTRICITY ACT 1989 TO VARY THE CONSENT GRANTED UNDER SECTION 36 OF THE ELECTRICITY ACT 1989 ON 10<sup>TH</sup> OCTOBER 2014 TO CONSTRUCT AND OPERATE THE NEART NA GAOITHE OFFSHORE WIND FARM TO THE EAST OF FIFE NESS IN THE FIRTH OF FORTH

I refer to the variation application made by Mainstream Renewable Power Limited (on 16<sup>th</sup> July 2015), on behalf of Neart na Gaoithe Offshore Wind Limited (NnGOWL") for:

a) variation under section 36C of the Electricity Act 1989 (as amended) to the consent granted under section 36 ("S36") of the Electricity Act 1989 (as amended) ("the Electricity Act") on 10<sup>th</sup> October 2014 for construction and operation of the Neart na Gaoithe Offshore Wind Farm ("NnGOWF") ("the Development") to the East of Fife Ness in the Firth of Forth ("the relevant S36 consent").

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

#### Nature of the Variation Sought

The variation proposed in the application was to amend the relevant S36 consent to allow:

- An increase in the maximum rated turbine capacity from 6 MW to 7 MW (the maximum generating capacity of the Development will continue to be limited to 450 MW);
- A change in the maximum turbine hub heights from 107.5 m to 115 m above Lowest Astronomical Tide ("LAT"); and
- A change in maximum turbine platform height from 18 m to 21 m above LAT.

#### **Environmental Impacts**

The Scottish Ministers are satisfied that environmental information, including an Environmental Statement ("ES") and an Addendum of Supplementary Environmental Information (both submitted also in support of the original application for a S36 consent) and also the further Supporting Environmental Information, has been produced in accordance with the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 ("the EIA Regulations") (as amended; and as modified by regulation 5 of the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013) ("the Variation Regulations") and that the applicable procedures regarding publicity and consultation have been followed.

Having consulted with relevant consultees, the Scottish Ministers have considered the environmental information and assessed the environmental impacts of the development as amended by the proposed variation. Ministers consider that the proposed variations to the consented development will not result in significant environmental impacts.

Under Regulation 61 of the Conservation of Habitats and Species Regulations 2010 Marine Scotland Licensing Operations Team ("MS-LOT") on behalf of the Scottish Ministers have completed an Appropriate Assessment ("AA"). Although the worst case scenario was assessed in the Regional Forth and Tay AA completed in October 2014, MS-LOT considered it appropriate to undertake a further AA in order to include the best available evidence (including the British Trust for Ornithology Avoidance Rate Report which was not available in its final version for use in the Forth and Tay Regional AA), and also to include additional projects in the in-combination assessment which had been consented since the Forth and Tay Regional AA was completed.

The AA concluded that NnGOWF would not adversely affect the integrity of the Buchan Ness to Collieston Coast Special Protection Area ("SPA"), Fowlsheugh SPA, Forth Islands SPA, St Abb's Head to Fast Castle SPA, Moray Firth Special Area of Conservation ("SAC"), Firth of Tay and Eden Estuary SAC, Isle of May SAC, Berwickshire & North Northumberland Coast SAC, River South Esk SAC, River Tay SAC, River Dee SAC, River Teith SAC or River Tweed SAC, either alone or incombination with the other Forth and Tay offshore wind farms (Inch Cape, Seagreen Alpha and Seagreen Bravo) (or where appropriate for consideration, other developments already licensed as detailed in the AA).

#### Consultation

The Variation Regulations and the EIA Regulations set out that an applicant must publish the application on a website, serve a copy of the variation application on any planning authority as the Scottish Ministers may direct 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 Dundee Courier, East Lothian Courier, Edinburgh Gazette and Fishing News for two weeks, and for one week each in The Scotsman and Lloyds List.

MS-LOT consulted a wide range of relevant organisations on the application and Supporting Statement including Angus Council ("AC"), Dundee City Council ("DCC"), East Lothian Council ("ELC"), Fife Council ("FC") and Scottish Borders Council ("SBC"), Scottish Natural Heritage ("SNH"), the Joint Nature Conservation Committee ("JNCC"), Scottish Environment Protection Agency ("SEPA") and non-statutory consultees.

An objection was received from the Royal Society for the Protection of Birds Scotland ("RSPB Scotland"). RSPB Scotland maintained their objection from the original S36 application and cited further concerns around the methods used to estimate seabird impacts, and the validity of the original Habitats Regulations Appraisal being relied upon for the variation assessment.

#### Public Representations

There were no representations made on the Application from members of the public.

#### The Scottish Ministers' Determination

The Scottish Ministers have considered the application documentation and all responses from consultees. Having consented the NnGOWF on 10<sup>th</sup> October 2014, and set out their reasons for doing so in the decision letter associated with that consent, and being satisfied that the variations proposed in the application do not fundamentally alter the character or scale of the Development whilst allowing a potential reduction of environmental impacts of the development, the Scottish Ministers are supportive of the proposed variation of that consent, on the basis that such a variation will allow the Company the opportunity to utilise most up to date commercially available technology.

The Scottish Ministers consider that amendment to the existing Annexes, will provide the Development opportunities to potentially reduce the environmental impacts of the project by permitting a reduced number of turbines to be constructed through the increase in capacity from 6 MW to 7 MW turbines.

The Scottish Ministers consider that the amended annexes are both reasonable and enforceable.

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

Annex or Condition	Amendment
In Annex 1	In <b>Description of the Development</b> substitute point 1. with –
	"not more than 75 three-bladed horizontal axis wind turbines each with a maximum blade tip height of up to 197 metres and a maximum rated capacity of up to 7MW;"
	In Description of the Development substitute last paragraph with –
	"and, except to the extent modified by the foregoing, all as specified in the application letter and the project description contained in the accompanying Environmental Statement (Chapter 5 of the ES as supplemented by Technical Appendix 1 of the SEIS) and the section 36 Consent Variation: Supporting Environmental Information but subject always to the conditions specified in Annex 2 of this consent."
In Annex 2, Condition 7	Substitute full text with –
Condition 7	"The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the SEIS, the section 36 Consent Variation: Supporting Environmental Information and Annex 1 of this letter, except in so far as amended by the terms of this Section 36 consent"
In Annex 3	In <b>Definition of "the Application"</b> add to the end of the text –
	"and the section 36 Consent Variation: Supporting Environmental Information submitted to the Scottish Ministers by the Company under section 36C of the Electricity Act on 16th July 2015;"

For illustrative purposes a consolidated version of the relevant S36 consent (with variations shown in tracked changes for ease of reference) is provided at **Annex 1**.

Copies of this letter have been sent to the nearest onshore Planning Authorities, AC, DCC, ELC, FC and SBC. This letter has also been published on the MS-LOT website.

http://www.gov.scot/Topics/marine/Licensing/marine/scoping/Mainstream-NeartnaGaoithe 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 S36 consent.

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

Yours sincerely

JAMES McKIE Head of Licensing Operations Team, Marine Scotland For and on behalf of the Scottish Ministers A member of the staff of the Scottish Government Annex 1

COPY OF THE DECISION LETTER ISSUED ON 10<sup>th</sup> October 2014, WITH TRACKED CHANGES SHOWING CONSOLIDATED VERSION OF THE LETTER – IE. WITH VARIATIONS TO THE CONSENT HIGHLIGHTED

ANNEX D – DECISION LETTER AND CONDITIONS

## marinescotland

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Mr David Sweenie Offshore Manager Scotland Mainstream Renewable Power C/O Shepperd and Wedderburn 191 West George Street Glasgow G2 2LB





10 October 2014

Dear Mr Sweenie,

#### CONSENT GRANTED BY THE SCOTTISH MINISTERS TO CONSTRUCT AND OPERATE THE NEART NA GAOITHE OFFSHORE WIND FARM ELECTRICITY GENERATING STATION, APPROXIMATELY 15.5 KM TO THE EAST OF FIFE NESS, IN THE FIRTH OF FORTH

Defined Terms used in this letter and Annex 1 & 2 are contained in **Annex 3**.

The following applications have been made to the Scottish Ministers for:

- i. A consent under Section 36 of the Electricity Act 1989 (as amended) ("the Electricity Act") by Neart na Gaoithe Offshore Wind Limited (Company Number SC356223) ("the Company") and having its registered office at C/O Shepherd and Wedderburn LLP, 191 West George Street, Glasgow, G2 2LB for the Neart na Gaoithe Offshore Wind Farm in the Firth of Forth;
- ii. A marine licence to be considered under the Marine (Scotland) Act 2010 ("the 2010 Act") by Neart na Gaoithe Offshore Wind Limited to deposit any substance or object and to construct, alter or improve any works in relation to the Neart na Gaoithe Offshore Wind Farm; and

iii. A marine licence to be considered under the 2010 Act by Neart na Gaoithe Offshore Wind Limited to deposit any substance or object and to construct, alter or improve any works in relation to the Offshore Transmission Works within the Scottish marine area.

#### THE APPLICATION

I refer to applications at i. and ii. above made by Neart na Gaoithe Offshore Wind Limited ('the Company'), received on the 13<sup>th</sup> July 2012 for consent under Section 36 of the Electricity Act for the construction and operation of Neart na Gaoithe Offshore Wind Farm in the Firth of Forth with a maximum generating capacity of **450** megawatts ("MW") ("the Application").

In this letter, "the Development" means the proposed Neart na Gaoithe Offshore Wind Limited electricity generating station as described in **Annex 1** of this letter.

#### STATUTORY AND REGULATORY FRAMEWORK

# The Scotland Act 1998, The Scotland Act 1998 (Transfer of Functions to the Scottish Ministers etc.) Order 1999 and The Scotland Act 1998 (Transfer of Functions to the Scottish Ministers etc.) (No. 2) Order 2006

The generation, transmission, distribution and supply of electricity are reserved matters under Schedule 5, Part II, section D1 of the Scotland Act 1998. The Scotland Act 1998 (Transfer of Functions to the Scottish Ministers etc.) Order 1999 ("the 1999 Order") executively devolved Section 36 consent functions under the Electricity Act (with related Schedules) to the Scottish Ministers. The Scotland Act 1998 (Transfer of Functions to the Scottish Ministers. The Scotland Act 1998 (Transfer of Functions to the Scottish Ministers etc.) (No. 2) Order 2006 revoked the transfer of Section 36 consent functions as provided under the 1999 Order and then, one day later, re-transferred those functions, as amended by the Energy Act 2004, to the Scottish Ministers in respect of Scotland and the territorial waters adjacent to Scotland and extended those consent functions to a defined part of the Renewable Energy Zone beyond Scottish territorial waters (as set out in the Renewable Energy Zone (Designation of Area) (Scottish Ministers) Order 2005).

#### The Electricity Act 1989

Any proposal to construct, extend or operate a generating station situated in the territorial sea (out to 12 nautical miles ("nm") from the shore), with a generation capacity in excess of 1 MW requires consent under Section 36 of the Electricity Act. A consent under Section 36 may include such conditions (including conditions as to the ownership or operation of the station) as appear to the Scottish Ministers to be appropriate. The consent shall continue in force for such period as may be specified in or determined by or under the consent.

Paragraph 3 of Schedule 9 to the Electricity Act places a duty on licence holders or persons authorised by an exemption to generate, distribute, supply or participate in the transmission of electricity when formulating "relevant proposals" within the meaning of paragraph 1 of Schedule 9 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. Such persons are statutorily obliged to do what they reasonably can to mitigate any effect which the proposals would 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 preserving natural beauty etc. and the extent to which the person by whom the proposals were formulated has complied with their duty to mitigate the effects of the proposals. When exercising any relevant functions, a licence holder, a person authorised by an exemption to generate or supply electricity, and 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 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, and considering the conditions to be included in such consent, must have regard to the extent and nature of any obstruction of 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 consent, the Scottish Ministers must have regard to the likely overall effect (both while being carried on and subsequently) of the activities in question and such other offshore generating activities which are either already the subject of Section 36 consent or activities for which it appears likely that such consents will be granted.

Under Schedule 8 to the Electricity Act and the Electricity (Applications for Consent) Regulations 1990 ("the 1990 Regulations"), 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 to the Electricity Act the Scottish Ministers must serve notice of application for consent upon any relevant Planning Authority.

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

The location and extent of the proposed Development to which the Application relates (being wholly offshore) means that the Development is not within the area of any local Planning Authority. The Scottish Ministers are not, therefore, obliged under paragraph 2(2) of Schedule 8 to the Electricity Act to require a public inquiry to be held. The nearest local Planning Authorities did not object to the Application. If they

had objected to the Application, and even then if they did not withdraw their objections, the Scottish Ministers would not have been statutorily obliged to hold a public inquiry.

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

The Scottish Ministers are satisfied that they have considered and applied all the necessary tests set out within the Electricity Act when assessing the Application. The Company, at the time of application, was not a licence holder or a person authorised by an exemption to generate, distribute, supply or participate in the transmission of electricity when formulating "relevant proposals" within the meaning of paragraph 1 of Schedule 9 to the Electricity Act. The Company obtained a generation licence during the period whilst the Scottish Ministers were determining the Application for consent. The Minister and his officials have, from the date of the Application for consent, approached matters on the basis that the same Schedule 9, paragraph 3(1) obligations as apply to licence holders and the specified exemption holders should also be applied to the Company.

The approach taken has been endorsed by the Outer House of the Court of Session where Lord Doherty in *Trump International Golf Club Scotland Limited and The Trump Organization against The Scottish Ministers and Aberdeen Offshore Wind Farm Limited* [2014] CSOH 22 opines that the Electricity Act and regulations made under it contemplate and authorise consent being granted to persons who need not be licence holders or persons with the benefit of an exemption. Lord Docherty's reasoning in that case was agreed by the Inner House of the Court of Session in the Opinion delivered by Lord Brodie in the reclaiming motion in the petition of *Sustainable Shetland v Scottish Ministers and Viking Energy Partnership* [2014] CSIH 60. The Company is, in any event, required to consider the protection of the environment under statutory regulations which are substantially similar to Schedule 9 to the Electricity Act, namely the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 ("the 2000 Regulations"), whether or not the Company is among the categories of persons described in Schedule 9, paragraph 3(1).

#### Marine (Scotland) Act 2010

The 2010 Act regulates the territorial sea adjacent to Scotland in terms of marine environment issues. As this Application falls within the Scottish marine area (essentially the territorial sea adjacent to Scotland, which extends out to 12 nm from the shore), it falls to the 2010 Act to regulate marine environmental issues in this area. Subject to exemptions specified in subordinate legislation, under Part 4 of the 2010 Act, licensable marine activities may only be carried out in accordance with a marine licence granted by the Scottish Ministers.

Under Part 2 of the 2010 Act 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 2010 Act, must act in a way best calculated to mitigate, and adapt to, climate change.

#### Climate Change (Scotland) Act 2009

Under Part 2 of the 2010 Act, the Scottish Ministers must, when exercising any function that affects the Scottish marine area (essentially the territorial sea adjacent to Scotland) under the Climate Change (Scotland) Act 2009 (as amended), act in the way best calculated to mitigate, and adapt to, climate change so far as is consistent with the purpose of the function concerned. Under the Climate Change (Scotland) Act 2009 (as amended), actin the Act 2009 (as amended), 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, and they have exercised their functions in compliance with the requirements of the Climate Change (Scotland) Act 2009 (as amended).

# Environmental Impact Assessment Directive; The Electricity (Applications for Consent) Regulations 1990 and the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended)

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 ("ES") in terms of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended) ("the 2000 Regulations").

The proposal for the Development has been publicised, to include making the ES available to the public, in terms of the 2000 Regulations. The Scottish Ministers are satisfied that an ES has been produced and the applicable procedures regarding publicity and consultation all as laid down in the 1990 Regulations, the 2000 Regulations and the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) have been followed.

The Scottish Ministers have, in compliance with the 2000 Regulations consulted with Scottish Natural Heritage ("SNH"), the Joint Nature Conservation Committee ("JNCC"), the Scottish Environment Protection Agency ("SEPA"), the Planning Authorities most local to the Development, and such other persons likely to be concerned by the proposed Development by reason of their specific environmental responsibilities on the terms of the Application in accordance with the regulatory requirements. The Scottish Ministers have taken into consideration the environmental information, including the ES and Supplementary Environmental Information Statement ("SEIS"), and the representations received from the statutory consultative bodies and from all other persons.

The Scottish Ministers have, in compliance with the 2000 Regulations, obtained the advice of the SEPA on matters relating to the protection of the water environment. This advice was received on 10<sup>th</sup> September 2012.

The Scottish Ministers have also consulted a wide range of relevant organisations, including colleagues within the Scottish Government on the Application, on the ES and as a result of the issues raised, upon the required SEIS.

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

#### The Habitats Directive and the Wild Birds Directive

The Habitats Directive provides for the conservation of natural habitats and of wild flora and fauna in the Member States' European territory, including offshore areas such as the proposed site of the Development. It promotes the maintenance of biodiversity by requiring Member States to take measures which include those which maintain or restore natural habitats and wild species listed in the Annexes to the Habitats Directive at a favourable conservation status and contributes to a coherent European ecological network of protected sites by designating Special Areas of Conservation ("SACs") for those habitats listed in Annex I and for the species listed in Annex II, both Annexes to that Directive.

The Wild Birds Directive applies to the conservation of all species of naturally occurring wild birds in the member states' European territory, including offshore areas such as the proposed site of the developments and it applies to birds, their eggs, nests and habitats. Under Article 2, Member States are obliged to "take the requisite measures to maintain the population of the species referred to in Article 1 at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or to adapt the population of these species to that level". Article 3 further provides that "[i]n the light of the requirements referred to in Article 2, Member States shall take the requisite measures to preserve maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Article 1". Such measures are to include the creation of protected areas: article 3.2.

Article 4 of the Wild Birds Directive provides *inter alia* as follows:

- "1. The species mentioned in Annex I [of that Directive] shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. [...]
- 2. Member States shall take similar measures for regularly occurring migratory species not listed in Annex I [of that Directive], bearing in mind their need for protection in the geographical sea and land area where this Directive applies, as regards their breeding, moulting and wintering areas and staging posts along their migration routes. To this end, Member States shall pay particular attention to the protection of wetlands and particularly to wetlands of international importance.

[...]

4. 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."

Articles 6 & 7 of the Habitats Directive provide *inter alia* as follows:

- "6.2 Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive.
- 6.3 Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to an appropriate assessment ("AA") of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.
- 6.4. If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.
- 7. Obligations arising under Article 6 (2), (3) and (4) of this Directive shall replace any obligations arising under the first sentence of Article 4 (4) of Directive 79/409/EEC in respect of areas classified pursuant to Article 4 (1) or similarly recognized under Article 4 (2) thereof, as from the date of implementation of this Directive or the date of classification or recognition by a Member State under Directive 79/409/EEC, where the latter date is later."

The Habitats Directive and the Wild Birds Directive have, in relation to the marine environment, been transposed into Scots law by the Conservation (Natural Habitats, & c.) Regulations 1994 ("the 1994 Regulations"). As the Development is to be sited in the Scottish Territorial Sea, it is the 1994 Regulations which are applicable in respect of this application for Section 36 consent.

The 1994 Regulations ("the Habitats Regulations") clearly implement the obligation in article 6(3) & (4) of the Habitats Directive, which by article 7 applies in place of the

obligation found in the first sentence of article 4(4) of the Wild Birds Directive. In each case the "competent authority", which in this case is the Scottish Ministers, is obliged to "make an appropriate assessment of the implications for the site in view of the site's conservation objectives" (hereafter an "AA"). Such authority is also obliged to consult SNH and, for the purpose of regulation 48 of the 1994 Regulations, to have regard to any representations made by SNH.

Developments in, or adjacent to, European protected sites, or in locations which have the potential to affect such sites, must undergo what is commonly referred to as a Habitats Regulations Appraisal ("HRA"). The appraisal involves two stages which are set out as follows:

- Stage 1 Where a project is not connected with or necessary to the site's management and it is likely to have a significant effect thereon (either individually or in combination with other projects), then an AA is required.
- Stage 2 In light of the AA of the project's implications for the site in view of the site's conservation objectives, the competent authority must ascertain to the requisite standard that the project will not adversely affect the integrity of the site, having regard to the manner in which it is proposed to be carried out and to any conditions or restrictions subject to which the consent is proposed to be granted.

SNH and the JNCC were of the opinion that the Development is likely to have a significant effect on the qualifying interests of certain Special Protected Areas ("SPAs") and SAC sites, therefore an AA was required. The AA which has been undertaken concludes that the proposed Development, and the Inch Cape Offshore Limited ("ICOL"), Seagreen Alpha Offshore Wine Energy Limited ("SAWEL") and Seagreen Bravo Offshore Wind Limited ("SBWEL") developments will not, on their own or in combination with each other (or where appropriate for consideration, other developments already licenced), subject to conditions, adversely affect site integrity of the Buchan Ness to Collieston Coast SPA, Fowlsheugh SPA, Forth Islands SPA, St Abb's Head to Fast Castle SPA, Moray Firth SAC, Firth of Tay and Eden Estuary SAC, Isle of May SAC, Berwickshire & North Northumberland Coast SAC, River South Esk SAC, River Tay SAC, River Dee SAC, River Teith SAC or River Tweed SAC.

SNH and the JNCC are in agreement with the conclusions of the AA for the marine mammal and freshwater fish SACs, and in some instances, the SPAs. There is disagreement on the conclusions of the following:

- Kittiwake at Fowlsheugh
- Kittiwake at Forth Islands
- Gannet at Forth Islands
- Puffin at Forth Islands
- Razorbill at Forth Islands

This disagreement is as a result of differences in assessment methods and the predicted effect.

The Scottish Ministers, as a competent authority, have complied with European Union ("EU") obligations under the Habitats Directive and the Wild Birds Directive in relation to the Development. Marine Scotland Licensing Operations Team ("MS-LOT"), on behalf of the Scottish Ministers, undertook an AA. In carrying out the AA, MS-LOT concludes that the Development will not adversely affect site integrity of any of the identified European protected sites assessed to have connectivity with the Development, and have imposed conditions on the grant of this consent ensuring that this is the case. The test in the *Waddenzee* judgement formed the basis for the approach taken (CJEU Case C-127/02 [2004] ECR I-7405), and the Scottish Ministers are certain that the Development will not adversely affect site integrity of the sites "where no reasonable scientific doubt remains as to the absence of such effects". The AA will be published and available on the Marine Scotland licensing page of the Scottish Government's website.

#### APPLICABLE POLICIES AND GUIDANCE

#### <u>Marine area</u>

#### The UK Marine Policy Statement 2011

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

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

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 Statement clearly states that the new system of marine planning introduced across the UK will integrate with terrestrial planning. The Statement also makes it clear that the geographic overlap between the Marine Plan and existing plans will help organisations to work effectively together and to ensure that appropriate harmonisation of plans is achieved. The Scottish Ministers have, accordingly, had regard to the terms of relevant terrestrial planning policy documents and plans when assessing the Application for the purpose of ensuring consistency in approach.

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

#### <u>Blue Seas-Green Energy: A Sectorial Plan for Offshore Wind Energy in Scottish</u> <u>Territorial Waters</u>

The Scottish Government has used a marine planning approach to develop Blue Seas Green Energy – A Sectorial Marine Plan for Offshore Wind in Scottish Territorial Waters ("the Plan").

The Plan represents the Scottish Minister's vision for the delivery of energy from offshore wind resources within Scottish Territorial Waters (0 to 12 nautical miles). The Plan contains proposals for offshore wind development at the regional level up to 2020 and beyond. It seeks to maximise the benefits for Scotland, its communities and people and recognises the need for public acceptability in the development of offshore wind. It aims to strike a balance between economic, social and environmental needs and also recognises that there are national and regional challenges to overcome to facilitate development.

The draft Plan contained 10 short term (up to 2020) and 30 medium term (up to 2030) options including Neart na Gaoithe as a short term site in the East region. The sites were selected by developers and The Crown Estate Commissioners ("CEC") and awarded Exclusivity Agreements. The Scottish Ministers decided that 6 short term sites and 25 medium term areas of search should be progressed within the Plan. However, one of the six short term sites (Forth Array) has since been removed from the Plan due to the CEC withdrawing the exclusivity agreement for this site.

The Scottish Ministers further decided that 3 short term sites in the West and South-West regions were unsuitable for the development of offshore wind and should not be progressed as part of the Plan. These short term sites were considered unsuitable because of the presence of a wide range of constraints on a number of receptors (including communities, shipping, fishing, biodiversity, recreation, defence, economic impact, cultural heritage, seascapes and landscapes).

The main findings for the East (Firth of Forth) Offshore Wind Plan region was that this region has favourable conditions and significant potential for the development of offshore wind within Scottish Territorial Waters. The significant strategic issues to be resolved, according to the Plan, related to fishing and the environment. Other key issues to be addressed for the region included shipping and navigation, biodiversity, aviation and radar and defence activities. Evidence at this stage suggested that issues could be addressed through appropriate mitigation measures at the project level.

The Neart na Gaoithe short term site was seen to be suitable for development by 2020 (as well as the Inch Cape development in Scottish Territorial Waters and Seagreen Round 3 offshore wind development site just outside Scottish Territorial

Waters adjacent to Neart na Gaoithe). The cumulative and in combination impacts of these developments were identified as requiring further consideration.

The Plan recommended that the Neart na Gaoithe short term option should be taken forward to the licensing stage. A key finding was that there is significant potential for this development in the short term, and it appears to be publicly and environmentally acceptable at the strategic level.

The Plan seeks to deliver the Scottish Ministers' policies for green energy, thereby helping to meet carbon reduction targets. The Plan underpins the promotion of economic development and competitiveness for Scotland and has been built using environmental and socio-economic assessments and consultation, both public and sectoral, as marine plan making tools.

The outcomes of Strategic Environmental Assessment ("SEA"), HRA, Socioeconomic Assessment and Consultation Analysis informed the final Plan.

The Scottish Ministers consider that the Development accords with the Plan.

#### Draft National Marine Plan

A draft National Marine Plan, developed under the 2010 Act and the 2009 Act was subject to consultation which closed in November 2013. Marine Scotland Planning & Policy are now considering the responses and undertaking a consultation analysis exercise. When formally adopted, the Scottish Ministers must take authorisation and enforcement decisions which affect the marine environment in accordance with the Plan.

The draft National Marine Plan sets an objective to promote the sustainable development of offshore wind, wave and tidal renewable energy in the most suitable locations. It also contains specific policies relating to the mitigation of impacts on habitats and species; and in relation to treatment of cables.

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

#### Offshore Renewable Policy

Published in September 2010, Scotland's Offshore Wind Route Map sets out the opportunities, challenges and priority recommendations for action for the sector to realise Scotland's full potential for offshore wind. The refreshed version of this document, published in January 2013, highlighted the progress that has been made but pointed to the continuing challenges that need to be overcome. The Scottish Ministers remain fully committed to realising Scotland's offshore wind potential and to capture the biggest sustainable economic growth opportunity for a generation.

This Development, will contribute significantly to Scotland's renewable energy targets via its connection to the National Grid. It will also provide wider benefits to the

offshore wind industry which are reflected within Scotland's Offshore Wind Route Map and the National Renewables Infrastructure Plan.

#### 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 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), the Scottish Ministers have had regard to the following documents.

#### Scottish Planning Policy

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

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

#### National Planning Framework 2

Scotland's National Planning Framework 2 ("NPF2") sets out strategic development priorities to support the Scottish Government's central purpose, namely sustainable economic growth. Relevant paragraphs to the Application are paragraphs 65, 144, 145, 146, and 147. NPF2 provides strong support for the development of renewable energy projects to meet ambitious targets to generate the equivalent of 100% of our gross annual electricity consumption from renewable sources and to establish Scotland as a leading location for the development of the renewable offshore wind sector.

# National Planning Framework 3

Scotland's National Planning Framework 3 ("NPF3") is the national spatial plan for delivering the Government Economic Strategy. The Main Issues Report sets out the ambition for Scotland to be a low carbon country, and emphasises the role of planning in enabling development of renewable energy onshore and offshore. NPF3 includes a proposal for national development to support onshore infrastructure for offshore renewable energy, as well as wider electricity grid enhancements. NPF3 also supports development and investment in sites identified in the National Renewables Infrastructure Plan.

The Main Issues Report was published for consultation in April 2013 and the Proposed NPF3 was laid in the Scottish Parliament on 14<sup>th</sup> January 2014. Parliamentary consideration concluded in March 2014. Having taken into account the views of Parliament, the Scottish Government published the finalised NPF3 on 23<sup>rd</sup> June 2014.

NPF3 sets the context for development planning in Scotland and provides a framework for the spatial development of Scotland as a whole setting out the Scottish Governments development priorities over the next 20-30 years and identifies national developments which support the development strategy. Paragraphs relevant to the Application are 3.4, 3.6, 3.8, 3.9, 3.12, 3.34 and 3.41.

NPF3 sets out the ambition for Scotland to move towards a low carbon country placing emphasis on the development of onshore and offshore renewable energy. NPF3 recognises the significant wind resource available in Scotland sets out targets to meet at least 30% of overall energy demand from renewable sources by 2020 including generating the equivalent of at least 100% of gross electricity consumption from renewables with an interim target of 50% by 2015. NPF3 also identifies targets to source 11% of heat demand and 10% of transport fuels from renewable sources by 2020.

NPF3 aims for Scotland to be a world leader in offshore renewable energy and expects that the pace of onshore wind development will be overtaken by the development of marine energy including wind, wave and tidal. NPF3 notes the potential for an energy hub from Cockenzie extending along the Forth coast towards Torness. With significant plans for offshore wind farms in the Firths of Forth and Tay proposals for grid connections are coming forward requiring undersea cabling connecting convertor stations and substations. NPF3 looks for developments where feasible. NPF3 also recognises Cockenzie as a site with potentially significant opportunities for renewable energy related investment.

# Fife Development Plan

Fife Council ("FC") advised that due to the scale of the Development, in terms of turbine height and numbers, it requires to be assessed against the Fife Development Plan. This Plan comprises of the TAYplan Strategic Development Plan 2012-2032 and the Adopted St. Andrews and East Fife Local Plan 2012.

# TAYplan Strategic Development Plan 2012-2032

The TAYplan Strategic Development Plan ("TAYplan SDP") sets out a spatial strategy which says where development should and should not go. It is designed to deliver the location related components of sustainable economic development, good quality places and effective resource management.

The Scottish Ministers consider that the TAYplan SDP is broadly supportive of the Development

#### Adopted St. Andrews and East Fife Local Plan 2012

The Adopted St. Andrews and East Fife Local Plan 2012 implements the strategic vision set out in the Fife Structure Plan as it applies to the St Andrews and East Fife area. It contains proposals to guide the area's development over the period until 2022.

The relevant policies in this Plan are E3, E8, E11, E12, E20, E21, E22, E23 and I1. The Scottish Ministers consider that the St Andrews and East Fife Local Plan is broadly supportive of the Development.

# Fife Council's Supplementary Planning Guidance (SPG) on Wind Energy 2011

This supplementary Planning Guidance, whilst carrying less weight as a consideration than the TAYplan SDP, supplements the local plan policies. It indicates that proposals for wind farms/turbines will be assessed against the following constraints, any positive or adverse effects on them, and how any adverse effects can be overcome or minimised: Historic environment; areas designated for their regional and local natural heritage value; tourism and recreational interests; communities; buffer zones; aviation and defence interests; broad casting installations.

The Scottish Ministers consider that the Development has been assessed against these constraints.

#### East Lothian Local Plan 2008

East Lothian Council ("ELC") have advised that the policies of the East Lothian Local Plan do not apply to the offshore works as the plan only covers land to the Low Water Mark therefore the only aspect of the Development that this plan relates to is the inter-tidal works.

Where the cable makes landfall at Thorntonloch, a planning application will be made to East Lothian Council. The area concerned is covered by East Lothian Local Plan Policy DC1: Development in the Countryside and Undeveloped Coast; Policy C3: Protection of Open Space; NH4: Areas of Great Landscape Value and Policy NRG2: Torness Consultation Zone.

#### Angus Local Plan Review (Adopted 2009)

The Angus Local Plan Review sets out the land use planning response and policy framework which will contribute to ensuring that the physical, social and economic needs of all communities in Angus are provided for in a sustainable manner. Angus Council ("AC") have advised that the Angus Local Plan Review is not a relevant consideration as the Development is out with the area covered.

# **CONSULTATION**

In accordance with the statutory requirements of the 1990 Regulations and the 2000 Regulations, notices 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 East Lothian Council (as the onshore Planning Authority where the transmission works export cable comes ashore at Thorntonloch) as well as to Fife Council (as the nearest onshore Planning Authority), Angus Council, Scottish Borders Council ("SBC") and Dundee City Council ("DCC") as well as to SNH, and SEPA.

A two-stage formal consultation process was undertaken by the Scottish Ministers. The first, which related to the application for Section 36 consent, the marine licence applications (applications i, ii, and iii) and the ES, was commenced on 30<sup>th</sup> July 2012, and the second which related to the submission of further information in the form of a SEIS began on 21<sup>st</sup> June 2013.

# **Representations and Objections**

A total of twenty three (23) representations were received from members of the public during both consultation periods. Of these, sixteen (16) object to the Development, five (5) support it, and two neither objected to nor supported the Development with one (1) relating to the onshore cable route and subsequent onshore planning application, and one (1) relating to information used to assess the Development's potential impact on bats.

A number of representations received were from members of the public who currently reside in the area local to the Development.

Members of the public who objected to the Development stated concerns including, but not limited to, the visual impact of the Development, impact on tourism, detrimental to human health, failure to meet the requirements of the Aarhus Convention, inefficiency of the technology, the expense of constructing and operating wind farms, impacts on the Ministry of Defence and other communications infrastructure, impacts on the marine environment including marine mammals, fish and benthic ecology as well as birds.

Representations which noted support for the project were of the belief that the Development would offer benefits such as the creation of jobs, economic

opportunities for the area, and lead to a reduction in emissions from utilising a clean energy source. Additionally, it was felt that the visual impact was lessened due to the turbines being situated offshore compared to terrestrial projects.

Representations deemed to be neutral did not offer any support or objection to the Development however it was queried what studies had been undertaken to assess the possible impact on bats from the Development. Another representation was submitted that dealt with terrestrial interests covering possible disruption to a person's land during cable laying and removal operations. This representation deals with concerns out with the remit of Marine Scotland and was provided to the Planning Authority for their consideration of the onshore planning application.

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

Objections were received from, amongst others, the Royal Society for the Protection of Birds Scotland ("RSPB Scotland"), the Defence Infrastructure Organisation ("DIO") (Ministry of Defence ("MoD")), the Association of Salmon Fishery Boards ("ASFB"), the Esk District Salmon Fishery Board ("EDSFB"), the Tay District Salmon Fishery Board ("TDSFB"), and Whale and Dolphin Conservation ("WDC") the Scottish Fishermen's Federation ("SFF"), the East Coast Inshore Fisheries Group ("ECIFG") (also and previously referred to as the South East Inshore Fisheries Group ("SEIFG")) and the.

The DIO stated their willingness to withdraw their objections following a reassessment of the Development. The Scottish Ministers consider that conditions applied regarding marine mammals address concerns raised by WDC (**Annex 2**).

Objections from members of the public, the ASFB, EDSFB, TDSFB, WDC and the RSPB Scotland are being maintained. In light of these concerns, the Company has reduced the number of turbines in the Development from 125 to 75. The Company has also reduced the footprint area of the Development from 105 km<sup>2</sup> to 82.7 km<sup>2</sup>. Scottish Ministers have applied conditions for monitoring and mitigation to this consent (**Annex 2**).

The SFF and ECIFG also objected to the Development, however have welcomed the proposal for a Fisheries Working Group and the potential to participate in such a group.

The Scottish Minsters have considered and had regard to all representations and objections received.

# Material Considerations

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

The Scottish Ministers consider that no further information is required to determine the Application.

# Public Local Inquiry ("PLI")

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

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

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

The Scottish Ministers have received objections to the Development as outlined above, raising a number of issues. In summary, and in no particular order, the objections were related to the following issues:

- The efficiency of wind energy, high subsidies and cost to the consumer;
- Visual impacts of the Development;
- Impact upon the tourism industry;
- Impact on shipping, aviation, MOD and communications;
- Impact on marine wildlife, including birds;
- Impact on Atlantic salmon and sea trout;
- Impact on commercial fishing;
- Impact on bats;
- Failure to meet the requirements of the Aarhus convention;
- Sediment disturbance, transport and deposition;
- Decommissioning;
- Economic and employment benefits; and
- Emissions reductions.

# The efficiency of wind energy, high subsidies and cost to the consumer

A number of respondents to the Application commented on a range of issues relating to the efficiency of wind energy and consumer paid subsidies. The Scottish Ministers consider that although the electrical output of wind farms is variable, and cannot be relied on as a constant source of power, the electricity generated by wind is a necessary component of a balanced energy mix which is large enough to match Scotland's demand. Power supplied from wind farms reduces the need for power from other sources and helps reduce fossil fuel consumption.

With regard to high subsidies, support schemes play an important role in the development of renewable electricity schemes, particularly for more immature technologies. Increased deployment of offshore wind turbines is anticipated to result in declining costs, as the industry learns more about the technical issues which arise in challenging conditions. Alongside this, a number of other factors will also impact the future costs, including steel prices, exchange rates, labour and vessel costs.

The challenge laid down to industry as part of the Offshore Wind Cost Reduction Task Force is to reduce the levelised cost of offshore wind to £100 per megawatt hour. This is clearly ambitious and will require developers to work in collaboration and consider innovative technology and working practices. Test and demonstration facilities will also continue to be crucial to the development of the industry and in particular in pursuing the cost reduction agenda.

The Scottish Ministers, therefore, consider they have sufficient information regarding the efficiency of wind energy and high subsidies, 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.

#### Visual impacts of the Development

Adverse visual impact of the Development in its proposed location was raised in the outstanding objections to the Development. The Company in its ES indicates that the Development would have visual impacts that range from none to major depending upon where the viewer is situated. SNH, the Scottish Ministers' statutory nature conservation advisers who advise on, amongst other matters, visual impacts on designated landscape features, advised widespread and significant landscape, seascape, and visual impacts of the Development together with the ICOL, SAWEL and SBWEL proposals. These impacts would occur along the Scottish East coast from St Cyrus in Aberdeenshire, through Angus and Fife, South to Dunbar in East Lothian on a scale, and to an extent, unprecedented within Scotland (onshore or offshore) in recent times. At its closest the Development is 15.5 km from the shore with the ICOL development being approximately 15 km from the shore, the SAWEL development being 27 km from the shore and the SBWEL development being 38 km from the shore. The four developments are likely to be perceived as a single wind farm lying offshore, parallel to the coast. The visual impacts are primarily caused by the Development or ICOL, depending on viewpoint, rather than SAWEL or SBWEL, due to their closer proximity to shore, with the Development being highlighted as being particularly visually prominent across the East Lothian horizon and as having a particularly severe effect on East Fife. A change in the night-time character of seas and skies in the area where there is currently limited light pollution was also raised as a potential concern.

The Company's ES includes a number of visual photomontages that give an indication of the likely visual impacts. Although these are not definitive, the visualisation material acts as a tool to help inform the decision making process. Viewpoints were selected on a regional basis through the Forth and Tay Offshore Wind Developers Group ("FTOWDG") through consultation and agreement with SNH and relevant Local Authorities.

East Lothian Council and Angus Council raised some concerns over the visual impact of the Development, both alone and cumulatively, as they considered that there would be significant impacts on landscape and seascape character. They did not agree with all impacts as presented by the Company within the ES or SEIS, and also upheld concerns regarding night time lighting. Their concerns were not sufficient however to cause them to object to the Development.

Marine Scotland officials carried out a site visit of a selection of viewpoints provided in the Company's Application and in the course of which were able to compare the views from those viewpoints using visual photomontages.

The Scottish Ministers, therefore consider that they have sufficient information regarding the potential visual impacts 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 these impacts.

#### Impact upon the tourism industry

Concerns have been raised by respondents to the Application regarding the Development's potential impact upon tourism, particularly relating to the visual aspect and the effects this will have on livelihoods associated with tourism.

In this respect, 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. The attitudes of recreational users have been researched to a lesser extent. Landry, Allen, Cherry & Whitehead's 2012 study into the impact of wind farms on coastal recreational demand found that offshore wind farms overall had little impact on recreational visits by residents. However, there are individual differences within the data which, averaged out, show an overall limited impact. Whilst some residents said they would take fewer trips to the beach if there was a wind farm within view, others indicated that they would actually take more trips.

The Scottish Ministers consider they have sufficient information regarding the potential impacts of the Development upon the tourism industry, to reach a conclusion on the matter, and therefore advise the Scottish Ministers that it is appropriate not to cause a public inquiry to be held to further investigate this.

#### Impact on shipping, aviation, MOD and communications

Representations received raised concerns that the Development might present a hazard to vessels navigating in the Forth and Tay, and have impacts on aviation,

national defence as well as a proposed identified war graves site. The Scottish Ministers consider that the information provided to them by, amongst others, the Chamber of Shipping ("CoS"), Marine Coastguard Agency ("MCA") and Northern Lighthouse Board ("NLB"), National Air Traffic Services ("NATS"), MoD, British Telecom ("BT") and Joint Radio Company ("JRC") provides them with sufficient information on which to make a decision in this matter. MOD initially raised objections against the Development on the basis of the Development's impact upon air traffic services and MOD radar. Following discussions between the Company and these organisations objections were removed subject to conditions being placed on the consent (**Annex 2**).

The Scottish Ministers consider they have sufficient information regarding the potential hazards of the Development to shipping, aviation and the MOD, 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.

# Impact on marine wildlife, including birds

The impact on marine mammals, birds, benthic ecology and other marine life, as well as Natura concerns, was raised in the outstanding objections to the Development. The Company, in its ES and SEIS, assessed the potential impact of the Development on fauna and MS-LOT consulted various nature conservation bodies including SNH, the JNCC, the RSPB Scotland and WDC on these documents. RSPB Scotland and WDC have maintained their objection. Neither SNH nor the JNCC provided a position statement, however in the event that consent is granted have provided specified conditions. Such conditions have been included in this consent to ensure that impacts on wildlife are acceptable (**Annex 2**). Marine Scotland Science ("MSS") have reviewed the ES, SEIS, and the conditions, and consider that the conditions attached to the consent will allow impacts on marine wildlife to be within acceptable limits.

The Scottish Ministers recognise that there is an outstanding objection from RSPB Scotland due to the potential impacts on several seabird species (most notably kittiwake, gannet and puffin). The Scottish Ministers also recognise that there is an outstanding objection from WDC due to potential impacts on marine mammals (most notably bottlenose dolphins and harbour seals). An AA completed by MS-LOT, concluded that the Development will not adversely affect site integrity of any SAC or SPAS considered to have connectivity with the Development. Conditions to mitigate and monitor the effects on marine wildlife form part of this consent (**Annex 2**).

The Scottish Ministers, therefore, consider they have sufficient information regarding the potential impacts of the Development on marine wildlife, including birds, 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.

# Impact on Atlantic salmon and sea trout

Objections relating to potential effects on fish were raised during the public consultation exercise. Whilst not specifically in relation to Atlantic salmon or sea trout, the ASFB and the DSFBs also maintained their objections. The Company, in the ES and SEIS, recognised the uncertainties around the assessments of these species. The ASFB also recognise these uncertainties and believe they can only be

overcome though strategic research. A strategy is being developed by Marine Scotland to address monitoring requirements for Atlantic salmon and sea trout at a national level. The Company has engaged with MS-LOT, MSS, and the ASFB, to address this issue. A condition for the Company to engage at a local level (the Forth and Tay) to the strategic salmon and trout monitoring strategy is contained in this consent (**Annex 2**).

The Scottish Ministers, therefore, consider that sufficient steps, including the development of national strategic monitoring, are being taken to address the uncertainties regarding the potential effects of the Development on Atlantic salmon and sea trout, 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.

#### Impact on commercial fishing

The SFF, SEIFG/ECIFG, Fishermen's Mutual Association (Pittenweem) Ltd. ("FMA"), 10 Metre and Under Association ("10MAU"), Fife Fish Producers Organisation ("FFPO") and Firth of Forth Lobster Hatchery ("FFLH") raised concerns and / or objections over impacts on fishing and this was also raised within a number of public representations objecting to the proposal. The Company in the ES assessed the loss of fishing grounds as minor significance with the wind farm area showing a low level of fishing compared with other areas in the Forth and Tay. The assessment also highlighted that there is a likelihood that some degree of fishing operations will be able to be safely resumed once construction is complete.

The Company have engaged with the SFF, and in conjunction with neighbouring wind farm developers, has formed the Forth and Tay Offshore Wind Developers – Commercial Fisheries Working Group ("FTOWDG-CFWG"). The FTOWDG-CFWG has been established to facilitate on-going dialogue throughout the pre-construction, construction and operational phases of the Development. The FTOWDG-CFWG has representation for all commercial fishing interests in the area and provides a forum to discuss any issues and potential mitigation in relation to the wind farm developments in the Forth and Tay. Conditions for the Company to continue in the FTOWDG-CFWG and mitigate hazards to fishing are contained in this consent (**Annex 2**). Notices to Mariners and notices placed through the Kingfisher Fortnightly Bulletins is to be considered as a condition as part of the marine licence, the application for which will be determined in due course.

The Scottish Ministers, therefore, consider that they have sufficient information regarding the potential impacts of the Development on commercial fisheries, and that a mechanism is now in place to facilitate communication, and do not consider that it is appropriate to cause a public inquiry to be held to further investigate this.

#### Impact on bats

One objection was raised in relation to bats through the public consultation process. The Company in the ES assessed the impact on bats and summarised that there was unlikely to be a pathway to an impact on bats and therefore no impacts were predicted. Nature conservation bodies SNH and the JNCC were consulted on the application and did not raise any concerns in relation to potential impacts on this species.

The Scottish Ministers, therefore, consider they have sufficient information regarding the potential impacts of the Development on bats, 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.

### Failure to meet the requirements of the Aarhus convention

Concerns were raised that, in August 2013, the United Nations Economic Commission Europe ("UNECE") declared that the UK government's National Renewable Energy Action Plan ("NREAP") violated the laws that transpose the Aarhus Convention into the UK legal framework. In particular, the public had not been given full access to information on the impacts on people and the environment, nor had been given decision-making powers over their approval.

The Aarhus Convention is an international convention which protects the rights of individuals in relation to environmental matters in gaining access to information, public participation in decision-making, and access to justice. The UK is a signatory to the Convention, as is the EU.

On the single accusation relating to the UK Government – public participation in the Renewables Roadmap – the UK Government was found to be in breach of the Convention, as it had not conducted a Strategic Environmental Assessment ("SEA") or other public consultation. However, on the four accusations for which the Scottish Government had lead responsibility, including public participation in the preparation of plans, programmes and policies in Scotland, and public participation in relation to the Section 36 consent of a wind farm proposal, the Scottish Government's position was upheld. The ruling confirmed that Scotland is in compliance with this international obligation.

The Scottish Ministers consider that proper assessments have been undertaken for this Development and proper opportunity was afforded for consultation with stakeholders and members of the public, in compliance with the Public Participation Directive, to reach a conclusion on the matter. The Scottish Ministers are committed to applying strict environmental assessment procedures. The Scottish Ministers, therefore, do not consider it appropriate to cause a public inquiry to be held to further investigate this.

# Sediment disturbance, transportation and deposition

One concern raised through the public consultation was regarding sediment disturbance, transportation and deposition and how this could affect spawning or nursery grounds for a number of fish species. Also raised was the potential for chemical contaminants within the sediment to be released.

The Company, in its ES and SEIS, assessed the potential impact of the Development on sediment disturbance. During the consultation, neither SNH nor the JNCC provided significant concerns with regard to sediment impacts, however raised the requirement for pre-construction sandeel surveys in the event that consent is granted and have recommended that this forms part of a condition of consent. Such a condition has been included in this consent (**Annex 2**).

Sea bed mobilisation arising from the installation of offshore turbines has to be set in the context of on-going mobilisation events resulting from human activities. There are many activities undertaken in the marine environment that result in sea bed mobilisation including demersal trawling for fish and sea bed dredging to ensure safe navigational access in and out UK ports and harbours. These activities can occur on a much larger spatial scale than the installation of offshore renewable turbines. Also sea bed mobilisation will take place as a result natural process particularly during storm events.

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

# <u>Decommissioning</u>

A concern was raised regarding information on procedures and costs for decommissioning wind farms. It is a statutory requirement (sections 105 to 114 of Part 2 of the Energy Act 2004) that Secretary of State may require developers of offshore renewable installations to produce a fully costed decommissioning programme detailing how they intend to remove the installation when it comes to the end of its useful life and how the costs of doing so will be funded.

Section 109 of the 2004 Act provides that where a decommissioning programme has been approved by the Secretary of State it shall be the duty of the person who submitted the programme to secure that it is carried out in full, and in accordance with any conditions which may be attached to the approval. It is an offence for a person to decommission in any way that is not in accordance with either the decommissioning programme or the agreement of the Secretary of State.

In order to ensure that costs of decommissioning are met, the Company is required to have a financial bond in place and, in cases where ownership transfers, the new owners will be tested on their ability to fund decommissioning.

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

# Economic and employment benefits

A representation received raised concerns that the numbers of jobs for Scotland estimated within the Company's ES was based on conjecture. The Scottish Ministers do recognise that at this stage, many development and procurement decisions are still to be made. Changes in the anticipated expenditure or procurement patterns from those anticipated during the assessment will change the associated estimates of employment and Gross Value Added ("GVA"). The effect on employment through the supply chain depends critically on the design, construction and operation decisions that are yet to be taken, and on the extent to which Scottish companies are able to secure contracts. The figures also assume that the full proposal of 450 MW is developed.

The Scottish Ministers, therefore, consider they have sufficient information regarding economic and employment benefits 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.

# Claims for emissions reductions

A representation received raised concerns that the claims made by developers are fanciful and misleading. The Scottish Ministers consider the Development will act as a major contributor for reducing the amount of  $CO_2$  released in the atmosphere and hence help meet targets forming part of Scotland's commitments on climate change action to reduce greenhouse gases.

The Scottish Ministers consider the proposed project could result in an increase in the amount of renewable energy produced in Scotland and is consistent with the Government's policy on the promotion of renewable energy. Marine Scotland have estimated that the electricity generated by the Development would provide energy equivalent to the needs of over 288,400 homes, approximately 10% of the total number of homes in Scotland.

The Scottish Ministers, therefore, consider they have sufficient information regarding emissions reductions 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.

# <u>Summary</u>

In addition to the issues raised by the objections, as discussed above, the Scottish Ministers have considered all other material considerations with a view to determining whether a public inquiry should be held with respect to the Application. Those other material considerations are discussed in detail below, as part of the Scottish Ministers' consideration of the Application. The Scottish Ministers are satisfied that they have sufficient information to enable them to take those material considerations into proper account when making their final determination on this Application. The Scottish Ministers have had regard to the detailed information available to them from the Application, the ES, the SEIS and in the consultation responses received from the closest onshore Planning Authorities, SEPA, SNH and other relevant bodies, together with all other objections and representations. The Scottish Ministers do not consider that a PLI is required in order to inform them further in that regard.

# DETERMINATION ON WHETHER TO CAUSE A PUBLIC INQUIRY TO BE HELD

In the circumstances, the Scottish Ministers are satisfied that:

- 1. they possess sufficient information upon which to determine the Application;
- 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;
- 3. they have had regard to the various material considerations relevant to the Application, including issues raised by objections; and

4. 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 ES has been produced in accordance with 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 ES and SEIS, and the representations received from the consultative bodies, including SNH, SEPA, and from Fife Council, Scottish Borders Council, East Lothian Council, Angus Council, Dundee Council and from all other persons.

The Company, at the time of submitting the Application, was not a licence holder or a person authorised by an exemption to generate, distribute, supply or participate in the transmission of electricity when formulating "relevant proposals" within the meaning of paragraph 1 of Schedule 9 to the Electricity Act. The Company obtained a generation licence during the period whilst the Scottish Ministers were determining the application for consent. The Scottish Ministers have, from the date of the Application for consent, approached matters on the basis that the same Schedule 9, paragraph 3(1) obligations as applied to licence holders and the specified exemption holders should also be applied to the Company. The Scottish Ministers have also, as per regulation 4(2) of the 2000 Regulations, taken into account all of the environmental information and are satisfied the Company has complied with their obligations under regulation 4(1) of those Regulations.

# 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 a 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 Regulations, if it is considered that the development is likely to have a significant effect on a European protected site, then the competent authority must undertake an AA of its implications for the site in view of the site's conservation objectives.

With regards to the Development, SNH and the JNCC advised that the Development is likely to have a significant effect upon the qualifying interests of a number of sites, both SACs and SPAs. As the recognised competent authority under European legislation, the Scottish Ministers, through MS-LOT, have considered the relevant information and undertaken an AA. On the basis of the AA, MS-LOT 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 this consent (**Annex 2**). Under the Habitats Regulations the relevant statutory nature conservation bodies must be consulted. This has been carried out and SNH and the JNCC are in agreement with the cumulative assessment conclusions for the marine mammal and freshwater fish SACs and in some instances the SPAs. There is disagreement on conclusions of the following:

- Kittiwake at Fowlsheugh
- Kittiwake at Forth Islands
- Gannet at Forth Islands
- Puffin at Forth Islands
- Razorbill at Forth Islands

In the case of this Development the key decision for the Scottish Ministers has been the test laid down under article 6(3) of the Habitats Directive (and transposed by the Habitats Regulations) which applies to the effects of projects on both SACs and SPAs. The Scottish Ministers are satisfied that the test in article 6(3) is met, and that the relevant provisions in the Habitats Directive, the Wild Birds Directive and the Habitats Regulations are being complied with. The precautionary principle, which is inherent in article 6 of the Habitats Directive and is evident from the approach taken in the AA, has been applied and complied with.

The Scottish Ministers are convinced that, by the attachment of conditions to the consent, the Development will not adversely affect site integrity of the European protected sites included within the AA. The Scottish Ministers are satisfied that no reasonable scientific doubt remains as to the absence of such effects and that the most up-to-date scientific data available has been used.

# THE SCOTTISH MINISTERS' CONSIDERATION OF THE APPLICATION

The Scottish Ministers' consideration of the Application and the material considerations are set out below.

For the reasons already set out above, the Scottish Ministers are satisfied that the Development finds support from the applicable policies and guidance. The Scottish Ministers are also satisfied that all applicable Acts and Regulations have been complied with, and that the Development will not adversely affect site integrity of any European protected site.

# The impacts on birds

SNH, the JNCC and the RSPB Scotland expressed concerns about the potential impact of the Development in combination with the SAWEL, SBWEL and ICOL developments on several bird species using the Firth of Forth. Advice from SNH and the JNCC on the 7<sup>th</sup> March 2014 was that they could not conclude with reasonable certainty that there would be no adverse effect arising from the Forth and Tay wind

farms on the site integrity of Forth Islands or Fowlsheugh SPAs. RSPB Scotland object to the Forth and Tay wind farms, due to the unacceptable harm to seabird species. The species highlighted by SNH, the JNCC, and RSPB Scotland to be of most concern due to the cumulative impacts of the Forth and Tay wind farms were kittiwake, gannet and puffin. Concerns over gannet were mainly in relation to collision risk with the WTGs during operation whereas concerns over puffin were in relation to displacement of these species from the wind farm sites. Kittiwake were principally affected by displacement and barrier effects, with collision effects making a relatively small contribution to the estimated impacts.

These species along with guillemot, razorbill, herring gull, lesser black-backed gull, fulmar and common and Arctic tern were considered in the AA. The AA requires to assess the implications of the Development (in combination with the SAWEL, SBWEL and ICOL proposals, and including mitigation measures) for each site in view of the site's conservation objectives. SNH and the JNCC have advised that in the case of bird species the relevant conservation objective in the present case is to ensure the long-term maintenance of the population of the relevant qualifying bird species as a viable component of the relevant SPA. This is because that objective not only encompasses direct impacts to the species, such as significant disturbance when birds are out with the SPA, but it can also address indirect impacts, such as the degradation or loss of supporting habitats which are out with the SPA but which help maintain the population of the species of the SPA in the long-term. Such an assessment requires the use of data and scientific method to estimate two key values: first, to predict the impact of the Development (in combination with the SAWEL, SWBEL and ICOL proposals, and including mitigation measures) on the population of the qualifying species; and second, to quantify the level of impact that such populations could sustain without there being an adverse effect on the population of the species as a viable component of the site (i.e. an acceptable level of population change or "impact threshold", whether caused by increased mortality or decreased productivity). In the case of offshore wind farms, such impacts on bird species principally occur by virtue of two key effects, namely (i) increased mortality by direct collision of birds with a wind turbine and/or (ii) decreased productivity by displacement/barrier of birds from their foraging area (full details are provided in the AA).

The impacts from the Development were detailed by the Company and further refined by MSS, SNH and the JNCC. Several methods were used by SNH, the JNCC and MSS to determine levels of acceptable change. The AA concluded that the proposed Development, ICOL, SAWEL and SBWEL will not, on their own or in combination with each other (or where appropriate for consideration, other developments already licenced), subject to conditions, adversely affect site integrity of the Buchan Ness to Collieston Coast SPA, Fowlsheugh SPA, Forth Islands SPA or St Abb's Head to Fast Castle SPA.

SNH and the JNCC disagreed with some of the conclusions of the AA and advised that no adverse effect on site integrity could not be concluded for:

- Fowlsheugh SPA with respect to kittiwake
- Forth Islands SPA with respect to kittiwake, gannet, puffin and razorbill

The reasons for the differences in the conclusions made by the AA and SNH and the JNCC were mainly due to the different methods used to estimate thresholds and the SNH and the JNCC view that where species are known to be declining that the levels of predicted effects should not come close to the identified thresholds. MSS advice is that the thresholds take account of the trajectories of all species assessed and it is therefore appropriate to conclude no adverse effect on site integrity if the predicted effect is below the identified threshold. The AA used the most up to date and best available evidence in reaching its conclusions.

SNH and the JNCC also highlighted that effects on species not covered under HRA also require consideration (i.e. individuals breeding out with SPAs and non-breeding individuals). For some species, e.g. kittiwake, a considerable number of smaller colonies exist outside of the SPA boundaries. Whilst it is possible for effects to be attributed to these colonies, the setting of thresholds in the same manner as with the SPA populations becomes problematic due to the paucity of data from the colonies, their small size, and the questionable value of any population models that could therefore be produced. Assessments therefore focused upon the SPA populations as these were identified in advice from SNH and the JNCC as being of greatest concern.

Following a meeting held on 7th July 2014 between Marine Scotland and SNH, SNH followed up with a letter of 11th July which stated they had the opportunity to review and discuss aspects of their advice where conclusions reached by SNH & JNCC on Special Protection Areas are at variance from those reached by Marine Scotland Science. This was done in an effort to understand the nature and origin of the differences, and the extent to which they were germane to the decisions facing the Scottish Ministers with regards to this Application and the other applications for wind farms in the Forth and Tay.

In the letter, SNH noted that there was agreement between their advisers on the vast majority of the issues raised by the Forth and Tay proposals in terms of their effects on the natural heritage and in particular on protected species of seabird. SNH also noted there were precautionary elements in the approaches taken and the models recommended by SNH & JNCC, and by Marine Scotland Science.

SNH stated that what level of precaution is appropriate is not a matter that can be determined precisely, and judgements have to be made. They went on to say that this is a new and fast developing area of scientific study and that approaches are continually developing and being tested. Many of the methods underpinning assessment (such as collision risk modelling) are based on assumptions for which it may take a long time to get field data to provide verification. So again judgements had to be made where empirical analysis is unable to provide certainty.

SNH outlined several areas of ornithology monitoring which they recommended should be included in any consent granted. These are:

- the avoidance behaviour of breeding seabirds around turbines;
- flight height distributions of seabirds at wind farm sites;
- displacement of kittiwake, puffin and other auks from wind farm sites; and
- effects on survival and productivity at relevant breeding colonies.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, the AA completed, and having regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the Development's impact on birds which would require consent to be withheld.

#### The impacts on fish and shellfish

The consultation responses from the ASFB, the TDSFB, and the EDSFB confirmed objections to the Development from each. The three organisations raised concerns regarding the uncertainty over the potential impacts on migratory fish and their belief that there is insufficient information to make an adequate assessment of the potential effect on salmonid populations.

The key issues included subsea noise during construction and operation, EMFs arising from cabling and operation of the devices, disturbance or degradation of the benthic environment and aggregation effects.

A condition requiring a comprehensive monitoring programme has been included within this consent (Annex 2) and MSS are undertaking strategic research on migratory fish which the Company will contribute to at a local level (Firth of Forth). SNH identified several river SACs where the Development is likely to have a significant effect on the qualifying interests. This required MS-LOT, on behalf of the Scottish Ministers, to undertake an AA in view of the conservation objectives for each SAC. The AA concluded that subject to certain conditions, including appropriate mitigation and monitoring, the Development could be implemented without adversely effecting site integrity. Such conditions have been included by the Scottish Ministers within this consent (Annex 2). To mitigate the impacts of noise, the Company must produce a Construction Method Statement ("CMS") and Environmental Management Plan ("EMP") for the approval of the Scottish Ministers, and to mitigate against potential Electro Magnetic Fields ("EMF"), the Company has committed to burying cables to a minimum of 1.5 metres where possible, and where this is not possible, to use rock armouring in order to provide similar distance between cables and fish receptors.

SNH raised some concerns over the potential impacts on cod, herring and sandeels and requested that the Company conduct a post consent/pre construction sandeel survey to ascertain the distribution and density of sandeels across their site and provide additional baseline information. This would then be used in conjunction with a post construction survey to validate the ES assessments of low impact to sandeels. MSS highlighted that scouring around the bases of jackets was likely to have the largest effect on the bed and suspended sediments, as well as temporarily for sandeels due to short term changes to the sediment transport as a result although also highlighted that should the Company choose to utilise Gravity Base Foundations there may be some localised loss of habitat for sandeels due to the requirement for dredging and the area covered by each base. MSS did advise that the Development area is not of key importance to the species.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, and having

regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the Development's impact on fish species and shellfish which would require consent to be withheld.

# The impacts on marine mammals

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

SNH and the JNCC concluded that, subject to conditions, there would be no longterm effects from underwater noise disturbance on the bottlenose dolphin population from the Moray Firth SAC, or the harbour seal population from the Firth of Tay & Eden Estuary SAC. It was also concluded that there would be no long-term effects from underwater noise disturbance on the grey seal population from the Isle of May or Berwickshire & Northumberland Coast SACs and thus no adverse effect on site integrity. SNH and the JNCC agreed with all the conclusions reached in the AA with respect to marine mammals.

Impacts on other cetacean species including harbour porpoise, minke whale and white beaked dolphin were also considered by SNH and the JNCC who advised that the temporary disturbance/ displacement caused by the Development and the other proposed Forth and Tay wind farms has the potential to affect the animals energy budget. However these species are wide-ranging, and the spatial scale and temporary nature of the disturbance from wind farm piling and other construction activity is very small when compared to the range and movements of these species. SNH and the JNCC advised that disturbance to these species will not be detrimental to the maintenance of these populations at a favourable conservation status in their natural range.

Concerns were raised regarding potential corkscrew injuries to harbour seals. Discussions are ongoing between MSS and SNH over the cause and effect of corkscrew injuries to seals but there is not sufficient evidence at this time to attribute this type of injury to one particular source. A potential source may be a ducted propeller, such as a Kort nozzle or some types of Azimuth thrusters. Such systems are common to a wide range of ships including tugs, self-propelled barges and rigs, various types of offshore support vessels and research boats.

SNH and the JNCC have previously advised that it has not been established whether there is a link between the use of ducted propellers and the corkscrew injuries which have been recorded in seal species over the last couple of years. Research in this regard has been commissioned by Marine Scotland and SNH, and is currently being undertaken by the Sea Mammal Research Unit ("SMRU"). SNH and the JNCC will be consulted on the Vessel Management Plan ("VMP") which is a condition of this consent, as will such other advisors and organisations as may be required at the discretion of the Scottish Ministers. This plan will detail the mitigation measures proposed by the Company to reduce the probability of injuries of this type occurring to seals as a direct result of vessels associated with the Development. Scottish Ministers are satisfied that the mitigation and monitoring included in the conditions attached to this consent (Annex 2) will suffice.

A European Protected Species ("EPS") licence will be required by the Company prior to construction and a Marine Mammal Monitoring Programme ("MMMP") is required as part of the Project Environmental Monitoring Programme ("PEMP") condition of this consent.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, and having regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the Development's impact on marine mammals which would require consent to be withheld.

# The impacts on benthic ecology and habitat interests

Benthic surveys undertaken by the Company did not identify any Priority Marine Features within the wind farm site or cable corridor. As such no concerns regarding benthic ecology were raised by SNH, the JNCC or MSS.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, and having regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the Development's impact on benthic ecology and habitat interests which would require consent to be withheld.

# Sediment disturbance, transport and deposition

The Company, in its ES and SEIS, assessed the potential impact of the Development on sediment disturbance. Neither SNH nor the JNCC provided significant concerns with regard to sediment impacts, however did recommend a requirement for pre-construction sandeel surveys in the event that consent is granted. This requirement is reflected in conditions of this consent (Annex 2).

Sea bed mobilisation arising from the installation of offshore turbines has to be set in the context of on-going mobilisation events resulting from human activities. There are many activities undertaken in the marine environment that result in sea bed mobilisation including demersal trawling for fish and sea bed dredging to ensure safe navigational access in and out UK ports and harbours. These activities can occur on a much larger spatial scale than the installation of offshore renewable turbines. Also sea bed mobilisation will take place as a result of natural processes particularly during storm events.

The Scottish Ministers consider that they have sufficient information regarding sediment disturbance, to reach a conclusion on the matter, and therefore there are no outstanding concerns relating to sediment disturbance, transport and deposition which would require consent to be withheld.

# The impact on bats

The Company in the ES assessed the impact on bats and summarised that there was unlikely to be a pathway to an impact on bats and therefore no impacts were predicted. Nature conservation bodies SNH and the JNCC were consulted on the application and did not raise any concerns in relation to potential impacts on this species.

Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, there are no outstanding concerns in relation to the Development's impact on bats which would require consent to be withheld.

# The impacts on commercial fishing activity

Regarding commercial fishing activity, the SFF, ECIFG, 10MAU, FMA, FFPO and Forth lobster hatchery raised concerns regarding the impact on traditional fishing grounds.

The Scottish Ministers are aware that there will be temporary displacement of those fishing in the Development area during construction however the Company has agreed that all efforts will be made to minimise any displacement.

A FTOWDG-CFWG has been established to facilitate on-going dialogue throughout all phases of the Development. This group represents all commercial fishing interests in the area, including SFF and ECIFG. The participation in and the continuation of this group, and also the appointment of a Fisheries Liaison Officer ("FLO") are reflected in conditions of this consent **(Annex 2)**. The Company have stressed that they remain committed to the FTOWDG-CFWG and highlight that the terms of reference were agreed alongside fishing industry representatives.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, and having regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the Development's impact on commercial fishing activity which would require consent to be withheld.

#### The impacts on shipping and navigational safety

The CoS had no objections to the Development and found that the Company had taken every step to accommodate existing shipping patterns and minimise diversions. The CoS did have concerns regarding cumulative impacts with other potential developments in the Forth and Tay, however these were not significant enough to object.

The NLB did not object to the Development and highlighted lighting and marking requirements and also that the nature and timescale of the works to be placed in Notice(s) to Mariners, Radio Navigation Warnings and publication in appropriate bulletins. The Lighting and Marking requirements will form part of the Development Specification and Layout Plan ("DSLP") once submitted by the Company. Submission of a DSLP is a condition of this consent (Annex 2) Notice(s) to Mariners will be a condition contained within the Marine Licence

Neither the MCA nor the Royal Yachting Association Scotland ("RYA Scotland") had any concerns regarding navigational issues.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, and having regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the Development's impact on shipping and navigational safety which would require consent to be withheld.

# The impacts on aviation

NATS did not object to the Development.

The DIO did initially object to the Development due to the Development potentially causing unacceptable interference to Air Traffic Control ("ATC") radar at RAF Leuchars, Precision Approach Radar ("PAR") at Leuchars, and Air Defence ("AD") radar at Brizlee Wood.

After discussions with the Company, during which the Company submitted a technical proposal to overcome the unacceptable impacts of the proposed Development on ATC at RAF Leuchars, the MoD undertook a reassessment of the Development and confirmed that they were content to remove their objection. The reassessment concluded that the MoD had no concerns regarding the impact of the Development on the PAR at RAF Leuchars, the AD radar at Brizlee Wood and, subject to conditions being included on any consent, the ATC radar at Leuchars.

The DIO confirmed that there would be no physical impacts from the Development on offshore defence interests.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, and having regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the Development's impact on aviation which would require consent to be withheld.

# The impacts on recreation and tourism

Some concerns have been raised through the public consultation regarding the Development's potential impact upon tourism resulting from its landscape and visual impacts.

In this respect, MS-LOT 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. The attitudes of recreational users have been researched to a lesser extent. Landry, Allen, Cherry & Whitehead's 2012 study into the impact of wind farms on coastal recreational demand found that offshore wind farms overall had little impact on recreational visits by residents. However, there are individual differences within the data which, averaged out, show an overall limited impact. Whilst some residents said they would take fewer trips to the beach if there was a wind farm within view, others indicated that they would actually take more trips.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of consultative bodies, and having regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the Development's impact on recreation and tourism which would require consent to be withheld.

# Visual impacts of the Development

SNH, the Scottish Ministers statutory advisors on visual impacts and designated landscape features, was consulted and did not object to the proposed Development on the grounds of visual impacts. SNH did state however that the key landscape, seascape and visual impacts of the Development, together with the ICOL, SAWEL and SBWEL proposals to develop another three offshore wind farms adjacent to the Development site, would cause widespread and significant adverse landscape and visual impacts along the Scottish East coast from St Cyrus in Aberdeenshire, through Angus and Fife, South to Dunbar in East Lothian.

SNH highlighted that the main impacts of the Development would be experienced along three stretches of coast: South Aberdeenshire/Angus; East Fife; and East Lothian. Furthermore, in combination with ICOL, SAWEL and SBWEL, the Development would result in significant cumulative effects on views and coastal character. The Development would have a particularly significant effect on the East Fife coastline given its proximity.

SNH also advised that the Development (mainly in combination with ICOL) would change the night time character of the sea, extending lit-ribbon development from along the Fife and East Lothian coasts out into the Forth.

SNH recommended that landscape consultants continue to be involved post-consent to work with the project and engineering teams to scope and finalise the wind farm design. It is also stated that visualisations could be provided post-consent to illustrate the finalised wind farm from key representative viewpoints which would be for public information only and not for consultation.

East Lothian Council and Angus Council also both raised concerns regarding the potential visual impacts of the Development. These concerns were not however sufficient to cause either Council to object to the Development.

The Scottish Ministers recognise that the Development will be a prominent new feature on the seascape from the Fife coastline.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, and having regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the Development's visual impact which would require consent to be withheld.

# Cumulative impacts of the Development

The close proximity of the Development to the proposed adjacent ICOL and SAWEL and SBWEL proposals has meant that cumulative impacts have raised significant concerns. The issue of potential cumulative impact on landscape and visual amenity was considered by SNH and the Planning Authorities with a number of concerns raised, however not enough to merit any objections to the Development. Cumulative impacts on marine wildlife was raised by several organisations including, amongst others, SNH, the JNCC, RSPB Scotland, WDC, and the ASFB. Cumulative impacts on birds, marine mammals and fish interests have been fully considered in this consent and conditions put in place to minimise the impacts and ensure that residual impacts are within acceptable limits (Annex 2).

The cumulative impacts on certain bird species has led to the original design envelope being reduced to ensure that any impacts are within calculated acceptable levels (the number of turbines being reduced from the 125 applied for to the 75 consented, the Development footprint area was also reduced by the Company from 105 km<sup>2</sup> to 82.7 km<sup>2</sup>). The cumulative impacts on any protected species or habitats have also been considered in the AA, undertaken by MS-LOT, on behalf of the Scottish Ministers. Cumulative impacts on commercial fisheries were also raised by the SFF, however a working group ("FTOWDG-CFWG") has been established in order to discuss and address any issues. A condition to ensure the Company continues its membership of the working group and its commitment to any mitigation strategy forms part of this consent (Annex 2).

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies, and having regard to the mitigation measures and conditions proposed, there are no outstanding concerns in relation to the cumulative impact of this Development with other developments in the Forth and Tay region which would require consent to be withheld.

# The efficiency of wind energy

No form of electricity generation is 100% efficient and wind farms, in comparison with other generators, are relatively efficient. Less than half the energy of the fuel going into a conventional thermal power station is turned into useful electricity – a lot of it ends up as ash, nuclear waste or air pollution harmful to health as well as carbon dioxide. Also, the fuel for a wind farm does not need to be mined, refined or shipped and transported from foreign countries. The Scottish Ministers consider that although the electrical output of wind farms is variable, and cannot be relied on as a constant source of power, the electricity generated by wind is a necessary component of a balanced energy mix which is large enough to match Scotland's demand. Power supplied from wind farms reduces the need for power from other sources and helps reduce fossil fuel consumption.

The Scottish Ministers consider that, having taken account of the information provided by the Company and representations received, there are no outstanding concerns in relation to the efficiency of wind energy which would require consent to be withheld.

# The development of renewable energy

The Scottish Ministers must ensure that the development of the offshore wind sector is achieved in a sustainable manner in the seas around Scotland. This Development forms part of the Scottish Territorial Waters Round of offshore wind farm sites to be consented in Scotland and as such will raise confidence within the offshore wind industry that Scotland is delivering on its commitment to maximise offshore wind potential. This Development will also benefit the national and local supply chains. 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.

This 450 MW Development has the potential to annually generate renewable electricity equivalent to the demand from approximately 288,400 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 gross annual electricity consumption by 2020. Scotland requires a mix of energy infrastructure in order to achieve energy security at the same time as moving towards a low carbon economy. Due to the intermittent nature of renewables generation, a balanced electricity mix is required to support the security of supply requirements. This does not mean an energy mix where Scotland's plan to remain a net exporter of electricity.

The Scottish Ministers consider that, having taken account of the information provided by the Company and representations received, there are no outstanding concerns in relation to the development of renewable energy which would require consent to be withheld.

# The proposed location of the Development

The Scottish Ministers consider that the Company has carefully considered the location of the Development and selected the Firth of Forth due to its many advantages. In February 2009 The Crown Estate ("TCE") announced an Exclusivity Agreement with the Company. The suitability of the site was further affirmed in May 2010 with the Scottish Government's publication of the Strategic Environmental Assessment ("SEA") in the Draft Plan for Offshore Wind Energy in Scotland which confirmed that all ten Scottish Territorial Waters 2009 lease round sites could be developed between 2010 and 2020 if "appropriate mitigation is implemented to avoid, minimise and offset significant environmental impacts". The Marine Renewable Energy and the Natural Heritage: an Overview and Policy Statement SNH, 2004) and Matching Renewable Electricity Generation and Demand (Scottish Government, 2006) indicated the Firth of Forth Area was favoured for development of large scale offshore wind farms. In 2008 the Company identified the wind farm site as a suitable site for offshore wind farm development; there are a number of reasons for the site being suitable:

- Seabed of less than 60 m in depth;
- Economic distance from major grid connection points and ports;
- Avoidance of excessive wave heights;
- Avoidance of remote areas; and
- Avoidance of known major ecological constraints.

In March 2011 Blue Seas – Green Energy, A Sectoral Marine Plan for Offshore Wind Energy in Scottish Territorial Waters was published by Marine Scotland. The Final Plan in this document included 6 of the 10 sites initially put forward by TCE. Kintyre; Forth Array; Bell Rock and Solway Firth were not included in the Final Plan. BOWL was included in the Final Plan as a short-term site.

The Scottish Ministers consider that, having taken account of the information provided by the Company, the responses of the consultative bodies and members of the public, there are no outstanding concerns with regards to the proposed location of the Development which would require consent to be withheld.

# **Decommissioning**

Some concerns were raised through the public consultation regarding procedures and costs for decommissioning wind farms. Chapter 3 (sections 105 to 114) of Part 2 of the Energy Act 2004 provides for the decommissioning of offshore installations. The scheme provides that the Secretary of State, by notice, requires a developer who wishes to construct or extend an offshore installation to submit to him a decommissioning programme. Where the development in question is – wholly or partly – in Scottish waters, then the Secretary of State must consult the Scottish Ministers before issuing the notice to the developer.

Section 109 of the 2004 Act provides that where a decommissioning programme has been approved by the Secretary of State it shall be the duty of the person who submitted the programme to secure that it is carried out in full, and in accordance with any conditions which may be attached to the approval. It is an offence for a person to decommission in any way that is not in accordance with either the decommissioning programme or the agreement of the Secretary of State.

In order to ensure that costs of decommissioning are met, the Company is required to have a financial bond in place and, in cases where ownership transfers, the new owners will be tested on their ability to fund decommissioning.

The Scottish Ministers consider that, having taken account of the information provided by the Company, and the representations received, there would be no outstanding concerns in relation to decommissioning which would require consent to be withheld.

# Economic benefits

The Company estimate that in Scotland the expenditure made by the proposed Development could generate GVA of between £119m (of which just under two-thirds is generated during construction phase, 10% during operation and just over 25% during decommissioning) and £570m (of which approximately 90% is generated during construction phase, approximately 3% during operations and the remainder during decommissioning)

The Company estimate that the Development could support between 470 jobs in the peak year of construction phase reducing to approximately 100 jobs per year for operations (this rises to 275 jobs per year for decommissioning) and 5,200 jobs in the peak year of construction phase, reducing to 145 jobs per year for operations (rising to approximately 350 jobs per year for decommissioning).

The above estimates are based on 2 scenarios:

1. a 'low case' scenario whereby the percentage of expenditure by project sub – phase and geography was described. This low case refers to the total value of contracts that have been delivered, or are expected to be delivered, from within each

geography, assuming the current supply chain. This represents a conservative estimate of the supply chain.

2. a 'high case' scenario using the same process as for the low case to reflect the uncertainties involved and the long duration of project works. The high case scenario refers to the total value of contracts that could be secured with a stronger supply chain. This assumes that some Scottish based firms not currently in a position to tender for work, but there is reason to expect them to be in the future, could secure contracts.

It should be recognised however that at this stage, many development and procurement decisions are still to be made. Changes in the anticipated expenditure or procurement patterns from those anticipated during the assessment will change the associated estimates of employment and GVA. The effect on employment through the supply chain depends critically on the design, construction and operation decisions that are yet to be taken, and on the extent to which Scottish companies are able to secure contracts. The figures also assume that the full proposal of 450 MW is developed.

The Scottish Ministers have taken account of the economic information provided by the Company and consider that there are no reasons in relation to this which would require consent to be withheld.

# <u>Summary</u>

The Scottish Ministers consider the following as principal 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's ES, SEIS and the consultation process has identified what can be done to mitigate the potential impacts of the Development;
- The matters specified in regulation 4(1) of the 2000 Regulations have been adequately addressed by means of the submission of the Company's ES and SEIS, and the Scottish Ministers have judged that the likely environmental impacts of the Development, subject to the conditions included in this consent (Annex 2), are acceptable;
- The Scottish Ministers are satisfied that the Development can be satisfactorily decommissioned and will take steps to ensure that where any decommissioning programme is required under the Energy Act 2004, such programme is prepared in a timely fashion by imposing a condition requiring its submission to the Secretary of State before the Commencement of the Development (Annex 2);

- The Scottish Ministers have considered material details of how the Development can contribute to local or national economic development priorities and the Scottish Government's renewable energy policies;
- The Scottish Ministers have considered fully and carefully the Application and accompanying documents, the SEIS, all relevant responses from consultees and the twenty five (25) public representations received; and
- On the basis of the AA, the Scottish Ministers have ascertained to the appropriate level of scientific certainty that the Development (in combination with the other potential Forth and Tay proposals, and in light of mitigating measures and conditions proposed) will not adversely affect site integrity of any European protected sites, in view of such sites' conservation objectives.

# 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, with a permitted capacity of up to **450 MW** (as described in **ANNEX 1**).

Deemed planning for the onshore ancillary development was not applied for by the Company.

In accordance with the 2000 Regulations, 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, the Scottish Ministers have had regard to all, representations and relevant material considerations, and, subject to the conditions included in this consent (**Annex 2**), are satisfied that it is appropriate for the Company to construct and operate the generating station in the manner described in **Annex 1**.

Copies of this letter and consent have been sent to Fife Council, Scottish Borders Council, East Lothian Council, Angus Council, and Dundee Council. This letter has also been published on the Marine Scotland licensing page of the Scottish Government's website –

http://www.scotland.gov.uk/Topics/marine/Licensing/marine/scoping

The Scottish Ministers' decision is final, subject to the right of any aggrieved person to apply to the Court of Session for judicial review. Judicial review is the mechanism by which the Court of Session supervises the exercise of administrative functions, including how the Scottish Ministers exercise their statutory function to determine Applications for consent. The rules relating to applications for judicial review can be found at Chapter 58 of the Court of Session rules on the website of the Scottish Courts –

http://www.scotcourts.gov.uk/rules-and-practice/rules-of-court/court-of-session-rules

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

Yours sincerely,

# JAMES McKIE

Leader, Marine Scotland Licensing Operations Team A member of the staff of the Scottish Ministers 10 October 2014

# ANNEX 1

# **Description Of The Development**

An offshore wind turbine generating station, located as shown in Figure 1 below, with a gross electrical output capacity of up to 450 MW comprising:

- not more than 75 three-bladed horizontal axis wind turbines each with a maximum blade tip height of up to 197 metres <u>and a maximum rated capacity</u> <u>of up to 7MW</u>; and a maximum rated capacity of up to 6MW;
- 2. for each WTG, a jacket or gravity base foundation;
- 3. for each WTG, a transition piece (including access ladders / fences and landing platforms), turbine tower, blades and nacelle; and
- 4. inter array cabling between the turbines and the offshore substation platforms,

and, except to the extent modified by the foregoing, all as specified in the application letter, and the project description contained in the accompanying Environmental Statement (Chapter 5 of the ES as supplemented by Technical Appendix 1 of the SEIS) and the Section 36 Consent Variation: Supporting Environmental Information but subject always to the conditions specified in **Annex 2** of this consent.

# ANNEX 2

# **CONDITIONS OF THE 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 this consent is granted until the date occurring 25 years after the Final Commissioning of the Development. Written confirmation of the date of the Final Commissioning of the Development must be provided by the Company to the Scottish Ministers, the Planning Authorities, SNH and the JNCC no later than one calendar month after the Final Commissioning of the Development. Where the Scottish Ministers deem the Development to be complete on a date prior to the date when all wind turbine generators forming the Development have supplied electricity on a commercial basis to the National Grid then, the Scottish Ministers will provide written confirmation of the date of the Final Commissioning of the Development to the Company, the Planning Authority, SNH and the JNCC no later than one calendar month after the date on which the Scottish Ministers deem the Development to be complete.

# Reason: To define the duration of the consent.

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

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

**3.** Where the Secretary of State has, following consultation with the Scottish Ministers, given notice requiring the Company to submit to the Secretary of State a Decommissioning Programme, pursuant to section 105(2) and (5) of the Energy Act 2004, then construction may not begin on the site of the Development until after the Company has submitted to the Secretary of State a Decommissioning Programme in compliance with that notice.

**Reason:** <u>To ensure that a decommissioning programme is submitted to the</u> <u>Secretary of State where the Secretary of State has, following consultation with the</u> <u>Scottish Ministers, so required before any construction commences.</u>

4. The Company is not permitted to assign this consent without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may grant (with or without conditions) or refuse such authorisation as they, at 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: <u>To safeguard the obligations of the consent if assigned to another</u> <u>company.</u>

5. In the event that for a continuous period of 12 months or more any WTG installed and commissioned and forming part of the Development 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 the Company and any advisors as required at the discretion of the Scottish Ministers, any such WTG may be deemed by the Scottish Ministers to cease to be required. If so deemed, the WTG must be decommissioned and the area of the Site containing that WTG must be reinstated by the Company in accordance with the procedures laid out within the Company's Decommissioning Programme, within the period of 24 months from the date of the deeming decision by the Scottish Ministers.

# **Reason:** To ensure that any redundant WTGs are removed from the Site in the interests of safety, amenity and environmental protection.

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 company becoming aware of an incident occurring.

# **Reason:** <u>To inform the Scottish Ministers of any serious health and safety incident</u> <u>occurring on the Site</u>.

7. The Development must be constructed and operated in accordance with the terms of the Application and related documents, including the accompanying ES, the SEIS, the Section 36 Consent Variation: Supporting Environmental Information and Annex 1 of this letter, except in so far as amended by the terms of this Section 36 consent.

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

8. As far as reasonably practicable, the Company must, on being given reasonable notice by the Scottish Ministers (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Scottish Ministers to inspect the Site.

# Reason: To ensure access to the Site for the purpose of inspection.

**9.** The Company must, no later than 6 months prior to the Commencement of the Development, submit a Construction Programme ("CoP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, the JNCC, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved CoP (as updated and amended from time to time by the Company). Any updates or amendments made to the CoP by the Company

must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CoP must set out:

- a. The proposed date for Commencement of Development;
- b. The proposed timings for mobilisation of plant and delivery of materials, including details of onshore lay-down areas;
- c. The proposed timings and sequencing of construction work for all elements of the Development infrastructure;
- d. Contingency planning for poor weather or other unforeseen delays; and
- e. The scheduled date for Final Commissioning of the Development.

# **Reason:** To confirm the timing and programming of construction.

10. The Company must, no later than 6 months prior to the Commencement of the Development submit a Construction Method Statement ("CMS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, the JNCC, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CMS must set out the construction procedures and good working practices for installing the Development. The CMS must also include details of the roles and responsibilities, chain of command and contact details of company personnel, any contractors or sub-contractors involved during the construction of the development. The CMS must be in accordance with the construction methods assessed in the ES and must include details of how the construction related mitigation steps proposed in the ES are to be delivered. The Development must, at all times, be constructed in accordance with the approved CMS (as updated and amended from time to time by the Company). Any updates or amendments made to the CMS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CMS must, so far as is reasonably practicable, be consistent with the DS, the EMP, the VMP, the Navigational Safety Plan ("NSP"), the Piling Strategy ("PS"), the CaP and the Lighting and Marking Plan ("LMP").

**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.

11. The event that pile foundations are to be used, the Company must, no later than 6 months prior to the Commencement of the Development, submit a Piling Strategy ("PS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, the JNCC and any such other advisors as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved PS (as updated and amended from time to time by the Company). Any updates or

amendments made to the PS by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The PS must include:

- a. Full details of the proposed method and anticipated duration of piledriving at all locations;
- b. Details of soft-start piling procedures and anticipated maximum piling energy required at each pile location; and
- c. Details of any mitigation and monitoring to be employed during piledriving, as agreed by the Scottish Ministers.

The PS must be in accordance with the Application and must reflect any surveys carried out after submission of the Application. The PS must demonstrate how the exposure to and / or the effects of underwater noise have been mitigated in respect of the following species: bottlenose dolphin; harbour seal; grey seal; Atlantic salmon; cod; and herring.

The PS must, so far as is reasonably practicable, be consistent with the EMP, the PEMP and the CMS.

# Reason: To mitigate the underwater noise impacts arising from piling activity.

12. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Development Specification and Layout Plan ("DSLP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MCA, NLB, CoS, SNH, the JNCC, SFF, ECIFG, Civil Aviation Authority ("CAA") and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed in accordance with the approved DSLP (as updated and amended from time to time by the Company). Any updates or amendments made to the DSLP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The DSLP must include, but not be limited to the following:

- A plan showing the proposed location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification / numbering, location of the substation platforms, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the Site;
- A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG, this should also be provided as a Geographic Information System ("GIS") shape file using World Geodetic System 1984 ("WGS84") format;
- c. A table or diagram of each WTG dimensions including height to blade tip (measured above Lowest Astronomical Tide ("LAT"), height to hub (measured above LAT to the centreline of the generator shaft), rotor diameter and maximum rotation speed;

- d. The generating capacity of each WTG used on the Site and a confirmed generating capacity for the Site overall;
- e. The finishes for each WTG (see condition 19 on WTG lighting and marking); and
- f. The length and proposed arrangements on the seabed of all inter-array cables.

# **Reason:** To confirm the final Development specification and layout.

**13.** The Company must, prior to the Commencement of the Development, submit a Design Statement ("DS"), in writing, to the Scottish Ministers that includes representative wind farm visualisations from key viewpoints agreed with the Scottish Ministers, based upon the final DSLP as approved by the Scottish Ministers (as updated and amended from time to time by the Company). The DS must be provided, for information only, to the Planning Authorities, and SNH, the JNCC and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The DS must be prepared and signed off by at least one qualified landscape architect, instructed by the Company prior to submission to the Scottish Ministers.

# **Reason:** To inform interested parties of the final wind farm scheme proposed to be built.

14. The Company must, no later than 6 months prior to the Commencement of the Development, submit an Environmental Management Plan ("EMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, the JNCC, SEPA, RSPB Scotland, WDC, ASFB and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved EMP (as updated and amended from time to time by the Company). Any updates or amendments made to the EMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The EMP must provide the over-arching framework for on-site environmental management during the phases of development as follows:

- a. all construction as required to be undertaken before the Final Commissioning of the Development; and
- b. the operational lifespan of the Development from the Final Commissioning of the Development until the cessation of electricity generation. (Environmental management during decommissioning is addressed by condition 3).

The EMP must be in accordance with the ES and SEIS as it relates to environmental management measures. The EMP must set out the roles, responsibilities and chain of command for the Company personnel, any contractors or sub-contractors in respect of environmental management for the protection of environmental interests during the construction and operation of the Development. It must address, but not be limited to, the following overarching requirements for environmental management during construction:

- a. Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the ES and pre-consent and pre-construction surveys, and include the relevant parts of the CMS (refer to condition 10);
- b. Pollution prevention measures and contingency plans;
- c. Management measures to prevent the introduction of invasive nonnative marine species;
- d. Measures to minimise, recycle, reuse and dispose of waste streams; and
- e. The reporting mechanisms that will be used to provide the Scottish Ministers and relevant stakeholders (including, but not limited to, SNH, the JNCC, SEPA, RSPB Scotland, MCA and NLB) with regular updates on construction activity, including any environmental issues that have been encountered and how these have been addressed.

The Company must, no later than 3 months prior to the Final Commissioning of the Development, submit an updated EMP, in writing, to cover the operation and maintenance activities for the Development to the Scottish Ministers for their written approval. Such approval may be given only following consultation with SNH, the JNCC, SEPA, RSPB Scotland and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The EMP must be regularly reviewed by the Company and the Forth and Tay Regional Advisory Group ("FTRAG") (referred to in condition 24 over the lifespan of the Development, and be kept up to date (in relation to the likes of construction methods and operations of the Development in terms of up to date working practices) by the Company in consultation with the FTRAG

The EMP must be informed, so far as is reasonably practicable, by the baseline surveys undertaken as part of the Application and the PEMP.

# **Reason:** To mitigate the impacts on the environmental interests during construction and operation.

**15.** The Company must, no later than 6 months prior to the Commencement of the Development, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, the JNCC, WDC and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved VMP (as updated and amended from time to time by the Company). Any updates or amendments made to the VMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval:

The VMP must include, but not be limited to, the following details:

- a. The number, types and specification of vessels required;
- b. Working practices to minimise the use of ducted propellers;
- c. How vessel management will be coordinated, particularly during construction but also during operation; and
- d. Location of working port(s), how often vessels will be required to transit between port(s) and the site and indicative vessel transit corridors proposed to be used during construction and operation of the development.

The confirmed individual vessel details must be notified to the Scottish Ministers in writing no later than 14 days prior to the Commencement of the Development, and thereafter, any changes to the details supplied must be notified, as soon as practicable, to the Scottish Ministers prior to any such change being implemented in the construction or operation of the Development.

The VMP must, so far as is reasonably practicable, be consistent with the CMS, the EMP, the PEMP, the NSP, and the LMP.

# Reason: To mitigate disturbance or impact to marine mammals and birds.

**16.** The Company must, no later than 3 months prior to the Commissioning of the first WTG, submit an Operation and Maintenance Programme ("OMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the JNCC, SNH, SEPA, MCA, NLB, RSPB Scotland, the Planning Authority, SFF, ECIFG and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The OMP must set out the procedures and good working practices for operations and the maintenance of the WTG's, substructures, and inter-array cable network of the Development. Environmental sensitivities which may affect the timing of the operation and maintenance activities must be considered in the OMP.

Operation and maintenance of the Development must, at all times, proceed in accordance with the approved OMP (as updated and amended from time to time by the Company). Any updates or amendments made to the OMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The OMP must, so far as is reasonably practicable, be consistent with the EMP, the PEMP, the VMP, the NSP, the CaP and the LMP.

# **Reason:** To safeguard environmental interests during operation of the offshore generating station.

**17.** The Company must, no later than 6 months prior to the Commencement of the Development, submit a Navigational Safety Plan ("NSP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB and any other navigational advisors or organisations as may be required at the

discretion of the Scottish Ministers. The NSP must include, but not be limited to, the following issues:

- a. Navigational safety measures;
- b. Construction exclusion zones;
- c. Notice(s) to Mariners and Radio Navigation Warnings;
- d. Anchoring areas;
- e. Temporary construction lighting and marking;
- f. Emergency response and coordination arrangements for the construction, operation and decommissioning phases of the Development; and
- g. Buoyage.

The Company must confirm within the NSP that they have taken into account and adequately addressed all of the recommendations of the MCA in the current Marine Guidance Note 371, and its annexes that may be appropriate to the Development, or any other relevant document which may supersede said guidance. The Development must, at all times, be constructed and operated in accordance with the approved NSP (as updated and amended from time to time by the Company). Any updates or amendments made to the NSP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

#### Reason: To mitigate the navigational risk to other legitimate users of the sea.

**18.** The Company must, no later than 6 months prior to the Commencement of the Development, submit a Cable Plan ("CaP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, the JNCC, MCA, SFF, ECIFG and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The CaP must be in accordance with the ES. The Development must, at all times, be constructed and operated in accordance with the approved CaP (as updated and amended from time to time by the Company). Any updates or amendments made to the CaP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

The CaP must include the following:

- a. Details of the location and cable laying techniques for the inter array cables;
- b. The results of survey work (including geophysical, geotechnical and benthic surveys) which will help inform cable routing;
- c. Technical specification of inter array cables, including a desk based assessment of attenuation of electro-magnetic field strengths and shielding;
- d. A burial risk assessment to ascertain burial depths and, where necessary, alternative suitable protection measures.

- e. Methodologies for over trawl surveys of the inter array cables through the operational life of the wind farm where mechanical protection of cables laid on the sea bed is deployed; and
- f. Methodologies for inter array cable inspection with measures to address and report to the Scottish Ministers any exposure of inter array cables.

### **Reason:** To ensure all environmental and navigational issues are considered for the location and construction of the inter array cables.

**19.** The Company must, no later than 6 months prior to the Commencement of the Development, submit a Lighting and Marking Plan ("LMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with MCA, NLB, CAA MoD and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The LMP must provide that the Development be lit and marked in accordance with the current CAA and MoD aviation lighting policy and guidance that is in place as at the date of the Scottish Ministers approval of the LMP, or any such other documents that may supersede said guidance prior to the approval of the LMP. The LMP must also detail the navigational lighting requirements detailed in IALA Recommendation O-139 or any other documents that may supersede said guidance prior to approval of the LMP.

The Company must provide the LMP, for information, to the Planning Authorities, SNH, the JNCC and any other bodies as may be required at the discretion of the Scottish Ministers. The Development must, at all times, be constructed and operated in accordance with the approved LMP (as updated and amended from time to time by the Company). Any updates or amendments made to the LMP by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

### Reason: To ensure safe marking and lighting of the offshore generating station.

- **20.** The Company must, prior to the erection of any WTGs on the Site, submit an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MoD. No WTGs shall become operational until:
  - a. The mitigation measures that are required under the approved ATC Scheme have been implemented;
  - b. Any performance criteria, all as specified in the approved ATC Scheme as requiring to be satisfied, have been so satisfied; and
  - c. The implementation and satisfaction of the performance criteria have been approved by the Scottish Ministers in consultation with the MoD.

The Company must, at all times, comply with all obligations under the approved ATC Scheme.

**Reason:** To mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the operations of the MoD.

**21.** The Company must, prior to the Commencement of the Development, and following confirmation of the approved DSLP by the Scottish Ministers (refer to condition 13), provide the positions and maximum heights of the WTGs and construction equipment above 150m LAT and any offshore substation platform to the United Kingdom Hydrographic Office ("UKHO") for aviation and nautical charting purposes. The Company must, within 1 month of the Final Commissioning of the Development, provide the positions and maximum heights of the WTGs to the UKHO co-ordinates accurate to three decimal places of minutes of arc for aviation and nautical charting purposes.

#### Reason: For aviation and navigational safety.

22. The Company must, no later than 6 months prior to the Commencement of the Development submit a Traffic and Transportation Plan ("TTP") in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with Transport Scotland and any such other advisors as may be required at the discretion of the Scottish Ministers. The TTP must set out a mitigation strategy for the impact of road based traffic and transportation associated with the construction of the Development. The Development must, at all times, be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval by the Scottish Ministers).

#### Reason: To maintain the free flow and safety of the Trunk Road network.

**23.** The Company must, no later than 6 months prior to the Commencement of the Development, submit a Project Environmental Monitoring Programme ("PEMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, the JNCC, RSPB Scotland, WDC, ASFB and any other ecological advisors or organisations as required at the discretion of the Scottish Ministers. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Company must monitor the environmental impacts of the Development. Monitoring is required throughout the lifespan of the Development where this is deemed necessary by the Scottish Ministers. Lifespan in this context includes pre-construction, construction, operational and decommissioning phases.

Monitoring must be done in such a way as to ensure that the data which is collected allows useful and valid comparisons as between different phases of the Development. Monitoring may also serve the purpose of verifying key predictions in the Application. In the event that further potential adverse environmental effects are identified, for which no predictions were made in the Application, the Scottish Ministers may require the Company to undertake additional monitoring.

The Scottish Ministers may agree that monitoring may be reduced or ceased before the end of the lifespan of the Development.

The PEMP must cover, but not be limited to the following matters:

- a. Pre-construction, construction (if considered appropriate by the Scottish Ministers) and post-construction monitoring surveys as relevant in terms of the ES and any subsequent surveys for:
  - 1. Birds;
  - 2. Sandeels;
  - 3. Marine fish;
  - 4. Diadromous fish;
  - 5. Benthic communities; and
  - 6. Seabed scour and local sediment deposition.
- b. The participation by the Company in surveys to be carried out in relation to marine mammals as set out in the MMMP; and
- c. The participation by the Company in a National Strategic Bird Monitoring Framework ("NSBMF") and surveys to be carried out in relation to regional and / or strategic bird monitoring including but not necessarily limited to:
  - 1. The avoidance behaviour of breeding seabirds around turbines;
  - 2. Flight height distributions of seabirds at wind farm sites;
  - 3. Displacement of kittiwake, puffin and other auks from wind farm sites; and
  - 4. Effects on survival and productivity at relevant breeding colonies

All initial methodologies for the above monitoring must be approved, in writing, by the Scottish Ministers and, where appropriate, in consultation with the FTRAG referred to in condition 24 of this consent. Any pre-consent surveys carried out by the Company to address any of the above species may be used in part to discharge this condition subject to written approval by the Scottish Ministers.

The PEMP is a live document and must be regularly reviewed by the Scottish Ministers, at timescales to be determined by the Scottish Ministers, in consultation with the FTRAG to identify the appropriateness of on-going monitoring. Following such reviews, the Scottish Ministers may, in consultation with the FTRAG, require the Company to amend the PEMP and submit such an amended PEMP, in writing, to the Scottish Ministers, for their written approval. Such approval may only be granted following consultation with FTRAG and any other ecological, or such other advisors as may be required at the discretion of the Scottish Ministers. The PEMP, as amended from time to time, must be fully implemented by the Company at all times.

The Company must submit written reports and associated raw data of such monitoring surveys to the Scottish Ministers at timescales to be determined by the Scottish Ministers in consultation with the FTRAG. Subject to any legal restrictions regarding the treatment of the information, the results are to be made publicly available by the Scottish Ministers, or by such other party appointed at their discretion.

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

24. The Company must participate in any Forth and Tay Regional Advisory Group ("FTRAG") established by the Scottish Ministers for the purpose of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish. Should a Scottish Strategic Marine Environment Group ("SSMEG") be established (refer to condition 25), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish

# **Reason:** To ensure effective environmental monitoring and mitigation is undertaken at a regional scale.

25. The Company must participate in any Scottish Strategic Marine Environment Group ("SSMEG") established by the Scottish Ministers for the purposes of advising the Scottish Ministers on research, monitoring and mitigation programmes for, but not limited to, ornithology, diadromous fish, marine mammals and commercial fish.

# **Reason:** To ensure effective environmental monitoring and mitigation is undertaken at a National scale.

**26.** Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with SNH and the JNCC, appoint an Ecological Clerk of Works ("ECoW"). The ECoW must be appointed in time to review and approve the final draft version of the first plan or programme submitted under this consent to the Scottish Ministers.

The responsibilities of the ECoW must include, but not be limited to:

- a. Quality assurance of final draft versions of all plans and programmes required under this consent;
- b. Providing advice to the Company on compliance with consent conditions, including the conditions relating to the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- c. Monitoring compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- d. Providing reports on point c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers; and

e. Inducting site personnel on site / works environmental policy and procedures.

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

27. The Company must, to the satisfaction of the Scottish Ministers, participate in the monitoring requirements as laid out in the 'Scottish Atlantic Salmon, Sea Trout and European Eel Monitoring Strategy' so far as they apply at a local level. The extent and nature of the Company's participation is to be agreed by the Scottish Ministers in consultation with the FTRAG.

# **Reason:** To ensure effective monitoring of the effects on migratory fish at a local level.

28. The Company must, no later than 6 months prior to the Commencement of the Development, submit a Commercial Fisheries Mitigation Strategy ("CFMS"), in writing, to the Scottish Ministers. The Company must also continue its membership in the Forth and Tay Offshore Wind Developers Group - Commercial Fisheries Working Group ("FTOWDG-CFWG"), or any successor group formed to facilitate commercial fisheries dialogue, to define and finalise the CFMS.

As part of any finalised CFMS, the Company must produce and implement a mitigation strategy for each commercial fishery that can prove to the Scottish Ministers that they will be adversely affected by the Development. The CFMS to be implemented must be approved in writing by the Scottish Ministers. The Company must implement all mitigation measures committed to be carried out by the Company within the CFMS so far as is applicable to the Development. Any contractors, or sub-contractors working for the Company, must co-operate with the fishing industry to ensure the effective implementation of said CFMS.

### Reason: To mitigate the impact on commercial fishermen.

**29.** Prior to the Commencement of the Development, a FLO, approved by Scottish Ministers in consultation with the FTOWDG-CFWG, must be appointed by the Company for the period from Commencement of the Development until the Final Commissioning of the Development. The Company must notify the Scottish Ministers of the identity and credentials of the FLO before Commencement of the Development by including such details in the EMP (referred to in condition 14). The FLO must establish and maintain effective communications between the Company, any contractors or subcontractors, fishermen and other users of the sea during the construction of the Development, and ensure compliance with best practice guidelines whilst doing so.

The responsibilities of the FLO must include, but not be limited to:

- a. Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall project and any amendments to the CMS and site environmental procedures;
- b. Provision of information relating to the safe operation of fishing activity on the site of the Development; and
- c. Ensuring that information is made available and circulated in a timely manner to minimise interference with fishing operations and other users of the sea.

#### Reason: To mitigate the impact on commercial fishermen.

**30.** The Company must, no later than 6 months prior to the Commencement of the Development, submit a Marine Archaeology Reporting Protocol which sets out what the Company must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the Development, in writing, to the Scottish Ministers for their written approval. Such approval may be given only following consultation by the Scottish Ministers with any such advisors as may be required at the discretion of the Scottish Ministers. The Reporting Protocol must be implemented in full, at all times, by the Company.

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

**31.** The Company must, prior to the submission of the DS to the Scottish Ministers, submit an optimal design of the Development, in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation with SNH and the JNCC, and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. The optimal design of the Development must be undertaken using the Centre for Ecology and Hydrography ("CEH") displacement model to minimise the barrier and displacement effects on kittiwake. The optimal design of the Development must demonstrate a reduction to the negative effect on adult survival of kittiwakes from Forth Islands SPA by 0.2%. The Development must, at all times, be constructed and operated in accordance with the approved optimal design.

**Reason:** To ensure there is no adverse effect on the integrity of the Forth Islands SPA in relation to kittiwakes.

### ANNEX 3

### **DEFINITIONS AND GLOSSARY OF TERMS**

In this decision letter and in Annex 1 and 2:

"AA" means Appropriate Assessment;

"AD" means Air Defence;

"the Application" means the Application letters and Environmental Statement submitted to the Scottish Ministers, by the Company on 13 July 2012 and Supplementary Environmental Information Statement submitted to the Scottish Ministers by the Company on 15 April 2013 for consent under Section 36 of the Electricity Act for the construction and operation of Neart na Gaoithe Offshore Wind Farm in the Firth of Forth with a maximum generating capacity of 450 megawatts and the Section 36 Consent Variation: Supporting Environmental Information submitted to the Scottish Ministers, by the Company under Section 36C of the Electricity Act on 16<sup>th</sup> July 2015;

"ATC" means Air Traffic Control;

"ATC Scheme" means Air Traffic Control Radar Mitigation Scheme. A detailed Scheme to mitigate the adverse impacts of the Development on the air traffic control radar at RAF Leuchars and the air surveillance and control operations of the Defence Infrastructure Organisation (Ministry of Defence). The Scheme will set out the appropriate measures to be implemented to that end;

"BT" means British Telecom;

"CEH displacement model" means Centre for Ecology and Hydrography <u>time and</u> <u>energy expenditure model</u> to investigate the potential displacement / barrier effects on seabird species that could arise from the proposed wind farms;

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

"Commissioning of the first WTG" means the date on which the first wind turbine generator forming the Development has supplied electricity on a commercial basis to the National Grid;

"the Company" means Neart na Gaoithe Offshore Wind Limited, Company Registration No. SC356223; and having its registered office at C/O Shepherd and Wedderburn, 191 West George Street, Glasgow, G2 2LB for the Neart na Gaoithe Offshore Wind Farm in the Firth of Forth;

"the Development" means the Neart na Gaoithe Offshore Wind Limited electricity generating station in the Firth of Forth, as described in **Annex 1** of this letter;

"ECoW" means Ecological Clerk of Works;

"EIA" means Environmental Impact Assessment;

"EMF" means electromagnetic fields;

"EPS" means European Protected Species;

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

"EU" means European Union;

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

"FLO" means Fisheries Liaison Officer;

"FTOWDG–CFWG" means Forth and Tay Offshore Wind Developers Group – Commercial Fisheries Working Group. A group formed, and set up, to develop the Commercial Fisheries Mitigation Strategy, and as a forum to facilitate on-going dialogue with the commercial fishing industry;

"FTRAG" means the Forth and Tay Regional Advisory Group. A group yet to be formed, responsible for overseeing monitoring and mitigation on a regional scale, set up by the Scottish Ministers;

"GIS" means Geographic Information System;

"GVA" means Gross Value Added, a measure of contribution to the economy of each individual producer, industry or sector in the United Kingdom;

"GW" means gigawatt;

"HAT" means Highest Astronomical Tide;

"HRA" means Habitats Regulations Appraisal;

"IALA Recommendation O-139" means the International Association of Marine Aids to Navigation and Lighthouse Authorities Recommendation O-139 On the Marking of Man Made Offshore Structures;

"JRC" means Joint Radio Company;

"Marine Guidance Note 371" means the maritime and Coastguard Agency Marine Guidance Note 371 Offshore Renewable Energy Installations (OREI's) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues;

"MW" means megawatt.

"nm" means nautical miles;

"NRA" means Navigational Risk Assessment;

"PAR" means Precision Approach Radar;

"The Plan" means Blue Seas Green Energy – A Sectorial Marine Plan for Offshore Wind in Scottish Territorial Waters.

"the Planning Authorities" means Fife Council, East Lothian Council, Angus Council, Scottish Borders Council and Dundee Council;"

"Planning Authority" means East Lothian Council;

"PLI" means Public Local Inquiry;

"SAC" means Special Area of Conservation;

"Scottish Atlantic Salmon, Sea Trout and European Eel Monitoring Strategy" means a strategy that will be formulated from the MSS Report 05/13 – 'The Scope of Research Requirements for Atlantic Salmon, Sea Trout and European Eel in the Context of Offshore Renewables' to monitor migratory fish at a strategic level;

"Scottish marine area" has the meaning given in Section 322 in the Marine and Coastal Access Act 2009 (as amended);

"SEA" means Strategic Environmental Assessment;

"SEIS" means the Supplementary Environmental Information Statement submitted to the Scottish Ministers by the Company on 7 June 2013 as part of the Application as defined above;

"the Site" means the area outlined in red in **Figure 1**, attached to this consent at **Annex 1**;

"SPA" means Special Protection Area;

"SSMEG" means Strategic Scottish Marine Environment Group. A group yet to be formed, responsible for overseeing monitoring and mitigation on a National scale, set up by the Scottish Ministers;

"WGS84" means the World Geodetic System 1984; and

"WTG" means wind turbine generator.

#### Organisations and Companies

"10MAU" means 10 Metre and Under Association;

"AC" means Angus Council;

"ASFB" means The Association of Salmon Fishery Boards;

"CAA" means The Civil Aviation Authority;

"CEC" means The Crown Estate Commissioners;

"CoS" means The Chamber of Shipping;

"DCC" means Dundee City Council;

"DECC" means Department of Energy and Climate Change;

"DIO" means The Defence Infrastructure Organisation (Ministry of Defence);

"ECIFG" means East Coast Inshore Fisheries Group (Previously as South East Inshore Fishery Group in this document);

"EDSFB" means Esk District Salmon Fishery Board;

"ELC" means East Lothian Council, the Planning Authority for the onshore works;

"FC" means Fife Council, the nearest onshore Planning Authority;

"FFPO" means Fife Fish Producers Organisation;

"FMA" means Fishermen's Mutual Association (Pittenweem) Ltd.;

"FFLH" means Firth of Forth Lobster Hatchery;

"IALA" means International Association of Marine Aids to Navigation and Lighthouse Authorities;

"ICOL" means Inch Cape Offshore Limited;

"JNCC" means The Joint Nature Conservation Committee;

"MCA" means The Maritime and Coastguard Agency;

"MOD" means Ministry of Defence;

"MMO" means Marine Management Organisation;

"MS-LOT" means Marine Scotland Licensing Operations Team;

"MSS" means Marine Scotland Science;

"NATS" means National Air Traffic Service;

"NLB" means The Northern Lighthouse Board;

"NREAP" means UK Government's National Renewable Energy Action Plan;

"RSPB Scotland" means The Royal Society for the Protection of Birds Scotland;

"RYA Scotland" means Royal Yachting Association Scotland;

"SAWEL" means Seagreen Alpha Wind Energy Limited;

"SAS" means Surfers Against Sewage;

"SBC" means Scottish Borders Council;

"SBWEL" means Seagreen Bravo Wind Energy Limited;

"SCA" means the Scottish Canoe Association;

"SEIFG" means South East Inshore Fisheries Group (latterly referred as East Coast Inshore Fisheries Group in this document);

"SEPA" means The Scottish Environment Protection Agency;

"SFF" means The Scottish Fishermen's Federation;

"SMRU" means Sea Mammal Research Unit;

"SNH" means Scottish Natural Heritage;

"TCE" means The Crown Estate;

"TDSFB" means Tay District Salmon Fishery Board;

"UNECE" means United Nations Economic Commission for Europe;

"UKHO" means United Kingdom Hydrographic Office; and

"WDC" means Whale and Dolphin Conservation;

### Plans, Programmes and Statements

"CaP" means Cable Plan;

"CFMS" means Commercial Fisheries Mitigation Strategy;

"CMS" means Construction Method Statement;

"CoP" means Construction Programme;

"DIO Scheme" means Air Traffic Control Radar Mitigation Scheme;

"DS" means Design Statement;

"DSLP" means Development Specification and Layout Plan;

"EMP" means Environmental Management Plan;

"LMP" means Lighting and Marking Plan;

"MMMP" means Marine Mammal Monitoring Programme;

"NPF2" means Scotland's National Planning Framework 2;

"NPF3" means Scotland's National Planning Framework 3;

"NSP" means Navigational Safety Plan;

"OMP" means Operation and Maintenance Programme;

"PEMP" means Project Environmental Monitoring Programme;

"PS" means Piling Strategy;

"the Statement" means The UK Marine Policy Statement 2011;

"TTP" means Traffic and Transportation Plan; and

"VMP" means Vessel Management Plan.

#### **Legislation**

"Wild Birds Directive" means Council Directive 79/409/EEC of 2<sup>nd</sup> April 1979 on the conservation of wild birds, as amended and as codified by Directive 2009/147/EC of the European Parliament and of the Council of 30<sup>th</sup> November 2009;

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

"the 1990 Regulations" means the Electricity (Applications for Consent) Regulations 1990 (as amended);

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

"the Habitats Regulations" means the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended) and the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007 (as amended); "the 1994 Regulations" means the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended);

"the 2000 Regulations" means the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 (as amended);

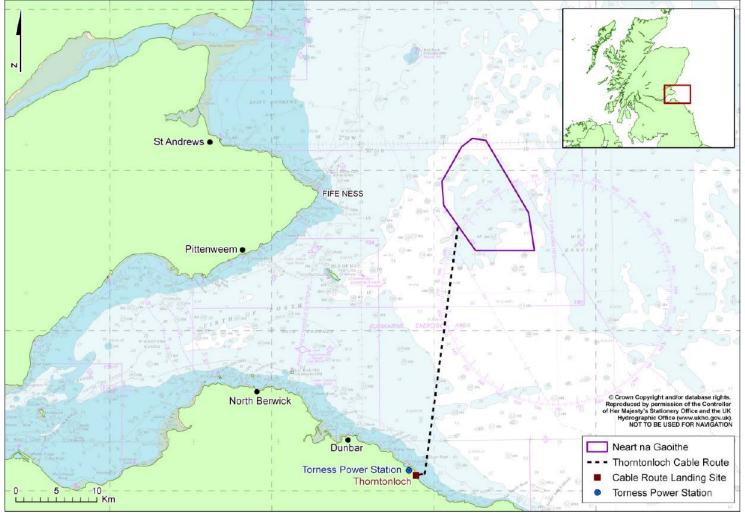
"the 2007 Regulations" means the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007 (as amended);

"the 2009 Act" means Marine and Coastal Access Act 2009 (as amended); and

"the 2010 Act" means Marine (Scotland) Act 2010.

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

ANNEX 3 LOCATION OF PROJECT



Phase 1 area for turbine and potential cable deployment.