

Mr Allan Ralston  
Project Director  
Seagreen Wind Energy Limited  
No. 1 Forbury Place  
43 Forbury Road  
Reading  
RG1 3JH

28<sup>th</sup> August 2018

Dear Mr Ralston,

**APPLICATIONS TO VARY ANNEX 1 OF THE SEAGREEN ALPHA OFFSHORE WIND FARM AND THE SEAGREEN BRAVO OFFSHORE WIND FARM SECTION 36 CONSENTS UNDER SECTION 36C OF THE ELECTRICITY ACT 1989 (AS AMENDED) IN ACCORDANCE WITH THE ELECTRICITY GENERATING STATIONS (APPLICATIONS FOR VARIATION OF CONSENT) (SCOTLAND) REGULATIONS 2013 (AS AMENDED)**

I refer to the applications to vary the consents of the Seagreen Alpha Offshore Wind Farm and Seagreen Bravo Offshore Wind Farm (“the Developments”). These applications were made by Seagreen Wind Energy Limited (“the Applicant”) on 30<sup>th</sup> March 2018 on behalf of Seagreen Alpha Wind Energy Limited and Seagreen Bravo Wind Energy Limited (“the Companies”), for:

- a) variation under section 36C of the Electricity Act 1989 (as amended) to the consents granted under section 36 (“s.36”) of the Electricity Act 1989 (as amended) (“the Electricity Act”) on 10<sup>th</sup> October 2014 for construction and operation of the Developments located in the Firth of Forth area.

**This letter contains the Scottish Ministers’ decision to grant the applications and to vary the relevant s.36 consents.**

**Nature of the Variations Sought**

- Vary Annex 1 of the Companies’ s.36 consents to remove the maximum installed capacity.

**Environmental Impacts**

The Scottish Ministers are satisfied with the supporting information provided, that include details on why an Environmental Impact Assessment (“EIA”) and Appropriate Assessment (“AA”) were not required for the variations. The proposed variations, which remove the overall maximum installed capacity of the Developments, will not result in any physical changes to the Developments. Scottish Ministers have considered regulation 28 of the Conservation of Offshore Marine Habitats and Species Regulations 2017 (“2017 Regulations”), the Electricity Generating Stations (Applications for Variation of Consent) (Scotland) Regulations 2013 (as amended) (“the Variation Regulations”), and the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) (“the EIA Regulations”).

The Scottish Ministers consider that the proposed changes will likely have any no significant effects on the environment and therefore no new EIA Report is needed in support of these applications. As there will be no likely significant effects from the proposed changes on any European offshore marine site or European protected sites an AA is not required.

### **Consultation**

The Variation Regulations provide that an applicant must publish the application on a website, serve a copy of the variation application on any planning authority, and advertise by public notices in specified publications as set out in regulation 4 of the Variation Regulations. These requirements have been met. Public notices were placed in the Arbroath Herald Carnoustie Guide & Gazette for two weeks and for one week each in the Edinburgh Gazette, the Scotsman, Lloyd's List and the Fishing News.

Marine Scotland Licensing Operations Team (“MS-LOT”) on behalf of the Scottish Ministers, consulted a wide range of relevant organisations in respect of the Applicant’s application for variation, including Scottish Natural Heritage, Scottish Environment Protection Agency, the Maritime and Coastguard Agency, Historic Environment Scotland, and the Northern Lighthouse Board. MS-LOT also consulted Angus Council, Dundee City Council, East Lothian Council, Fife Council and Scottish Borders Council.

RSPB Scotland maintained the objections which it had made in respect of the Applicant’s original applications for s.36 consent in 2014, while East Lothian Council stated its position and concerns concerning the Developments. However with regard to the Applicant’s variation application, East Lothian Council filed comments only and did not make an objection . The Applicant has addressed all of these issues.

### **Public Representations**

There were no representations made on the applications to vary the s.36 consents from members of the public.

### **The Scottish Ministers’ Determination**

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

The Scottish Ministers consider that the amended s.36 consents are both reasonable and enforceable.

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

Annex	Amendment
<p>In Annex 1 of the Seagreen Alpha Offshore Wind Farm s.36 Consent</p>	<p><b>DESCRIPTION OF THE DEVELOPMENT</b>            The Development, located as shown on Figure 1 below, <del>shall have a permitted generating capacity not exceeding 525 MW and</del> shall comprise a wind-powered electricity generating station in the FFZ, including:</p> <ol style="list-style-type: none"> <li>1. not more than 75 three-bladed horizontal axis wind turbine generators each with:               <ol style="list-style-type: none"> <li>a) a maximum blade tip height of 209.7 metres (measured from LAT);</li> <li>b) a rotor diameter of between 122 and 167 metres;</li> <li>c) a hub height of between 87.1 and 126.2 metres (measured from LAT);</li> <li>d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);</li> <li>e) blade width of up to 5.4 metres; and</li> <li>f) a minimum spacing of 1,000 metres;</li> </ol> </li> <li>2. all foundations, substructures, fixtures, fittings, fixings, and protections;</li> <li>3. inter array cabling and cables up to and onto the offshore substation platforms; and</li> <li>4. transition pieces including access ladders / fences and landing platforms,</li> </ol> <p>and, except to the extent modified by the foregoing, all as specified in the Application and by the conditions imposed by the Scottish Ministers. References to “the Development” in this consent shall be construed accordingly.</p>
<p>In Annex 1 of the Seagreen Bravo Offshore Wind Farm s.36 Consent</p>	<p><b>DESCRIPTION OF THE DEVELOPMENT</b>            The Development, located as shown on Figure 1 below, <del>shall have a permitted generating capacity not exceeding 525 MW and</del> shall comprise a wind-powered electricity generating station in the FFZ, including:</p>

1. not more than 75 three-bladed horizontal axis wind turbine generators each with:
    - a) a maximum blade tip height of 209.7 metres (measured from LAT);
    - b) a rotor diameter of between 122 and 167 metres;
    - c) a hub height of between 87.1 and 126.2 metres (measured from LAT);
    - d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);
    - e) blade width of up to 5.4 metres; and
    - f) a minimum spacing of 1,000 metres;
  2. all foundations, substructures, fixtures, fittings, fixings, and protections;
  3. inter array cabling and cables up to and onto the offshore substation platforms; and
  4. transition pieces including access ladders / fences and landing platforms,
- and, except to the extent modified by the foregoing, all as specified in the Application and by the conditions imposed by the Scottish Ministers. References to “the Development” in this consent shall be construed accordingly.

For illustrative purposes a consolidated version of the relevant s.36 consents (with variations shown in tracked changes for ease of reference) is provided.

Copies of this letter have been sent to the nearest onshore planning authorities; Angus Council, Dundee City Council, East Lothian Council, Fife Council and Scottish Border Council. This letter has also been published on the MS-LOT website, [Submission to Ministers](#).

The Scottish Ministers’ decision is final, subject to the right of any aggrieved person to apply to the Court of Session for judicial review. Judicial review is the mechanism by which the Court of Session supervises the exercise of administrative functions, including how the Scottish Ministers exercise their statutory function to determine applications for variation of a s.36 consent.

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

Yours sincerely

**Zoe Crutchfield, Marine Scotland**  
Head of Marine Scotland Licensing Operations Team  
For and on behalf of the Scottish Ministers  
A member of the staff of the Scottish Government

**COPY OF THE ORIGINAL SEAGREEN ALPHA OFFSHORE WIND FARM  
CONSENT ISSUED ON 10 OCTOBER 2014, BUT WITH TRACKED CHANGES  
SHOWING CONSOLIDATED VERSION OF THE CONSENT – I.E. WITH  
VARIATIONS TO THE CONSENT WORDING**

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Mr Mike Scott  
General Manager  
Seagreen Wind Energy Limited  
55 Vastern Road,  
Reading, Berkshire,  
RG1 8BU



10 October 2014

Dear Mr Scott,

**CONSENT GRANTED BY THE SCOTTISH MINISTERS UNDER SECTION 36 OF  
THE ELECTRICITY ACT 1989 TO CONSTRUCT AND OPERATE THE SEAGREEN  
ALPHA OFFSHORE WIND FARM ELECTRICITY GENERATING STATION, 27  
KILOMETRES EAST OF THE ANGUS COASTLINE.**

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 Seagreen Wind Energy Limited (Company Number 06873902)(“SWEL”) on behalf of Seagreen Alpha Wind Energy Limited (Company Number 07185533) (“SAWEL”) (“the Company”) and having its registered office at 55 Vastern Road, Reading, Berkshire, RG1 8BU for the construction and operation of Seagreen Alpha Offshore Wind Farm off the Angus Coast;
- ii. A consent under section 36 of the Electricity Act by SWEL on behalf of Seagreen Bravo Wind Energy Limited (Company Number 07185543)(“SBWEL”) and having its registered office at 55 Vastern Road, Reading, Berkshire, RG1 8BU for the construction and operation of Seagreen Bravo Offshore Wind Farm off the Angus Coast;

- iii. A marine licence to be considered under the Marine (Scotland) Act 2010 (“the 2010 Act”) and the Marine and Coastal Access Act 2009 (as amended) (“the 2009 Act”) by SWEL on behalf of SAWEL to deposit any substance or object and to construct, alter or improve any works in relation to the Seagreen Alpha Offshore Wind Farm;
- iv. A marine licence to be considered under the 2010 Act and the 2009 Act by SWEL on behalf of SBWEL to deposit any substance or object and to construct, alter or improve any works in relation to the Seagreen Bravo Offshore Wind Farm;
- v. A marine licence to be considered under the 2010 Act and the 2009 Act by SWEL to deposit any substance or object and to construct, alter or improve any works in relation to the Seagreen Transmission Asset (“STA”) project within the Scottish marine area and Scottish offshore region.

## **THE APPLICATION**

I refer to the applications at i, iii and v above made by SWEL, submitted on 15<sup>th</sup> October 2012, for consent under section 36 of the Electricity Act for the construction and operation of the Seagreen Alpha Offshore Wind Farm in the Firth of Forth Zone (“FFZ”); with a maximum generating capacity of 525 megawatts (“MW”) (“the Application”).

In this letter, ‘the Development’ means the proposed Seagreen Alpha Offshore Wind Farm electricity generating station as described in **Annex 1** (Figure 1) of this letter.

In this letter, ‘the Proposal’ means the proposed Seagreen Phase 1 development, consisting of both wind farms, Alpha and Bravo (applications i to v above), for a maximum generating capacity of up to 1050 MW.

## **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 1989 (as amended) (“the Electricity Act”) (with related Schedules) 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 Scottish offshore region (12-200 nautical miles (“nm”) from the shore) with a generation capacity in excess of 50 megawatts requires consent under section 36 of the Electricity Act. Section 93 of the Energy Act 2004 extends the requirement for section 36 consent to the construction, extension or operation of a generating station situated in the Scottish offshore region (12 -200 nm). 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 station activities if they consider that interference with the use of recognised sea lanes essential to international navigation is likely to be caused by the carrying on of those activities or is likely to result from their having been carried on. The Scottish Ministers, when determining whether to give consent for any particular offshore generating activities, 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 issue, 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 subject to section 36 consent or are activities for which it appears likely that such consents will be granted.

The Company applied for two declarations under section 36A of the Electricity Act to extinguish public rights of navigation so far as they pass through those places within the Scottish marine area (essentially the territorial sea adjacent to Scotland) where structures (but not, for the avoidance of doubt the areas of sea between those structures) forming part of the offshore wind farm and offshore transmission works are to be located. As the Proposal is located outwith the limits of the Scottish marine area, a declaration under section 36A of the Electricity Act cannot be issued. The Company has been informed of this as a matter of courtesy.

Under Schedule 8 to the Electricity Act and the Electricity (Applications for Consent) Regulations 1990 (as amended) (“the 1990 Regulations”), notice of applications for section 36 consent must be published by the applicant in one or more local newspapers, in one or more national newspapers, and in the Edinburgh Gazette to allow representations to be made to the Applications. Under Schedule 8 to the Electricity Act, the Scottish Ministers must serve notice of any Applications 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 Marine Scotland Licensing Operation Team (“MS-LOT”), on behalf of the Scottish Ministers, did however consult with the Planning Authorities most local to the Development. 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 Applications.

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 and all procedural requirements have been complied with. The Company, at the time of submitting the Application, were a licence holder authorised to generate electricity for the purpose of giving a supply to any premises in the area specified in Schedule 1 of the Licence, or enabling a supply to be so given during the period specified in paragraph 3 of the licence, subject to the terms and conditions specified therein. 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 and the Marine and Coastal Access Act 2009**

The Marine (Scotland) Act 2010 ("the 2010 Act") regulates activities in the territorial sea adjacent to Scotland in terms of marine environment issues. 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.

As this application lies outwith the Scottish Territorial Sea, i.e. beyond the 12 nm limit, it falls to the 2009 Act to regulate marine environmental issues in this area. Other than for certain specified matters, the 2009 Act executively devolved marine planning, marine licensing and nature conservation powers in the Scottish offshore region to the Scottish Ministers.

The 2009 Act transferred certain functions in issuing consents under section 36 of the Electricity Act from the Secretary of State to the Marine Management Organisation

("MMO"). The MMO does not exercise such functions in Scottish waters or in the Scottish part of the renewable energy zone, as that is where the Scottish Ministers perform such functions.

Where applications for both a marine licence under the 2009 Act and consent under section 36 of the Electricity Act are made then, in those cases where they are the determining authority, the Scottish Ministers may issue a note to the applicant stating that both applications will be subject to the same administrative procedure. Where that is the case then that will ensure that the two related applications may be considered at the same time.

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

### **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 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), 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) and The Marine Works (Environmental Impact Assessment) Regulations 2007 (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") and The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) ("the 2007 Regulations").

The proposal for the Development has been publicised, to include making the ES available to the public, in terms of the 2000 and 2007 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 Electricity (Applications for Consent) Regulations 1990 ("the 1990 Regulations"), the 2000 Regulations and the 2007 Regulations (as amended) have been followed.

The Scottish Ministers have, in compliance with the 2000 and 2007 Regulations

consulted with the Joint Nature Conservation Committee (“JNCC”), Scottish Natural Heritage (“SNH”), 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 5<sup>th</sup> December 2012. Under the 2007 Regulations Scottish Ministers have consulted with “the consultation bodies”, as defined in regulation 2(1).

The Scottish Ministers have also consulted a wide range of relevant organisations, including colleagues within the Scottish Government (“SG”) 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 Development 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 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”) and the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007 (“the 2007 Regulations”). As the Development is to be sited in the Scottish offshore region, it is the 2007 Regulations which are, in the main, applicable in respect of this application for section 36 consent. The 1994 Regulations do, however, apply to those parts of the associated transmission infrastructure which lie inside the Scottish Territorial Sea (i.e. within 12 nm from the shore).

The 1994 and the 2007 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. The nature of the decision may be taken for present purposes from the provision in regulation 25(4) & (5) of the 2007 Regulations:

- “(4) In the light of the conclusions of the assessment, and subject to regulation 26, the competent authority may agree to the plan or project only if it has ascertained that it will not adversely affect the integrity of the European offshore marine site or European site (as the case may be).
- (5) In considering whether a plan or project will adversely affect the integrity of a site, the competent authority must have regard to the manner in which it is proposed to be carried out and to any conditions or restrictions subject to which the competent authority proposes that the consent, permission or other authorisation should be given.”

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.

The JNCC and SNH 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 has

considered the combined effects of the Proposal with other Forth and Tay Offshore wind farms, (the Neart na Gaoithe Offshore Wind Limited (“NNGOWL”) and Inch Cape Offshore Limited (“ICOL”) applications). This is because the NNGOWL and ICOL, the Applications for which were submitted to the Scottish Ministers in July 2012 and July 2013 respectively, are proposed to be sited close to the Development. The AA which has been undertaken concludes that the proposed Development, and the SBWEL, ICOL and NNGOWL 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.

The JNCC and SNH 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, however, disagreement on the conclusions concerning the impacts upon:

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

This disagreement is regarding differences in assessment methods and the JNCC and SNH view that the closer the levels of effect are to the thresholds the greater the risk of adverse effects. The Scottish Ministers consider that the best available evidence has been used in the AA and that the assessment has been precautionary. A full explanation of the ornithology issues and justification for decisions regarding site integrity is provided in the AA.

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. 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 site integrity will not be adversely affected and that “no reasonable scientific doubt remains as to the absence of such effects”. The Scottish Ministers also consider that the best available evidence has been used in reaching conclusions. The AA will be published and available on the Marine Scotland licensing page of the Scottish Government’s website.

## **APPLICABLE POLICIES AND GUIDANCE**

### **Marine Area**

#### **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, wave, tidal stream and tidal range 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 (“MLWS”). The marine plan area boundaries extend up to the level of Mean High Water Spring tides (“MHWS”). 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.

#### 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 MLWS. The marine plan area boundaries extend up to the level of MHWS. 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<sup>th</sup> Oct 2012)), the Scottish Ministers have had regard to the following documents:

### Scottish Planning Policy

Scottish Planning Policy ("SPP") 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 Proposal 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, the JNCC, SNH and other relevant bodies.

## National Planning Framework 2

At the time of the Application to the Scottish Ministers Scotland's National Planning Framework 2 ("NPF2") was of relevance. 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

During the determination of the Application, Scotland's National Planning Framework 3 ("NPF3") was published. NPF3 is the national spatial plan for delivering the Scottish Government's 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. National Development 4 'High Voltage Electricity Transmission Network' is designed to facilitate electricity grid enhancements needed to support the increasing renewable energy generation, both on and offshore. 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. This was subject, by statute, to sixty (60) day Parliamentary consideration ending on 22<sup>nd</sup> March 2014. 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 Government's development priorities over the next 20-30 years. It also identifies national developments which support the development strategy. Paragraphs relevant to the Application are 3.4, 3.6, 3.8, 3.9, 3.12, 3.14, 3.25, 3.32, 3.33, 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 and reflects 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, in time, the pace of onshore wind development will be overtaken by the development of marine energy including wind, wave and tidal. NPF3 notes the Firth Coast from Cockenzie to Torness is a 'potentially important energy hub'. It notes that there are significant plans for offshore wind to the east of the Firths of Forth and Tay and states; 'Proposals for grid connections for these projects are now emerging,

requiring undersea cabling connecting with converter stations and substations. We want developers to work together to minimise the number and impacts of these developments by combining infrastructure where possible'. 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 Proposal, 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 developments 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 Proposal

#### 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 Proposal has been assessed against these constraints and addressed in **Annex 2**.

#### 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”) has advised that the Angus Local Plan Review is not a relevant consideration as the Development is outwith the area covered.

### Summary

The Scottish Ministers consider the policies as outlined above are broadly supportive of the Development.

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## **CONSULTATION**

In accordance with the statutory requirements of the 1990 Regulations, the 2000 Regulations and the 2007 Regulations, notices of the Application had to be placed in the local and national press and the Edinburgh Gazette to notify any interested parties. 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 Angus Council, as the onshore Planning Authority where the STA export cable comes ashore at Carnoustie, as well as to Fife Council. Notifications were also sent to the JNCC, SNH and SEPA.

The formal consultation process that was undertaken by the Scottish Ministers consulted on the whole Seagreen project (“the Proposal” - which consists of applications i to v and the ES). This was conducted between October 2012 and February 2013.

Due to further work being required to inform impact assessments (including HRA), further information was requested from the Company. The SEIS was received by MS-LOT on 18<sup>th</sup> October 2013 and public notices placed in the local press and Edinburgh Gazette to notify any interested parties. MS-LOT also consulted on the SEIS with all the organisations invited to comment on the original application and ES. The public consultation was conducted between October 2013 and December 2013.

Following comments received by Repsol, the company developing the Inch Cape Offshore Wind farm (“ICOL”), an SEIS Erratum (“the Erratum”) was produced, which was treated as additional information under the 2008 Amendment to the Electricity Works EIA Regulations. Therefore, a copy of the Erratum was sent to all consultees, the Erratum was made available to the members of the public in the same public places as the ES; and two public notices were placed for two consecutive weeks in the local press and Edinburgh Gazette to notify any interested parties. This took place in March 2014.

## **Representations and Objections**

A total of three (3) valid public representations were received by Marine Scotland from members of the public during the course of the public consultation exercise. Of these, two (2) representations objected to the Development, and one (1) was in support.

Representations in support of the Development were of the belief that in conjunction with nuclear fusion, electricity generated from clean sources, such as wind power, may be able to address concerns such as increasing energy demands, increasing dependency on fossil fuels, effects of climate change due to burning of fossil fuels and exponential population growth. They also believe that quality of life should be considered and by siting turbines at sea a good distance from residential sites is seen as fair.

Representations objecting to the Development raised concerns regarding: the effects on the sea bird colonies on the Bass Rock and Fair Isle; threats to the natural

environment of the Firth of Forth; impact on marine mammals; tourism; fishing industry; bats; and alternative technologies to wind power being available.

During the consultation, objections were also received from the Aberdeen International Airport (“AIA”), Arbroath and Montrose Static Gear Association (“AMSGA”), the Association of Salmon Fishery Boards (“ASFB”), the Ministry of Defence (“MOD”), National Air Traffic Services (“NATS”), the Royal Society for the Protection of Birds Scotland (“RSPB Scotland”), Scottish Fishermen’s Federation (“SFF”) and the Whale and Dolphin Conservation (“WDC”).

Following further discussions between the Company and the MOD, NATS and AIA, these consultees removed their objections subject to conditions being applied to any consent. Further discussion between the Company and the AMSGA also led to the removal of their objection subject to conditions being applied to any consent.

Objections from members of the public, the ASFB, SFF, RSPB Scotland, and WDC are being maintained.

The Scottish Ministers 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 are content that the material considerations have been addressed in the Application and within the responses received to the consultations by the closest onshore Planning Authorities, SEPA, the JNCC, SNH, and other relevant bodies.

The Scottish Ministers consider that no further information is required before the Application may be determined.

### **Public Local Inquiry**

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

The location and extent of the Development to which the Application relates being

wholly offshore means that the Development is not within the area of any local planning authority. The Scottish Ministers are not, therefore, obliged under paragraph 2(2) of Schedule 8 to the Electricity Act to require a public inquiry to be held. The nearest local Planning 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 and the Proposal as outlined above, raising a number of issues. In summary, and in no particular order, the objections were related to the following issues:

- Effects on marine life (including seabirds and marine mammals);
- Impacts on the bat population;
- Impact upon the tourism industry;
- Impact on commercial fishing;
- Impact on migratory fish; and
- Alternative technologies to wind power.

*Effects on marine life (including seabirds and marine mammals)*

The impacts on marine mammals, sea birds, benthic ecology and other marine life, were raised by two members of the public. The Company, in its ES and SEIS, assessed the potential impact of the Proposal on fauna and, through the consultation process, the Scottish Ministers consulted nature conservation bodies including the JNCC, SNH and other stakeholders as the RSPB Scotland, WDC and Marine Scotland Science (“MSS”) on these documents.

The RSPB Scotland and WDC have maintained their objection. Neither the JNCC nor SNH provided a position statement, however, they have provided conditions (included in **Annex 2**) of this consent to ensure that impacts on wildlife are acceptable. 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, such that the integrity of the sites which are protected sites under the Habitats and Wild Birds Directives, and relevant domestic implementing legislation, will not be adversely affected.

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). MS-LOT also recognise that there is an outstanding objection from WDC due to potential impacts on marine mammals (most notably bottlenose dolphins and harbour seals). Having carried out the AA (considering all the advice received from the JNCC, SNH and MSS) it can be ascertained with confidence that the Development, subject to appropriate conditions being included within the

consent (**Annex 2**), will not adversely affect site integrity of any of the identified SPAs and SACs assessed to have connectivity with the Development. The JNCC and SNH are in agreement with the AA conclusions for the marine mammal and freshwater fish SACs, and in some instances the SPAs. There is, however, disagreement on the conclusions concerning the impacts upon:

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

This disagreement is regarding differences in assessment methods and the JNCC and SNH view that the closer the effects are to thresholds the greater the risk of adverse effects. The Scottish Ministers consider that the best available evidence has been used in the AA and that the assessment has been precautionary. A full explanation of the ornithology issues and justification for decisions regarding site integrity is provided in the AA.

One representation stated that the noise and vibrations of the construction process will significantly disturb fish and sea mammals. Further modelling was commissioned by Marine Scotland and was undertaken by Prof Paul Thompson (University of Aberdeen and Marine Scotland Science Advisory Board). This work looked at the cumulative impacts of pile driving at the Forth and Tay wind farms together with the recently consented Moray Firth wind farms and concluded that there would be no long-term effects from underwater noise disturbance on the bottlenose dolphin population of the Moray Firth SAC.

Impacts on other cetacean species, including harbour porpoise, minke whale and white beaked dolphin, were also considered by the Company in their ES and SEIS. The JNCC and SNH 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. A European Protected Species (“EPS”) licence will be required prior to construction. A Marine Mammal Monitoring Programme (“MMMP”) is required as part of the Project Environmental Monitoring Programme (“PEMP”) condition of this consent (**Annex 2**).

The AA concluded that the site integrity of any of the SACs designated for marine mammals would not be adversely affected, subject to appropriate conditions being included on any consent. These conditions are detailed in **Annex 2**. Further details of the assessments are provided in the AA. The JNCC and SNH agreed with all the conclusions reached in the AA with respect to marine mammals. MSS have reviewed the ES, the SEIS, the AA and the conditions and consider that the conditions attached to the consent will allow impacts on marine wildlife to be within acceptable limits, such that the integrity of the designated SACs would not be adversely affected. Conditions to mitigate and monitor the effects on marine wildlife are reflected in **Annex 2**.

The JNCC and SNH 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”). The JNCC and SNH will be consulted on the Vessel Management Plan (“VMP”) which is a condition of this

consent, as will such other advisors 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.

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 Scottish Ministers, therefore, consider that they have sufficient information regarding the effects on marine life, 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.

#### Impacts on the bat population

One (1) objection was raised in relation to bats through the public consultation process. The statutory nature conservation bodies the JNCC and SNH were consulted on the Application and did not raise any concerns in relation to potential impacts on this species.

The Scottish Ministers, therefore, consider that they have sufficient information regarding the effects on the bat population, 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 upon the tourism industry

Concerns have been raised by respondents to the Application regarding the Development's potential impact upon eco-tourism, as the dolphins and seals become more elusive.

In this respect, MS-LOT notes 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, therefore, consider that they have sufficient information regarding the eco-tourism industry, 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 and AMSGA had concerns over impacts on the fishing industry and this was also raised by one (1) member of the public in their objection. The Company in the ES stated that impacts on both the squid and scallop fisheries are predicated due to potential increased steaming time to fishing grounds, displacement of fishing activity or navigational conflict with other vessels but these are not assessed as significant. Within the export cable route corridor, during both the construction and operation phases, a significant impact is predicted on the crab and lobster fishery that uses static gear. The impact on the scallop, squid and nephrops fisheries that use mobile gear is assessed as not significant. Until the appropriate post construction has been completed, the safety risks to fishing vessels arising from the installation of array cables or export cables sites are considered to be outside of acceptable limits.

SWEL will act cumulatively with other wind farms to produce significant impacts on the scallop, squid, nephrops and the crab and lobster fisheries during operation. In line with the natural fish and shellfish resource assessment a significant impact on herring has been assessed at both project and cumulative levels during construction. Significant cumulative impacts have also been assessed with regards to safety, displacement and interference with fishing vessels.

The Company have engaged with the SFF and AMSGA and in conjunction with neighbouring wind farm developers, have formed the Forth and Tay Offshore Wind Developers Group ("FTOWDG") and the Commercial Fisheries Working group ("CFWG"). The FTOWDG-CFWG has been established to facilitate on-going dialogue throughout the pre-construction, construction and operational phases of the Proposal. 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 to assess impacts to fishing are reflected within 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.

Since November 2012, there have been a number of meetings of the FTOWDG-CFWG which have provided an effective forum for discussion between the commercial fishing industry and the offshore wind industry in the Forth and Tay. On the 12 August 2014, the developers forwarded to the Scottish Ministers a Shared Position Statement to confirm the areas of agreement that have been achieved so far within the FTOWDG-CFWG. This Shared Position Statement seeks to provide the basis for moving the discussions forward and rightly states it is desirable that consistent approaches in relation to the interactions with commercial fishing activities are agreed through by FTOWDG-CFWG, and adopted by the Company as far as possible.

The matters raised in the Shared Position Statement are addressed in the consent conditions, Annex 2 or in the appropriate marine licence.

The Scottish Ministers, therefore, consider that they have sufficient information regarding the impacts on commercial fisheries, 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 migratory fish

Objections relating to potential effects on Atlantic salmon and sea trout were received through the public consultation exercise from ASFB. These are in addition to the objections that are being maintained from the SFF on the Application consultation.

The uncertainty around the assessments of these species has been recognised by the Company in their Application. The ASFB also recognise these uncertainties and believe that they can only be overcome through strategic research. A National Research and Monitoring Strategy for Diadromous Fish (“the Strategy”) has been developed by Marine Scotland Science to address monitoring requirements for Atlantic salmon and sea trout at a national level. The Company has engaged with MSS, the ASFB, SFF and MS-LOT to address this issue. A condition requiring the Company to engage at a local level (the Forth and Tay) in the Strategy is contained within this consent (**Annex 2**).

The Scottish Ministers, therefore, consider that sufficient steps, including the development of national strategic monitoring, have been 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.

#### Alternative technologies to wind power are available

A member of the public expressed an opinion that there is no need for the Proposal as alternative technologies to wind power are available that are less harmful to the environment. They suggested that Scotland also produces enough electricity for our own needs.

The Scottish Government’s commitment to increase the amount of electricity generated from renewable sources is a vital part of the response to climate change. The Scottish Government’s Electricity Generation Policy Statement states we believe that Scotland has the capability and the opportunity to generate a level of electricity from renewables by 2020 that would be the equivalent of 100% of Scotland’s gross annual electricity consumption. The target will require the market to deliver an estimated 14-16 GW of installed capacity. It does not mean or require an energy mix where Scotland will be 100% reliable on renewables generation by 2020; but it supports Scotland’s desire to remain a net exporter of electricity. Due to the intermittent nature of much renewables generation, we will need a balanced energy mix to ensure security of supply.

The technology to be used in this Proposal is one of a number of commercial developments being proposed in the renewables mix to help achieve 2020 targets for renewable electricity generation.

The Scottish Ministers considers that they have sufficient information regarding the alternative technologies to wind power, 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.

The Scottish Ministers, therefore, considers that there are no significant issues which have not been adequately considered in the ES, the SEIS and in consultation responses from the closest onshore Planning Authorities, SEPA, the JNCC, SNH and other relevant bodies, together with all other objections and third party representations. The Scottish Ministers, therefore, considers that it has sufficient information to recommend to the Scottish Ministers that they are able to make an informed decision on the Application without the need for a Public Inquiry.

### Summary

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, the SEIS Erratum, the AA and in the consultation responses received from the closest onshore Planning Authorities, SEPA, the JNCC, SNH and other relevant bodies, together with all other objections and representations. The Scottish Ministers do not consider that a public local inquiry 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 2007 Regulations and the applicable procedures regarding publicity and consultation laid down in the 2000 and 2007 Regulations have been followed.

The Scottish Ministers have taken into consideration the environmental information, including the ES, the SEIS, the SEIS Erratum, the AA and the representations received from the consultative bodies, including JNCC, SNH, SEPA, Angus Council, and Fife Council and from all other persons.

The Company, at the time of submitting the Application, was a licence holder authorised to generate electricity for the purpose of giving a supply to any premises in the area specified in Schedule 1 of the Licence, or enabling a supply to be so given during the period specified in paragraph 3 of the licence, subject to the terms and conditions specified therein. 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 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 and regulation 22 of the 2007 Regulations, taken into account all of the environmental information and are satisfied the Company has complied with their obligations under regulation 4(1) of the 2000 Regulations and regulation 12 of the 2007 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 regard to the Development, the JNCC and SNH advised that the Development or the Proposal 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.

Having carried out the AA (considering all the advice received from the JNCC, SNH and MSS) it can be ascertained with confidence that the Proposal, subject to appropriate conditions being included within the consent, will not adversely affect site integrity of any of the identified SPAs and SACs assessed to have connectivity with the Development. The JNCC and SNH are in agreement with the conclusions for the marine mammal and freshwater fish SACs and in some instances the SPAs. There is, however, disagreement on the conclusions concerning the impacts upon:

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

This disagreement is regarding differences in assessment methods and the JNCC and SNH view that the closer the levels of effect are to the thresholds the greater the risk of adverse effects. MS-LOT consider that the best available evidence has been used in the AA and that the assessment has been precautionary. A full explanation of the ornithology issues and justification for decisions regarding site integrity is provided in the AA.

The JNCC, SNH and MSS recommended that certain conditions be included on any consent which would allow this Development to be implemented. These conditions have been included within this consent (**Annex 2**).

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.

A recent announcement by the Scottish Government has highlighted the Outer Firth of Forth and Tay Complex as a draft marine SPA as it meets the JNCC and SNH selection

guidelines. A formal consultation will be undertaken towards the end of 2014 / beginning of 2015. Following consultation it is possible that this area could become a designated marine SPA towards the end of 2015. At this stage a further AA may be required if Likely Significant Effects (“LSE”) on the qualifying features is identified from the Proposal. Under the Habitats regulations this must be carried out as soon as is reasonably practicable following designation.

### **THE SCOTTISH MINISTERS’ CONSIDERATION OF THE POSSIBLE EFFECTS ON A NATURE CONSERVATION MARINE PROTECTED AREA**

When considering an application for section 36 consent under the Electricity Act, which might affect a Nature Conservation Marine Protected Area (“NC MPA”), the competent authority (under section 126 of the Marine and Coastal Access Act 2009) is required to consider whether the activity is capable of affecting (other than insignificantly) a protected feature in a NC MPA or any ecological or geomorphological process on which the conservation of any protected feature in a NC MPA is dependant. If the competent authority believe that there is or may be a significant risk of an activity hindering the achievement of the conservation objectives then they must notify the conservation bodies (SNH for MPAs within 12 nm or the JNCC for MPAs outwith 12 nm) of that fact. The JNCC have provided advice in terms of section 127 of the 2009 Act that as there are areas of overlap between the Proposal and the NC MPA the Proposal is capable of affecting (other than insignificantly) the ocean quahog and offshore subtidal sand and gravel protected features of the MPA. The JNCC advised that there was no significant risk of the Proposal hindering the achievement of the conservation objectives for the protected features of the Firth of Forth Banks Complex NC MPA if mitigation proposed by the Company is implemented. Having carried out the MPA assessment (considering all the advice received from the JNCC) it can be ascertained with confidence that there is no significant risk of the Proposal, subject to appropriate conditions being included within the consent, hindering the achievement of the conservation objectives of the Firth of Forth Banks Complex NC MPA.

### **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 statutory regulations have been complied with, and that the Development will not adversely affect site integrity of any European protected site.

#### **Impacts on fish and shellfish**

The consultation responses from the ASFB and SFF confirmed objections to the Development and the Proposal from each. The key concerns raised were regarding the uncertainty over the potential impacts on migratory fish. The key issues included the potential impacts associated with subsea noise during construction and operation, electromagnetic fields (“EMF”), degradation of the benthic environment, impact on prey species, unknown aggregation effects at the turbines, loss of fishing grounds.

The ASFB and SFF requested monitoring and mitigation measures to be put in place. 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.

The JNCC and SNH identified SACs where the Development or the Proposal 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 affecting site integrity. Such conditions have been included by the Scottish Ministers within this consent (**Annex 2**).

A key concern of the JNCC and SNH in respect of marine fish, relates to underwater noise impacts from pile-driving of the Wind Turbine Generator (“WTG”) foundations during construction on cod and herring. Noise impacts that interrupt or adversely affect spawning activity could be expected to result in an impact to the cohort for that year. Pile-driving activities in successive years may, therefore, result in a series of weakened cohorts within a population. Conditions to mitigate these impacts including the requirement for soft start piling, piling schedules and construction programmes are included in this consent (**Annex 2**). Post consent sandeel surveys were also recommended by the JNCC and SNH in order to better inform sandeel distribution with the Forth and Tay wind farm sites, again this requirement is included in the conditions.

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 that would require consent to be withheld.

### Impacts on birds

The JNCC, SNH and the RSPB Scotland expressed concerns about the potential impact of the Proposal in combination with NNGOWL and ICOL developments on several bird species using the Firth of Forth. Advice from the JNCC and SNH on 7<sup>th</sup> March 2014 was that they could not conclude with reasonable certainty that the Forth and Tay wind farms would not adversely affect the site integrity of Forth Islands or Fowlsheugh SPAs. RSPB Scotland object to the Forth and Tay wind farms, in their view, due to the unacceptable harm to seabird species. The species highlighted by the JNCC, SNH 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 affected by displacement, barrier effects and collision.

These species along with guillemot, razorbill, herring gull, lesser black-backed gull, fulmar, common and Arctic tern were considered in the AA. The AA requires to assess the implications of the Development (in combination with the SBWEL, NNGOWL and ICOL developments, and including mitigation measures) for each site in view of the site’s conservation objectives. The JNCC and SNH 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 outwith the SPA, but it can also address indirect impacts, such as the degradation or loss of supporting habitats which are outwith 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 SBWEL, NNGOWL 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, the JNCC and SNH. Several methods were used by the JNCC, SNH and MSS to determine levels of acceptable change. The AA concluded that the proposed Development, SBWEL and NNGOWL 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.

The JNCC and SNH disagreed with some of the conclusions of the AA and advised that it could not be concluded that the site integrity of:

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

would not be adversely affected.

The reasons for the differences in the conclusions made by the AA and the JNCC and SNH were mainly due to the different methods used to estimate thresholds and the JNCC and SNH 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 that site integrity is not adversely affected 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.

The JNCC and SNH also highlighted that effects on species not covered under HRA also require consideration (i.e. individuals breeding outwith 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 the JNCC and SNH as being of greatest concern.

Following a meeting held on 7<sup>th</sup> July 2014 between Marine Scotland and SNH, SNH followed up with a letter of 11<sup>th</sup> July which stated that they had the opportunity to review and discuss aspects of their advice where conclusions reached by JNCC & SNH 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 regard 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 advisors 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 seabirds. SNH also noted that there were precautionary elements in the approaches taken and the models recommended by the JNCC and SNH and by MSS.

SNH stated that the level of precaution which is appropriate is not a matter which can be determined precisely, and that judgments 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, judgments 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.

#### *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.

The JNCC and SNH concluded that, subject to conditions, there would be no long-term 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, site integrity of all these SACs would not be adversely affected. The JNCC and SNH 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 the JNCC and SNH 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. The JNCC and SNH 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 on-going 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.

The JNCC and SNH 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 SMRU. The JNCC and SNH 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.

An EPS licence will be required by the Company prior to construction and a MMMP is required as part of the PEMP condition 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 Development’s impact on marine mammals which would require consent to be withheld.

#### Impacts on benthic ecology and habitat interests

The Design Envelope applied for includes the option for gravity bases to be used in

the construction of the Development. In their interim advice on the Proposal the JNCC and SNH highlighted the inability to conclude assessment for sediment release arising from “worst case” scenarios utilising gravity bases as the Company was unable to confirm the upper limit of gravity bases to be used for turbine foundations. The Scottish Ministers have informed the Company that if gravity bases are to be used as part of the Development this will not be permitted until a further application and supporting EIA for the assessment of the dredging requirements, sediment release and disposal of dredgings has been provided to the Scottish Ministers for their consideration.

The Priority Marine Feature (“PMF”) species *Artica islandica* (ocean quahog) has been recorded in limited numbers, and only as juveniles, by the Company within the Proposal site and along the export cable route. The JNCC and SNH advise that this species is sensitive to smothering, and therefore would welcome potential mitigation measures. These mitigation measures have been included in this consent (**Annex 2**). The Company has also recorded *Sabellaria spinulosa* within the site, but not in crust or reef form constituting Annex 1 habitat. The JNCC and SNH have welcomed the Company’s initial mitigation proposals in respect of potential rare or important habitats within the site namely the mitigation measures presented in paragraph 11.130 in Chapter 11 of the ES. The Proposal site partially overlaps with the MPA for the Firth of Forth Banks Complex. The JNCC and SNH welcome the Company’s proposals to mitigate impacts to benthic habitats, including MPA features as well as their continued engagement over the proposed management options for this MPA. An assessment completed on the potential impacts of the Proposal on the protected features of the MPA concluded that there is no significant risk of the Proposal, subject to appropriate conditions being included within the consent, hindering the achievement of the conservation objectives of the Firth of Forth Banks Complex NC MPA.

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 the JNCC nor SNH 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 of 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.

#### Impacts on commercial fishing activity

Regarding commercial fishing activity in the Forth and Tay zone, the SFF, AMSGA and FMA raised concerns regarding the impact on fishing grounds, damage and loss of gear. SFF and AMSGA also consider displacement of fishing to be an issue. SFF agrees with the information in the ES stating that the scallop fleet will be the primary fleet affected.

The Scottish Ministers are aware that there will be temporary displacement within the Development area during construction. MSS advised that in general the Company has provided a robust assessment of the key impacts. MSS commented that the scallop fishing activity in SAWEL is heavier than in SBWEL and they would consider scallop fishing to be of medium sensitivity and the impacts to be of medium magnitude from temporary loss or restriction of access to fishing grounds and displacement of fishing vessels, resulting in moderate adverse and significant impacts. MSS noted that it has been difficult for the developer to address cumulative impacts with any great certainty and advised that this should be looked at by the fisheries working group that has been set up. SFF also requests that the Company continues its membership in the fisheries working group and appoint an Fisheries Liaison Officer (“FLO”).

As suggested by MSS and the SFF, the 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 AMSGA, FMA and SFF. The participation in and the continuation of this group, the development of a Commercial Fisheries Mitigation Strategy (“CFMS”) along with the appointment of a FLO are reflected in conditions of this consent (**Annex 2**). Conditions in this consent requiring over trawl surveys and the CFMS, will potentially mitigate the impacts of the Development on commercial fisheries.

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 that would require consent to be withheld.

#### Impacts on shipping and navigational safety

The Chamber of shipping (“CoS”) were concerned over the potential cumulative impacts on navigation resulting from the construction of all the Forth and Tay proposals with the increase in vessel traffic risking shipping routes. The CoS consider that mitigation measures should be applied to ensure a safely navigable corridor is maintained between the Proposal and the Firth of Forth Round 3 projects.

The Northern Lighthouse Board (“NLB”) was unable to specify final marking and lighting requirements owing to a lack of clarity in the Application with regard to the final

layout of WTGs. Lighting and marking requirements will be given by the NLB during the finalisation of the Development Specification and Layout Plan (“DSLPL”) once submitted by the Company. Submission of a DSLP as well as a Lighting and Marking Plan (“LMP”) are conditions of this consent (**Annex 2**).

The Marine and Coastguard Agency (“MCA”) raised no objection to the Development but noted that the Proposal had the potential to impact on navigation through displacement of vessel traffic in the area and called for careful monitoring of the potential effects on vessel traffic. The MCA required a full Emergency Response & Cooperation Plan (“ERCoP”) properly documented in order to satisfy the requirements of MCA Marine Guidance Note 371. A condition capturing this requirement is reflected in this consent (**Annex 2**).

Royal Yachting Association Scotland (“RYA Scotland”) had no objection to the Development but showed some concerns regarding having a gap between SAWEL and SBWEL and how it could pose an increased risk to recreational craft. A condition requiring a comprehensive Navigational Safety Plan (“NSP”) has been included within 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 Development’s impact on shipping and navigational safety that would require consent to be withheld.

#### Impacts on aviation

NATS objected to the Development due to potential impacts on the Perwinnes Primary Radar and associated air traffic management operations. Following discussions between the Company and NATS, an agreement has been entered into between the two parties for the design and implementation of an identified and defined mitigation solution in relation to the Development and the Proposal. Consequently, NATS have withdrawn their objection. A condition capturing the requirement for the Company to produce and implement a mitigation solution is reflected in this consent (**Annex 2**).

The MOD initially objected to the Development citing concerns with the Air Traffic Control (“ATC”) radar at Leuchars, the Air Defence Radar at Remote Radar Head (“RRH”) Buchan and the Air Defence Radar at RRH Brizlee Wood. The MOD raised concerns, but no objection, with regard to the export cable route and its passage through the Barry Buddon Danger Area D604 (“Danger Area”). Following discussions with the MOD, and further consideration of the mitigation proposals submitted by the Company, the MOD have withdrawn their objection subject to conditions being attached to any consent (**Annex 2**).

The Civil Aviation Authority (“CAA”) did not object to the Development but stressed the need to inform the Defence Geographic Centre of the locations, heights and lighting status of the turbines and meteorological masts, the dates of construction and the maximum height of any construction equipment to be used prior to construction to allow the inclusion on aviation charts. A condition capturing this requirement is reflected in 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 Development's impact on aviation that would require consent to be withheld.

#### Impacts on recreation and tourism

Some concerns have been raised through the consultation regarding the Development's potential impact upon tourism, particularly relating to disruption and disturbance to the golf courses during and after construction, by Carnoustie Golf Links Management Committee ("CGLMC"). The same consultee stressed the importance of the Open Championship to the local and Scottish economies. Although these concerns are largely related to the terrestrial planning application, MS-LOT is considering the inclusion of a condition in the marine licence, which has jurisdiction up to the level of MHWS, preventing works relating to the cable landfall ancillary infrastructure from taking place at the same time as important golf tournaments. Angus Council will be consulted and will liaise with the Company.

Surfers Against Sewage ("SAS") requested that the time for access restricted to Carnoustie bay are kept to an absolute minimum so as to have a minimal effect on the surfing community and advised that the Company should liaise with local surfing groups and arrange mitigation factors such as alternative access. The Company informed SAS that the assessment of landside impacts, such as beach access at Carnoustie bay, was specifically scoped out of the Offshore ES, as agreed with Marine Scotland. Nevertheless, as per the Company's onshore application "The majority of the beach (Carnoustie) will be unaffected, with access maintained where it is safe to do so, and it is likely that visitors will not be deterred from visiting the coastline. No other beaches in the area will be affected by the scheme."

MS-LOT did not receive any response from Scottish Canoe Association and RYA Scotland did not object to the Development.

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 recreation and tourism that would require consent to be withheld.

#### Visual impacts of the Development

SNH, the Scottish Ministers statutory advisors on visual impacts on designated landscape features, and the JNCC were consulted and neither objected on landscape and visual grounds.

SNH stated that, cumulatively, the proposed Forth and Tay wind farms (SAWEL, SBWEL, ICOL and NNGOWL) 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.

According to SNH, on the South Aberdeenshire/Angus Coast, the Proposal would have a small visual influence because it would be further from the coast. Cumulative visual effects would be major on the South Aberdeenshire and Angus coast when ICOL is seen in combination with either the Proposal (to the north, around St Cyrus and within Montrose Bay) or NNGOWL (to the south from Arbroath to Carnoustie).

On the East Fife coast, NNGOWL and ICOL would have the greatest effects on the East Fife coast. The Proposal would be visible in good conditions but seen at considerable distance (>50 km) and behind ICOL in many views, further limiting the visual influence of the Proposal. When considering the possibility of cumulative effects on this stretch of coast, SNH considered that the Proposal would have minor effects on seascape character and on views in this area due to its distance (>50 km).

From the East Lothian coast, the Proposal would be unlikely to be visible from shore as it would lie over 60 km away (at its nearest point). SNH advised that, cumulatively the Proposal when seen together with NNGOWL and ICOL would only be visible from the East Lothian coast to a very small degree.

SNH stated that, within Aberdeenshire, north of St Cyrus, the Proposal would be seen at distances greater than 40 km and would have relatively minor visual influence. It would be seen as a very distant linear feature on the horizon in clear conditions and would not dominate the coast.

Angus Council and Fife Council were also consulted on landscape and visual grounds. Both Angus Council and Fife Council raised concerns regarding visuals, however, their concerns were not sufficient to cause them to object to the Proposal.

No consultees, Statutory or otherwise, have objected to the Development on landscape and visual impacts. This was primarily due to the distance the Development is from the shore (over 12 nm).

Conditions requiring the submission of a DSLP, Design Statement (“DS”) and a LMP have been included in this decision letter and consent. Furthermore, 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. As part of this consent a condition has been placed on the Company to provide final visualisations to the SNH, the local authorities and all consultees with an interest in visual amenity (**Annex 2**).

The Scottish Ministers recognise that the Development, ICOL and NNGOWL will be a prominent new features on the seascape from the Angus coastline.

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. Marine Scotland officials have undertaken a site visit of a selection of viewpoints provided in the Company’s Application. During these visits, officials were able to compare the views from those viewpoints using the visual photomontages in the Company’s ES.

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 impacts that would require consent to be withheld.

#### *Failure to meet the requirements of the Aarhus Convention*

Concerns were raised that in August 2013, the United Nations Economic Commission for 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. 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.

#### *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 of the energy of the fuel going into a conventional thermal power station is transformed into useful electricity - a lot of it ends up as ash or air pollution harmful to health, as well as carbon dioxide. Also, unlike conventional electricity generating stations the fuel for a wind farm does not need to be mined, refined or shipped and transported from other 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 that 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 Zone 2, of Round 3 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 525 MW Development has the potential to annually generate renewable electricity equivalent to the demand from approximately 335,000 homes. This increase in the amount of renewable energy produced in Scotland is entirely consistent with the Scottish Government's policy on the promotion of renewable energy and its target for renewable sources to generate the equivalent of 100% of Scotland's 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 will be 100% reliable on renewables generation by 2020; but it supports Scotland's plan to remain a net exporter of electricity.

The Scottish Ministers 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 that would require consent to be withheld.

### *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 2009 The Crown Estate ("TCE") awarded the Company exclusive developments rights to the Round 3 Zone 2 (named the 'Firth of Forth Zone') and in January 2010 TCE awarded Seagreen a Zone Development Agreement ("ZDA") with a target Zone generation capacity of circa 3.5 GW.

The suitability of the site was further affirmed in May 2010 with the Scottish Government's publication of the 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.

The Company has adopted the Zone Appraisal and Planning (“ZAP”) approach and used it to provide a clear rationale for site boundaries. The initial site identification process comprised a detailed, desk based assessment of constraints to development. This focused on factors including:

- Grid connection;
- Navigation and shipping;
- Commercial fisheries;
- Aviation and military;
- Wind resource;
- Construction and ports;
- Bathymetry;
- Nationally designated landscape / seascape within 35 kilometres;
- Internationally designated sites (Natura 2000) and proposed sites/ extensions to sites;
- Ornithology, marine mammals and features of marine ecological interest; and
- Sensitive fish spawning areas considered for hearing specialists (herring, sprat and sandeel).

Revised boundaries were established to provide a balance between the environmental constraints considered significant and the requirement to maintain design flexibility and economic viability. The initial Phase 1 boundary established at the bid stage was revised to exclude the Scalp Bank feature following the initial modelling of collision risk for birds. Subsequent to this, and based on a further review of consenting strategy options, the Company finalised the SAWEL and SBWEL site areas taken forward in the EIA and consent applications. Phases 2 and 3 of the development have been scoped, however, applications have not been made at this time.

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.

#### *Cumulative impacts of the Development*

The close proximity of the Development (as part of the Proposal) to the proposed adjacent ICOL and NNGOWL wind farms 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, the JNCC, SNH, 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 Company commitment to increasing the air gap measured from LAT by 4 metres in order to mitigate collision impacts. The effect of displacement from the Proposal is also less than that from NNGOWL and ICOL as the turbines are more widely spaced. These factors were taken into account when completing the AA. 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 has been established in order to discuss and address any issues. A condition to ensure the Company continues its membership of the CFWG and its commitment to any mitigation strategy forms part of this consent (**Annex 2**).

Concerns were also raised on the cumulative impacts on navigation by the CoS. A condition ensuring that consultation with the CoS regarding the DSLP is undertaken prior to commencement of the Development, 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 area that would require consent to be withheld.

### Economic Benefits

Scottish Planning Policy (“SPP”) advises that economic benefits are material issues which must be taken into account as part of the determination process.

SPP also confirms 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, particularly in rural areas, and to provide significant export opportunities. The planning system has a key role in supporting this aim and the Scottish Ministers should consider material details of how the proposal can contribute to local or national economic development priorities as stated in SPP.

The Development will contribute significantly to the new energy infrastructure that needs to be developed to replace existing generating capacity that is reaching the end of its lifespan, to ensure security of supply and to assist in meeting targets for renewable energy generation capacity. The Firth of Forth Round 3 Zone has a target capacity of circa 3.5 GW, with the Development delivering the first 525 MW of this target. SAWEL and SBWEL will deliver 525 MW capacity each. The Zone target capacity would contribute significantly to the requirement for new plant and, given the significant closures in the middle of this decade, it is important that the Proposal progresses as scheduled to avoid risks to security of supply and to minimise reliance on foreign sources of energy.

The Development will contribute to the growth of the decarbonised energy sector in Scotland. As stated previously, the Government have set out clear policy drivers that seek to maximise future economic opportunities presented by offshore wind

development. The Zone is Scotland's largest Round 3 project and is therefore integral to Governments strategy for sustainable economic growth.

The extent of the project expenditure is not yet known accurately, and hence this has been estimated based on published sources applicable to the offshore wind industry. The capital expenditure costs of developing and constructing an offshore wind farm are estimated to be around £3 million per MW. SAWEL and SBWEL each have a maximum output of 525 MW, therefore the predicted expenditure is £1,575 million per project, corresponding to a total expenditure of £3,150 million for the Proposal. In reality should both SAWEL and SBWEL progress to construction, the expenditure on the Proposal will be less as there will be shared costs associated with the export cable and grid connection infrastructure. The Company states that it is not possible at this stage to accurately assess the level of expenditure and have consequently assumed a 50% reduction in the total £3,150 million expenditure, to account for economies of scale between the two projects. If actual expenditure is higher than this, socio-economic impacts will be more beneficial than as assessed.

As individual projects, either of SAWEL and SBWEL have the potential to contribute GVA between a low case of £60 million and a high case of £241 million in Scotland. In both cases this would represent a beneficial impact on the Scottish economy. The CAPEX would be spent over the 4 year construction period and hence would be a short term impact. For both projects together, the Proposal would contribute between a low case of £80 million and a high case of £321 million GVA in Scotland.

The Company assume an operating expenditure of £75,000 per MW per annum within the assessment, with an anticipated project operational lifespan of 25 years. If the Proposal were to progress as a whole this would generate an annual GVA of between a low case of £17.4 million and a high case of £23.5 million in Scotland. There would be an additional GVA impact in the rest of Great Britain of between £0 (low case) and £5.9 million (high case). In the event that one of SAWEL or SBWEL proceeded individually and the other did not this would represent an annual GVA of between a low case of £8.7 million and a high case of £11.7 million in Scotland.

The number of employees required for the construction and operation and maintenance ("O&M") phases cannot be accurately quantified at this stage of the development process. However, assuming both projects are developed concurrently, the Company estimate employments impacts of between 1728 jobs (low case) and 7196 jobs (high case) in Scotland during the construction phase. This is significantly higher than any other wind farms estimated in Scotland. These figures include indirect and induced jobs. Equivalent figures are 1295 jobs to 5392 if either of the projects go ahead separately. The Company also estimate an additional 0 jobs (low case) to 4293 jobs (high case) in the rest of Great Britain of the full proposal goes ahead.

Industry reports (Oxford Economics, 2010) estimate a likely scenario of 0.19 direct O&M jobs created per MW for offshore wind in the UK. This translates to approximately 100 O&M jobs for each of SAWEL and SBWEL projects, and approximately 200 O&M jobs for the combined Proposal.

The supporting Application for this Development contains the justification for the use of the figures below;

“The above estimates are based on 2 scenarios for development of the supply chain in Scotland and Great Britain from a report by IPA and Scottish Renewables (2010):

- High Case (Scenario A within the industry report) – 10.6 GW of available offshore wind sites in Scotland will be developed. This exploits all the opportunities has to offer including a turbine manufacturer setting up a base in Scotland, development of skills and port infrastructure. A significant supply chain market is developed
- Low Case (Scenario C within the industry report) – Offshore wind sites are brought online at a similar rate to scenario A but the supply chain and wider industrial base does not develop. The majority of goods and services are imported.

Whilst it is not possible to be definitive at this stage, the Proposal has the potential to encourage the establishment of manufacturing or pre-assembly facilities, as well as research and support facilities, by wind turbine generator manufacturers and installers in Scotland and the wider Forth and Tay region. In addition, port, transport and other support facilities will be required during the construction period. Beneficial impacts are expected to continue during the operation period, with support and port facilities required by operators for maintenance and related activities.

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 Scottish Ministers recognise this High Case may include overly optimistic economic impacts for Scotland as the assumed total 10.6 GW of electricity may not be fully achieved in the timescales stated. The development of a supply chain in Scotland, and hence retention rates of activity, is likely to be linked to the total power generation achieved.

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 that would require consent to be withheld.

## **Summary**

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 Application 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 and regulation 22 of the 2007 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 three (3) 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 SBWEL, ICOL, NNGOWL and all other relevant developments, 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 **525 MW** (as described in **Annex 1**).

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

The Company applied for two declarations under section 36A of the Electricity Act to extinguish public rights of navigation so far as they pass through those places within the Scottish marine area (essentially the territorial sea adjacent to Scotland) where structures (but not, for the avoidance of doubt the areas of sea between those structures) forming part of the offshore wind farm and offshore transmission works are to be located. As the Proposal is located outwith the limits of the Scottish marine area, a declaration under section 36A of the Electricity Act cannot be issued. The Company has been informed of this as a matter of courtesy.

In accordance with the 2000 Regulations and the 2007 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. The Company must provide copies of the public notices to the Scottish Ministers.

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 as set out in the Application and as described in **Annex 1**.

Copies of this letter and the consent have been sent to Angus Council and Fife 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 the judicial review process can be found at Chapter 58 of the Court of Session rules on the website of the Scottish Courts –

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

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

Yours sincerely

A handwritten signature in black ink, appearing to read 'J C McKie'.

**JAMES C 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

The Development, located as shown on Figure 1 below, ~~shall have a permitted generating capacity not exceeding 525 MW and~~ shall comprise a wind-powered electricity generating station in the FFZ, including:

1. not more than 75 three-bladed horizontal axis wind turbine generators each with:
  - a) a maximum blade tip height of 209.7 metres (measured from LAT);
  - b) a rotor diameter of between 122 and 167 metres;
  - c) a hub height of between 87.1 and 126.2 metres (measured from LAT);
  - d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);
  - e) blade width of up to 5.4 metres; and
  - f) a minimum spacing of 1,000 metres;
2. all foundations, substructures, fixtures, fittings, fixings, and protections;
3. inter array cabling and cables up to and onto the offshore substation platforms; and
4. transition pieces including access ladders / fences and landing platforms,

and, except to the extent modified by the foregoing, all as specified in the Application and by the conditions imposed by the Scottish Ministers. References to “the Development” in this consent shall be construed accordingly.

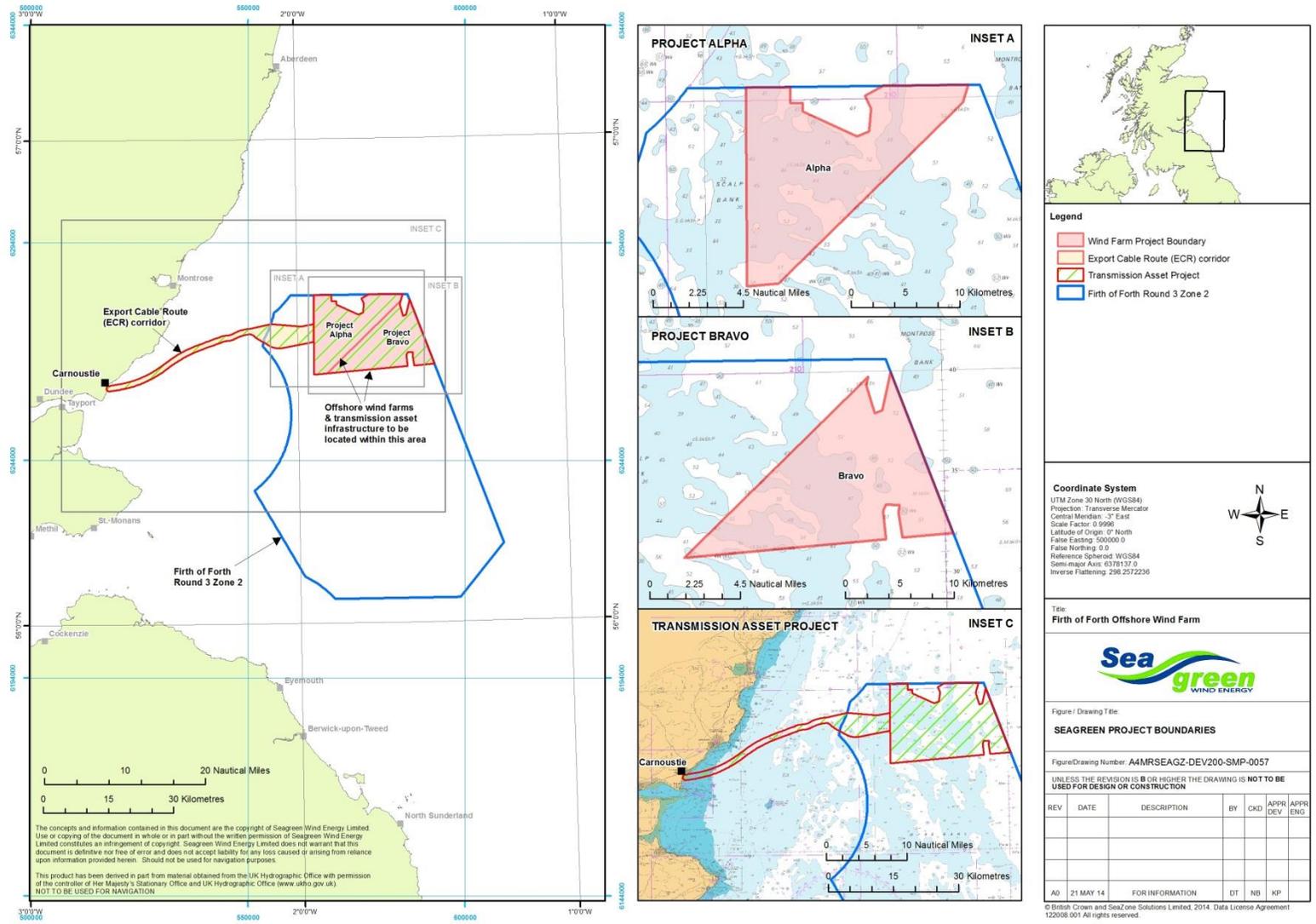


Figure 1: Development Location – see KEY

## 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 Authority, the JNCC and SNH 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, the JNCC and SNH 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 the 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: To ensure the Commencement of the Development is undertaken 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: To ensure that a decommissioning programme is submitted to the Secretary of State where the Secretary of State has, following consultation with the Scottish Ministers, so required before any construction commences.**

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

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 and associated ancillary equipment is 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: To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.**

7. The Development must be constructed and operated in accordance with the terms of the Application 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.**

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 the JNCC, SNH, 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 the JNCC, SNH, 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 Application and must include details of how the construction related mitigation steps proposed in the ES and in the SEIS 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 Design Statement (“DS”), the Environmental Management Plan (“EMP”), the Vessel Management Plan (“VMP”), the Navigational Safety Plan (“NSP”), the Piling Strategy (“PS”), the Cable Plan (“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. In 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 the JNCC, SNH 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 pile-driving 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 pile-driving, as agreed 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 Project Environmental Monitoring Programme ("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 ("DSLPL"), 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, the JNCC, SNH, SFF, 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 DSLPL (as updated and amended from time to time by the Company). Any updates or amendments made to the DSLPL by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

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

- a. 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;
- b. 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 WGS84 format;
- c. A table or diagram of each WTG dimensions including - height to blade tip (measured above Lowest Astronomical Tide ("LAT")) to the highest point, 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 (Annex 1, Inset A of Figure 1) 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 as 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 the JNCC, SNH 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. The Development must, at all times, be constructed in accordance with the approved DS (as updated and amended from time to time by the Company).

**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 the JNCC, SNH, 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 the Decommissioning Programme provided for 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 over-arching 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 non-native 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, the JNCC, SNH, 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 the JNCC, SNH, 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 27) 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 the JNCC, SNH, 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 to the Scottish Ministers, as soon as practicable, 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 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 prior to approval of the NSP. 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 the JNCC, SNH, MCA, SFF 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 protection measures;
- e. Methodologies for surveys (e.g. over trawl) 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 only, to the Planning Authorities, the JNCC, SNH 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.

The ATC Scheme is a scheme designed to mitigate the impact of the Development upon the operation of the Primary Surveillance Radar at RAF Leuchars (“the Radar”) and the air traffic control operations of the MOD which is reliant upon the Radar. The ATC Scheme shall set out the appropriate measures to be implemented to mitigate the impact of the Development on the Radar and shall be in place for the operational life of the Development provided the Radar remains in operation.

No turbines shall become operational unless and until all those measures required by the approved ATC Scheme to be implemented prior to the operation of the turbines have been implemented and the Scottish Ministers have confirmed this in writing. The Development shall thereafter be operated fully in accordance with 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 ensure that no part of any turbine shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head (RRH) Buchan unless and until an Air Defence Radar Mitigation Scheme (“the ADRM scheme”) has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Buchan and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of the Development.

**Reason:** *To mitigate the adverse impact of the Development on air defence radar at Remote Radar Head (RRH) Buchan.*

- 22.** The Company must ensure that no part of any turbine shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head (“RRH”) Brizlee Wood unless and until an Air Defence Radar Mitigation Scheme (“the ADRM scheme”) has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Brizlee Wood and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of the Development.

**Reason:** *To mitigate the adverse impact of the development on air defence radar at Remote Radar Head (RRH) Brizlee Wood.*

- 23.** The Company must ensure that no turbine shall be erected until a Primary Radar Mitigation Scheme (“PRMS”) agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to mitigate the impact of the Development on the Primary Radar Installation at Perwinnes and associated air traffic management operations.

No blades shall be fitted to any turbine unless and until the approved Primary Radar Mitigation Scheme has been implemented and the development shall thereafter be operated fully in accordance with such approved Scheme.

**Reason: To mitigate the adverse impact of the development on air traffic operations.**

24. The Company must, prior to the Commencement of the Development, and following confirmation of the approved DSLP by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment over 150 m (measured above LAT) and any Offshore Sub-Station Platforms 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 co-ordinates accurate to three decimal places of minutes of arc for each WTG position and maximum heights of the WTGs to the UKHO for aviation and nautical charting purposes.

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

25. The Company must, at least 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 be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval from the Scottish Ministers).

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

26. 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 the JNCC, SNH, 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 so as to ensure that the data which is collected allows useful and valid comparisons 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 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 Marine Mammal Monitoring Programme (“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 Forth and Tay Regional Advisory Group (“FTRAG”) referred to in condition 27 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 the 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.**

27. 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 28), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

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

28. 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.**

29. 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 the JNCC and SNH, 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 for approval, until the Final Commissioning of the Development. The responsibilities of the ECoW must include, but not be limited to:

- a. Quality assurance of final draft version of all plans and programmes required under this consent;
- b. Provide 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. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- d. Provide 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.**

30. The Company must, to the satisfaction of the Scottish Ministers, participate in the monitoring requirements as laid out in the ‘National Research and Monitoring Strategy for Diadromous Fish’ 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.*

31. 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 for their written approval. The Company must remain a member of the Forth and Tay Offshore Wind Developers Group-Commercial Fisheries Working Group or any successor group formed to facilitate commercial fisheries dialogue in the Forth and Tay regions. The Company must include in the CFMS a mitigation strategy for each commercial fishery that Ministers are reasonably satisfied would be adversely affected by the Development. The CFMS must, in particular, include mitigation measures for lobster stock enhancement if the Scottish Ministers are satisfied that such mitigation measures are reasonably necessary. The Company must implement all mitigation measures committed to be carried out by the Company within the terms of the CFMS. The Company must require all of its contractors, and sub-contractors, to co-operate with the fishing industry to ensure the effective implementation of the CFMS.

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

32. Prior to the Commencement of the Development, a Fisheries Liaison Officer ("FLO"), approved in writing 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 sub-contractors, 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.*

33. 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.*

### **Annex 3**

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

In this decision letter and in Annex 1 and 2:

“the Application” includes the Application letter and Environmental Statement submitted to the Scottish Ministers by Seagreen Wind Energy Limited, on behalf of Seagreen Alpha Wind Energy Limited and Seagreen Bravo Wind Energy Limited, on 15<sup>th</sup> October 2012; the Supplementary Environmental information Statement submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 18<sup>th</sup> October 2013; and the SEIS Erratum submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 11<sup>th</sup> March 2014.

“AA” means Appropriate Assessment.

“CAPEX” means Capital Expenditure.

“Commencement of the Development” means the date on which Construction begins on the site of the Development in accordance with this consent.

“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.

“Construction” means as defined at section 64(1) of the Electricity Act 1989, read with section 104 of the Energy Act 2004.

“Danger Area” means the seaward extent of MOD Danger Area D604 into which military firing practise at Barry Buddon Range is conducted.

“Decommissioning Programme” means the programme for decommissioning the relevant object, to be submitted by the Company to the Secretary of State under section 105(2) of the Energy Act 2004 (as amended).

“Design Envelope”, also referred to as Rochdale Envelope, is an approach to consenting and environmental impact, named after a UK planning law case, which allows a project description to be broadly defined, within a number of agreed parameters, for the purposes of a consent application.

“ECoW” means Ecological Clerk of Works.

“EIA” means Environmental Impact Assessment.

“EMF” means Electromagnetic Fields.

“EPS” means European Protected Species.

“ERCoP” means Emergency Response & Cooperation Plan.

“ES” means the Environmental Statement submitted to the Scottish Ministers by the Seagreen Wind Energy Limited on 15<sup>th</sup> October 2012 as part of the Application as defined above.

“EU” means European Union.

“FFZ” means Firth of Forth Zone.

“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 a Fisheries Liaison Officer.

“GIS” means Geographic Information System.

“GVA” means Gross Value Added and represents a measure of the contribution to the economy of each individual producer, industry or sector in the United Kingdom.

“GW” means gigawatt.

“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.

“LAT” means Lowest Astronomical Tide.

“LSE” means Likely Significant Effect.

“MGN371” means Marine Guidance Note 371 and refers to 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.

“MHWS” means Mean High Water Springs.

“MLWS” means Mean Low Water Springs.

“MPA” means Marine Protected Area.

“MW” means megawatt.

“nm” means nautical miles.

“NSBMF” means National Strategic Bird Monitoring Framework.

“O&M” means operation and maintenance.

"Operator" means NERL (En Route) plc, incorporated under the Companies Act (4129273) whose registered office is 4000 Parkway, Whiteley, Fareham, Hants PO15 7FL or such other organisation licensed from time to time under sections 5 and 6 of the Transport Act 2000 to provide air traffic services to the relevant managed area (within the meaning of section 40 of that Act).

“ the Planning Authorities” means Angus Council and Fife Council.

“PMF” means Priority Marine Feature.

“SAC” means Special Area of Conservation.

“Scottish marine area” has the meaning given in section 1 of the Marine (Scotland) Act 2010.

“Scottish offshore region” has the meaning given in section 322 of the Marine and Coastal Access Act 2009 (as amended).

“SEA” means Strategic Environmental Assessment.

“SEIS” means Supplementary Environmental information Statement” and refers to the covering letter and report, submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 18<sup>th</sup> October 2013.

“Soft start piling” means the gradual increase of piling power, incrementally over a set time period, until full operational power is achieved.

“SPA” means Special Protection Area.

“SPP” means Scottish Planning Policy.

“SSMEG” means Scottish Strategic 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.

“STA” means Seagreen Transmission Asset.

“the Company” means Seagreen Alpha Wind Energy Limited, 55 Vastern Road, Reading, Berkshire, RG1 8BU. Company Number: 07185533.

“the Development” means the Seagreen Alpha Wind Farm in the Firth of Forth Zone.

“the Erratum” means the SEIS Erratum submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 11th March 2014 as a result of comments received by Repsol, the company developing the Inch Cape Offshore Wind farm.

“the Proposal” means the proposed Seagreen Phase 1 Project, consisting of all two wind farms: Seagreen Alpha Offshore Wind Farm and Seagreen Bravo Offshore Wind Farm.

“the Radar” means the Primary Surveillance Radar at RAF Leuchars.

“the Site” means the area shaded in red in Annex 1, Inset A of Figure 1.

“the Zone” means Firth of Forth Round 3 Zone 2 leasing agreements in the UK Renewable Energy Zone.

“UK” means United Kingdom.

“WGS84” means the World Geodetic System 1984.

“WTG” means wind turbine generator.

“ZAP” means Zone Appraisal and Planning.

“ZDA” means Zone Development Agreement.

### Organisations

“AIA” means Aberdeen International Airport.

“AC” means Angus Council.

“AMSGA” means Arbroath and Montrose Static Gear Association.

“ASFB” means The Association of Salmon Fishery Boards.

“CAA” means The Civil Aviation Authority.

“CFWG” means Commercial Fisheries Working Group a Working group part of FTOWDG.

“CGLMC” means Carnoustie Golf Links Management Committee.

“CoS” means The Chamber of Shipping.

“FC” means Fife Council.

“FMA” means the Fishermen’s Mutual Association (Pittenweem) Ltd

“FTOWDG” means The Forth and Tay Offshore Wind Developers Group A group formed, and set up, to develop the Commercial Fisheries Mitigation Strategy, and as forum to facilitate on-going dialogue with the commercial fishing industry.

“FTRAG” means Forth and Tay Regional Advisory Group.

“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.

“MMO” means Marine Management Organisation.

“MOD” means Ministry of Defence.

“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.

“NNGOWL” means Neart na Gaoithe Offshore Wind Limited.

“Repsol” means Repsol Nuevas Energias UK Limited.

“RSPB Scotland” means The Royal Society for the Protection of Birds Scotland.

“RYA Scotland” means Royal Yachting Association Scotland.

“SAS” means Surfers Against Sewage.

“SAWEL” means Seagreen Alpha Wind Energy Limited.

“SBWEL” means Seagreen Bravo Wind Energy Limited.

“SEPA” means The Scottish Environment Protection Agency.

“SFF” means The Scottish Fisherman’s Federation.

“SG” means The Scottish Government.

“SMRU” means Sea Mammal Research Unit.

“SNH” means Scottish Natural Heritage.

“SWEL” means Seagreen Wind Energy Limited.

“TCE” means The Crown Estate.

“UKHO” means United Kingdom Hydrographic Office.

“UNECE “ means United Nations Economic Commission for Europe.

“WDC” means Whale and Dolphin Conservation.

#### Plans, Programmes and Statements

“ADRM scheme” means Air Defence Radar Mitigation Scheme.

“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 Ministry of Defence. The scheme will set out the appropriate measures to be implemented to that end.

“CaP” means Cable Plan.

“CFMS” means Commercial Fisheries Mitigation Strategy - the final document produced from consultation between Seagreen Wind Energy Limited and the Forth & Tay Offshore Wind Developers Group - Commercial Fisheries Working Group (“FTOWDG-CFWG”).

“CMS” means Construction Method Statement.

“CoP” means Construction Programme.

“DS” means Design Statement.

“DSL P” means Development Specification and Layout Plan.

“EMP” means Environmental Management Plan.

“LMP” means Lighting and Marking Plan.

“MMMP” means Marine Mammal Monitoring Programme which is a programme to be put in place by the licensee to monitor the effects of the Seagreen Alpha Offshore Limited wind farm on marine mammals in co-ordination (through the Forth and Tay Regional Advisory Group (“FTRAG”)) with other MMMPs to be developed by other Forth and Tay projects, as required by the Licensing Authority.

“NPF2” means Scotland’s National Planning Framework 2.

“NPF3” means Scotland’s National Planning Framework 3.

“NREAP” means UK Government's National Renewable Energy Action Plan.

“NSP” means Navigational Safety Plan.

“OMP” means Operation and Maintenance Programme.

“PEMP” means Project Environmental Monitoring Programme.

"Primary Radar Mitigation Scheme" or "Scheme" means a detailed scheme agreed with the Operator which sets out the measures to be taken to mitigate at all times the impact of the development on the PERWINNES primary radar and air traffic management operations of the Operator.

“PRMS” means Primary Radar Mitigation Scheme.

“PS” means Piling Strategy.

“RRH” means Remote Radar Head and it may refer to Air Defence Radar at RRH Buchan or to the Air Defence Radar at RRH Brizlee Wood.

“the Strategy” means “National Research and Monitoring Strategy for Diadromous Fish” and refers to a strategy that will be formulated from the Marine Scotland Science 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.

“TTP” means Traffic and Transportation Plan.

“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).

“Habitats Directive” means Council Directive 92/43/EEC of 21<sup>st</sup> 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 1990 Regulations” means the Electricity (Applications for Consent) Regulations 1990 (as amended).

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

“the 1999 Order” means The Scotland Act 1998 (Transfer of Functions to the Scottish Ministers etc.) Order 1999.

“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).

“the 2010 Act” means Marine (Scotland) Act 2010.

“SPG” means the Fife Council’s Supplementary Planning Guidance (SPG) on Wind Energy 2011 which supplements the local plan policies.

“the Statement” means The UK Marine Policy Statement 2011.

“TAYplan SDP” means the TAYplan Strategic Development Plan.

**COPY OF THE ORIGINAL SEAGREEN BRAVO OFFSHORE WIND FARM  
CONSENT ISSUED ON 10 OCTOBER 2014, BUT WITH TRACKED CHANGES  
SHOWING CONSOLIDATED VERSION OF THE CONSENT – I.E. WITH  
VARIATIONS TO THE CONSENT WORDING**

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Mr Mike Scott  
General Manager  
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RG1 8BU



10 October 2014

Dear Mr Scott,

**CONSENT GRANTED BY THE SCOTTISH MINISTERS UNDER SECTION 36 OF  
THE ELECTRICITY ACT 1989 TO CONSTRUCT AND OPERATE THE SEAGREEN  
BRAVO OFFSHORE WIND FARM ELECTRICITY GENERATING STATION, 38  
KILOMETRES EAST OF THE ANGUS COASTLINE.**

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 Seagreen Wind Energy Limited (Company Number 06873902)(“SWEL”) on behalf of Seagreen Alpha Wind Energy Limited (Company Number 07185533) (“SAWEL”) and having its registered office at 55 Vastern Road, Reading, Berkshire, RG1 8BU for the construction and operation of Seagreen Alpha Offshore Wind Farm off the Angus Coast;
- ii. A consent under section 36 of the Electricity Act by SWEL on behalf of Seagreen Bravo Wind Energy Limited (Company Number 07185543)(“SBWEL”)(“the Company”) and having its registered office at 55 Vastern Road, Reading, Berkshire, RG1 8BU for the construction and operation of Seagreen Bravo Offshore Wind Farm off the Angus Coast;
- iii. A marine licence to be considered under the Marine (Scotland) Act 2010 (“the 2010 Act”) and the Marine and Coastal Access Act 2009 (as amended) (“the 2009 Act”) by SWEL on behalf of SAWEL to deposit any substance or object

and to construct, alter or improve any works in relation to the Seagreen Alpha Offshore Wind Farm;

- iv. A marine licence to be considered under the 2010 Act and the 2009 Act by SWEL on behalf of SBWEL to deposit any substance or object and to construct, alter or improve any works in relation to the Seagreen Bravo Offshore Wind Farm;
- v. A marine licence to be considered under the 2010 Act and the 2009 Act by SWEL to deposit any substance or object and to construct, alter or improve any works in relation to the Seagreen Transmission Asset (“STA”) project within the Scottish marine area and Scottish offshore region.

## **THE APPLICATION**

I refer to the applications at ii, iv, v above made by SWEL, submitted on 15<sup>th</sup> October 2012, for consent under section 36 of the Electricity Act for the construction and operation of the Seagreen Bravo Offshore Wind Farm in the Firth of Forth Zone (“FFZ”); with a maximum generating capacity of 525 megawatts (“MW”) (“the Application”).

In this letter, ‘the Development’ means the proposed Seagreen Bravo Offshore Wind Farm electricity generating station as described in **Annex 1** (Figure 1) of this letter.

In this letter, ‘the Proposal’ means the proposed Seagreen Phase 1 development, consisting of both wind farms, Alpha and Bravo (applications i to v above), for a maximum generating capacity of up to 1050 MW.

## **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 1989 (as amended) (“the Electricity Act”) (with related Schedules) 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 Scottish offshore region (12-200 nautical miles (“nm”) from the shore) with a generation capacity in excess of 50 megawatts requires consent under section 36 of the Electricity Act. Section 93 of the Energy Act 2004 extends the requirement for section 36 consent to the construction, extension or operation of a generating station situated in the Scottish offshore region (12 -200 nm). 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 station activities if they consider that interference with the use of recognised sea lanes essential to international navigation is likely to be caused by the carrying on of those activities or is likely to result from their having been carried on. The Scottish Ministers, when determining whether to give consent for any particular offshore generating activities, 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 issue, 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 subject to section 36 consent or are activities for which it appears likely that such consents will be granted.

The Company applied for two declarations under section 36A of the Electricity Act to extinguish public rights of navigation so far as they pass through those places within the Scottish marine area (essentially the territorial sea adjacent to Scotland) where structures (but not, for the avoidance of doubt the areas of sea between those structures) forming part of the offshore wind farm and offshore transmission works are to be located. As the Proposal is located outwith the limits of the Scottish marine area, a declaration under section 36A of the Electricity Act cannot be issued. The Company has been informed of this as a matter of courtesy.

Under Schedule 8 to the Electricity Act and the Electricity (Applications for Consent) Regulations 1990 (as amended) (“the 1990 Regulations”), notice of applications for section 36 consent must be published by the applicant in one or more local newspapers, in one or more national newspapers, and in the Edinburgh Gazette to allow representations to be made to the Applications. Under Schedule 8 to the Electricity Act, the Scottish Ministers must serve notice of any Applications 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 Marine Scotland Licensing Operation Team (“MS-LOT”), on behalf of the Scottish Ministers, did however consult with the Planning Authorities most local to the Development. 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 Applications.

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 and all procedural requirements have been complied with. The Company, at the time of submitting the Application, were a licence holder authorised to generate electricity for the purpose of giving a supply to any premises in the area specified in Schedule 1 of the Licence, or enabling a supply to be so given during the period specified in paragraph 3 of the licence, subject to the terms and conditions specified therein. 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 and the Marine and Coastal Access Act 2009**

The Marine (Scotland) Act 2010 ("the 2010 Act") regulates activities in the territorial sea adjacent to Scotland in terms of marine environment issues. 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.

As this application lies outwith the Scottish Territorial Sea, i.e. beyond the 12 nm limit, it falls to the 2009 Act to regulate marine environmental issues in this area. Other than for certain specified matters, the 2009 Act executively devolved marine planning, marine licensing and nature conservation powers in the Scottish offshore region to the Scottish Ministers.

The 2009 Act transferred certain functions in issuing consents under section 36 of the Electricity Act from the Secretary of State to the Marine Management Organisation

("MMO"). The MMO does not exercise such functions in Scottish waters or in the Scottish part of the renewable energy zone, as that is where the Scottish Ministers perform such functions.

Where applications for both a marine licence under the 2009 Act and consent under section 36 of the Electricity Act are made then, in those cases where they are the determining authority, the Scottish Ministers may issue a note to the applicant stating that both applications will be subject to the same administrative procedure. Where that is the case then that will ensure that the two related applications may be considered at the same time.

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

### **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 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), 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) and The Marine Works (Environmental Impact Assessment) Regulations 2007 (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") and The Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended) ("the 2007 Regulations").

The proposal for the Development has been publicised, to include making the ES available to the public, in terms of the 2000 and 2007 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 Electricity (Applications for Consent) Regulations 1990 ("the 1990 Regulations"), the 2000 Regulations and the 2007 Regulations (as amended) have been followed.

The Scottish Ministers have, in compliance with the 2000 and 2007 Regulations

consulted with the Joint Nature Conservation Committee (“JNCC”), Scottish Natural Heritage (“SNH”), 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 5<sup>th</sup> December 2012. Under the 2007 Regulations Scottish Ministers have consulted with “the consultation bodies”, as defined in regulation 2(1).

The Scottish Ministers have also consulted a wide range of relevant organisations, including colleagues within the Scottish Government (“SG”) 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 Development 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 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”) and the Offshore Marine Conservation (Natural Habitats, & c.) Regulations 2007 (“the 2007 Regulations”). As the Development is to be sited in the Scottish offshore region, it is the 2007 Regulations which are, in the main, applicable in respect of this application for section 36 consent. The 1994 Regulations do, however, apply to those parts of the associated transmission infrastructure which lie inside the Scottish Territorial Sea (i.e. within 12 nm from the shore).

The 1994 and the 2007 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. The nature of the decision may be taken for present purposes from the provision in regulation 25(4) & (5) of the 2007 Regulations:

- “(4) In the light of the conclusions of the assessment, and subject to regulation 26, the competent authority may agree to the plan or project only if it has ascertained that it will not adversely affect the integrity of the European offshore marine site or European site (as the case may be).
- (5) In considering whether a plan or project will adversely affect the integrity of a site, the competent authority must have regard to the manner in which it is proposed to be carried out and to any conditions or restrictions subject to which the competent authority proposes that the consent, permission or other authorisation should be given.”

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.

The JNCC and SNH 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 has

considered the combined effects of the Proposal with other Forth and Tay Offshore wind farms, (the Neart na Gaoithe Offshore Wind Limited (“NNGOWL”) and Inch Cape Offshore Limited (“ICOL”) applications). This is because the NNGOWL and ICOL, the Applications for which were submitted to the Scottish Ministers in July 2012 and July 2013 respectively, are proposed to be sited close to the Development. The AA which has been undertaken concludes that the proposed Development, and the SAWEL, ICOL and NNGOWL 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.

The JNCC and SNH 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, however, disagreement on the conclusions concerning the impacts upon:

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

This disagreement is regarding differences in assessment methods and the JNCC and SNH view that the closer the levels of effect are to the thresholds the greater the risk of adverse effects. The Scottish Ministers consider that the best available evidence has been used in the AA and that the assessment has been precautionary. A full explanation of the ornithology issues and justification for decisions regarding site integrity is provided in the AA.

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. 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 site integrity will not be adversely affected and that “no reasonable scientific doubt remains as to the absence of such effects”. The Scottish Ministers also consider that the best available evidence has been used in reaching conclusions. The AA will be published and available on the Marine Scotland licensing page of the Scottish Government’s website.

## **APPLICABLE POLICIES AND GUIDANCE**

### **Marine Area**

#### **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, wave, tidal stream and tidal range 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 (“MLWS”). The marine plan area boundaries extend up to the level of Mean High Water Spring tides (“MHWS”). 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.

#### 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 MLWS. The marine plan area boundaries extend up to the level of MHWS. 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<sup>th</sup> Oct 2012)), the Scottish Ministers have had regard to the following documents:

### Scottish Planning Policy

Scottish Planning Policy ("SPP") 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 Proposal 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, the JNCC, SNH and other relevant bodies.

## National Planning Framework 2

At the time of the Application to the Scottish Ministers Scotland's National Planning Framework 2 ("NPF2") was of relevance. 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

During the determination of the Application, Scotland's National Planning Framework 3 ("NPF3") was published. NPF3 is the national spatial plan for delivering the Scottish Government's 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. National Development 4 'High Voltage Electricity Transmission Network' is designed to facilitate electricity grid enhancements needed to support the increasing renewable energy generation, both on and offshore. 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. This was subject, by statute, to sixty (60) day Parliamentary consideration ending on 22<sup>nd</sup> March 2014. 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 Government's development priorities over the next 20-30 years. It also identifies national developments which support the development strategy. Paragraphs relevant to the Application are 3.4, 3.6, 3.8, 3.9, 3.12, 3.14, 3.25, 3.32, 3.33, 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 and reflects 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, in time, the pace of onshore wind development will be overtaken by the development of marine energy including wind, wave and tidal. NPF3 notes the Firth Coast from Cockenzie to Torness is a 'potentially important energy hub'. It notes that there are significant plans for offshore wind to the east of the Firths of Forth and Tay and states; 'Proposals for grid connections for these projects are now emerging, requiring undersea cabling connecting with converter stations and substations. We

want developers to work together to minimise the number and impacts of these developments by combining infrastructure where possible'. 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 Proposal, 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 developments 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 Proposal

### 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 Proposal has been assessed against these constraints and addressed in **Annex 2**.

### 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”) has advised that the Angus Local Plan Review is not a relevant consideration as the Development is outwith the area covered.

### Summary

The Scottish Ministers consider the policies as outlined above are broadly supportive of the Development.

## **CONSULTATION**

In accordance with the statutory requirements of the 1990 Regulations, the 2000 Regulations and the 2007 Regulations, notices of the Application had to be placed in the local and national press and the Edinburgh Gazette to notify any interested parties. 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 Angus Council, as the onshore Planning Authority where the STA export cable comes ashore at Carnoustie, as well as to Fife Council. Notifications were also sent to the JNCC, SNH and SEPA.

The formal consultation process that was undertaken by the Scottish Ministers consulted on the whole Seagreen project (“the Proposal” - which consists of applications i to v and the ES). This was conducted between October 2012 and February 2013.

Due to further work being required to inform impact assessments (including HRA), further information was requested from the Company. The SEIS was received by MS-LOT on 18<sup>th</sup> October 2013 and public notices placed in the local press and Edinburgh Gazette to notify any interested parties. MS-LOT also consulted on the SEIS with all the organisations invited to comment on the original application and ES. The public consultation was conducted between October 2013 and December 2013.

Following comments received by Repsol, the company developing the Inch Cape Offshore Wind farm (“ICOL”), an SEIS Erratum (“the Erratum”) was produced, which was treated as additional information under the 2008 Amendment to the Electricity Works EIA Regulations. Therefore, a copy of the Erratum was sent to all consultees, the Erratum was made available to the members of the public in the same public places as the ES; and two public notices were placed for two consecutive weeks in the local press and Edinburgh Gazette to notify any interested parties. This took place in March 2014.

## **Representations and Objections**

A total of three (3) valid public representations were received by Marine Scotland from members of the public during the course of the public consultation exercise. Of these, two (2) representations objected to the Development, and one (1) was in support.

Representations in support of the Development were of the belief that in conjunction with nuclear fusion, electricity generated from clean sources, such as wind power, may be able to address concerns such as increasing energy demands, increasing dependency on fossil fuels, effects of climate change due to burning of fossil fuels and exponential population growth. They also believe that quality of life should be considered and by siting turbines at sea a good distance from residential sites is seen as fair.

Representations objecting to the Development raised concerns regarding: the effects on the sea bird colonies on the Bass Rock and Fair Isle; threats to the natural

environment of the Firth of Forth; impact on marine mammals; tourism; fishing industry; bats; and alternative technologies to wind power being available.

During the consultation, objections were also received from the Aberdeen International Airport (“AIA”), Arbroath and Montrose Static Gear Association (“AMSGA”), the Association of Salmon Fishery Boards (“ASFB”), the Ministry of Defence (“MOD”), National Air Traffic Services (“NATS”), the Royal Society for the Protection of Birds Scotland (“RSPB Scotland”), Scottish Fishermen’s Federation (“SFF”) and the Whale and Dolphin Conservation (“WDC”).

Following further discussions between the Company and the MOD, NATS and AIA, these consultees removed their objections subject to conditions being applied to any consent. Further discussion between the Company and the AMSGA also led to the removal of their objection subject to conditions being applied to any consent.

Objections from members of the public, the ASFB, SFF, RSPB Scotland, and WDC are being maintained.

The Scottish Ministers 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 are content that the material considerations have been addressed in the Application and within the responses received to the consultations by the closest onshore Planning Authorities, SEPA, the JNCC, SNH, and other relevant bodies

The Scottish Ministers consider that no further information is required before the Application may be determined.

### **Public Local Inquiry**

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

The location and extent of the Development to which the Application relates being

wholly offshore means that the Development is not within the area of any local planning authority. The Scottish Ministers are not, therefore, obliged under paragraph 2(2) of Schedule 8 to the Electricity Act to require a public inquiry to be held. The nearest local Planning 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 and the Proposal as outlined above, raising a number of issues. In summary, and in no particular order, the objections were related to the following issues:

- Effects on marine life (including seabirds and marine mammals);
- Impacts on the bat population;
- Impact upon the tourism industry;
- Impact on commercial fishing;
- Impact on migratory fish; and
- Alternative technologies to wind power.

*Effects on marine life (including seabirds and marine mammals)*

The impacts on marine mammals, sea birds, benthic ecology and other marine life, were raised by two members of the public. The Company, in its ES and SEIS, assessed the potential impact of the Proposal on fauna and, through the consultation process, the Scottish Ministers consulted nature conservation bodies including the JNCC, SNH and other stakeholders as the RSPB Scotland, WDC and Marine Scotland Science (“MSS”) on these documents.

The RSPB Scotland and WDC have maintained their objection. Neither the JNCC nor SNH provided a position statement, however, they have provided conditions (included in **Annex 2**) of this consent to ensure that impacts on wildlife are acceptable. 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, such that the integrity of the sites which are protected sites under the Habitats and Wild Birds Directives, and relevant domestic implementing legislation, will not be adversely affected.

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). MS-LOT also recognise that there is an outstanding objection from WDC due to potential impacts on marine mammals (most notably bottlenose dolphins and harbour seals). Having carried out the AA (considering all the advice received from the JNCC, SNH and MSS) it can be ascertained with confidence that the Development, subject to appropriate conditions being included within the

consent (**Annex 2**), will not adversely affect site integrity of any of the identified SPAs and SACs assessed to have connectivity with the Development. The JNCC and SNH are in agreement with the AA conclusions for the marine mammal and freshwater fish SACs and in some instances the SPAs. There is, however, disagreement on the conclusions concerning the impacts upon:

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

This disagreement is regarding differences in assessment methods and the JNCC and SNH view that the closer the effects are to thresholds the greater the risk of adverse effects. The Scottish Ministers consider that the best available evidence has been used in the AA and that the assessment has been precautionary. A full explanation of the ornithology issues and justification for decisions regarding site integrity is provided in the AA.

One representation stated that the noise and vibrations of the construction process will significantly disturb fish and sea mammals. Further modelling was commissioned by Marine Scotland and was undertaken by Prof Paul Thompson (University of Aberdeen and Marine Scotland Science Advisory Board). This work looked at the cumulative impacts of pile driving at the Forth and Tay wind farms together with the recently consented Moray Firth wind farms and concluded that there would be no long-term effects from underwater noise disturbance on the bottlenose dolphin population of the Moray Firth SAC.

Impacts on other cetacean species, including harbour porpoise, minke whale and white beaked dolphin, were also considered by the Company in their ES and SEIS. The JNCC and SNH 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. A European Protected Species (“EPS”) licence will be required prior to construction. A Marine Mammal Monitoring Programme (“MMMP”) is required as part of the Project Environmental Monitoring Programme (“PEMP”) condition of this consent (**Annex 2**).

The AA concluded that the site integrity of any of the SACs designated for marine mammals would not be adversely affected, subject to appropriate conditions being included on any consent. These conditions are detailed in **Annex 2**. Further details of the assessments are provided in the AA. The JNCC and SNH agreed with all the conclusions reached in the AA with respect to marine mammals. MSS have reviewed the ES, the SEIS, the AA and the conditions and consider that the conditions attached to the consent will allow impacts on marine wildlife to be within acceptable limits, such that the integrity of the designated SACs would not be adversely affected. Conditions to mitigate and monitor the effects on marine wildlife are reflected in **Annex 2**.

The JNCC and SNH 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”). The JNCC and SNH will be consulted on the Vessel Management Plan (“VMP”) which is a condition of this

consent, as will such other advisors 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.

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 Scottish Ministers, therefore, consider that they have sufficient information regarding the effects on marine life, 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.

#### Impacts on the bat population

One (1) objection was raised in relation to bats through the public consultation process. The statutory nature conservation bodies the JNCC and SNH were consulted on the Application and did not raise any concerns in relation to potential impacts on this species.

The Scottish Ministers, therefore, consider that they have sufficient information regarding the effects on the bat population, 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 upon the tourism industry

Concerns have been raised by respondents to the Application regarding the Development's potential impact upon eco-tourism, as the dolphins and seals become more elusive.

In this respect, MS-LOT notes 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, therefore, consider that they have sufficient information regarding the eco-tourism industry, 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 and AMSGA had concerns over impacts on the fishing industry and this was also raised by one (1) member of the public in their objection. The Company in the ES stated that impacts on both the squid and scallop fisheries are predicated due to potential increased steaming time to fishing grounds, displacement of fishing activity or navigational conflict with other vessels but these are not assessed as significant. Within the export cable route corridor, during both the construction and operation phases, a significant impact is predicted on the crab and lobster fishery that uses static gear. The impact on the scallop, squid and nephrops fisheries that use mobile gear is assessed as not significant. Until the appropriate post construction has been completed, the safety risks to fishing vessels arising from the installation of array cables or export cables sites are considered to be outside of acceptable limits.

SWEL will act cumulatively with other wind farms to produce significant impacts on the scallop, squid, nephrops and the crab and lobster fisheries during operation. In line with the natural fish and shellfish resource assessment a significant impact on herring has been assessed at both project and cumulative levels during construction. Significant cumulative impacts have also been assessed with regards to safety, displacement and interference with fishing vessels.

The Company have engaged with the SFF and AMSGA and in conjunction with neighbouring wind farm developers, have formed the Forth and Tay Offshore Wind Developers Group (“FTOWDG”) and the Commercial Fisheries Working group (“CFWG”). The FTOWDG-CFWG has been established to facilitate on-going dialogue throughout the pre-construction, construction and operational phases of the Proposal. 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 to assess impacts to fishing are reflected within 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.

Since November 2012, there have been a number of meetings of the FTOWDG-CFWG which have provided an effective forum for discussion between the commercial fishing industry and the offshore wind industry in the Forth and Tay. On the 12 August 2014, the developers forwarded to the Scottish Ministers a Shared Position Statement to confirm the areas of agreement that have been achieved so far within the FTOWDG-CFWG. This Shared Position Statement seeks to provide the basis for moving the discussions forward and rightly states it is desirable that consistent approaches in relation to the interactions with commercial fishing activities are agreed through by FTOWDG-CFWG, and adopted by the Company as far as possible.

The matters raised in the Shared Position Statement are addressed in the consent conditions, Annex 2 or in the appropriate marine licence.

The Scottish Ministers, therefore, consider that they have sufficient information regarding the impacts on commercial fisheries, 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 migratory fish

Objections relating to potential effects on Atlantic salmon and sea trout were received through the public consultation exercise from ASFB. These are in addition to the objections that are being maintained from the SFF on the Application consultation.

The uncertainty around the assessments of these species has been recognised by the Company in their Application. The ASFB also recognise these uncertainties and believe that they can only be overcome through strategic research. A National Research and Monitoring Strategy for Diadromous Fish (“the Strategy”) has been developed by Marine Scotland Science to address monitoring requirements for Atlantic salmon and sea trout at a national level. The Company has engaged with MSS, the ASFB, SFF and MS-LOT to address this issue. A condition requiring the Company to engage at a local level (the Forth and Tay) in the Strategy is contained within this consent (**Annex 2**).

The Scottish Ministers, therefore, consider that sufficient steps, including the development of national strategic monitoring, have been 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.

#### Alternative technologies to wind power are available

A member of the public expressed an opinion that there is no need for the Proposal as alternative technologies to wind power are available that are less harmful to the environment. They suggested that Scotland also produces enough electricity for our own needs.

The Scottish Government’s commitment to increase the amount of electricity generated from renewable sources is a vital part of the response to climate change. The Scottish Government’s Electricity Generation Policy Statement states we believe that Scotland has the capability and the opportunity to generate a level of electricity from renewables by 2020 that would be the equivalent of 100% of Scotland’s gross annual electricity consumption. The target will require the market to deliver an estimated 14-16 GW of installed capacity. It does not mean or require an energy mix where Scotland will be 100% reliable on renewables generation by 2020; but it supports Scotland’s desire to remain a net exporter of electricity. Due to the intermittent nature of much renewables generation, we will need a balanced energy mix to ensure security of supply.

The technology to be used in this Proposal is one of a number of commercial developments being proposed in the renewables mix to help achieve 2020 targets for renewable electricity generation.

The Scottish Ministers considers that they have sufficient information regarding the alternative technologies to wind power, 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.

The Scottish Ministers, therefore, considers that there are no significant issues which have not been adequately considered in the ES, the SEIS and in consultation responses from the closest onshore Planning Authorities, SEPA, the JNCC, SNH and other relevant bodies, together with all other objections and third party representations. The Scottish Ministers, therefore, considers that it has sufficient information to recommend to the Scottish Ministers that they are able to make an informed decision on the Application without the need for a Public Inquiry.

### Summary

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, the SEIS Erratum, the AA and in the consultation responses received from the closest onshore Planning Authorities, SEPA, the JNCC, SNH and other relevant bodies, together with all other objections and representations. The Scottish Ministers do not consider that a public local inquiry is required in order to inform them further in that regard.

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## **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 2007 Regulations and the applicable procedures regarding publicity and consultation laid down in the 2000 and 2007 Regulations have been followed.

The Scottish Ministers have taken into consideration the environmental information, including the ES, the SEIS, the SEIS Erratum, the AA and the representations received from the consultative bodies, including JNCC, SNH, SEPA, Angus Council, and Fife Council and from all other persons.

The Company, at the time of submitting the Application, was a licence holder authorised to generate electricity for the purpose of giving a supply to any premises in the area specified in Schedule 1 of the Licence, or enabling a supply to be so given during the period specified in paragraph 3 of the licence, subject to the terms and conditions specified therein. 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 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 and regulation 22 of the 2007 Regulations, taken into account all of the environmental information and are satisfied the Company has complied with their obligations under regulation 4(1) of the 2000 Regulations and regulation 12 of the 2007 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 regard to the Development, the JNCC and SNH advised that the Development or the Proposal 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.

Having carried out the AA (considering all the advice received from the JNCC, SNH and MSS) it can be ascertained with confidence that the Proposal, subject to appropriate conditions being included within the consent, will not adversely affect site integrity of any of the identified SPAs and SACs assessed to have connectivity with the Development. The JNCC and SNH are in agreement with the conclusions for the marine mammal and freshwater fish SACs and in some instances the SPAs. There is, however, disagreement on the conclusions concerning the impacts upon:

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

This disagreement is regarding differences in assessment methods and the JNCC and SNH view that the closer the levels of effect are to the thresholds the greater the risk of adverse effects. MS-LOT consider that the best available evidence has been used in the AA and that the assessment has been precautionary. A full explanation of the ornithology issues and justification for decisions regarding site integrity is provided in the AA.

The JNCC, SNH and MSS recommended that certain conditions be included on any consent which would allow this Development to be implemented. These conditions have been included within this consent (**Annex 2**).

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.

A recent announcement by the Scottish Government has highlighted the Outer Firth of Forth and Tay Complex as a draft marine SPA as it meets the JNCC and SNH selection guidelines. A formal consultation will be undertaken towards the end of 2014 / beginning

of 2015. Following consultation it is possible that this area could become a designated marine SPA towards the end of 2015. At this stage a further AA may be required if Likely Significant Effects (“LSE”) on the qualifying features is identified from the Proposal. Under the Habitats regulations this must be carried out as soon as is reasonably practicable following designation.

### **THE SCOTTISH MINISTERS’ CONSIDERATION OF THE POSSIBLE EFFECTS ON A NATURE CONSERVATION MARINE PROTECTED AREA**

When considering an application for section 36 consent under the Electricity Act, which might affect a Nature Conservation Marine Protected Area (“NC MPA”), the competent authority (under section 126 of the Marine and Coastal Access Act 2009) is required to consider whether the activity is capable of affecting (other than insignificantly) a protected feature in a NC MPA or any ecological or geomorphological process on which the conservation of any protected feature in a NC MPA is dependant. If the competent authority believe that there is or may be a significant risk of an activity hindering the achievement of the conservation objectives then they must notify the conservation bodies (SNH for MPAs within 12 nm or the JNCC for MPAs outwith 12 nm) of that fact. The JNCC have provided advice in terms of section 127 of the 2009 Act that as there are areas of overlap between the Proposal and the NC MPA the Proposal is capable of affecting (other than insignificantly) the ocean quahog and offshore subtidal sand and gravel protected features of the MPA. The JNCC advised that there was no significant risk of the Proposal hindering the achievement of the conservation objectives for the protected features of the Firth of Forth Banks Complex NC MPA if mitigation proposed by the Company is implemented. Having carried out the MPA assessment (considering all the advice received from the JNCC) it can be ascertained with confidence that there is no significant risk of the Proposal, subject to appropriate conditions being included within the consent, hindering the achievement of the conservation objectives of the Firth of Forth Banks Complex NC MPA.

### **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 statutory regulations have been complied with, and that the Development will not adversely affect site integrity of any European protected site.

#### **Impacts on fish and shellfish**

The consultation responses from the ASFB and SFF confirmed objections to the Development and the Proposal from each. The key concerns raised were regarding the uncertainty over the potential impacts on migratory fish. The key issues included the potential impacts associated with subsea noise during construction and operation, electromagnetic fields (“EMF”), degradation of the benthic environment, impact on prey species, unknown aggregation effects at the turbines, loss of fishing grounds. The ASFB and SFF requested monitoring and mitigation measures to be put in place.

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.

The JNCC and SNH identified SACs where the Development or the Proposal 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 affecting site integrity. Such conditions have been included by the Scottish Ministers within this consent (**Annex 2**).

A key concern of the JNCC and SNH in respect of marine fish, relates to underwater noise impacts from pile-driving of the Wind Turbine Generator (“WTG”) foundations during construction on cod and herring. Noise impacts that interrupt or adversely affect spawning activity could be expected to result in an impact to the cohort for that year. Pile-driving activities in successive years may, therefore, result in a series of weakened cohorts within a population. Conditions to mitigate these impacts including the requirement for soft start piling, piling schedules and construction programmes are included in this consent (**Annex 2**). Post consent sandeel surveys were also recommended by the JNCC and SNH in order to better inform sandeel distribution with the Forth and Tay wind farm sites, again this requirement is included in the conditions.

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 that would require consent to be withheld.

### Impacts on birds

The JNCC, SNH and the RSPB Scotland expressed concerns about the potential impact of the Proposal in combination with NNGOWL and ICOL developments on several bird species using the Firth of Forth. Advice from the JNCC and SNH on 7<sup>th</sup> March 2014 was that they could not conclude with reasonable certainty that the Forth and Tay wind farms would not adversely affect the site integrity of Forth Islands or Fowlsheugh SPAs. RSPB Scotland object to the Forth and Tay wind farms, in their view, due to the unacceptable harm to seabird species. The species highlighted by the JNCC, SNH 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 affected by displacement, barrier effects and collision.

These species along with guillemot, razorbill, herring gull, lesser black-backed gull, fulmar, common and Arctic tern were considered in the AA. The AA requires to assess the implications of the Development (in combination with the SAWEL, NNGOWL and ICOL developments, and including mitigation measures) for each site in view of the site’s conservation objectives. The JNCC and SNH 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 outwith the SPA, but it can also address indirect impacts, such as the degradation or loss of supporting habitats which are outwith 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, NNGOWL 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, the JNCC and SNH. Several methods were used by the JNCC, SNH and MSS to determine levels of acceptable change. The AA concluded that the proposed Development, SAWEL and NNGOWL 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.

The JNCC and SNH disagreed with some of the conclusions of the AA and advised that it could not be concluded that the site integrity of:

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

would not be adversely affected.

The reasons for the differences in the conclusions made by the AA and the JNCC and SNH were mainly due to the different methods used to estimate thresholds and the JNCC and SNH 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 that site integrity is not adversely affected 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.

The JNCC and SNH also highlighted that effects on species not covered under HRA also require consideration (i.e. individuals breeding outwith 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 the JNCC and SNH as being of greatest concern.

Following a meeting held on 7<sup>th</sup> July 2014 between Marine Scotland and SNH, SNH followed up with a letter of 11<sup>th</sup> July which stated that they had the opportunity to review and discuss aspects of their advice where conclusions reached by JNCC & SNH 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 regard 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 advisors 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 seabirds. SNH also noted that there were precautionary elements in the approaches taken and the models recommended by the JNCC and SNH and by MSS.

SNH stated that the level of precaution which is appropriate is not a matter which can be determined precisely, and that judgments 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, judgments 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.

#### *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.

The JNCC and SNH concluded that, subject to conditions, there would be no long-term 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, site integrity of all these SACs would not be adversely affected. The JNCC and SNH 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 the JNCC and SNH 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. The JNCC and SNH 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 on-going 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.

The JNCC and SNH 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 SMRU. The JNCC and SNH 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.

An EPS licence will be required by the Company prior to construction and a MMMP is required as part of the PEMP condition 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 Development’s impact on marine mammals which would require consent to be withheld.

#### Impacts on benthic ecology and habitat interests

The Design Envelope applied for includes the option for gravity bases to be used in

the construction of the Development. In their interim advice on the Proposal the JNCC and SNH highlighted the inability to conclude assessment for sediment release arising from “worst case” scenarios utilising gravity bases as the Company was unable to confirm the upper limit of gravity bases to be used for turbine foundations. The Scottish Ministers have informed the Company that if gravity bases are to be used as part of the Development this will not be permitted until a further application and supporting EIA for the assessment of the dredging requirements, sediment release and disposal of dredgings has been provided to the Scottish Ministers for their consideration.

The Priority Marine Feature (“PMF”) species *Artica islandica* (ocean quahog) has been recorded in limited numbers, and only as juveniles, by the Company within the Proposal site and along the export cable route. The JNCC and SNH advise that this species is sensitive to smothering, and therefore would welcome potential mitigation measures. These mitigation measures have been included in this consent (**Annex 2**). The Company has also recorded *Sabellaria spinulosa* within the site, but not in crust or reef form constituting Annex 1 habitat. The JNCC and SNH have welcomed the Company’s initial mitigation proposals in respect of potential rare or important habitats within the site namely the mitigation measures presented in paragraph 11.130 in Chapter 11 of the ES. The Proposal site partially overlaps with the MPA for the Firth of Forth Banks Complex. The JNCC and SNH welcome the Company’s proposals to mitigate impacts to benthic habitats, including MPA features as well as their continued engagement over the proposed management options for this MPA. An assessment completed on the potential impacts of the Proposal on the protected features of the MPA concluded that there is no significant risk of the Proposal, subject to appropriate conditions being included within the consent, hindering the achievement of the conservation objectives of the Firth of Forth Banks Complex NC MPA.

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 the JNCC nor SNH 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 of 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.

#### Impacts on commercial fishing activity

Regarding commercial fishing activity in the Forth and Tay zone, the SFF, AMSGA and FMA raised concerns regarding the impact on fishing grounds, damage and loss of gear. SFF and AMSGA also consider displacement of fishing to be an issue. SFF agrees with the information in the ES stating that the scallop fleet will be the primary fleet affected.

The Scottish Ministers are aware that there will be temporary displacement within the Development area during construction. MSS advised that in general the Company has provided a robust assessment of the key impacts. MSS commented that the scallop fishing activity in SAWEL is heavier than in SBWEL and they would consider scallop fishing to be of medium sensitivity and the impacts to be of medium magnitude from temporary loss or restriction of access to fishing grounds and displacement of fishing vessels, resulting in moderate adverse and significant impacts. MSS noted that it has been difficult for the developer to address cumulative impacts with any great certainty and advised that this should be looked at by the fisheries working group that has been set up. SFF also requests that the Company continues its membership in the fisheries working group and appoint an Fisheries Liaison Officer (“FLO”).

As suggested by MSS and the SFF, the 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 AMSGA, FMA and SFF. The participation in and the continuation of this group, the development of a Commercial Fisheries Mitigation Strategy (“CFMS”) along with the appointment of a FLO are reflected in conditions of this consent (**Annex 2**). Conditions in this consent requiring over trawl surveys and the CFMS, will potentially mitigate the impacts of the Development on commercial fisheries.

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 that would require consent to be withheld.

#### Impacts on shipping and navigational safety

The Chamber of shipping (“CoS”) were concerned over the potential cumulative impacts on navigation resulting from the construction of all the Forth and Tay proposals with the increase in vessel traffic risking shipping routes. The CoS consider that mitigation measures should be applied to ensure a safely navigable corridor is maintained between the Proposal and the Firth of Forth Round 3 projects.

The Northern Lighthouse Board (“NLB”) was unable to specify final marking and lighting requirements owing to a lack of clarity in the Application with regard to the final

layout of WTGs. Lighting and marking requirements will be given by the NLB during the finalisation of the Development Specification and Layout Plan (“DSL P”) once submitted by the Company. Submission of a DSL P as well as a Lighting and Marking Plan (“LMP”) are conditions of this consent (**Annex 2**).

The Marine and Coastguard Agency (“MCA”) raised no objection to the Development but noted that the Proposal had the potential to impact on navigation through displacement of vessel traffic in the area and called for careful monitoring of the potential effects on vessel traffic. The MCA required a full Emergency Response & Cooperation Plan (“ERCoP”) properly documented in order to satisfy the requirements of MCA Marine Guidance Note 371. A condition capturing this requirement is reflected in this consent (**Annex 2**).

Royal Yachting Association Scotland (“RYA Scotland”) had no objection to the Development but showed some concerns regarding having a gap between SAWEL and SBWEL and how it could pose an increased risk to recreational craft. A condition requiring a comprehensive Navigational Safety Plan (“NSP”) has been included within 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 Development’s impact on shipping and navigational safety that would require consent to be withheld.

#### Impacts on aviation

NATS objected to the Development due to potential impacts on the Perwinnes Primary Radar and associated air traffic management operations. Following discussions between the Company and NATS, an agreement has been entered into between the two parties for the design and implementation of an identified and defined mitigation solution in relation to the Development and the Proposal. Consequently, NATS have withdrawn their objection. A condition capturing the requirement for the Company to produce and implement a mitigation solution is reflected in this consent (**Annex 2**).

The MOD initially objected to the Development citing concerns with the Air Traffic Control (“ATC”) radar at Leuchars, the Air Defence Radar at Remote Radar Head (“RRH”) Buchan and the Air Defence Radar at RRH Brizlee Wood. The MOD raised concerns, but no objection, with regard to the export cable route and its passage through the Barry Buddon Danger Area D604 (“Danger Area”). Following discussions with the MOD, and further consideration of the mitigation proposals submitted by the Company, the MOD have withdrawn their objection subject to conditions being attached to any consent (**Annex 2**).

The Civil Aviation Authority (“CAA”) did not object to the Development but stressed the need to inform the Defence Geographic Centre of the locations, heights and lighting status of the turbines and meteorological masts, the dates of construction and the maximum height of any construction equipment to be used prior to construction to allow the inclusion on aviation charts. A condition capturing this requirement is reflected in 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 Development's impact on aviation that would require consent to be withheld.

#### Impacts on recreation and tourism

Some concerns have been raised through the consultation regarding the Development's potential impact upon tourism, particularly relating to disruption and disturbance to the golf courses during and after construction, by Carnoustie Golf Links Management Committee ("CGLMC"). The same consultee stressed the importance of the Open Championship to the local and Scottish economies. Although these concerns are largely related to the terrestrial planning application, MS-LOT is considering the inclusion of a condition in the marine licence, which has jurisdiction up to the level of MHWS, preventing works relating to the cable landfall ancillary infrastructure from taking place at the same time as important golf tournaments. Angus Council will be consulted and will liaise with the Company.

Surfers Against Sewage ("SAS") requested that the time for access restricted to Carnoustie bay are kept to an absolute minimum so as to have a minimal effect on the surfing community and advised that the Company should liaise with local surfing groups and arrange mitigation factors such as alternative access. The Company informed SAS that the assessment of landside impacts, such as beach access at Carnoustie bay, was specifically scoped out of the Offshore ES, as agreed with Marine Scotland. Nevertheless, as per the Company's onshore application "The majority of the beach (Carnoustie) will be unaffected, with access maintained where it is safe to do so, and it is likely that visitors will not be deterred from visiting the coastline. No other beaches in the area will be affected by the scheme."

MS-LOT did not receive any response from Scottish Canoe Association and RYA Scotland did not object to the Development.

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 recreation and tourism that would require consent to be withheld.

#### Visual impacts of the Development

SNH, the Scottish Ministers statutory advisors on visual impacts on designated landscape features, and the JNCC were consulted and neither objected on landscape and visual grounds.

SNH stated that, cumulatively, the proposed Forth and Tay wind farms (SAWEL, SBWEL, ICOL and NNGOWL) 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.

According to SNH, on the South Aberdeenshire/Angus Coast, the Proposal would have a small visual influence because it would be further from the coast. Cumulative visual effects would be major on the South Aberdeenshire and Angus coast when ICOL is seen in combination with either the Proposal (to the north, around St Cyrus and within Montrose Bay) or NNGOWL (to the south from Arbroath to Carnoustie).

On the East Fife coast, NNGOWL and ICOL would have the greatest effects on the East Fife coast. The Proposal would be visible in good conditions but seen at considerable distance (>50 km) and behind ICOL in many views, further limiting the visual influence of the Proposal. When considering the possibility of cumulative effects on this stretch of coast, SNH considered that the Proposal would have minor effects on seascape character and on views in this area due to its distance (>50 km).

From the East Lothian coast, the Proposal would be unlikely to be visible from shore as it would lie over 60 km away (at its nearest point). SNH advised that, cumulatively the Proposal when seen together with NNGOWL and ICOL would only be visible from the East Lothian coast to a very small degree.

SNH stated that, within Aberdeenshire, north of St Cyrus, the Proposal would be seen at distances greater than 40 km and would have relatively minor visual influence. It would be seen as a very distant linear feature on the horizon in clear conditions and would not dominate the coast.

Angus Council and Fife Council were also consulted on landscape and visual grounds. Both Angus Council and Fife Council raised concerns regarding visuals, however, their concerns were not sufficient to cause them to object to the Proposal.

No consultees, Statutory or otherwise, have objected to the Development on landscape and visual impacts. This was primarily due to the distance the Development is from the shore (over 12 nm).

Conditions requiring the submission of a DSLP, Design Statement (“DS”) and a LMP have been included in this decision letter and consent. Furthermore, 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. As part of this consent a condition has been placed on the Company to provide final visualisations to the SNH, the local authorities and all consultees with an interest in visual amenity (**Annex 2**).

The Scottish Ministers recognise that the Development, ICOL and NNGOWL will be a prominent new features on the seascape from the Angus coastline.

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. Marine Scotland officials have undertaken a site visit of a selection of viewpoints provided in the Company’s Application. During these visits, officials were able to compare the views from those viewpoints using the visual photomontages in the Company’s ES.

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 impacts that would require consent to be withheld.

### *Failure to meet the requirements of the Aarhus Convention*

Concerns were raised that in August 2013, the United Nations Economic Commission for 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. 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.

### *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 of the energy of the fuel going into a conventional thermal power station is transformed into useful electricity - a lot of it ends up as ash or air pollution harmful to health, as well as carbon dioxide. Also, unlike conventional electricity generating stations the fuel for a wind farm does not need to be mined, refined or shipped and transported from other 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 that 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 Zone 2, of Round 3 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 525 MW Development has the potential to annually generate renewable electricity equivalent to the demand from approximately 335,000 homes. This increase in the amount of renewable energy produced in Scotland is entirely consistent with the Scottish Government's policy on the promotion of renewable energy and its target for renewable sources to generate the equivalent of 100% of Scotland's 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 will be 100% reliable on renewables generation by 2020; but it supports Scotland's plan to remain a net exporter of electricity.

The Scottish Ministers 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 that would require consent to be withheld.

### *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 2009 The Crown Estate ("TCE") awarded the Company exclusive developments rights to the Round 3 Zone 2 (named the 'Firth of Forth Zone') and in January 2010 TCE awarded Seagreen a Zone Development Agreement ("ZDA") with a target Zone generation capacity of circa 3.5 GW.

The suitability of the site was further affirmed in May 2010 with the Scottish Government's publication of the 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.

The Company has adopted the Zone Appraisal and Planning (“ZAP”) approach and used it to provide a clear rationale for site boundaries. The initial site identification process comprised a detailed, desk based assessment of constraints to development. This focused on factors including:

- Grid connection;
- Navigation and shipping;
- Commercial fisheries;
- Aviation and military;
- Wind resource;
- Construction and ports;
- Bathymetry;
- Nationally designated landscape / seascape within 35 kilometres;
- Internationally designated sites (Natura 2000) and proposed sites/ extensions to sites;
- Ornithology, marine mammals and features of marine ecological interest; and
- Sensitive fish spawning areas considered for hearing specialists (herring, sprat and sandeel).

Revised boundaries were established to provide a balance between the environmental constraints considered significant and the requirement to maintain design flexibility and economic viability. The initial Phase 1 boundary established at the bid stage was revised to exclude the Scalp Bank feature following the initial modelling of collision risk for birds. Subsequent to this, and based on a further review of consenting strategy options, the Company finalised the SAWEL and SBWEL site areas taken forward in the EIA and consent applications. Phases 2 and 3 of the development have been scoped, however, applications have not been made at this time.

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.

#### *Cumulative impacts of the Development*

The close proximity of the Development (as part of the Proposal) to the proposed adjacent ICOL and NNGOWL wind farms 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, the JNCC, SNH, 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 Company commitment to increasing the air gap measured from LAT by 4 metres in order to mitigate collision impacts. The effect of displacement from the Proposal is also less than that from NNGOWL and ICOL as the turbines are more widely spaced. These factors were taken into account when completing the AA. 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 has been established in order to discuss and address any issues. A condition to ensure the Company continues its membership of the CFWG and its commitment to any mitigation strategy forms part of this consent (**Annex 2**).

Concerns were also raised on the cumulative impacts on navigation by the CoS. A condition ensuring that consultation with the CoS regarding the DSLP is undertaken prior to commencement of the Development, 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 area that would require consent to be withheld.

### *Economic Benefits*

Scottish Planning Policy (“SPP”) advises that economic benefits are material issues which must be taken into account as part of the determination process.

SPP also confirms 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, particularly in rural areas, and to provide significant export opportunities. The planning system has a key role in supporting this aim and the Scottish Ministers should consider material details of how the proposal can contribute to local or national economic development priorities as stated in SPP.

The Development will contribute significantly to the new energy infrastructure that needs to be developed to replace existing generating capacity that is reaching the end of its lifespan, to ensure security of supply and to assist in meeting targets for renewable energy generation capacity. The Firth of Forth Round 3 Zone has a target capacity of circa 3.5 GW, with the Development delivering the first 525 MW of this target. SAWEL and SBWEL will deliver 525 MW capacity each. The Zone target capacity would contribute significantly to the requirement for new plant and, given the significant closures in the middle of this decade, it is important that the Proposal progresses as scheduled to avoid risks to security of supply and to minimise reliance on foreign sources of energy.

The Development will contribute to the growth of the decarbonised energy sector in Scotland. As stated previously, the Government have set out clear policy drivers that seek to maximise future economic opportunities presented by offshore wind

development. The Zone is Scotland's largest Round 3 project and is therefore integral to Governments strategy for sustainable economic growth.

The extent of the project expenditure is not yet known accurately, and hence this has been estimated based on published sources applicable to the offshore wind industry. The capital expenditure costs of developing and constructing an offshore wind farm are estimated to be around £3 million per MW. SAWEL and SBWEL each have a maximum output of 525 MW, therefore the predicted expenditure is £1,575 million per project, corresponding to a total expenditure of £3,150 million for the Proposal. In reality should both SAWEL and SBWEL progress to construction, the expenditure on the Proposal will be less as there will be shared costs associated with the export cable and grid connection infrastructure. The Company states that it is not possible at this stage to accurately assess the level of expenditure and have consequently assumed a 50% reduction in the total £3,150 million expenditure, to account for economies of scale between the two projects. If actual expenditure is higher than this, socio-economic impacts will be more beneficial than as assessed.

As individual projects, either of SAWEL and SBWEL have the potential to contribute GVA between a low case of £60 million and a high case of £241 million in Scotland. In both cases this would represent a beneficial impact on the Scottish economy. The CAPEX would be spent over the 4 year construction period and hence would be a short term impact. For both projects together, the Proposal would contribute between a low case of £80 million and a high case of £321 million GVA in Scotland.

The Company assume an operating expenditure of £75,000 per MW per annum within the assessment, with an anticipated project operational lifespan of 25 years. If the Proposal were to progress as a whole this would generate an annual GVA of between a low case of £17.4 million and a high case of £23.5 million in Scotland. There would be an additional GVA impact in the rest of Great Britain of between £0 (low case) and £5.9 million (high case). In the event that one of SAWEL or SBWEL proceeded individually and the other did not this would represent an annual GVA of between a low case of £8.7 million and a high case of £11.7 million in Scotland.

The number of employees required for the construction and operation and maintenance (“O&M”) phases cannot be accurately quantified at this stage of the development process. However, assuming both projects are developed concurrently, the Company estimate employments impacts of between 1728 jobs (low case) and 7196 jobs (high case) in Scotland during the construction phase. This is significantly higher than any other wind farms estimated in Scotland. These figures include indirect and induced jobs. Equivalent figures are 1295 jobs to 5392 if either of the projects go ahead separately. The Company also estimate an additional 0 jobs (low case) to 4293 jobs (high case) in the rest of Great Britain of the full proposal goes ahead.

Industry reports (Oxford Economics, 2010) estimate a likely scenario of 0.19 direct O&M jobs created per MW for offshore wind in the UK. This translates to approximately 100 O&M jobs for each of SAWEL and SBWEL projects, and approximately 200 O&M jobs for the combined Proposal.

The supporting Application for this Development contains the justification for the use of the figures below;

“The above estimates are based on 2 scenarios for development of the supply chain in Scotland and Great Britain from a report by IPA and Scottish Renewables (2010):

- High Case (Scenario A within the industry report) – 10.6 GW of available offshore wind sites in Scotland will be developed. This exploits all the opportunities has to offer including a turbine manufacturer setting up a base in Scotland, development of skills and port infrastructure. A significant supply chain market is developed.
- Low Case (Scenario C within the industry report) – Offshore wind sites are brought online at a similar rate to scenario A but the supply chain and wider industrial base does not develop. The majority of goods and services are imported.

Whilst it is not possible to be definitive at this stage, the Proposal has the potential to encourage the establishment of manufacturing or pre-assembly facilities, as well as research and support facilities, by wind turbine generator manufacturers and installers in Scotland and the wider Forth and Tay region. In addition, port, transport and other support facilities will be required during the construction period. Beneficial impacts are expected to continue during the operation period, with support and port facilities required by operators for maintenance and related activities.

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 Scottish Ministers recognise this High Case may include overly optimistic economic impacts for Scotland as the assumed total 10.6 GW of electricity may not be fully achieved in the timescales stated. The development of a supply chain in Scotland, and hence retention rates of activity, is likely to be linked to the total power generation achieved.

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 that would require consent to be withheld.

## **Summary**

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 Application 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 and regulation 22 of the 2007 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 three (3) 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 SAWEL, ICOL, NNGOWL and all other relevant developments, 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 **525 MW** (as described in **Annex 1**).

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

The Company applied for two declarations under section 36A of the Electricity Act to extinguish public rights of navigation so far as they pass through those places within the Scottish marine area (essentially the territorial sea adjacent to Scotland) where structures (but not, for the avoidance of doubt the areas of sea between those structures) forming part of the offshore wind farm and offshore transmission works are to be located. As the Proposal is located outwith the limits of the Scottish marine area, a declaration under section 36A of the Electricity Act cannot be issued. The Company has been informed of this as a matter of courtesy.

In accordance with the 2000 Regulations and the 2007 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. The Company must provide copies of the public notices to the Scottish Ministers.

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 as set out in the Application and as described in **Annex 1**.

Copies of this letter and the consent have been sent to Angus Council and Fife 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 the judicial review process can be found at Chapter 58 of the Court of Session rules on the website of the Scottish Courts –

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

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

Yours sincerely

  
**JAMES CMCKIE**

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

## Annex 1

### DESCRIPTION OF THE DEVELOPMENT

The Development, located as shown on Figure 1 below, ~~shall have a permitted generating capacity not exceeding 525 MW and~~ shall comprise a wind-powered electricity generating station in the FFZ, including:

1. not more than 75 three-bladed horizontal axis wind turbine generators each with:
  - a) a maximum blade tip height of 209.7 metres (measured from LAT);
  - b) a rotor diameter of between 122 and 167 metres;
  - c) a hub height of between 87.1 and 126.2 metres (measured from LAT);
  - d) a minimum blade tip clearance of between 29.8 and 42.7 metres (measured from LAT);
  - e) blade width of up to 5.4 metres; and
  - f) a minimum spacing of 1,000 metres;
2. all foundations, substructures, fixtures, fittings, fixings, and protections;
3. inter array cabling and cables up to and onto the offshore substation platforms; and
4. transition pieces including access ladders / fences and landing platforms,

and, except to the extent modified by the foregoing, all as specified in the Application and by the conditions imposed by the Scottish Ministers. References to “the Development” in this consent shall be construed accordingly.

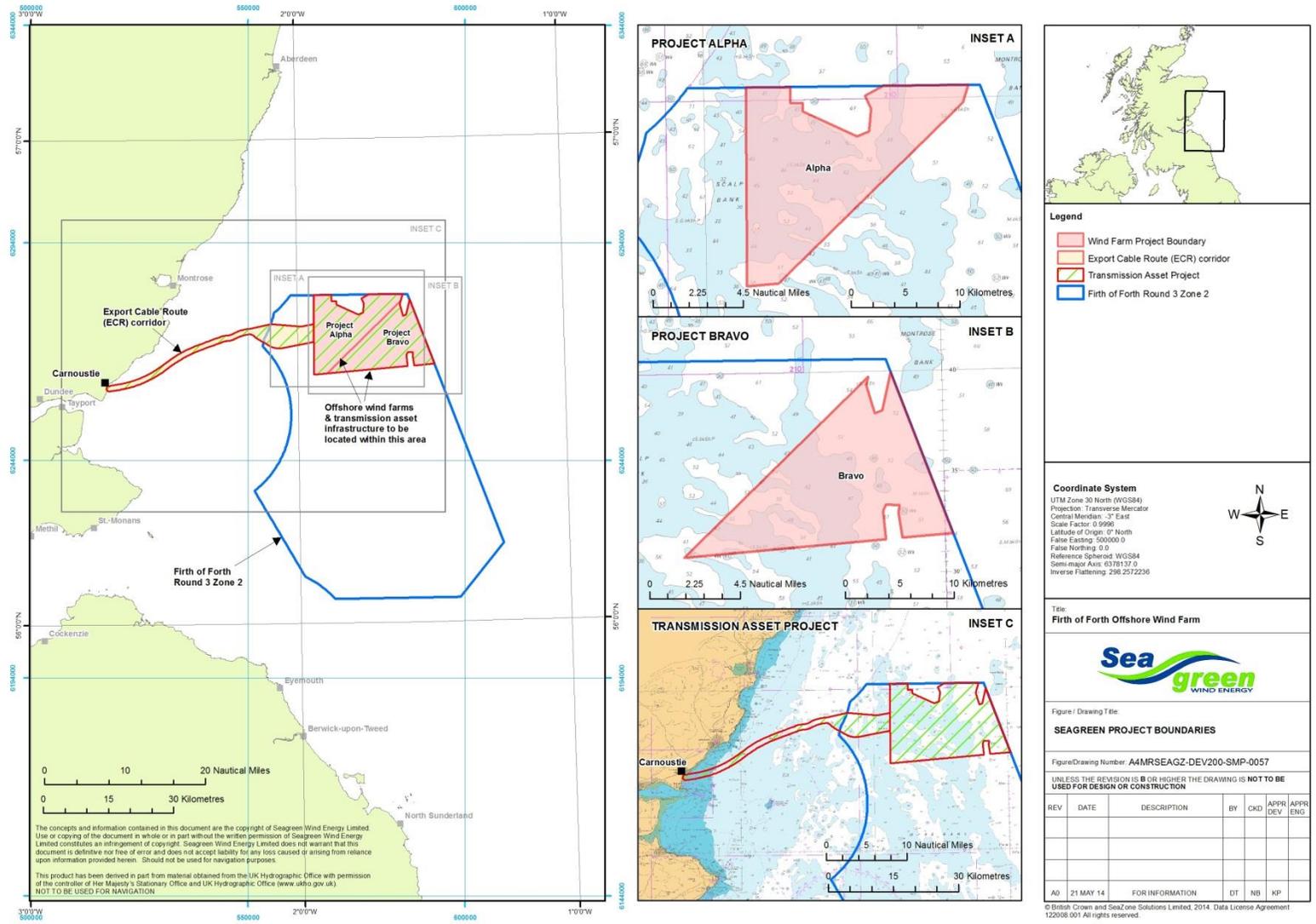


Figure 1: Development Location – see KEY

## 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 Authority, the JNCC and SNH 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, the JNCC and SNH 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 the 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: To ensure the Commencement of the Development is undertaken 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: To ensure that a decommissioning programme is submitted to the Secretary of State where the Secretary of State has, following consultation with the Scottish Ministers, so required before any construction commences.**

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

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 and associated ancillary equipment is 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: To inform the Scottish Ministers of any serious health and safety incident occurring on the Site.**

7. The Development must be constructed and operated in accordance with the terms of the Application 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.**

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 the JNCC, SNH, 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 the JNCC, SNH, 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 Application and must include details of how the construction related mitigation steps proposed in the ES and in the SEIS 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 Design Statement (“DS”), the Environmental Management Plan (“EMP”), the Vessel Management Plan (“VMP”), the Navigational Safety Plan (“NSP”), the Piling Strategy (“PS”), the Cable Plan (“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. In 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 the JNCC, SNH 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 pile-driving 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 pile-driving, as agreed 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 Project Environmental Monitoring Programme ("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 ("DSLPL"), 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, the JNCC, SNH, SFF, 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 DSLPL (as updated and amended from time to time by the Company). Any updates or amendments made to the DSLPL by the Company must be submitted, in writing, by the Company to the Scottish Ministers for their written approval.

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

- a. 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;
- b. 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 WGS84 format;
- c. A table or diagram of each WTG dimensions including - height to blade tip (measured above Lowest Astronomical Tide ("LAT")) to the highest point, 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 (Annex 1, Inset B of Figure 1) 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 as 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 the JNCC, SNH 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. The Development must, at all times, be constructed in accordance with the approved DS (as updated and amended from time to time by the Company).

**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 the JNCC, SNH, 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 the Decommissioning Programme provided for 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 over-arching 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 non-native 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, the JNCC, SNH, 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 the JNCC, SNH, 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 27) 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 the JNCC, SNH, 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 to the Scottish Ministers, as soon as practicable, 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 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 prior to approval of the NSP. 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 the JNCC, SNH, MCA, SFF 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 protection measures;
- e. Methodologies for surveys (e.g. over trawl) 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 only, to the Planning Authorities, the JNCC, SNH 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.

The ATC Scheme is a scheme designed to mitigate the impact of the Development upon the operation of the Primary Surveillance Radar at RAF Leuchars (“the Radar”) and the air traffic control operations of the MOD which is reliant upon the Radar. The ATC Scheme shall set out the appropriate measures to be implemented to mitigate the impact of the Development on the Radar and shall be in place for the operational life of the Development provided the Radar remains in operation.

No turbines shall become operational unless and until all those measures required by the approved ATC Scheme to be implemented prior to the operation of the turbines have been implemented and the Scottish Ministers have confirmed this in writing. The Development shall thereafter be operated fully in accordance with 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 ensure that no part of any turbine shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head (RRH) Buchan unless and until an Air Defence Radar Mitigation Scheme

("the ADRM scheme") has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Buchan and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of the Development.

**Reason: To mitigate the adverse impact of the Development on air defence radar at Remote Radar Head (RRH) Buchan.**

- 22.** The Company must ensure that no part of any turbine shall be erected above sea level within radar line of sight of the air defence radar at Remote Radar Head ("RRH") Brizlee Wood unless and until an Air Defence Radar Mitigation Scheme ("the ADRM scheme") has been submitted to and approved in writing by the Scottish Ministers in consultation with the MOD.

For the purposes of this condition, the ADRM Scheme means a detailed scheme to mitigate the adverse impacts of the Development on the air defence radar at RRH Brizlee Wood and the air surveillance and control operations of the MOD. The scheme will set out the appropriate measures to be implemented to that end.

No turbines shall become operational until:

- a. the mitigation measures which the approved ADRM Scheme requires to be implemented prior to the operation of the turbines have been implemented; and
- b. any performance criteria specified in the approved ADRM Scheme and which the approved ADRM Scheme requires to have been satisfied prior to the operation of the turbines have been satisfied.

The Company shall thereafter comply with all other obligations contained within the approved ADRM Scheme for the duration of the operation of the Development.

**Reason: To mitigate the adverse impact of the development on air defence radar at Remote Radar Head (RRH) Brizlee Wood.**

23. The Company must ensure that no turbine shall be erected until a Primary Radar Mitigation Scheme (“PRMS”) agreed with the Operator has been submitted to and approved in writing by the Scottish Ministers in order to mitigate the impact of the Development on the Primary Radar Installation at Perwinnes and associated air traffic management operations.

No blades shall be fitted to any turbine unless and until the approved Primary Radar Mitigation Scheme has been implemented and the development shall thereafter be operated fully in accordance with such approved Scheme.

**Reason: To mitigate the adverse impact of the development on air traffic operations.**

24. The Company must, prior to the Commencement of the Development, and following confirmation of the approved DSLP by the Scottish Ministers (refer to condition 12), provide the positions and maximum heights of the WTGs and construction equipment over 150 m (measured above LAT) and any Offshore Sub-Station Platforms 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 co-ordinates accurate to three decimal places of minutes of arc for each WTG position and maximum heights of the WTGs to the UKHO for aviation and nautical charting purposes.

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

25. The Company must, at least 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 be constructed and operated in accordance with the approved TTP (as updated and amended from time to time, following written approval from the Scottish Ministers).

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

26. 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 the JNCC, SNH, 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 so as to ensure that the data which is collected allows useful and valid comparisons 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 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 Marine Mammal Monitoring Programme (“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 Forth and Tay Regional Advisory Group (“FTRAG”) referred to in condition 27 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 the 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.**

27. 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 28), the responsibilities and obligations being delivered by the FTRAG will be subsumed by the SSMEG at a timescale to be determined by the Scottish Ministers.

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

28. 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.**

29. 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 the JNCC and SNH, 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

for approval, until the Final Commissioning of the Development. The responsibilities of the ECoW must include, but not be limited to:

- a. Quality assurance of final draft version of all plans and programmes required under this consent;
- b. Provide 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. Monitor compliance with the CMS, the EMP, the PEMP, the PS (if required), the CaP and the VMP;
- d. Provide 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.*

- 30.** The Company must, to the satisfaction of the Scottish Ministers, participate in the monitoring requirements as laid out in the 'National Research and Monitoring Strategy for Diadromous Fish' 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*

- 31.** 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 for their written approval. The Company must remain a member of the Forth and Tay Offshore Wind Developers Group-Commercial Fisheries Working Group or any successor group formed to facilitate commercial fisheries dialogue in the Forth and Tay regions.

The Company must include in the CFMS a mitigation strategy for each commercial fishery that Ministers are reasonably satisfied would be adversely affected by the Development. The CFMS must, in particular, include mitigation measures for lobster stock enhancement if the Scottish Ministers are satisfied that such mitigation measures are reasonably necessary. The Company must implement all mitigation measures committed to be carried out by the Company within the terms of the CFMS. The Company must require all of its contractors, and sub-contractors, to co-operate with the fishing industry to ensure the effective implementation of the CFMS.

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

- 32.** Prior to the Commencement of the Development, a Fisheries Liaison Officer ("FLO"), approved in writing 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 sub-contractors, 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.*

- 33.** 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.*

### **Annex 3**

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

In this decision letter and in Annex 1 and 2:

“the Application” includes the Application letter and Environmental Statement submitted to the Scottish Ministers by Seagreen Wind Energy Limited, on behalf of Seagreen Alpha Wind Energy Limited and Seagreen Bravo Wind Energy Limited, on 15<sup>th</sup> October 2012; the Supplementary Environmental information Statement submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 18<sup>th</sup> October 2013; and the SEIS Erratum submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 11<sup>th</sup> March 2014.

“AA” means Appropriate Assessment.

“CAPEX” means Capital Expenditure.

“Commencement of the Development” means the date on which Construction begins on the site of the Development in accordance with this consent.

“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.

“Construction” means as defined at section 64(1) of the Electricity Act 1989, read with section 104 of the Energy Act 2004.

“Danger Area” means the seaward extent of MOD Danger Area D604 into which military firing practise at Barry Buddon Range is conducted.

“Decommissioning Programme” means the programme for decommissioning the relevant object, to be submitted by the Company to the Secretary of State under section 105(2) of the Energy Act 2004 (as amended).

“Design Envelope”, also referred to as Rochdale Envelope, is an approach to consenting and environmental impact, named after a UK planning law case, which allows a project description to be broadly defined, within a number of agreed parameters, for the purposes of a consent application.

“ECoW” means Ecological Clerk of Works.

“EIA” means Environmental Impact Assessment.

“EMF” means Electromagnetic Fields.

“EPS” means European Protected Species.

“ERCoP” means Emergency Response & Cooperation Plan.

“ES” means the Environmental Statement submitted to the Scottish Ministers by the Seagreen Wind Energy Limited on 15<sup>th</sup> October 2012 as part of the Application as defined above.

“EU” means European Union.

“FFZ” means Firth of Forth Zone.

“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 a Fisheries Liaison Officer.

“GIS” means Geographic Information System.

“GVA” means Gross Value Added and represents a measure of the contribution to the economy of each individual producer, industry or sector in the United Kingdom.

“GW” means gigawatt.

“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.

“LAT” means Lowest Astronomical Tide.

“LSE” means Likely Significant Effect.

“MGN371” means Marine Guidance Note 371 and refers to 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.

“MHWS” means Mean High Water Springs.

“MLWS” means Mean Low Water Springs.

“MPA” means Marine Protected Area.

“MW” means megawatt.

“nm” means nautical miles.

“NSBMF” means National Strategic Bird Monitoring Framework.

“O&M” means operation and maintenance.

"Operator" means NERL (En Route) plc, incorporated under the Companies Act (4129273) whose registered office is 4000 Parkway, Whiteley, Fareham, Hants PO15 7FL or such other organisation licensed from time to time under sections 5 and 6 of the Transport Act 2000 to provide air traffic services to the relevant managed area (within the meaning of section 40 of that Act).

“ the Planning Authorities” means Angus Council and Fife Council.

“PMF” means Priority Marine Feature.

“SAC” means Special Area of Conservation.

“Scottish marine area” has the meaning given in section 1 of the Marine (Scotland) Act 2010.

“Scottish offshore region” has the meaning given in section 322 of the Marine and Coastal Access Act 2009 (as amended).

“SEA” means Strategic Environmental Assessment.

“SEIS” means Supplementary Environmental information Statement” and refers to the covering letter and report, submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 18<sup>th</sup> October 2013.

“Soft start piling” means the gradual increase of piling power, incrementally over a set time period, until full operational power is achieved.

“SPA” means Special Protection Area.

“SPP” means Scottish Planning Policy.

“SSMEG” means Scottish Strategic 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.

“STA” means Seagreen Transmission Asset.

“the Company” means Seagreen Alpha Wind Energy Limited, 55 Vastern Road, Reading, Berkshire, RG1 8BU. Company Number: 07185533.

“the Development” means the Seagreen Alpha Wind Farm in the Firth of Forth Zone.

“the Erratum” means the SEIS Erratum submitted to the Scottish Ministers by Seagreen Wind Energy Limited on the 11th March 2014 as a result of comments received by Repsol, the company developing the Inch Cape Offshore Wind farm.

“the Proposal” means the proposed Seagreen Phase 1 Project, consisting of all two wind farms: Seagreen Alpha Offshore Wind Farm and Seagreen Bravo Offshore Wind Farm.

“the Radar” means the Primary Surveillance Radar at RAF Leuchars.

“the Site” means the area shaded in red in Annex 1, Inset A of Figure 1.

“the Zone” means Firth of Forth Round 3 Zone 2 leasing agreements in the UK Renewable Energy Zone.

“UK” means United Kingdom.

“WGS84” means the World Geodetic System 1984.

“WTG” means wind turbine generator.

“ZAP” means Zone Appraisal and Planning.

“ZDA” means Zone Development Agreement.

### Organisations

“AIA” means Aberdeen International Airport.

“AC” means Angus Council.

“AMSGA” means Arbroath and Montrose Static Gear Association.

“ASFB” means The Association of Salmon Fishery Boards.

“CAA” means The Civil Aviation Authority.

“CFWG” means Commercial Fisheries Working Group a Working group part of FTOWDG.

“CGLMC” means Carnoustie Golf Links Management Committee.

“CoS” means The Chamber of Shipping.

“FC” means Fife Council.

“FMA” means the Fishermen’s Mutual Association (Pittenweem) Ltd

“FTOWDG” means The Forth and Tay Offshore Wind Developers Group A group formed, and set up, to develop the Commercial Fisheries Mitigation Strategy, and as forum to facilitate on-going dialogue with the commercial fishing industry.

“FTRAG” means Forth and Tay Regional Advisory Group.

“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.

“MMO” means Marine Management Organisation.

“MOD” means Ministry of Defence.

“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.

“NNGOWL” means Neart na Gaoithe Offshore Wind Limited.

“Repsol” means Repsol Nuevas Energias UK Limited.

“RSPB Scotland” means The Royal Society for the Protection of Birds Scotland.

“RYA Scotland” means Royal Yachting Association Scotland.

“SAS” means Surfers Against Sewage.

“SAWEL” means Seagreen Alpha Wind Energy Limited.

“SBWEL” means Seagreen Bravo Wind Energy Limited.

“SEPA” means The Scottish Environment Protection Agency.

“SFF” means The Scottish Fisherman’s Federation.

“SG” means The Scottish Government.

“SMRU” means Sea Mammal Research Unit.

“SNH” means Scottish Natural Heritage.

“SWEL” means Seagreen Wind Energy Limited.

“TCE” means The Crown Estate.

“UKHO” means United Kingdom Hydrographic Office.

“UNECE “ means United Nations Economic Commission for Europe.

“WDC” means Whale and Dolphin Conservation.

#### Plans, Programmes and Statements

“ADRM scheme” means Air Defence Radar Mitigation Scheme

“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 Ministry of Defence. The scheme will set out the appropriate measures to be implemented to that end.

“CaP” means Cable Plan.

“CFMS” means Commercial Fisheries Mitigation Strategy - the final document produced from consultation between Seagreen Wind Energy Limited and the Forth & Tay Offshore Wind Developers Group - Commercial Fisheries Working Group (“FTOWDG-CFWG”).

“CMS” means Construction Method Statement.

“CoP” means Construction Programme.

“DS” means Design Statement.

“DSLIP” means Development Specification and Layout Plan.

“EMP” means Environmental Management Plan.

“LMP” means Lighting and Marking Plan.

“MMMP” means Marine Mammal Monitoring Programme which is a programme to be put in place by the licensee to monitor the effects of the Seagreen Alpha Offshore Limited wind farm on marine mammals in co-ordination (through the Forth and Tay Regional Advisory Group (“FTRAG”)) with other MMMPs to be developed by other Forth and Tay projects, as required by the Licensing Authority.

“NPF2” means Scotland’s National Planning Framework 2.

“NPF3” means Scotland’s National Planning Framework 3.

“NREAP” means UK Government's National Renewable Energy Action Plan.

“NSP” means Navigational Safety Plan.

“OMP” means Operation and Maintenance Programme.

“PEMP” means Project Environmental Monitoring Programme.

"Primary Radar Mitigation Scheme" or "Scheme" means a detailed scheme agreed with the Operator which sets out the measures to be taken to mitigate at all times the impact of the development on the PERWINNES primary radar and air traffic management operations of the Operator.

“PRMS” means Primary Radar Mitigation Scheme.

“PS” means Piling Strategy.

“RRH” means Remote Radar Head and it may refer to Air Defence Radar at RRH Buchan or to the Air Defence Radar at RRH Brizlee Wood.

“the Strategy” means “National Research and Monitoring Strategy for Diadromous Fish” and refers to a strategy that will be formulated from the Marine Scotland Science 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.

“TTP” means Traffic and Transportation Plan

“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).

“Habitats Directive” means Council Directive 92/43/EEC of 21<sup>st</sup> 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 1990 Regulations” means the Electricity (Applications for Consent) Regulations 1990 (as amended).

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

“the 1999 Order” means The Scotland Act 1998 (Transfer of Functions to the Scottish Ministers etc.) Order 1999.

“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).

“the 2010 Act” means Marine (Scotland) Act 2010.

“SPG” means the Fife Council’s Supplementary Planning Guidance (SPG) on Wind Energy 2011 which supplements the local plan policies.

“the Statement” means The UK Marine Policy Statement 2011.

“TAYplan SDP” means the TAYplan Strategic Development Plan.