marinescotland

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3 December 2018

Dear [Redacted]

THE ELECTRICITY ACT 1989 (AS AMENDED)

THE ELECTRICITY WORKS (ENVIRONMENTAL IMPACT ASSESSMENT) (SCOTLAND) REGULATIONS 2017 (AS AMENDED)

DECISION NOTICE FOR THE SECTION 36 CONSENT FOR THE CONSTRUCTION, OPERATION AND MAINTENANCE OF THE NEART NA GAOITHE OFFSHORE WIND FARM, APPROXIMATELY 15.5km EAST OF FIFE NESS

DECLARATION UNDER SECTION 36A OF THE ELECTRICITY ACT 1989 (AS AMENDED) TO EXTINGUISH PUBLIC RIGHTS OF NAVIGATION SO FAR AS THEY PASS THROUGH THOSE PLACES WITHIN THE TERRITORIAL SEA WHERE STRUCTURES FORMING PART OF THE NEART NA GAOITHE OFFSHORE WIND FARM GENERATING STATION ARE TO BE LOCATED

1 Application and Description of the Development.

- 1.1 On 16 March 2018, Neart na Gaoithe Offshore Wind Ltd (Company Number SC 356223) having its registered office at Atria One, 144 Morrison Street, Edinburgh, United Kingdom, EH3 8EX ("NnGOWL" or "the Company"), submitted to the Scottish Ministers applications under Electricity Act 1989 (as amended") ("the Electricity Act 1989") for:
 - A consent under section 36 ("s.36") of the Electricity Act 1989 for the construction, operation and maintenance of the Neart Na Gaoithe Offshore Wind Farm, approximately 15.5km east of Fife Ness; and
 - A declaration under section 36A ("s.36A") of the Electricity Act 1989 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 forming part of the Neart Na Gaoithe Offshore Wind Farm are to be located.
- 1.2 These applications are collectively referred to as "the Application." The Application was accompanied by an Environmental Impact Assessment report ("EIA Report") as required under the Electricity Works (Environmental Impact

Assessment) (Scotland) Regulations 2017 (as amended) ("the 2017 EW Regulations") and a Habitats Regulations Appraisal ("HRA Report") as required under the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended) and the Conservation of Habitats and Species Regulations 2017 (collectively hereinafter referred to as "the Habitats Regulations"). An addendum of additional information ("EIA Addendum") concerning ornithology was submitted by the Company on 26 July 2018 and is also referred to as part of the Application.

- 1.3 In addition to the Application, the Company has also applied for two marine licences (under the Marine (Scotland) Act 2010) to deposit, construct and operate marine renewable energy works and offshore transmission infrastructure. Separate decision notices will be issued in respect of any marine licences granted.
- 1.4 The Application is for the construction, operation and maintenance of an offshore energy generating station, with a maximum generating output of around 450MW. The Development will comprise:
 - 1. Not more than 54, three-bladed horizontal axis Wind Turbine Generators ("WTGs"), each with:
 - a) A maximum rotor tip height of 208 metres (measured from Lowest Astronomical Tide ("LAT"));
 - b) A maximum rotor diameter of 167 metres;
 - c) A maximum hub height of 126 metres (measured from LAT);
 - d) A minimum blade tip clearance of 35 metres (measured from LAT);
 - e) Blade width of up to 4.5 metres; and
 - f) A minimum spacing of 800 metres.
 - 2. Up to 54 jacket foundations and ancillary equipment.
 - 3. Up to 2 Offshore Substation Platforms ("OSPs"), jacket foundations and ancillary equipment.
 - 4. Up to 140km of inter-array cabling and up to 4 interconnector cables between the 2 OSPs.
 - 5. 2 subsea Offshore Export Cables ("OEC") each of up to 43km in length.
 - 6. Scour and cable protection (as required),
 - 7. A Meteorological mast.
- 1.5 The total area within the Development site boundary is 105km². The location and boundary of the Development site is shown in Figure 1.

This decision notice contains the Scottish Ministers' decision to grant consent for the Development detailed above, in accordance with regulation 21 of the 2017 EW Regulations.

2 Summary of environmental information

- 2.1 The environmental information provided was:
 - An <u>EIA Report</u> that provided an assessment of the impact on a range of receptors;
 - A <u>HRA Report;</u> and
 - As a result of the responses from East Lothian Council, Scottish Natural Heritage ("SNH") and Royal Society for the Protection of Birds ("RSPB"), received through the original consultation exercise, <u>the EIA Addendum</u>.
- 2.2 In May 2017 the Company submitted a <u>scoping report</u> and a request for a scoping opinion in respect of the Development to the Scottish Ministers. Following consultation with statutory and other consultees, a <u>scoping opinion</u> was issued by Scottish Ministers on 8 September 2017, advising on the scope of the impacts to be addressed and the methods of assessment to be used within the EIA Report.
- 2.3 The Company currently holds a s.36 consent ("the Original Consent") and marine licences (which the Scottish Ministers granted in October 2014) for an offshore wind farm development within the same boundary as the current Application. As the Company had substantial evidence from the previous Environmental Statement submitted in 2012 for the application made for the Original Consent, it was possible to scope out a range of potential effects which were not found to be significant previously and where the baseline and assessment methodologies had not changed since 2012. A number of receptors were scoped out of the assessment completely, including (but not limited to): air quality, physical processes, geology and water quality. For the receptors which were scoped in, the assessment was limited to those effects which could be significant.
- 2.4 The EIA Report assessed the impact pathways identified in the scoping opinion and was prepared in accordance with the terms of the 2017 EW Regulations. As the request for a scoping opinion was made before 16 May 2017, the transitional arrangements within the 2017 EW Regulations applied to it.
- 2.5 A summary of the environmental information provided in the EIA Report and the EIA Addendum is given below.

Fish and Shellfish ecology

2.6 During the construction phase, minor, adverse effects arising from disturbance or injury as a result of particle motion arising from pile driving and disturbance from noise and particle motion arising from the Horizontal Direct Drilling ("HDD") pipe site works were reported for all fish and shellfish species. During the operational phase, potential disturbance resulting from particle motion, minor adverse effects on all fish and shellfish species were reported. In accordance with the scoping opinion justification was provided in the EIA Report for scoping diadromous fish out of the assessment.

Marine mammals

- 2.7 When the Development was considered in isolation, potential adverse effects arising from noise generated by pre-construction geophysical survey works and drilling construction noise were reported to be negligible for all species. Minor, adverse effects arising from pile driving construction noise were reported for harbour porpoise, bottlenose dolphin, minke whale and harbour seal, whilst the effects on white-beaked dolphin and grey seal were reported to be negligible.
- 2.8 The assessment of cumulative impacts within the EIA Report reported minor, adverse effects for harbour porpoise, white-beaked dolphin and harbour seal for pile driving construction noise. Major, adverse impacts were reported for bottlenose dolphin and grey seal and moderate, adverse impacts for minke whale. The cumulative impact assessment considered the Development incombination with all offshore wind farm projects in the Firths of Forth and Tay, the Moray Firth and the Aberdeen Harbour Expansion Project ("AHEP").
- 2.9 In addition to the EIA Report, the HRA Report considered the impacts of the Development on the Moray Firth Special Area of Conservation ("SAC"), the Firth of Tay and Eden Estuary SAC, Isle of May SAC and Berwickshire and Northumberland Coast SAC. The HRA Report concluded that the Development would not adversely affect the integrity of these protected sites alone or incombination with other plans or projects.
- 2.10 The AA highlights issues with the population modelling completed by the Company, and the precautionary nature of the cumulative impact assessment for marine mammals, carried out by the Company. These issues have given rise to the major adverse effects identified in the EIA Report for bottlenose dolphin and grey seal. Additional population modelling completed by SNH reduces the population level impacts and the AA completed concludes that there will be no adverse effect on the integrity of any SACs with bottlenose dolphin or grey seal as qualifying interests from the Development alone or in-combination with other plans or projects.

Ornithology

2.11 The EIA Report assessed the impacts on ornithology receptors during the construction, operational, maintenance and decommissioning phases of the Development. Effects from the Development in isolation were reported to be of negligible or minor significance, these included impacts resulting from construction activities and operational activities (displacement, barrier and collision impacts). No additional mitigation measures, beyond the embedded mitigation, were therefore proposed in respect of these impacts. The impacts during the decommissioning phase were assessed as being the same as the construction phase impacts.

- 2.12 The embedded mitigation measures included within the EIA Report included the reduction in the maximum number of WTGs proposed compared with the Original Consent and the increase in the minimum blade tip clearance to 35m above LAT.
- 2.13 The cumulative assessment reported minor, adverse effects for puffin and negligible adverse effects for all other species arising from displacement and barrier impacts.
- 2.14 For the cumulative assessment of collision impacts, two scenarios were assessed:
 - Scenario 1: the Development alongside the 2017 design parameters for Seagreen Alpha and Bravo wind farms and Inch Cape wind farm as outlined in their scoping reports as of May 2107 and April 2017 respectively; and
 - ii) Scenario 2: the Development alongside consented designs for Seagreen Alpha and Bravo wind farms and Inch Cape wind farm as determined in October 2014.
- 2.15 Scenario 1 predicted no significant effects. Scenario 2 predicted moderate impacts in terms of cumulative kittiwake collision mortality impacts in both the breeding and non-breeding seasons. The Company considers it highly unlikely that the 2014 consented, Seagreen Alpha and Bravo wind farms and Inch Cape wind farm, will be built to the maximum extent of their consented envelopes, therefore the outcomes of Scenario 2 were reported as being precautionary.
- 2.16 The EIA Addendum contained further information clarifying the assessment contained within the EIA and HRA Reports, including a comparison of the re-run population viability analysis ("PVA") models for guillemot and razorbill and further apportioning analysis for the guillemot, razorbill and kittiwake qualifying interests of the relevant Special Protection Areas ("SPAs"). The EIA Addendum did not alter the conclusions of the assessment reported in the EIA Report.
- 2.17 In addition to the EIA Report, the HRA Report considered the impacts of the Development on Forth Islands SPA, Fowlsheugh SPA, St Abbs Head to Fast Castle SPA, Buchan Ness to Collieston Coast SPA and the Outer Firth of Forth and St Andrews Bay Complex proposed SPA ("pSPA"). The HRA Report concluded that the Development would not adversely affect the integrity of these protected sites alone or in-combination with other plans or projects.

Commercial Fisheries

- 2.18 Impacts from the construction, operational, maintenance and decommissioning phases were considered within the EIA Report. The construction period is anticipated to last 3 years and is predicted to be continuous in respect of the wind farm area as a whole. The OEC is anticipated to be installed over a period of nine months.
- 2.19 Construction phase impacts considered both the construction activities and the physical presence of the constructed Development, leading to a reduction in

access to, or exclusion from, established fishing grounds for a range of fish resources, additional steaming times to alternative fishing grounds for vessels that would otherwise had been fishing within the Development area and increased vessel traffic within fishing grounds as a result of changes to shipping routes and construction vessel traffic from the Development area.

- 2.20 Operational phase impacts included the impacts arising from the physical presence of the project infrastructure within the wind farm area, leading to reduction in access to, or exclusion from established fishing grounds, gear snagging, additional steaming to alternative fishing grounds for vessels and increased vessel traffic within fishing grounds arising from changes to shipping routes and maintenance vessel traffic from the Development resulting in interference with fishing activity.
- 2.21 Impacts from the Development in isolation were considered to be minor or negligible, however, impacts arising from the reduction in access to, or exclusion from established fishing grounds, were classified as being of moderate significance for potting vessels during the operation and maintenance phase of the Development.
- 2.22 The cumulative impact assessment in the EIA Report concluded that reductions in access to, or exclusion from, potential and/or established fishing grounds and the effects of displacement (gear conflict and increased fishing pressure on alternative grounds) were of moderate significance for a range of commercial fisheries receptors. Other cumulative effects such as longer steaming distance and changes to shipping routes, leading to inference with fishing activity, were reported as being of minor or negligible significance.
- 2.23 A wide range of potential impacts were identified, both for the Development alone, and cumulatively, in relation to all phases of the Development and a range of receptors. Whilst some moderate adverse effects were initially identified, the EIA Report advised that implementation of additional mitigation measures reduced these effects to minor significance.

Shipping and Navigation

- 2.24 The impacts of the Development on shipping and navigation receptors during the construction, operational, maintenance and decommissioning phases were considered in the EIA Report. The impacts of the Development in isolation were reported as being of minor significance.
- 2.25 Cumulative effects, including impacts arising from the loss of navigable sea room and deviations around the structures, thereby resulting in increased allision (vessel to structure) and collision risk, were reported as being of moderate significance for all vessel types. The application of mitigation measures did not change the residual significance of the effects.

Military and Aviation

- 2.26 The EIA Report reported major significant effects on military and aviation receptors as a result of the Development, both in isolation and in-combination with other developments.
- 2.27 The EIA Report stated that the Development in isolation would have major significant effects on Leuchars Station Primary Surveillance Radar, Leuchars Station Precision Approach Radar and Remote Radar Head ("RRH") Brizlee Wood and RRH Buchan Air Defence Radars ("ADR") (resulting from reflected turbine signals from the WTGs) and on activities carried out in military Practice and Exercise Areas ("PEXA"). Military PEXA activity may be impacted by the creation of clutter on radar systems. The mitigation measures proposed in the EIA Report reduced the residual level of significance to minor, i.e. not significant. Mitigation measures are to be agreed with the Ministry of Defence ("MOD").
- 2.28 The use of helicopters to support operational and maintenance activities was deemed to be of minor/negligible effect.
- 2.29 The in-combination assessment reported major significant effects arising from persistent interference to RAF Leuchars PSR, RRH Brizlee Wood and RRH Buchan ADRs from the WTGs. The mitigation measures proposed in the EIA Report reduced the residual level of significance to minor, i.e., not significant. Mitigation measures are to be agreed with the MOD.

Cultural Heritage

- 2.30 The EIA Report considered impacts on the setting of archaeological and cultural heritage receptors, both onshore and offshore arising from the construction, operational, maintenance and decommissioning phases of the Development.
- 2.31 The effects arising from the operational phase of the Development in isolation, on the setting of onshore cultural heritage and archaeology receptors, were reported to be of minor or negligible significance. The effects of the Development in-combination with the Forth and Tay Developments were deemed to be of minor or negligible significance, with the exception of effects on the Isle of May Priory, which were deemed to be of moderate significance. The Isle of May Priory is a scheduled monument and the Development will be 16.5km to the east and the turbines will be visible to visitors of the priory and therefore, will contribute to a low level negative effect on the setting of the priory.

Seascape and Landscape Visual Impact Assessment

- 2.32 The EIA Report included an assessment of seascape, landscape and visual impact assessment during the construction, operational, maintenance and decommissioning phases of the Development. During the construction phase the EIA Report reported only minor effects (during landfall construction works at Thorntonloch beach). Impacts during the decommissioning phase were anticipated to be similar to those assessed during the construction phase.
- 2.33 Impacts of moderate significance were reported for the operational phase including the impact of the Development on coastal character, and on visual

amenity (within 35km only). The impact of aviation and navigation lighting on coastal character (along the Fife coast only) and on visual amenity (within 30km) was also reported to be of moderate significance. The impact of the Development on visual amenity within 22km was, however, reported to be of major significance.

2.34 The cumulative assessment reported impacts of moderate significance on coastal character arising from the additional presence of the Development in east Fife and south-east Angus (with impacts for other areas being of minor or negligible significance). However, the cumulative impact on visual amenity arising from views of the Development, in addition to other wind farms, was deemed to be of major adverse significance where both the Development and the Inch Cape offshore wind farm are viewed at closer range (and minor or negligible elsewhere). No mitigation measures were identified to reduce the significance of these impacts. Further minor or negligible effects were identified throughout the operational and decommissioning phases.

Socio-Economics

- 2.35 The EIA Report advised that socio-economic impacts during the construction, operational, maintenance and decommissioning phases were positive, with effects that are quantifiable, ranging from minor positive effects upon the Local Study Area (defined as the combined local authorities of Angus, City of Edinburgh, Dundee, East Lothian and Fife), to moderate positive Scotland-wide effects.
- 2.36 Moderate, positive, significant effects were reported for the construction phase of the Development resulting from direct and indirect employment creation in the construction supply chain for both the Local Study Area and Scotland. Minor, positive effects were also reported for the Local Study Area and Scotland resulting from indirect and direct Gross Value Added ("GVA") creation in the construction supply chain. Further minor, positive effects were reported for the operational phase on GVA creation in the construction supply chain and during the decommissioning phase on indirect and direct job and GVA creation in the construction supply chain.
- 2.37 Whilst the EIA Report stated that cumulative impacts are expected to be positive, it recognised that it is not possible to confidently predict the level of cumulative impact on direct and indirect employment and GVA creation within the supply chain. This depends on several factors, which are, at this time, unknown, including the overall costings and geographical sourcing of goods and services for the construction and the operation and maintenance of other wind farms. As this is not yet known, the EIA Report advised that it is impossible to provide a quantitative assessment of the potential cumulative effects.

3 Consultation

3.1 In accordance with the 2017 EW Regulations, on 16 March 2018, the Company submitted an EIA Report and HRA Report describing the Development and

giving an analysis of its significant environmental effects. On 26 July 2018, the Company submitted an EIA Addendum addressing specific queries raised in relation to the ornithology assessment included within the EIA Report and HRA Report.

- 3.2 Advertisement of the Application and EIA Addendum was made in the local and national press and the application website. The notices were placed in the public domain and the opportunity given for those wishing to make representations to do so.
- 3.3 The dates of the consultation exercises are given below. The regulatory requirements regarding consultation and public engagement have been met and the responses received taken into consideration. Where matters have not been fully resolved, conditions have been included to ensure appropriate action is taken post consent.

1.1 Document	1.2 Date received	1.3 Dates of consultation	1.4 Publication
1.5 EIA Report and Application1.6	1.7 16 March 2018	1.8 28 March 2018 – 13 May 2018 (24 March 2018 – 3 August 2018 for Planning Authorities)	 1.9 Dundee Courier (4 & 11 April 2018) East Lothian Courier (5 & 12 April 2018) Edinburgh Gazette – (3 & 10 April 2018) The Scotsman (4 April 2018) Fishing News (5 & 12 April 2018) <u>NnGOWL website</u> (3 April 2018)
1.10 EIA Addendum	1.11 26 July 2018	1.12 27 July 2018 – 10 September 2018	 1.13 Dundee Courier (2 & 9 August 2018) 1.14 East Lothian Courier (2 & 9 August 2018) 1.15 Edinburgh Gazette (5 & 12 August 2018) 1.16 The Scotsman (9 August 2018)

	1.17 Fishing News (2 & 9 August 2018)
	NnGOWL website (1 August 2018)

- 3.5 A summary of the responses received is set out at sections 4, 5 and 6. In addition, specialist advice was provided by Marine Scotland Science ("MSS") and the advice received is set out at section 7.
- 3.6 The responses to the consultation on the EIA Report are available to view <u>here</u> and the responses to the consultation on the EIA Addendum are available to view <u>here</u>.
- 3.7 In addition, SNH was consulted on the AA completed by Scottish Ministers.

4 Summary of statutory consultee responses

- 4.1 Under the 2017 EW Regulations, the statutory consultees are as follows: Scottish Natural Heritage ("SNH"), the Scottish Environment Protection Agency ("SEPA"), Historic Environment Scotland ("HES"). The planning authorities whom the Scottish Ministers consider appropriate in respect of the proposed Development are Angus Council, Dundee City Council, East Lothian Council, Fife Council and Scottish Borders Council.
- 4.2 In addition, the Maritime and Coastguard Agency ("MCA") and Northern Lighthouse Board ("NLB") are statutory consultees under the Marine (Scotland) Act 2010.
- 4.3 <u>Angus Council</u> did not object and advised that the impacts of the Development, in terms of material considerations relevant to Angus Council administrative area, do not raise any new or significant issues. Angus Council stated that its comments provided on the 2014 Neart na Gaoithe Offshore Wind Farm application ("the 2014 Application") remain valid to some extent.
- 4.4 Angus Council considered that there would be significant impacts on landscape and seascape character, however, it did not consider these visual impacts to be unacceptable. Angus Council considered that the aviation and navigation lighting would have significant night seascape impacts, in particular in relation to the setting of the Bell Rock Lighthouse, and that further consideration of appropriate technical solution(s) and mitigation measures is required.
- 4.5 Angus Council highlighted that its concerns raised in relation to the cumulative seascape, landscape and visual impacts for the 2014 Application in-combination with the Forth and Tay Developments remain valid. Angus Council highlighted that consistency is required to ensure that the collective view does not become visually inconsistent or distort seascape perspective. However, these significant

visual impacts were not considered unacceptable. Cumulative effects of lighting were also considered and Angus Council state that further consideration of this issue is required to identify a consistent lighting solution and appropriate mitigation measures.

- 4.6 Angus Council advised also that HES had noted the presence of nationally important designated cultural heritage assets within the vicinity of the Development. However, HES is content that the impact does not raise issues of national significance. However, Angus Council considered that this impact is likely to be higher than the 'minor' value assigned to it for both setting impacts and cumulative impacts. Angus Council previously expressed concerns regarding the impact of the Development on the Bell Rock Lighthouse and would concur with the assessment of HES in this regard, but highlights that the EIA Report has limitations in terms of assessing impacts of aviation and navigation lighting on the setting of the asset.
- 4.7 Angus Council had no comments to make on the EIA Addendum.
- 4.8 <u>Dundee City Council</u> advised that the Application and supporting information appeared satisfactory and had no other comments to make.
- 4.9 Dundee City Council had no comments to make on the EIA Addendum.
- 4.10 <u>East Lothian Council</u> initially submitted an objection to the Development, based on SNH's advice which stated that there would be adverse effects on the site integrity of Natura 2000 sites within or adjacent to the East Lothian Council administrative area. East Lothian Council subsequently provided a response following receipt of the EIA Addendum, stating that its objection had been withdrawn following receipt of SNH's response to the EIA Addendum.
- 4.11 East Lothian Council noted SNH's comments regarding potential adverse effects on the site integrity of the Forth Islands SPA and Fowlsheugh SPA, however, East Lothian Council further noted that SNH considers the effects of the Application to be less than the predicted effects for the Original Consent. Therefore, East Lothian Council withdrew its objection, on the basis that the predicted effects of the Development would be less than those of the Original Consent.
- 4.12 In its response, East Lothian Council considered the National Planning Framework 3 ("NPF3"), the Scottish Planning Policy 2014 ("SPP"), the National Marine Plan ("NMP"), the Strategic Development Plan for Edinburgh and South East Scotland ("SESPlan") Strategy Development Plan June 2013, Proposed Strategic Development Plan 2016, East Lothian Local Development Plan 2008 and the proposed East Lothian Development Plan and the Note on Community Benefits from Offshore Renewable Energy Developments – Scottish Government Good Practice Principles.
- 4.13 East Lothian Council provided comment on the risks associated with pollution incidents and possible impacts on geology, water quality, recreation and wildlife. East Lothian Council requested that conditions were placed on any consent

granted to ensure that best practice is followed during all phases of the Development to avoid the risk of pollution as far as possible and to ensure that financial provision is put in place to ensure that sufficient resources are available for any remedial action required.

- 4.14 East Lothian Council raised concerns regarding potential impacts on Thorntonloch beach and the Thortonloch Local Geodiversity Site and asked Marine Scotland to consider whether there is a need for further information regarding coastal hydro-dynamics.
- 4.15 East Lothian Council provided comments on the cultural heritage assessment, in particular the cumulative assessment undertaken. East Lothian Council considered that the cumulative assessment should have taken into account onshore wind farm developments and the potential cumulative impacts from both the offshore and onshore wind farms will have a significant impact on cultural heritage receptors.
- 4.16 East Lothian Council considered that there are likely to be significant adverse seascape and visual impacts from the Development. East Lothian Council did not agree with the classification of the level of significance of the effects for seascape SA17 (Eyebroughy to Torness Point) within East Lothian or the classification of the magnitude of cumulative impact for all viewpoints within East Lothian. East Lothian Council also provided comments on the potential impacts of turbine lighting.
- 4.17 East Lothian Council provided suggestions of potential mitigation measures to reduce the effects of the Development, including: monitoring measures and remediation of significant effects identified through monitoring, paint colour and finish, lighting solutions and the preparation of a detailed design and layout plan.
- 4.18 East Lothian Council also commented on the arrangements for decommissioning, including the need to ensure financial arrangements are in place to support decommissioning.
- 4.19 Conditions have been placed upon the s.36 consent to mitigate the impacts highlighted by East Lothian Council, including the requirement to prepare, consult on and adhere to the Lighting and Marking Plan ("LMP"), Design Specification and Layout Plan ("DSLP"), Construction Method Statement ("CMS") and Decommissioning Programme ("DP").
- 4.20 <u>Fife Council</u> was supportive of the Application, noting that the Development would make a significant contribution to Scotland's ambitious renewable energy generation and carbon dioxide reduction targets, whilst having the potential to contribute significantly to economic growth in the region in terms of local supply chain contributions and potential increases in tourism.
- 4.21 Fife Council had no comments to make on the EIA Addendum.
- 4.22 <u>Scottish Borders Council</u> did not object to the Development and noted that, whilst tip heights have increased by 11 metres, the number of turbines within the array

has been significantly reduced to 54. Given the distance has not altered at 30km plus, any slight perception of increased tip height is likely to be more than offset by the significant reduction in turbine numbers. This has been assessed through the Zone of Theoretical Visibility ("ZTV") information and Viewpoints 20 (Coldingham Moor) and 21 (St Abbs Head).

- 4.23 Scottish Borders Council did, however, recommend conditions regarding sequential pile driving and the implementation of mitigation measures to reduce impacts on the qualifying interests of the St Abb's Head to Fast Castle SPA be included as conditions of consent.
- 4.24 Scottish Borders Council had no comments on the EIA Addendum.
- 4.25 The AA considers the Development's impacts on SPA qualifying interests. Conditions have been placed upon the s.36 consent to mitigate the impacts highlighted by Scottish Borders Council, including the requirement to prepare, consult on and adhere to the Project Environmental Monitoring Programme ("PEMP"), Piling Strategy ("PS") and CMS.
- 4.26 <u>Historic Environment Scotland ("HES")</u> was content that the EIA Report provided sufficient information, and HES did not object to the Application. For the majority of the assessment with the exception of Bell Rock Lighthouse, HES was content to agree that the level of impacts on the setting of cultural heritage receptors is likely to be minor.
- 4.27 HES provided detailed comments on the assessment methodology utilised and the level of information provided within the EIA Report. HES stated that the definitions used for sensitivity of receptor are occasionally inconsistent, which may have the potential to affect the conclusions of the level of impact.
- 4.28 HES considered that the level of impact on the setting for the Bell Rock Lighthouse may have been underestimated, both in isolation and in-combination with other wind farm developments. HES considered that the impact may be higher than the 'minor' value assigned, for both setting and cumulative impacts, however, HES is content that this does not raise issues of national significance.
- 4.29 Following further discussion with the Company, HES stated that it was content with the justifications provided by the Company and that any differences in the conclusions reached by HES and the Company do not significantly alter the conclusions of the assessment.
- 4.30 HES had no comments on the EIA Addendum.
- 4.31 <u>Maritime & Coastguard Agency ("MCA"</u>) advised that detailed discussion with the Company regarding the required traffic surveys updates had taken place. The MCA accepted the original Navigation Risk Assessment ("NRA"), the updated EIA Report, the traffic validation study and MGN 543 checklist, as constituting an equivalent to a new NRA.

- 4.32 The MCA commented on the proposed layout design and requested that the final turbine layout design is subject to its approval. Further consideration of the layout design is required to mitigate risks to surface vessels (including rescue boats) and Search and Rescue ("SAR") aircraft operating within the Development area and to ensure all structures are aligned in straight rows and columns.
- 4.33 The MCA was satisfied that the recommendations within the Marine Guidance Note ("MGN") checklist had been adequately addressed and requested that a SAR checklist and updated Emergency Response Co-operation Plan ("ERCoP") be completed and implemented throughout the lifespan of the Development. MCA further requested that hydrographic surveys be undertaken to fulfil the requirements of the International Hydrographic Organisation Order 1a standard.
- 4.34 The MCA supported the use of safety zones throughout the lifespan of the Development, but stated that further detailed justification would be required for the implementation of a 50m operational safety zone.
- 4.35 The MCA stated that further work needs to be undertaken to define cable burial and protection options, particularly close to shore where impacts on navigable water depth may become significant. MCA stated that any consented cable protection works must ensure existing and future safe navigation is not compromised. The MCA would accept a maximum of 5% reduction in surrounding depth referenced to chart datum. The MCA stated that existing charted anchorage areas should be avoided.
- 4.36 The MCA advised that lighting and marking requirements would require further discussion with key stakeholders and provided further detail on the requirements for turbine lighting.
- 4.37 The MCA welcomed the list of embedded mitigation provided by the Company and stated that the Company should clarify whether they intend to install Automatic Identification System ("AIS") receivers and how they intend to communicate with vessels e.g. Very High Frequency ("VHF") radio systems should be utilised, and where the Development is wholly or partially outside effective shore based radio coverage, access should be provided to HM Coastguard.
- 4.38 The MCA stated that the cumulative impact assessment in the EIA Report provided a comprehensive overview. The MCA noted that appendix 11.2 of the EIA Report provides an indication of the rerouting that may occur as a result of the Development, and that the Company has recommended that marine traffic is monitored via AIS post-construction to ensure actual changes in shipping behaviour resulting from the Development can be fully understood. The MCA stated that this monitoring will serve to confirm deviated routeing and will also provide an indication of any vessel activity occurring within the Development area.
- 4.39 Finally, MCA advised that its preference would be for continuous construction operations, which are progressive across the Development with no opportunity for two separate areas to be constructed with a gap in the middle.

- 4.40 MCA had no comments on the EIA Addendum.
- 4.41 Conditions have been placed upon the s.36 consent to mitigate the impacts highlighted by MCA, including the requirement to prepare, consult on and adhere to the Emergency Response Co-operation Plan ("ERCoP"), Cable Plan ("CaP") CMS, DSLP, Navigational Safety Plan ("NSP") and LMP.
- 4.42 <u>Northern Lighthouse Board ("NLB")</u> stated that it requires the Company to establish a NSP and LMP, detailing the proposed marking and lighting for the lifespan of the Development. The NLB provided detailed comments on the lighting and marking requirements during the construction, operational and decommissioning phases of the Development, to be included within such plans.
- 4.43 NLB further highlighted that the lighting and marking requirements may require to be altered or amended according to other developments within the Forth and Tay.
- 4.44 The NLB provided further comments on the requirement to obtain a Statutory Sanction prior to the deployment of navigational marking and lighting equipment, promulgation of information regarding the nature and timescales of the Development and the requirement to inform the United Kingdom Hydrographic Office ("UKHO") of turbine installation locations, cable routes and cable landing points.
- 4.45 The NLB noted that an ERCoP will be required, detailing emergency response arrangements in the event of catastrophic failure and/or collision scenarios.
- 4.46 The NLB had no comments on the EIA Addendum.
- 4.47 Conditions have been placed on the s.36 consent to mitigate the impacts highlighted by the NLB, including the requirement to prepare, consult on and adhere to the ERCoP, NSP and LMP.
- 4.48 <u>Scottish Environment Protection Agency ("SEPA")</u> had no comments to make on the offshore element of this proposal and referred to their standing advice on marine consultations (<u>LUPS-GU13</u> Marine Scotland consultations: SEPA standing advice for Marine Scotland on marine licence consultations).
- 4.49 SEPA had no comments on the EIA Addendum.
- 4.50 Conditions relating to SEPA's standing advice have been placed on the s.36 consent, including the requirement to prepare, consult on and adhere to the Environmental Management Plan ("EMP") to minimise the risk of pollution.
- 4.51 <u>Scottish Natural Heritage ("SNH")</u> submitted an objection to the Development based on the grounds that it predicted adverse effects on the site integrity of the Forth Islands SPA, Fowlsheugh SPA and St Abb's Head to Fast Castle SPA for the Development in-combination with the existing consents for the other Forth and Tay Developments.

- 4.52 SNH initially advised that it was unable to provide advice on the razorbill and guillemot qualifying interests, due to the use of incorrect population counts within the population modelling.
- 4.53 The Company subsequently provided responses within the EIA Addendum to SNH's queries including the outputs of the population modelling undertaken with the correct population counts for razorbill and guillemot.
- 4.54 Following consideration of the EIA Addendum, SNH maintained its objection to the Development on the basis that it predicted significant adverse effects on the Forth Islands SPA (for gannet and kittiwake) and Fowlsheugh SPA, incombination with the existing consents for the Forth and Tay Developments. Further discussion took place between stakeholders on 18 September 2018 to discuss the issues further.
- 4.55 As there were some inconsistencies in the ornithology information provided by the Company to inform the AA, Scottish Ministers consulted SNH further on the information used to inform the AA which was taken from other sources. In addition SNH provided apportioning calculations for some species.
- 4.56 Following this consultation on the information being used to inform the AA, SNH maintained its objection, and advised that it believed there would be an adverse effect on the integrity from the Development in-combination with the existing consents from the other Forth and Tay Developments as follows:
 - Forth Islands SPA with respect to gannet, kittiwake and razorbill;
 - Fowlsheugh SPA with respect to kittiwake and razorbill; and
 - St Abb's Head to Fast Castle SPA with respect to kittiwake.
- 4.57 SNH advised that it believed that the greatest levels of impacts on marine mammals would occur during the construction phase of the Development. SNH welcomed the commitment to implement mitigation and consent conditions and provided further advice on these measures.
- 4.58 SNH maintained that the outputs of the model of the interim Population Consequences of Disturbance ("iPCoD") used by the Company were unreliable, due to known issues in the code and uncertainties regarding the input parameters. As it considered that these outputs could not be relied upon, SNH provided a qualitative assessment of the effects of Permanent Threshold Shift ("PTS") and disturbance from piling events (both single and concurrent events). SNH advised that if an updated model became available, the model should be rerun.
- 4.59 Following revisions to the iPCoD model, a workshop was held between Marine Scotland and SNH on 7 September 2018. This resulted in SNH running various agreed in-combination scenarios for bottlenose dolphin and grey seal to inform its advice. SNH provided outputs of this exercise and further advice on 26 September 2018.

- 4.60 SNH advised that the effect on the Moray Firth bottlenose dolphin population from the Development in-combination with the other Forth and Tay Developments, the Beatrice offshore wind farm, the Moray East offshore wind farms, the Moray West offshore wind farm proposal and the Aberdeen Harbour Expansion Project would not result in an adverse effect on site integrity of the Moray Firth SAC.
- 4.61 SNH advised that the Development in-combination with the other Forth and Tay Developments would not have an adverse effect on the integrity of the Isle of May SAC or the Berwickshire and Northumberland Coast SAC with respect to grey seal.
- 4.62 SNH also provided advice on landscape and visual impacts of the Development both in isolation and in-combination with the other Forth and Tay Developments. SNH advised that the individual and in-combination impact of the Development and as-consented Forth and Tay Developments would be the same and, therefore, its advice regarding significance of impacts for the Original Consent remained applicable. SNH advised that it believed the cumulative impact of the Development in-combination with the Forth and Tay Developments would be significant and adverse, in particular due to the increased height of the proposed Inch Cape Offshore Wind farm. SNH considered the worst-case scenarios assessed within the EIA Report.
- 4.63 SNH recommended that a number of conditions relating to the pre-construction, construction, operational and decommissioning phases should be attached to any consent granted in order to mitigate the impacts detailed above.
- 4.64 Conditions have been attached to the s.36 consent requiring the Company to prepare, consult on and adhere to EMP, PS, LMP, DSLP, Design Statement ("DS"), PEMP, Vessel Management Plan ("VMP"), DP, and participate in the Forth and Tay Regional Advisory Group ("FTRAG") to address the concerns outlined above.

5 Summary of non-statutory consultee responses

- 5.1 A number of other bodies and organisations were consulted on the EIA Report and EIA Addendum and provided responses.
- 5.2 <u>BT Radio Network Protection ("BT")</u> advised that the Development should not cause interference to BT's current and presently planned radio network.
- 5.3 <u>Chamber of Shipping ("CoS")</u> raised no objections and commended the useful summary in Appendix 11.3 of the EIA Report of the MGN 543 Checklist.
- 5.4 <u>Dunbar Fishermen's Association ("DFA"</u>) advised that the preparation and placement of cables would cause disruption to fishing grounds and that, should cable burial not be possible, this may result in permanent loss of fishing grounds. DFA stated that compensation would be necessary and that this would need to be considered further.

- 5.5 Conditions requiring the Company to prepare, consult on and adhere to a Fisheries Management and Mitigation Strategy ("FMMS") and to participate in the Forth and Tay Commercial Fisheries Working Group ("FTCFWG") have been attached to the s.36 consent to mitigate these concerns.
- 5.6 <u>Esk District Salmon Fishery Board ("Esk DSFB")</u> submitted an objection to the Development.
- 5.7 Esk DSFB stated that it does not agree with the conclusions of the EIA Report regarding the impacts on wild Atlantic salmon and sea trout populations. Esk DSFB strongly recommended that the Company be compelled to conduct pre-, peri- and post-construction monitoring of wild salmon and sea trout in and around the Development area to detect any changes in baseline conditions resulting from the Development. Esk DSFB raised concerns regarding potential incombination effects of the Forth and Tay Developments on wild salmonids.
- 5.8 Esk DSFB stated that it fully supports the comments and recommendations made by Fisheries Management Scotland ("FMS") in response to the Application. Esk DSFB stated that it would maintain its objection until an agreed and accepted monitoring and mitigation strategy is produced. Esk DSFB stated that it was keen to engage with the Company and other stakeholders to develop and deliver this strategy.
- 5.9 The Company provided further justification of the information used to support the preparation of the EIA Report and reiterated the commitment to the development of the PEMP, in consultation with FTRAG. No subsequent response was received from the Esk DSFB.
- 5.10 Conditions requiring the Company to participate in the FTRAG and prepare, consult on and implement the PEMP (which includes the requirement to monitor diadromous fish) and the requirement for an EMP have been attached to the s.36 consent.
- 5.11 Eyemouth Harbour Trust ("EHT") supported the granting of consent for this Development based on matters including: an otherwise unused resource being turned into a valuable commodity, having a generation capacity wholly in Scottish territorial waters to enhance the security of the national electricity supply, the contribution made by the Development to achievement of Scottish, UK and international targets for greenhouse gas emissions by 2050 and potential benefits to Scottish industry and coastal communities.
- 5.12 EHT stated that its concerns, regarding the local natural environment during the construction and operational phases of the Development, had been adequately addressed in the EIA Report. EHT welcomed the proposal to establish and maintain involvement with relevant statutory bodies and other local and national bodies, such as the involvement in the FTRAG and through the preparation and implementation of the PEMP.

- 5.13 EHT welcomed the consultation undertaken with local fisheries representatives during the preparation of the EIA Report and the proposal that these activities continue to be actively pursued in order to minimise intrusion to the fishing industry. Where this intrusion may impact adversely on the fishermen's income, EHT welcomed the Company's commitment to compensate for losses.
- 5.14 Conditions have been attached to the s.36 consent which will implement the commitments outlined in the EIA Report, including the requirement to prepare, consult on and implement the PEMP and to participate in the FTRAG.
- 5.15 <u>Forth District Salmon Fishery Board ("Forth DSFB")</u> raised concerns regarding potential impacts on migrating adult Atlantic salmon. Forth DSFB considered this receptor is of particularly high sensitivity as a large proportion of the east coast population pass through the Development area. Forth DSFB stated that uncontrolled negative effects will affect the whole of the east coast including the Rivers Tweed, Tay and South Esk.
- 5.16 Forth DSFB expressed its disappointment that many individual small-scale impacts were scoped out of the EIA Report when considered as standalone impacts. Forth DSFB stated that it is are disappointed that the cumulative impact of many small effects over an exceptionally large area, when the Development is considered together with the Forth and Tay Developments, has not been assessed.
- 5.17 Forth DSFB welcomed the commitment to participate in the FTRAG and development of an environmental monitoring plan for diadromous fish species. Forth DSFB stated that it is appropriate to use the Development (together with the Forth and Tay Developments) as an opportunity to further the understanding of salmonid movements and the impacts of offshore wind farms on salmonids. Forth DSFB advised that, should monitoring identify any negative impacts resulting from the Development, there should be a requirement for the developers to fund compensatory activities in the affected catchments to reduce and mitigate any further detriment to the Atlantic salmon and sea trout populations.
- 5.18 A response from the Company, along with MSS comments on consultation responses relating to diadromous fish were forwarded to Forth DSFB. The Company provided further justification of the information used to support the preparation of the EIA Report and reiterated the commitment to the development of the PEMP, in consultation with FTRAG. No subsequent response was received from the Forth DSFB.
- 5.19 Conditions have been added to the s.36 consent which will implement the commitment to participate in the FTRAG, as outlined in the EIA Report and include the requirement to prepare, consult on and implement the PEMP.
- 5.20 <u>Fisheries Management Scotland ("FMS"</u>) objected on the grounds that the Application contains insufficient information to make an adequate assessment of the potential effect on salmonid populations. FMS stated that there is a lack of knowledge of the migratory routes of smolts (Atlantic salmon and sea trout) and

the potential secondary impacts on increased predation of migratory fish by seals. FMS also emphasised the importance of the consenting process being flexible enough to take into account relevant information relating to migratory fish, as and when such information becomes available. FMS stated that it is therefore important that conditions are included which allow appropriate additional mitigation to be put in place, should negative impacts prove more likely than reported in the EIA Report.

- 5.21 FMS had a number of comments on appendix 7.2: Atlantic salmon Appraisal of Original EIA, around the use of the Development by seals and the potential for increased predation of migratory salmonids. FMS disagreed that Atlantic salmon present within the Development area are less at risk of being predated, as they are actively migrating and that sea trout and Atlantic salmon, as priority marine features have not been considered. FMS advised that, for these reasons, it does not consider NMP General Policy 9 to have been considered fully.
- 5.22 FMS emphasised that it does not wish to prevent or delay the Development unnecessarily, and it welcomed the opportunity to work with the Company, stakeholders and the Scottish Ministers to identify appropriate monitoring programmes. These monitoring programmes would allow more appropriate assessment of the acknowledged risks of the Development, and other proposed developments.
- 5.23 FMS considered that there is a clear and urgent need to fund, plan and start strategic research on the movement, abundance, swimming depth, feeding behaviour etc. of salmon and sea trout. FMS stated that such research would clearly feed into the potential mitigation measures to be implemented and the conditions under which such mitigation should be enacted.
- 5.24 FMS considered that the installation of fish counters, particularly in SAC rivers, to allow the real time understanding of adult salmon abundance (and other, newer technology) should be an immediate priority. FMS suggested that the installation of such counters, in close liaison with DSFBs and Marine Scotland Science ("MSS"), could potentially be considered as a condition of consent, where appropriate to local conditions.
- 5.25 FMS stated that offshore wind farm developers should be encouraged to work together to fund such strategic monitoring, including the on-going costs of operating such counters, in order to allow more certainty for all involved..
- 5.26 A response from the Company, along with MSS comments on consultation responses relating to diadromous fish were forwarded to FMS. No subsequent response was received from FMS.
- 5.27 Conditions have been added to the s.36 consent which will implement the commitment to participate in the FTRAG, as outlined in the EIA Report and include the requirement to prepare, consult on and implement the PEMP.

- 5.28 <u>Forth Ports ("FP")</u> advised that in light of the cumulative effect of the wind farms, a coastal vessel traffic service for the passing traffic may be required and should be considered further.
- 5.29 The Company advised that a coastal vessel traffic service for passing traffic has been considered and is not deemed necessary in the context of the range of proposed mitigation measures. Notwithstanding, the Company remains open to further discussions in the event of surrounding developments proceeding.
- 5.30 A condition requiring the preparation of a NSP and participation in the FTRAG have been attached to the s.36 consent, which will address these concerns.
- 5.31 <u>Inch Cape Offshore Limited ("ICOL")</u> stated that the approach taken by the Company to the cumulative assessment of seascape, landscape and visual impacts differs from the approach advised by SNH and Marine Scotland. ICOL also highlighted the approach taken by the Company in classifying the area as an area of open sea. ICOL recognised the difficulties encountered by the Company when preparing night time visualisations and noted that it would be beneficial for further strategic discussions regarding the preparation of night time visuals to assist with future applications.
- 5.32 ICOL highlighted that the fisheries datasets used to support the commercial fisheries assessment undertaken by the Company differ, thus resulting in the reporting of different effects by both ICOL and the Company in their respective EIA reports. ICOL stated its belief that the Company has overestimated the potential impacts on potting vessels and provided details of other datasets which could provide useful context when assessing the potential impacts on commercial fisheries. Further, ICOL stated that, in its opinion, the Company has overestimated the impacts on creelers as a result of displacement of nephrops vessels during the cable installation.
- 5.33 ICOL further stated that the definitions of sensitivity used in the marine mammal assessment, when considering the impacts of pile driving noise, has resulted in the reporting of reduced impacts for all species of marine mammals (other than bottlenose dolphin and harbour seal). ICOL also noted the use of the National Oceanic and Atmospheric Administration criteria ("NOAA") alone,¹ without the use of Southall (2007)² criteria to provide context, as advised at scoping, may have an impact on the numbers of animals reported as being likely to be impacted. ICOL further highlighted that the use of the uncorrected code when running the iPCoD model will have influence on the reported outputs. Further,

 ¹ NOAA (2016) Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing: Underwater Acoustic Thresholds for Onset of Permanent and Temporary Threshold Shifts. (U.S. Dept. of Commer., NOAA. NOAA Technical Memorandum NMFS-OPR-55, 178 p. National Marine Fisheries Service).
 ² Southall, B., Bowles, A., Ellison, W., Finneran, J., Gentry, Ro., Greene Jr., C., Kastak, D., Ketten, D., Miller, J., Nachtigall, P., Richardson, W., Thomas, J. and Tyack, P. (2007). Marine Mammal Noise Exposure Criteria: Initial Scientific recommendations. (Aquatic Mammals. 33(4): 411-521). ICOL noted that the summary data from the Brandt et al (2016)³ dose response curve has been utilised and stated that, therefore, the results would be less conservative than the data available from the Beatrice Offshore Wind Farm development.

- 5.34 Regarding ornithology, ICOL noted that the EIA Report does not provide clear detail on how effects have been apportioned amongst SPA and non-SPA colonies. ICOL believes that the assessment has been carried out in such a way that the impacts on SPA populations may have been overestimated.
- 5.35 ICOL further noted that a differing approach had been taken by the Company to the consideration of the Transponder Mandatory Zone ("TMZ") and should any improved technical mitigation measures be identified and implemented, they must be cost effective, time bound and subject to the usual MOD approach to mitigation measures.
- 5.36 Further consultation has taken place with SNH regarding the ornithology and marine mammal issues identified and conditions have been attached to the s.36 consent which require the Company to participate in the FTRAG and FTCFWG, which will help to address the issues raised above.
- 5.37 <u>The Ministry of Defence ("MOD")</u> objected to the Development, citing unacceptable interference to the Air Traffic Control ("ATC") radar used by Leuchars Airfield (as radar may be desensitised due to the proximity of the Development). Furthermore, the MOD noted that the Development would adversely affect the frequency of the provision of Traffic Service and Deconfliction Service in the vicinity of the proposed wind farm, air traffic density in the vicinity of the proposed wind farm, the performance of the radar, the complexity of the ATC task, the workload of controllers and the position of the Development in relation to handover points.
- 5.38 MOD highlighted that the agreement to the TMZ as a mitigation measure for the Original Consent was a temporary measure. MOD highlighted that it requires an enduring technical solution to mitigate potential impacts. MOD stated that it would welcome clarification from the Company regarding any potential mitigation measures for the Development.
- 5.39 MOD also objected on grounds of unacceptable interference to the Air Defence ("AD") radar at both Remote Radar Head ("RRH") Brizlee Wood and RRH Buchan, due to detectability of turbines. Further, visibility of the turbines at both locations would exceed the cumulative effect thresholds.
- 5.40 MOD advised that research into technical mitigation solutions is currently ongoing and the Company may wish to investigate these further. MOD requested

³ Brandt et al. (2016) Effects of offshore pile driving on harbour porpoise abundance in the German Bight. Assessment of Noise Effects. Final Report. Prepared for Offshore Forum Windenergie. Available at: <u>http://bioconsult-sh.de/site/assets/files/1573/1573.pdf</u> (Last accessed 01/11/2018)

that the turbines are fitted with aviation lighting in accordance with Article 219 of the Air Navigation Order, should the stated issues be overcome.

- 5.41 Following further discussion with the Company, MOD removed its outstanding objections on 20 August 2018 in relation to interference at RRH Brizlee Wood and RRH Buchan Air Defence radar. MOD advised that the impacts on the ATC radar at Leuchars Airfield could be effectively mitigated through the preparation and implementation of an Air Traffic Control Radar Mitigation Scheme.
- 5.42 Conditions requiring the Company to prepare, consult on and adhere to an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme") has been attached to the s.36 consent to mitigate these concerns.
- 5.43 <u>NATS Safeguarding ("NATS")</u> advised that the Development does not conflict with its safeguarding criteria. Accordingly, NATS (En Route) Public Limited Company ("NERL") had no safeguarding objection to the proposal.
- 5.44 <u>River Tweed Commission ("RTC")</u> advised that the EIA Report has not taken into account the large number of east coast salmon which travel across the North Sea in line with south Northumberland, and then travel northwards up the east coast to reach their Scottish natal rivers.
- 5.45 RTC advised that salmon passing through the Development area are vulnerable to seal predation and new information has shown that the bases of wind turbines can act as artificial reefs, attracting and thus altering the foraging patterns of seals. RTC considered that the influence of underwater structures on predation of salmon migration has not been fully considered in the EIA Report.
- 5.46 RTC considered that some compensatory support should be given to those rivers which will suffer as a consequence of greater predation on returning stocks, should further data support that this is the case.
- 5.47 A response from the Company, along with MSS comments on consultation responses relating to diadromous fish, was forwarded to RTC. RTC subsequently confirmed that the information provided by the Company does not alter its opinion regarding the potential impacts on seal predation and their request for further monitoring of potential impacts on salmon.
- 5.48 Conditions have been attached to the s.36 consent which will implement the commitments outlined in the EIA Report, including the requirement for the PEMP, EMP, PS and to participate in the FTRAG.
- 5.49 <u>Royal Society for the Protection of Birds Scotland ("RSPB Scotland")</u> submitted an objection to the proposed Development and stated that it strongly disagrees with the conclusions reported in the EIA Report. RSPB Scotland stated that the impacts of the worst-case in-combination scenario, as presented in the EIA Report, are wholly unacceptable and would result in significant and irreversible impacts to the region's seabird populations (particularly northern gannet, blacklegged kittiwake, Atlantic puffin, razorbill and common guillemot).

- 5.50 RSPB Scotland recognised that the reported impacts represent a reduction in the impacts reported for the as-consented Forth and Tay Developments (both in isolation and in-combination). RSPB Scotland, however, stated that the impacts reported in the EIA Report remain significant and will result in adverse effects on the site integrity of the relevant SPAs (in particular in respect of the kittiwake qualifying interest of the Fowlsheugh SPA and Firth of Forth SPA). RSPB Scotland provided detailed comments on the methods and outputs of the assessment and stated that it was not possible, based on the information provided, to reach a full description and conclusion of the likely significant effects of the Development.
- 5.51 RSPB Scotland also raised concerns regarding the absence of any mitigation or offsetting measures within the EIA Report and stated, that should any consent be granted, a strategic approach should be taken to the aim of the delivering maximum generating capacity for least environmental effect.
- 5.52 A response from the Company was forwarded to RSPB Scotland. RSPB Scotland subsequently confirmed that the information provided did not alter its position. RSPB Scotland stated the scale of impacts are a limiting factor to the Development and, on receipt of the 2018 applications for the Inch Cape, Seagreen Alpha and Seagreen Bravo offshore wind farms, RSPB Scotland will consider its position further.
- 5.53 RSPB Scotland submitted a response to the EIA Addendum and maintained its objection to the Development. RSPB Scotland provided detailed comment on discrepancies identified within the information provided, in particular the revised assessment of the in-combination impacts on the razorbill and guillemot qualifying interests of the Fowlsheugh SPA and Forth Islands SPA. RSPB Scotland stated that the information provided in the EIA Addendum added further weight to its initial concerns.
- 5.54 Conditions have been attached to the s.36 consent requiring the Company to prepare, consult on and adhere to the PEMP, EMP, CMS, and to participate in the FTRAG, to contribute to improved understanding of the impacts of the Development, both in isolation and in-combination, on seabird populations.
- 5.55 <u>Royal Yachting Association Scotland ("RYA")</u> agreed with the points raised in chapter 11 of the EIA Report. in relation to recreational vessels. RYA advised that it is likely that approximately four times the amount of recreational vessels may be present in the area when compared to the number presented via AIS data. RYA, however, advised that this difference would not alter the reported effects.
- 5.56 <u>Seagreen Wind Energy Limited ("Seagreen")</u> commented that the cumulative assessments for all receptors do not take account of the updated design envelope for the Seagreen Alpha and Seagreen Bravo Offshore Wind Farms. Further, Seagreen advised that there are differences in the underlying data used to support some of the assessments which will result in differing outputs. Seagreen highlighted a discrepancy in the marine mammal assessment which predicts up to 97 harbour porpoise will be exposed to Permanent Threshold Shift

("PTS"). Seagreen's assessment predicts that no harbour porpoise will be exposed to PTS. Seagreen further advised that its predicted disturbance numbers for some marine mammal species are significantly lower than those predicted by the Company.

- 5.57 Seagreen also raised concerns regarding the effects estimated by the Company on the displacement and collision impacts from the Seagreen project and how these were apportioned.
- 5.58 Information from other sources has been used by Scottish Ministers to inform the AA for marine mammals and seabirds for the in-combination assessment with the Seagreen development.
- 5.59 <u>Scottish Fishermen's Federation ("SFF")</u> submitted an objection to the Development. SFF objected to statements made within the EIA Report regarding decommissioning (including the proposal that the subsea structures and cables are to be left in situ), the use of the term "overfishing" (and the negative implications of this term) and the projected timescale for the installation of the OEC, which SFF stated was unrealistic and therefore, the impacts on fishing activities during the installation period had not been fully considered. SFF further advised that, in its experience, fishing would not automatically resume following completion of the real time impacts and consideration of mitigation/compensation measures, particularly for the nephrops fleet, is required.
- 5.60 SFF advised that it expects the scallop industry to be compensated, due to implications that continuous closures may take place over the three years of construction. The SFF advised that it considers the Company has insufficient understanding that mobile and static fisheries and mobile fishing operations may be seriously restricted post-construction. SFF highlighted that disturbance payments are intended for specific vessels and, therefore, do not replace the need to mitigate the impacts on the wider fleet and onshore fisheries supply chains (including potential impacts on food security) arising from the Development.
- 5.61 SFF requested to be consulted on all relevant plans to include the Commercial Fisheries Management Plan ("CFMS" now known as FMMS), CaP, require the Company to participate in the FTCFWG and to be involved in the monitoring of the impacts of the Development on commercial fisheries receptors.
- 5.62 A response from the Company was forwarded to SFF addressing the comments detailed above. The Company stated that arrangements for decommissioning would be addressed through the development of a DP post-consent and SFF advised that this measure would satisfactorily address its concerns.
- 5.63 The Company stated that ongoing monitoring of specific target groups will be undertaken through the PEMP as appropriate. The Company advised that the local fishing community would be kept informed of cable installation works. The Company also stated a commitment to ensuring the OEC is safe and available for fishing as soon as reasonably practicable. The SFF advised it expects

displaced vessels of all metiers to be compensated in some way, and that the monitoring of commercial species across the Development area, including the OEC route, will go some way to address this.

- 5.64 SFF stated that the Company's response regarding continuation of scallop fishing during the operational phase of the Development does not accurately reflect the impacts of displacement. SFF emphasised that monitoring of commercial species, including scallops, is essential to measure the impacts on this receptor. SFF stated that the Company should invest in trials with real fishing vessels to prove the proposition that safe fishing can occur within the Development area.
- 5.65 SFF maintained that the embedded mitigation included within the EIA Report is not intended to mitigate the impacts on fisheries receptors, but rather to mitigate health and safety concerns. SFF stated that the information and response provided by the Company does not reflect the need for the CFMS (now known as the FMMS) to be agreed by the FTCFWG. Further still, SFF stated that the response provided did not consider the potential impacts on scallop and nephrops fisheries and therefore, monitoring and compensation measures for these receptors require further consideration. SFF stated that the EIA Report did not include consideration of the potential negative socio-economic impacts resulting from impacts on commercial fisheries receptors.
- 5.66 Conditions have been attached to the s.36 consent which require the Company to prepare, consult on and adhere to the terms of a DP and CaP. Further, the Company will be required to prepare and deliver a PEMP to monitor the impacts of the Development on a range of receptors, including commercial fisheries receptors. The Company is required to prepare, consult on and adhere to the terms of a FMMS. The SFF will be consulted on all relevant post-consent plans.
- 5.67 Sport Scotland ("SS") had no comments to make on the Application.
- 5.68 <u>Scottish Seabird Centre ("SSC")</u> raised concerns regarding potential seabird fatalities in an area of international significance for seabird colonies and where wildlife tourism has become established as an important factor in the local economy, delivering important socio-economic benefits.
- 5.69 A response from the Company was forwarded to SSC. SSC welcomed the actions being taken to reduce the potential detrimental environmental impacts of this Development and that the Company will continue to consult with Marine Scotland, SNH and RSPB Scotland in order to prepare the PEMP.
- 5.70 SSC reiterated its concerns regarding seabird fatalities and the need to minimise detrimental environmental impacts, whilst identifying and delivering positive outcomes for the marine environment and wildlife, wherever possible.
- 5.71 Conditions have been attached to the s.36 consent, including the requirement to prepare, consult on and implement the PEMP and to participate in the FTRAG.

- 5.72 <u>Tay District Salmon Fishery Board ("Tay DSFB"</u>) submitted an objection to the Development. Tay DSFB raised concerns regarding potential negative impacts on Atlantic salmon and sea trout arising from the Development. Tay DSFB expressed its support for the consultation response submitted by FMS.
- 5.73 Tay DSFB requested that, should any consent be granted, conditions should be attached regarding monitoring and mitigation measures and expressed its willingness to participate in the development of such measures. Tay DSFB stated that it will maintain its objection until an agreed and accepted monitoring and mitigation strategy is produced
- 5.74 A response from the Company, along with MSS comments on consultation responses relating to diadromous fish were forwarded to Tay DSFB. No subsequent response was received from Tay DSFB.
- 5.75 Conditions have been attached to the s.36 consent which will implement the commitment to participate in the FTRAG, as outlined in the EIA Report and include the requirement to prepare, consult on and implement the PEMP.
- 5.76 <u>Transport Scotland ("TS")</u> advised that conditions, requiring the preparation and approval of a Construction Traffic Management Plan ("CTMP") and Traffic and Transportation Plan ("TTP") should be considered for any consent granted to mitigate potential impacts on the trunk road network and any impacts arising from road based traffic and transportation associated with the Development.
- 5.77 TS noted that no access, traffic and transport section had been included within the EIA Report. However, TS acknowledged that the EIA Report states that this information has not been included as no port has been selected. TS therefore considered it reasonable that the TTP is not prepared until the port/ports has/have been selected.
- 5.78 TS noted that the EIA Report states that traffic, transport and access matters relating to onshore works are dealt with under the onshore planning regime. TS stated that the requirements and conditions included in any associated onshore planning permission should be considered during the preparation of the TTP.
- 5.79 A condition has been attached to the s.36 consent requiring the Company to prepare, consult on and adhere to a CTMP to mitigate the impacts identified. This plan also incorporates the TTP requirements.
- 5.80 <u>Whale and Dolphin Conservation ("WDC"</u>) advised that it had concerns about the impacts of the Development, both in isolation and in-combination with other developments, on cetaceans, in particular harbour porpoise.
- 5.81 WDC reiterated its serious concerns regarding the current levels of scientific uncertainty regarding the impacts, and potential negative impacts, which renewable energy developments, both individually and cumulatively, may have on cetaceans and seals within Scottish waters.

- 5.82 WDC strongly urged that the Company considers alternative methods to pile driving, however, if pile driving is to be utilised, WDC stated that there should be a commitment to noise mitigation and monitoring during the entirety of the construction phase to assess if the conclusions of the noise modelling assessment reported in the EIA Report are accurate. WDC further stated that pre-construction monitoring should be undertaken. WDC encourages further consideration of the noise abatement technologies recommended in Faulkner et al. (2018)⁴ to mitigate the impacts of underwater noise.
- 5.83 WDC stated that marine mammal observers ("MMO") and passive acoustic monitoring ("PAM") should be utilised throughout the construction phase as mitigation. WDC recognised the use of soft-start as a sensible mitigation measure and requested that the use of the soft-start procedure should be monitored to establish its effectiveness.
- 5.84 WDC strongly urged that Acoustic Deterrent Devices ("ADD") are not utilised, due to its concerns regarding the impacts of the additional noise generated on harbour porpoise and other species. WDC stated that an European Protected Species ("EPS") licence would be required if ADD were to be utilised.
- 5.85 WDC requested to be involved in the development of the PS, VMP, EMP and PEMP and other such post-consent plans.
- 5.86 A response from the Company was forwarded to WDC addressing the comments detailed above. No subsequent response was received from WDC.
- 5.87 Conditions have been attached to the s.36 consent requiring that the Company prepare, consult on and adhere to a PS, VMP, EMP and PEMP. Conditions have been attached to the s.36 consent requiring the Company to participate in the FTRAG.

6 Representations from other organisations and members of the public

- 6.1 Four public representations were received, all of which objected to the Development.
- 6.2 One public representation felt that the Development required much larger public awareness and publicity in East Lothian, Fife and the Scottish Borders and that any positive economic impacts would not benefit East Lothian.
- 6.3 Two of the public representations objected on the grounds of adverse impacts to visual amenity, citing adverse effects on the views to sea from viewpoints in East Lothian and Fife East Lothian, with attendant impacts on the tourism industry.
- 6.4 The fourth public representation objected on the basis that the Development has the potential to damage the ecosystem and food stocks in the Firth of Forth and

⁴ Faulkner, R.C., Farcas, A. and Merchant, N.D. 2018. *Guiding principles for assessing the impact of underwater noise.* Journal of Applied Ecology 1-6. DOI: 10.1111/1365-2664.13161

bird breeding sites at the Bass Rock and Isle of May and that this would exceed the community benefits of the energy generated by the Development.

6.5 The information has been passed to the Company. The points raised are not considered to be determinative, but have been taken into consideration in the final decision.

7 Advice from 3rd Parties

7.1 MS-LOT sought advice from MSS on the Application, EIA Addendum and on consultation responses. MSS provided advice as follows and also provided expertise in completing the AA.

Marine mammals

- 7.2 MSS recognised the precaution in the marine mammal assessment and also the issues identified with the version of the iPCoD model used to inform the assessment.
- 7.3 MSS took part in a workshop with SNH on 7 September 2018 to agree a set of scenarios to run through the revised version of iPCoD for bottlenose dolphin and grey seal, and reviewed the report provided by SNH. MSS concurred with the SNH advice that the Development, in-combination with the Forth and Tay Developments (and in the case of bottlenose dolphin with the Moray Firth wind farms and AHEP), would not adversely affect the integrity of the SACs concerned.
- 7.4 MSS agreed with the mitigation measures outlined in the SNH response of 11 May 2018.

<u>Ornithology</u>

- 7.5 MSS raised several queries following its consideration of the ornithology chapter of the EIA Report, the HRA Report and the relevant appendices. MSS highlighted inconsistencies in the information provided by the Company. This, along with the concerns raised by SNH led to the Company submitting an EIA Addendum.
- 7.6 MSS advised that there is increasing evidence to suggest that kittiwake may be less susceptible to displacement than originally thought, with SNH advising that displacement of kittiwake did not need to be considered by the Company. The displacement rate of 30% assumed for kittiwake is therefore likely to be overly precautionary.
- 7.7 In its advice, MSS highlighted the new Seabird Offshore Renewable Development ("SeabORD") tool for estimating displacement effects.⁵ This tool

⁵ SeaBORD: A tool to estimate the fate of birds displaced by offshore renewable developments. Available here: <u>https://www2.gov.scot/Topics/marine/marineenergy/mre/current/SeabORD</u> (Last accessed 01/11/2018) was not available at the time the Application was submitted, and MSS advised that it may be some time before it can be used in casework, as there are a number of ways in which it can be applied and agreement will need to be reached by the relevant parties.

7.8 MSS advised that displacement effects using the matrix approach as advised in the scoping opinion are less that those estimated in 2014 when the Searle et al 2014 model was used.⁶ Preliminary examination of SeabORD also suggests that using the "shortest route method" the displacement effects would be less than those estimated in 2014.

Commercial Fisheries

- 7.9 MSS reviewed the Application and the SFF response. MSS considered that the SFF suggestion of a monitoring programme for validating impacts on commercial fisheries was appropriate. In particular, this would help inform the impacts on scallop dredgers and concerns raised by the SFF that the Development area would be incompatible with scallop dredging after construction.
- 7.10 MSS advised that the Company should provide clarity on the installation time for their cables. MSS advised that over-trawlability surveys would help inform whether it is safe for trawling to recommence along the cable route once installation is complete. However these may not be required if the Company can provide evidence that the installation of the cables has not left any fishing hazards.

Diadromous Fish

- 7.11 The scoping opinion advised that the Company should review the updated published information relating to the behaviour of diadromous fish to ensure that the conclusions of no significant effects in relation to the 2014 Application remain valid. The justification to scope out diadromous fish from the EIA was provided by the Company in Appendix 7.2 of the EIA Report. Despite the receptor being scoped out, concerns were raised through the consultation by several bodies.
- 7.12 Concerns were raised by consultees relating to the unknown effects of wind farms on diadromous species and lack of knowledge on migration routes. MSS advised that there has been substantial progress in research relating to movement, abundance, swimming depth, feeding behaviour etc. of salmon and sea trout. In general concerns about actual impacts caused by wind farm developments have been reduced.
- 7.13 MSS confirmed that salmon smolts and adults are likely to pass though the Development area and that sea trout will also occur in the area. MSS advised that information on the likely distribution of sea trout, is currently lagging behind

⁶ Searle, K., Mobbs, D., Butler, A., Bogdanova, M., Freeman, S., Wanless, S. & Daunt, F. (2014) Population consequences of displacement from proposed offshore wind energy developments for seabirds breeding at Scottish SPAs (CR/2012/03). (Final Report to Marine Scotland Science).

salmon smolts and adults, although there has again been progress on many topics.

7.14 MSS advised that turbine bases can provide shelter and potentially new feeding opportunities which might concentrate potential prey fish and/or predators under some situations. However, MSS is not aware of any evidence to date that migrating smolts or adult salmon gather at turbine bases. The view of MSS is that smolts or adult salmon while they were still offshore will be actively migrating and following cues taking them away from foundation bases. Therefore MSS does not consider that concerns raised by consultees that salmon may be more at risk from predation in the Development area to be a major issue.

Socio-economics

- 7.15 The Marine Analytical Unit ("MAU") reviewed the Application and found that the general methodological approach was sound and accounted for uncertainty about the economic content of the Development that will be realised in Scotland or in the local study area.
- 7.16 MAU raised some points regarding the economic multipliers that had been used and advised that as UK input/output tables had been used this could overstate or understate the indirect impact in Scotland.
- 7.17 MAU advised that as the displacement of other economic activity had not been assessed this could overstate the economic (GVA and employment) impacts of the Development.
- 7.18 MAU advised that socioeconomic analysis is exclusively focused on economic outcomes and does not consider potential impacts on social variables like health, education, access to services, housing and crime.
- 7.19 Scottish Ministers have considered the advice provided by MSS in reaching their decision.

8 Public Local Inquiry ("PLI")

8.1 Scottish Ministers did not require PLI to be held.

9 The Scottish Ministers Considerations

Environmental Matters

9.1 Scottish Ministers are satisfied that an environmental impact assessment has been carried out. Environmental information including the EIA Report and EIA Addendum has been produced and the applicable procedures regarding publicity and consultation laid down in regulations have been followed. The environmental impacts of the Development have been assessed and the Scottish Ministers have taken the environmental information into account when reaching their decision.

- 9.2 Scottish Ministers are satisfied that the Company, when formulating its proposal to construct the generating station, had regard to the desirability of preserving natural beauty, of conserving flora, fauna, and geological and physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic, or archaeological interest.
- 9.3 Scottish Ministers have had regard to the matters mentioned in the previous paragraph and the extent to which the Company has done what it reasonably could to mitigate the effects of the Development on those features, and are satisfied that the Company has done what it reasonably could with regard to mitigation.
- 9.4 Scottish Ministers have considered fully and carefully the Application, EIA Report, HRA Report, the EIA Addendum, all relevant responses from consultees, MSS and third party representations received.

Main Determinative Issues

- 9.5 Scottish Ministers, having taken account of all relevant information, consider that the main determining issues are:
 - The extent to which the Development accords with and is supported by Scottish Government policy and the terms of the NMP and relevant local development plans;
 - Renewable energy generation and associated policy benefits;
 - Economic impacts; and
 - The significant effects of the Development on the environment, which are in summary:
 - Impacts on marine mammals and seabirds including impacts on European sites and European offshore marine sites;
 - Impacts on diadromous fish;
 - Impacts on commercial fisheries;
 - Impacts on cultural heritage;
 - Impacts on seascape, landscape and visual amenity; and
 - Impacts on aviation and defence.

Scottish Government Policy Context

- 9.6 The NMP, formally adopted in 2015, and recently reviewed in Spring 2018, provides a comprehensive statutory planning framework for all activities out to 200 nm. Scottish Ministers must take authorisation and enforcement decisions, which affect the marine environment, in accordance with the NMP.
- 9.7 Of particular relevance to this proposal are:
 - Chapter 4 policies 'GEN 1-21', which guide all development proposals;
 - Chapter 6 Sea Fisheries, policies 'FISHERIES 1-3';
 - Chapter 8 Wild Salmon and Diadromous Fish, policies 'WILD FISH 1 and 3';

- Chapter 11 Offshore Wind and Marine Renewable Energy, policies 'RENEWABLES 1, 3-10';
- Chapter 12 Recreation and Tourism, policies 'REC & TOURISM 2 and 6';
- Chapter 13 Shipping, Ports, Harbours and Ferries, policies 'TRANSPORT 1 and 6';
- Chapter 14 Submarine Cables, policies 'CABLES 1, 2 and 5'; and
- Chapter 15 Defence, policy 'DEFENCE 1'.
- 9.8 The Development will contribute to Scotland's renewable energy targets and will provide wider benefits to the offshore wind industry which are reflected within Scotland's Offshore Wind Route Map and the National Renewables Infrastructure Plan. Offshore wind is seen as an integral element in Scotland's contribution towards action on climate change. The development of offshore wind also represents one of the biggest opportunities for sustainable economic growth in Scotland for a generation. Scotland's ports and harbours present viable locations to service the associated construction and maintenance activities for offshore renewable energy.
- 9.9 Scottish Planning Policy 2014 ("SPP") sets out Scottish Government's planning policy on renewable energy development. Efficient supply of low carbon and low cost heat and generation of heat and electricity from renewable energy sources are vital to reducing greenhouse gas emissions and can create significant opportunities for communities. Renewable energy also presents a significant opportunity for associated development, investment and growth of the supply chain, particularly for ports and harbours identified in the National Renewables Infrastructure Plan. Communities can also gain new opportunities from increased local ownership and associated benefits.
- 9.10 Whilst the SPP makes clear that the criteria against which applications should be assessed will vary depending upon the scale of the development and its relationship to the characteristics of the surrounding area, it states that these are likely to include impacts on landscapes and the historic environment, ecology (including birds, mammals and fish), biodiversity and nature conservation; the water environment; communities; aviation; telecommunications; noise; shadow flicker and any cumulative impacts that are likely to arise. It also makes clear that the scope for the development to contribute to national or local economic development should be a material consideration when considering an application.
- 9.11 Scotland's National Planning Framework 3 ("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. It also identifies targets to source 11% of heat demand and 10% of transport fuels from renewable sources by 2020.

9.12 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.

Impacts of the development on the environment

Impacts on marine mammals, seabirds, European sites and European offshore marine sites

- 9.13 The Conservation of Habitats and Species Regulations 2017 and the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) ("the Habitats Regulations") require Scottish Ministers to consider whether the proposed Development would be likely to have a significant effect on a European site or European offshore marine site (either alone or in-combination with other plans or projects), as defined in the Habitats Regulations.
- 9.14 Owing to the view of SNH that the Development is likely to have a significant effect on the qualifying interests of Forth Islands SPA, Fowlsheugh SPA, St Abb's Head to Fast Castle SPA and Buchan Ness to Collieston SPA, Moray Firth SAC, Tay and Eden Estuary SAC, Berwickshire and North Northumberland Coast SAC and Isle of May SAC, and the Outer Firth of Forth and St Andrews Bay Complex pSPA, Scottish Ministers, as the "competent authority", were required to carry out an AA.
- 9.15 For marine mammal species the main impact of the Development is from noise during construction due to piling operations, and in particular in-combination impacts with the other Forth and Tay Developments and wind farms in the Moray Firth.
- 9.16 For the SAC qualifying interests, namely, bottlenose dolphin, grey seal and harbour seal, SNH advised that there would be no adverse effect on the integrity of the above SACs. The Appropriate Assessment ("AA") considered the conservation objectives, the populations at the sites, the predicted levels of effect and population consequences, the fact that the effects are less than in those associated with the Original Consent, the precaution in the assessment methods and the advice from SNH. Scottish Ministers concluded that the Development, subject to the appliance of conditions, would not adversely affect the site integrity of the Moray Firth SAC, Tay and Eden Estuary SAC, Berwickshire and North Northumberland Coast SAC and Isle of May SAC either alone or in-combination with the other projects. The AA provides detail on the noise propagation modelling and the population modelling undertaken to inform the assessment.
- 9.17 In addition to the SAC qualifying interests above, other cetaceans (which are also European protected species) could be affected by the Development, in particular harbour porpoise and minke whale. These species were considered in the EIA Report. In its response of 11 May 2018, SNH advised that for both these species there would be no impact on favourable conservation status, subject to conditions being attached to the consent.

- 9.18 WDC raised some concerns in relation to impacts on marine mammals from construction, particularly from pile driving. WDC requested to be consulted on relevant post consent plans to inform the mitigation further.
- 9.19 For bird species the main impacts come from either collision and/or displacement and barrier effects. SNH considered that there would be likely significant effect as follows:
 - Forth Islands SPA gannet, kittiwake, herring gull, puffin, guillemot and razorbill;
 - Fowlsheugh SPA kittiwake, herring gull, guillemot and razorbill;
 - St Abb's Head to Fast Castle SPA kittiwake, herring gull, guillemot and razorbill;
 - Buchan Ness to Collieston Coast SPA kittiwake, herring gull, guillemot; and
 - Outer Firth of Forth and St Andrews Bay Complex pSPA gannet, kittiwake, herring gull, puffin, guillemot, razorbill, little gull, common gull and black-headed gull.
- 9.20 Advice was received from SNH on 11 May 2018 and 7 September 2018, on the information provided by the Company, objecting to the Development. This was due to SNH's view that the Development in-combination with the 2014 consents for Inch Cape and Seagreen Alpha and Bravo offshore wind farms would lead to an adverse effect on the Forth Islands SPA with respect to gannet and kittiwake and Fowlsheugh SPA with respect to kittiwake. SNH also raised concerns regarding the razorbill assessment methodology.
- 9.21 SNH did, however, advise that the impacts from the Development would be less than those associated with the Original Consent. A meeting was held between the Company, SNH, MS-LOT and MSS on 18 September 2018 to discuss the ornithology assessment and clarity was provided by the Company on the razorbill assessment.
- 9.22 As there were some inconsistencies in the information provided in the EIA Report, HRA Report and EIA addendum in relation to ornithology, Scottish Ministers also used information from other sources to inform the AA, and therefore consulted SNH further.
- 9.23 SNH responded on 5 and 8 October 2018, and advised that their previous position in relation to kittiwake and gannet at Forth Islands SPA and Fowlsheugh SPA still stood. SNH advised that it considered that there would also be an adverse effect on the integrity of the Forth Islands SPA and Fowlsheugh SPA with respect to razorbill, and an adverse effect on St Abb's Head to Fast Castle SPA with respect to kittiwake, from the Development in-combination with the 2014 consents for Inch Cape and Seagreen Alpha and Bravo offshore wind farms.
- 9.24 RSPB Scotland also objected to the Development both in isolation and incombination with the other Forth and Tay Developments due to unacceptable impacts on SPAs. RSPB Scotland did however recognise that the Development

would have less impacts than the Original Consent. As the information used to inform the AA came from other sources, and not solely from information provided by the Company, this information was shared with RSPB Scotland on 10 October 2018.

- 9.25 The AA considered the conservation objectives, the populations at the sites, the predicted levels of effect and population consequences, the fact that the effects are less than in those associated with the Original Consent, the precaution in the assessment methods and the advice from SNH. Scottish Ministers concluded that that , subject to the appliance of conditions, the Development will not adversely affect the site integrity of the Forth Islands SPA, Fowlsheugh SPA, St Abb's Head to Fast Castle SPA and Buchan Ness to Collieston SPA either alone or in-combination with other projects. Full details of the assessment methodology is provided in the AA.
- 9.26 In reaching their conclusions in the AA Scottish Ministers have given considerable weight to SNH advice. The methods advised by SNH through scoping, and additional information requested by SNH, have been fully incorporated into the assessment. As such, divergence from SNH advice is limited to differing conclusions for gannet at Forth Islands SPA, kittiwake at Forth Islands SPA, Fowlsheugh SPA, and St Abb's Head to Fast Castle SPA and razorbill at Forth Islands SPA and Fowlsheugh SPA. In reaching a different conclusion from SNH in the AA, Scottish Ministers note that SNH advice on the level of impact being adverse to site integrity is a subjective opinion. In reaching their own conclusions, Scottish Ministers have taken proper account of the entire context of the AA, in particular its highly precautionary assumptions, which make it very unlikely the number of impacted individuals will be as large as the values presented in the AA. For these reasons Scottish Ministers consider the levels of assessed impact to be reasonable and are convinced there will be no adverse effect on site integrity of any of the SACs, SPAs or the pSPA considered in the AA.
- 9.27 In Scotland, Scottish Ministers are currently in the process of identifying a suite of new marine SPAs. In 2014, advice was received from the Statutory Nature Conservation Bodies ("SNCBs") on the sites most suitable for designation and at this stage they became draft SPAs ("dSPAs"). Once Scottish Ministers have agreed the case for a dSPA to be the subject of a public consultation, the proposal is given the status of proposed SPA ("pSPA") and receives policy protection, which effectively puts such sites in the same position as designated sites, from that point forward until a decision on classification of the site is made. This policy protection for pSPAs is provided by Scottish Planning Policy (paragraph 210), the UK Marine Policy Statement (paragraph 3.1.3) and the NMP for Scotland (paragraph 4.45). The Outer Firth of Forth and St. Andrew's Bay Complex pSPA is currently at consultation and, therefore, is included in the AA.
- 9.28 It is not a legal requirement under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora ("the Habitats Directive") or the Habitats Regulations for the AA to assess the implications of the Development on the pSPA. The AA includes an assessment of implications

upon this sites in accordance with domestic policy. Scottish Ministers are also required to consider article 4(4) of Council Directive 2009/147/EC on the conservation of wild birds ("the Birds Directive") in respect of the pSPA. The considerations under article 4(4) of the Birds Directive are separate and distinct to the considerations which must be assessed under this Habitats Directive assessment but they are, nevertheless, set out within the AA.

- 9.29 SNH advised that the Development in-combination with the other Forth and Tay Developments would not adversely affect the integrity of the Outer Firth of Forth and St Andrews Bay pSPA. The completed AA came to the same conclusion.
- 9.30 Considering article 4(4) of the Birds Directive, Scottish Ministers concluded that the Development will not cause pollution or deterioration of habitats and any disturbance will be negligible.
- 9.31 In accordance with regulation 50 of the Conservation (Natural Habitats, &c.) Regulations 1994, and regulation 65 of the Conservation of Habitats and Species Regulations 2017, the Scottish Ministers will, as soon as reasonably practicable following the formal designation of the pSPA, review their decision authorising the Development. If required, this will include a supplementary AA being undertaken concerning the implications of the Development on the site as designated (as the site is currently a pSPA, the conservation objectives are currently in draft form; the conservation objectives will be finalised at the point at which the site is designated). If the conservation objectives, site boundary and qualifying features do not change when the site becomes designated then a further AA may not be required as the effects of the Development have been fully considered in the current AA.
- 9.32 Conditions requiring the Company to prepare, consult on and adhere to a CMS, EMP, PS, VMP and PEMP have been attached to the s.36 consent.
- 9.33 Scottish Ministers consider that, having taken into account the information provided by the Company, the responses of the consultative bodies, and having regard to the conditions attached, there are no outstanding concerns in relation to the impact of the Development on marine mammals, seabirds or European sites or European offshore marine sites which would require consent to be withheld.

Impacts on diadromous fish

9.34 In its scoping advice, SNH advised that diadromous fish should be scoped out of both EIA and HRA. During the scoping process, MSS advised that there was significant new information from recent research in relation to diadromous fish. Therefore the scoping opinion advised that the Company should review the updated published information relating to the behaviour of diadromous fish to ensure that the conclusions of no significant effects in relation to the Original Consent remain valid. The justification to scope out diadromous fish from the EIA was provided by the Company in appendix 7.2 of the EIA Report. Despite the receptor being scoped out, objections were raised during the consultation by FMS, Esk DSFB and Tay DSFB. The objections related to the Application not

containing sufficient information to make an adequate assessment of the potential effect on salmonid populations. In addition, a lack of knowledge of the migratory routes of smolts (Atlantic salmon and sea trout) and the potential secondary impacts on increased predation of migratory fish by seals were highlighted as key concerns.

- 9.35 MSS advised that that there has been substantial progress in research relating to movement, abundance, swimming depth, feeding behaviour etc. of salmon and sea trout. In general, concerns about actual impacts caused by wind farm developments have been reduced. MSS does not consider that concerns raised by consultees that salmon may be more at risk from predation in the Development area to be a major issue.
- 9.36 A condition requiring the Company to prepare, consult on and adhere to a PEMP, to include diadromous fish, has been attached to the s.36 consent to mitigate concerns.
- 9.37 Scottish Ministers consider that, having taken into account the information provided by the Company, the responses of the consultative bodies, and having regard to the conditions attached, there are no outstanding concerns in relation to the impact of the Development on diadromous fish which would require consent to be withheld.

Impacts on commercial fisheries

- 9.38 Moderate significant effects were identified by the Company on demersal trawlers and potters, however, with additional mitigation, the Company concluded that there would be no significant effects on commercial fisheries.
- 9.39 The SFF responded on behalf of the 500 plus fishing vessels in membership of its constituent associations objecting to the Development. The SFF objected to certain aspects of the EIA Report, in particular in relation to the construction period for the cables and impacts on the industry from the closure of the Development area for fishing during the 3 year construction period. SFF considered that impacts on the scallop fishery would be major, rather than minor as reported in the EIA Report. The SFF also raised concerns regarding the use of the area for fishing post construction.
- 9.40 Conditions requiring the Company to prepare, consult on and adhere to a FMMS and PEMP, to include commercial fisheries, and to participate in the FTCFWG have been attached to the s.36 consent to mitigate these concerns.
- 9.41 Scottish Ministers consider that, having taken into account the information provided by the Company, the responses of the consultative bodies, and having regard to the conditions attached, there are no outstanding concerns in relation to the impact of the Development on commercial fisheries which would require consent to be withheld.

Impacts on seascape, landscape and visual amenity

- 9.42 Assessments were completed for both the Development cumulatively with the Original Consents for the Inch Cape and Seagreen Alpha and Bravo offshore wind farms and the 2017 proposals for fewer, larger turbines. Moderate cumulative significant impacts were identified on the coastal character of east Fife and north-east East Lothian and south-east Angus. Moderate significant effects were identified from aviation and navigation lighting on coastal character and visual amenity. Major cumulative significant effects were identified on visual amenity where the Development and the Inch Cape offshore wind farm are viewed at close range. No objections were received from consultees in relation to these impacts.
- 9.43 SNH advised that the Development cumulatively with the 2017 proposals for Inch Cape and Seagreen Alpha and Bravo offshore wind farms results in the most severe effect, largely due to the increase in turbine height of the Inch Cape wind farm.
- 9.44 Angus Council considered that there would be significant impacts on landscape and seascape character, however, it did not consider these visual impacts to be unacceptable. Angus Council considered that the aviation and navigation lighting would have significant night seascape impacts.
- 9.45 East Lothian Council also considered that there would be significant adverse seascape and visual impacts from the Development and did not agree with the classification of the level of significance in certain instances. However, East Lothian Council did not object. Two public representations objected to the Development on the grounds of adverse impacts to visual amenity, citing adverse effects on the views to sea from viewpoints in East Lothian and Fife East Lothian, with attendant impacts on the tourism industry.
- 9.46 Conditions requiring the Company to prepare, consult on and adhere to a DSLP and DS have been attached to the s.36 consent.
- 9.47 Scottish Ministers consider that, having taken into account the information provided by the Company, the responses of the consultative bodies and the public representations, and having regard to the conditions attached, there are no outstanding concerns in relation to the impact of the Development on seascape, landscape and visual amenity which would require consent to be withheld.

Impacts on cultural heritage

- 9.48 Moderate, adverse impacts on the setting of the Isle of May Priory were reported in the EIA Report. The priory is a scheduled monument, located 16.5 km to the east of the Development. These impacts were not discussed in the responses received from consultees.
- 9.49 East Lothian Council provided specific comment on the reported effects of the Development on cultural heritage. East Lothian Council disagreed with the reporting of effects on Tantallon Castle and North Berwick Law as being of minor significance, stating that it considers these impacts to be of moderate

significance. East Lothian Council provided further detailed comments on the assessment methodology utilised, which it suggested would increase the potential impact of the Development upon the cultural heritage of East Lothian. East Lothian Council stated that the potential cumulative impacts of the Development would have a significant impact on cultural heritage, however, East Lothian Council did not object to the Development on these grounds.

- 9.50 HES was content that the reported impacts of the Development did not raise issues of national significance and did not object to the Development. HES stated that the Application should be considered further in accordance with national and local policy on development affecting the historic environment. HES provided detailed comment on the assessment methodologies utilised and inconsistencies and gaps within the EIA Report, particularly in relation to the assessment of impacts on the setting of the Bell Rock Lighthouse, however, HES was content that the discrepancies identified do not raise issues of national significance or alter the conclusions of the assessment.
- 9.51 Angus Council concurred with the HES's conclusions but highlighted limitations in the assessment of the impacts of navigation and aviation lighting on the setting of the Bell Rock Lighthouse.
- 9.52 One public representation raised issues of cultural heritage, in particular the potential impacts on the setting of the Bell Rock Lighthouse.
- 9.53 Conditions requiring the Company to prepare, consult on and adhere to a DSLP, Marine Archaeology Reporting Protocol ("MARP") and DS have been attached to the s.36 consent.
- 9.54 Scottish Ministers consider that, having taken into account the information provided by the Company, the responses of the consultative bodies and the public representations, and having regard to the conditions attached, there are no outstanding concerns in relation to the impact of the Development on cultural heritage which would require consent to be withheld.

Impacts on aviation and defence

- 9.55 The EIA Report reported major significant effects on military and aviation receptors, both in isolation and in-combination with other developments. MOD initially submitted an objection to the Development on safeguarding grounds, on the basis of unacceptable interference to the ADRs at RRHs Buchan and Brizlee Wood and the air traffic control radar at RAF Leuchars and potential subsequent impacts on air safety. MOD requested that further engagement take place with the Company to identify an enduring technical solution to mitigate impacts.
- 9.56 MOD requested that any WTGs are fitted with aviation lighting in accordance with Article 219 of the Air Navigation Order. Further requirements regarding aviation lighting were recommended by NLB and the requirements for aviation and navigation lighting will be implemented through consent conditions.

- 9.57 Further discussion between the Company and the MOD to identify appropriate technical solutions to mitigate the impacts of the Development occurred. MOD suggested that the inclusion of conditions requiring the preparation of and adherence to a Primary Radar Mitigation Scheme ("PRMS") and Air Traffic Control Radar Mitigation Scheme ("ATC Scheme") will ensure that appropriate mitigation measures are implemented prior to and throughout the entire operational phase of the Development to mitigate potential impacts on RAF Leuchars.
- 9.58 Following further consideration, MOD subsequently withdrew its objections in relation to the ADRs at RRH Buchan and RRH Brizlee Wood. Further assessment identified that, due to the height of the WTGs and limited coverage, the WTGs are unlikely to be detected by the Brizlee Wood ADR. Further, current technical evidence does not identify the need for the application of any mitigation measures to address the potential impacts of the operational WTGs on RRH Buchan ADR therefore the requirement for the PRMS is no longer required.
- 9.59 NATS had no safeguarding objection to the Development.
- 9.60 Conditions requiring the Company to prepare, consult on and adhere to a ATC Scheme, LMP, DSLP, DS, CMS and NSP have been attached to the s.36 consent.
- 9.61 Scottish Ministers consider that, having taken into account the information provided by the Company, the responses of the consultative bodies, and having regard to the conditions attached, there are no outstanding concerns in relation to the impact of the Development on aviation and defence which would require consent to be withheld.

Renewable energy generation and associated policy benefits

- 9.62 The key environmental benefit of the Development is to offset greenhouse gas ("GHG") emissions that might otherwise be produced by other means of electricity generation. Over the lifetime of the Development, carbon emissions from fabrication, construction, operation and decommissioning will be offset by the net reduction in emissions through the low carbon wind energy technology.
- 9.63 There are multiple benefits associated with the Development, including:
 - The reduction in emissions of carbon dioxide, nitrogen oxides, and sulphur dioxide during the operational phase equivalent to the annual emissions of carbon dioxide, nitrogen oxides, and sulphur dioxide from traditional thermal generation sources;
 - Improvements to the security of the UK's domestic energy supply through increased energy generation;
 - Reduction in the reliance on fossil fuels; and
 - Providing a contribution towards the ambitious Scottish, UK and European Union renewable energy targets.

9.64 The proposed installed generating capacity of the Development is around 450MW (however, the exact value is dependent on the nominal capacity and number of WTGs installed and cannot yet be confirmed). Based on the Scottish Government's published Renewable Electricity Output Calculator,⁷ it is estimated that, depending on the fuel type displaced, 584,581 tonnes of carbon dioxide will be saved each year. In addition, it is estimated that the Development will generate enough electricity to meet the needs of the equivalent 290,560 Scottish households per year.

Economic benefits

- 9.65 SPP advises that economic benefits are material issues which must be taken into account as part of the determination process. It also confirms the Scottish Ministers' aim of achieving a thriving renewables industry in Scotland. Further, national policy and strategies, such as NPF3 and The Scottish Energy Strategy: The Future of Energy in Scotland (Scottish Government, 2017), support the role of renewable energy development in achieving socio-economics benefits and supporting the growth of the low carbon economy. The EIA Report reported that the Development would support the development of the domestic renewable energy industry and offset GHG emissions.
- 9.66 Whilst impacts on tourism were scoped out of the EIA Report, the Company assessed socio-economic impacts related to the offshore elements of the Development on the Local Study Area and across Scotland.
- 9.67 The Company reported that, whilst cumulative impacts are expected to be positive, it is not possible to confidently predict these at the present time due to uncertainties around factors such as overall costing and the geographical sourcing of goods and services. Further, it is not yet possible to accurately predict the effects of the decommissioning phase of the Development.
- 9.68 The Company have estimated that construction of the Development would indirectly and directly support an average annual employment impact of between 300 full-time equivalent ("FTE") person years of employment each year under the lowest modelled socio-economic scenario to 3,295 FTEs under the highest impact scenario. Direct employment effects were predicted for a relatively small number of employment sectors, including: manufacturing and engineering, construction, transport and professional services sectors. Other sectors, including accommodation, food and beverage service activities and electric generation, transmission and distribution may also be impacted by the Development. The indirect effects would be spread across a much wider range of sectors.
- 9.69 During construction, the Development is expected to deliver Gross Added Value ("GVA") impact of between £79.7 million, under the low scenario, and up to £626.9 million under the highest impact scenario at a Scotland-wide level.

⁷ <u>https://www.gov.scot/Topics/Statistics/Browse/Business/Energy/onlinetools/ElecCalc</u> (Last accessed: 01/11/2018)

- 9.70 The Company assessed operations and maintenance scenarios across a range of impact scenarios. The Company have estimated that during the operational and maintenance phase, the potential employment impact ranges from 155 FTE posts each year for the lowest impact scenario to 215 FTE posts each year for the highest impact scenario.
- 9.71 At a Scotland-wide level, GVA during the operational and maintenance phase is expected to range from £10.7 million, under the lowest impact scenario, up to £17.0 million under highest impact scenario.
- 9.72 Fife Council, in its consultation response, advised that, in terms of wider tourism benefit locally, the Development may provide new tourism potential through the creation of a new boat tour route up to and around the turbines, as has happened in other developments across the UK. Fife Council highlighted the potential for the private sector to create a visitor centre, linked to any boat tour(s), explaining the engineering process of offshore wind farm development. Fife Council stated that the creation of potential boat tours may provide benefits for accommodation providers across the East Neuk and St Andrews area due to increased visitor numbers. Fife Council highlighted that there may be increased opportunities for existing harbours at Tayport, St Andrews, Crail and Anstruther etc. and that these harbours, where possible, should be encouraged to consider diversification.
- 9.73 In its consultation response, the SFF stated that the EIA Report did not include consideration of the potential negative socio-economic impacts resulting from impacts on commercial fisheries receptors.
- 9.74 MAU advised that the methodology and approach was largely appropriate, however highlighted some issues with the assessment regarding the economic multipliers and the fact that displacement of other economic activity had not been assessed.
- 9.75 The Scottish Ministers consider that there is sufficient information regarding the socio-economic impacts of the Development to inform their decision.

10 The Scottish Ministers' Determination

- 10.1 The Scottish Ministers are satisfied that an environmental impact assessment has been carried out, and that the applicable procedures regarding publicity and consultation in respect of the Application have been followed.
- 10.2 When formulating proposals for the construction of the proposed generating station, the Company must comply with paragraph 3 of Schedule 9 to the Electricity Act 1989. Paragraph 3(1)(a) of Schedule 9 requires the Company in formulating such proposals 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. Paragraph 3(1)(b) requires the Company to do what it reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites,

buildings or objects. Under paragraph 3(3) of that Schedule, the Company must also avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.

- 10.3 Under paragraph 3(2) of that Schedule, the Scottish Ministers must have regard to the desirability of the matters mentioned in paragraph 3(1)(a) of that Schedule and the extent to which the Company has complied with its duty under paragraph 3(1)(b). Under paragraph 3(3), the Scottish Ministers must avoid, so far as possible, causing injury to fisheries or to the stock of fish in any waters.
- 10.4 In considering the application, the Scottish Ministers have had regard to the desirability of the matters mentioned in paragraph 3(1)(a) of Schedule 9 and the extent to which the Company has complied with its duty under paragraph 3(1)(b). Ministers consider that the Company has done what it reasonably can to mitigate the effect of the proposed development on the matters mentioned in paragraph 3(1)(a). Ministers are satisfied that the requirements of paragraph 3 of Schedule 9 are satisfied.
- 10.5 Scottish Ministers have weighed the impacts of the proposed Development, and the degree to which these can be mitigated, against the economic and renewable energy benefits which would be realised. Ministers have undertaken this exercise in the context of national and local policies.
- 10.6 Scottish Ministers have considered the extent to which the Development accords with and is supported by Scottish Government policy, the terms of SPP, the NMP, local development plans and the environmental impacts of the Development, in particular: impacts on seabirds and marine mammals (including impacts on European sites and European offshore marine sites), impacts on diadromous fish, impacts on seascape, landscape and visual amenity, impacts on commercial fisheries, impacts on cultural heritage and impacts on aviation and defence. Scottish Ministers have also considered the estimated contribution made by the Development to reducing carbon dioxide emissions, and the socioeconomic and renewable energy benefits of the Development.
- 10.7 Scottish Ministers are satisfied that many of the environmental issues have been appropriately addressed by way of the design of the Development and mitigation, and that the issues which remain are, on balance, outweighed by the benefits of the Development. In particular Scottish Ministers are satisfied that the proposal will not adversely affect the site integrity of the Forth Islands SPA, Fowlsheugh SPA, St Abb's Head to Fastcastle SPA, Buchan Ness to Collieston Coast SPA, Moray Firth SAC, Firth of Tay and Eden Estuary SAC, Berwickshire and North Northumberland Coast SAC, Isle of May SAC or the Outer Firth of Forth and St Andrews Bay Complex pSPA.
- 10.8 Scottish Ministers have had regard to the requirements of Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds, and Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.

- 10.9 In their consideration of the environmental impacts of the Development, Scottish Ministers have identified conditions to be attached to the consent to reduce and monitor environmental impacts. These include requirements for pre-construction, construction and operational monitoring of birds, marine mammals and diadromous fish, CMS, an EMP, Operation and Maintenance Programme ("OMP") and a VMP.
- 10.10 A condition has also been identified containing requirements for the appointment of an Environmental Clerk of Works ("ECoW") to monitor compliance with all environmental and nature conservation mitigation works and working practices. The ECoW appointed will have powers to order a stop to any activity on site which in his or her reasonable opinion could lead to an incidence of noncompliance with the environmental and ecological conditions or a breach of environmental law.
- 10.11 Scottish Ministers have concluded that the Company has had regard to the potential interference of recognised sea lanes essential to international and national navigation. Any obstruction or danger to navigation has been addressed through specific consent conditions attached to the s.36 consent.
- 10.12 Scottish Ministers are satisfied, having regard to current knowledge and methods of assessment, that this reasoned conclusion, as required under the 2017 EW Regulations, is still up to date.
- 10.13 Subject to the conditions set out in Annex 2, Scottish Ministers grant consent under s.36 of the Electricity Act 1989 for the construction and operation of the Neart na Gaoithe Offshore Wind Farm (as described in Annex 1). In addition Scottish Ministers have also made a declaration under s.36A of the Electricity Act 1989 at Annex D.
- 10.14 The embedded mitigation and any additional mitigation identified in the EIA Report has been incorporated into the conditions of this s.36 consent and/or any marine licence granted. The conditions also capture monitoring measures required under Regulation 22 of the 2017 EW Regulations.
- 10.15 In accordance with the 2017 EW Regulations, the Company must publicise notice of this determination and provide that a copy of this decision letter may be inspected on the application website, in the Edinburgh Gazette and a newspaper circulating in the locality to which the Application relates is situated. The Company must provide copies of the public notices to the Scottish Ministers.
- 10.16 Copies of this letter have been sent to the public bodies consulted on the Application including the relevant planning authorities, SNH, SEPA and HES. This letter has also been published on the <u>Marine Scotland Information website</u>
- 10.17 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 on the <u>website of the Scottish Courts</u>. Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

Yours sincerely,

[Redacted]

[Redacted]

Marine Scotland Licensing Operations Team

A member of the staff of the Scottish Ministers

3 December 2018

ANNEX 1 – DESCRIPTION OF THE DEVELOPMENT

An offshore energy generating station, located in the outer Firth of Forth, approximately 15.5km from East Fife Ness, as shown in Figure 1 below, with a maximum generating output of around 450MW comprising:

- 1. Not more than 54, three-bladed horizontal axis Wind Turbine Generators ("WTGs"), each with:
 - a) A maximum rotor tip height of 208 metres (measured from Lowest Astronomical Tide ("LAT"));
 - b) A maximum rotor diameter of 167 metres;
 - c) A maximum hub height of 126 metres (measured from LAT);
 - d) A minimum blade tip clearance of 35 metres (measured from LAT);
 - e) Blade width of up to 4.5 metres; and
 - f) A minimum spacing of 800 metres.
- 2. Up to 54 jacket foundations and ancillary equipment.
- 3. Up to 2 Offshore Substation Platforms ("OSPs"), jacket foundations and ancillary equipment.
- 4. Up to 140km of inter-array cabling and up to 4 interconnector cables between the 2 OSPs.
- 5. Two subsea Offshore Export Cables ("OEC") each of up to 43km in length;
- 6. scour and cable protection.
- 7. A Meteorological mast.

The total area within the Development site boundary is 105km².

Figure 1

Neart na Gaoithe Offshore Wind farm Site and Export Cable Corridor to shore at Thorntonloch, East Lothian.



ANNEX 2 - SECTION 36 CONSENT CONDITIONS

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

The Company must submit the requested plans as detailed in the conditions prior to the Commencement of the Development, in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with any such advisors or organisations as detailed in the conditions or as may be required at the discretion of the Scottish Ministers.

The Development must, at all times, be constructed in accordance with the approved plans as updated or amended.

Any updates or amendments made to the approved plans must be submitted, in writing, to the Scottish Ministers for their prior written approval.

The Company must satisfy themselves that all contractors or sub-contractors are aware of the extent of the Development for which this consent has been granted, the activity which is consented and the terms of the conditions attached to this consent. All contractors and sub-contractors permitted to engage in the Development must abide by the conditions set out in this consent.

The Company must ensure that all personnel adhere to the Scottish Marine Wildlife Watching Code, where appropriate, during all installation, operation and maintenance activities.

Part 1 - Conditions Attached to Section 36 Consent

1. **Duration of the Consent**

The consent is for a period of 50 years from the date of Final Commissioning of the Development.

Written confirmation of the date of First and Final Commissioning must be provided by the Company to the Scottish Ministers and to Angus Council, Dundee City Council, East Lothian Council, Fife Council, Scottish Borders Council and Scottish Ministers no later than one calendar month after these respective dates.

Reason: To define the duration of the consent.

2. **Commencement of Development**

The Commencement of the Development must be no later than five years from the date of this consent, or in substitution such other later period as the Scottish Ministers may hereafter direct in writing. The Company must provide written confirmation of the intended date of Commencement of Development must to the Scottish Ministers and

to Angus Council, Dundee City Council, East Lothian Council, Fife Council and Scottish Borders Council no later than one calendar month before that date.

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

3. **Decommissioning**

There must be no Commencement of Development unless a Decommissioning Programme ("DP") has been submitted to and approved in writing by the Scottish Ministers. The DP must outline measures for the decommissioning of the Development, restoration of the sea bed and will include without limitation, proposals for the removal of the Development, the management and timing of the works and, environmental management provisions.

The Development must be decommissioned in accordance with the approved DP, unless otherwise agreed in writing in advance with the Scottish Ministers.

Reason: To ensure the decommissioning and removal of the Development in an appropriate and environmentally acceptable manner, and in the interests of safety and environmental protection.

4. Assignation

This consent must not be assigned without the prior written authorisation of the Scottish Ministers. The Scottish Ministers may authorise the assignation of the consent (with or without conditions) or refuse assignation as they may see fit. The consent is not capable of being assigned, alienated or transferred otherwise than in accordance with the assignation procedure as directed by Scottish Ministers.

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

5. **Redundant turbines**

If one or more turbine fails to generate electricity for a continuous period of 12 months, then unless otherwise agreed in writing by the Scottish Ministers, the Company must: (i) by no later than the date of expiration of the 12 month period, submit a scheme to the Scottish Ministers setting out how the relevant turbine(s) and associated infrastructure will be removed from the site and the sea bed restored; and (ii) implement the approved scheme within six months of the date of its approval, all to the satisfaction of the Scottish Ministers.

Reason: To ensure that any redundant wind turbine(s) is/are removed from the site, in the interests of safety, amenity and environmental protection.

6. Incident Reporting

In the event of any breach of health and safety or environmental obligations relating to the Development during the period of this consent, the Company must provide written notification of the nature and timing of the incident to the Scottish Ministers within 24 hours of the incident occurring. Confirmation of remedial measures taken and/or to be taken to rectify the breach must be provided, in writing, to the Scottish Ministers within a period of time to be agreed by the Scottish Ministers .

Reason: To keep the Scottish Ministers informed of any such incidents which may be in the public interest.

7. Implementation in accordance with approved plans and requirements of this consent

Except as otherwise required by the terms of this consent, the Development must be constructed and operated in accordance with the Application (as supplemented by the additional environmental information ("EIA Addendum"), submitted by the Company on 26 July 2018) and any other documentation lodged in support of the Application.

Reason: To ensure that the Development is carried out in accordance with the approved details.

8. **Transportation for site inspections**

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 inspecting compliance with this consent.

9. **Construction Programme**

The Company must, no later than six 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 Scottish Natural Heritage ("SNH"), Scottish Environment Protection Agency ("SEPA"), Maritime and Coastguard Agency ("MCA"), Northern Lighthouse Board ("NLB"), Royal Society for the Protection of Birds Scotland ("RSPB Scotland"), Angus Council, Dundee City Council, East Lothian Council, Fife

Council, Scottish Borders Council and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers. 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. **Construction Method Statement**

The Company must, no later than six months prior to the Commencement of the Development submit a Construction Method Statement ("CMS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, SEPA, MCA, NLB, RSPB Scotland, Forth Ports ("FP"), Angus Council, Dundee City Council, East Lothian Council, Fife Council, Scottish Borders Council and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers.

The CMS must include, but not be limited to:

- a. Details of the commencement dates, duration and phasing for the key elements of construction, the working areas, the construction procedures and good working practices for installing the Development.
- b. 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.
- c. Details of how the construction related mitigation steps proposed in the Application are to be delivered.

The CMS must adhere to the construction methods assessed in the Application. The CMS also 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. Piling Strategy

The Company must, no later than six months prior to the Commencement of the Development, submit a Piling Strategy ("PS"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, River Tweed Commission ("RTC"), Whale and Dolphin Conservation ("WDC"), Scottish Borders Council and any such other advisors as may be required at the discretion of the Scottish Ministers.

The PS must include, but not be limited to:

- a. Details of expected noise levels from pile-drilling/driving in order to inform point d below;
- b. Full details of the proposed method and anticipated duration of piling to be carried out at all locations;
- c. Details of soft-start piling procedures and anticipated maximum piling energy required at each pile location; and
- d. Details of any mitigation such as Passive Acoustic Monitoring ("PAM"), Marine Mammal Observers ("MMO"), use of Acoustic Deterrent Devices ("ADD") and monitoring to be employed during pile-driving, as agreed by the Scottish Ministers.

The PS must be in accordance with the Application and must also reflect any monitoring or data collection 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 to harbour porpoise, minke whale, bottlenose dolphin, harbour seal, grey seal, Atlantic salmon and sea trout.

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. **Development Specification and Layout Plan**

The Company must, no later than six months prior to the Commencement of the Development, submit a Development Specification and Layout Plan ("DSLP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with the MCA, NLB, SNH, the Ministry of Defence ("MOD"), Civil Aviation Authority ("CAA"), Chamber of Shipping ("CoS"), SNH, Scottish Fishermen's Federation ("SFF"), Angus Council, Dundee City Council, East Lothian Council, Fife Council, Scottish Borders Council, and any such

other advisors or organisations as may be required at the discretion of the Scottish Ministers.

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

- a. A plan showing the location of each individual WTG (subject to any required micro-siting), including information on WTG spacing, WTG identification/numbering, location of the substation platforms, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the site;
- A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG. This should also be provided as a Geographic Information System ("GIS") shape file using 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 output of each WTG used on the site (Figure 1) and a confirmed generating output for the site overall;
- e. The finishes for each WTG (see condition 20 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. **Design Statement**

The Company must, no later than six months prior to the Commencement of the Development, submit a Design Statement ("DS"), in writing, to the Scottish Ministers. The DS, which must be signed off by at least one qualified landscape architect, as instructed by the Company prior to submission to the Scottish Ministers, must include 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 or amended. The Company must provide the DS, for information only, to Angus Council, Dundee City Council, East Lothian Council, Fife Council, Scottish Borders Council, SNH, MCA and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers.

Reason: To ensure that the Development is carried out in accordance with the approved details, and to inform interested parties of the final wind farm scheme proposed to be built.

14. Environmental Management Plan

The Company must, no later than six months prior to the Commencement of the Development, submit an Environmental Management Plan ("EMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with, SNH, SEPA, RSPB Scotland, WDC, RTC, Tay District Salmon Fisheries Board ("Tay DSFB"), Esk District Salmon Fisheries Board ("Esk DSFB"), Forth District Salmon Fisheries Board ("Forth DSFB"), Fisheries Management Scotland ("FMS") and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers.

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 Application insofar 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:

- Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the Application and pre-consent and pre-construction monitoring or data collection, and include the relevant parts of the CMS (refer to condition 10);
- b. A pollution prevention and control method statement, including contingency plans;
- c. Management measures to prevent the introduction of invasive non-native marine species;
- d. A site waste management plan (dealing with all aspects of waste produced during the construction period), including details of contingency planning in the event of accidental release of materials which could cause harm to the environment. Wherever possible the waste hierarchy of reduce, reuse and recycle should be encouraged; and
- e. The reporting mechanisms that will be used to provide the Scottish Ministers and relevant stakeholders with regular updates on construction activity, including any environmental issues that have been encountered and how these have been addressed.

The EMP must be regularly reviewed by the Company and the Scottish Ministers or Forth and Tay Regional Advisory Group ("FTRAG"), at intervals agreed by the Scottish Ministers. Reviews must include, but not be limited to, the reviews of updated information on construction methods and operations of the Development and updated working practices.

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

Reason: To ensure that all construction and operation activities are carried out in a manner that minimises their impact on the environment, and that mitigation measures contained in the Application, or as otherwise agreed are fully implemented.

15. Vessel Management Plan

The Company must, no later than six months prior to the Commencement of the Development, submit a Vessel Management Plan ("VMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, WDC, FP, MCA, NLB, SFF and any such other advisors or organisations as may be required at the discretion of the Scottish Ministers.

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

- a. The number, types and specification of vessels required;
- b. How vessel management will be coordinated, particularly during construction but also during operation;
- c. Location of working port(s), the routes of passage, 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; and
- d. A fishing gear De-Confliction Notice. The De-Confliction Notice must lay out guidelines for vessels operating in around the site and transiting into the site from relevant ports.

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 the impact of vessels.

16. **Operation and Maintenance Programme**

The Company must, no later than three 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 SNH, SEPA, MCA, NLB, RSPB Scotland, SFF, Angus Council, Dundee City Council, East Lothian Council, Fife Council, Scottish Borders Council 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.

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 and maintenance of the Development.

17. Navigational Safety Plan

The Company must, no later than six 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. 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 543 ("MGN 543"), and its annexes that may be appropriate to the Development, or any other relevant document which may supersede this guidance prior to approval of the NSP.

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

18. Emergency Response Co-operation Plan

The Company must, no later than six months prior to the Commencement of the Development, submit an Emergency Response Co-operation Plan ("ERCoP") for the construction, operation, maintenance and decommissioning phases of the Development, 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 and NLB and any other navigational advisors or organisations as may be required at the discretion of the Scottish Ministers. The ERCoP should follow the template and guidance as found on the MCA website. The ERCoP must be developed in discussion with the MCA and be in accordance with condition 3.2.1.4 of the marine licence.

Reason: For emergency response planning relating to the Development and requirements for Search And Rescue ("SAR") helicopter operations.

19. Cable Plan

The Company must, no later than six months prior to the Commencement of the Development, submit a Cable Plan ("CaP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with, SNH, 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 Application.

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

a. The vessel types, location, duration and cable laying techniques for the inter array cables;

b. The results of monitoring or data collection 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.

Any consented cable protection works must ensure existing and future safe navigation is not compromised. The Scottish Ministers will accept a maximum of 5% reduction in surrounding depth referenced to Chart Datum. Any greater reduction in depth must be agreed in writing by the Scottish Ministers.

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

20. Lighting and Marking Plan

The Company must, no later than six 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 SNH, MCA, NLB, CAA, MOD, SFF, Angus Council, Dundee City Council, East Lothian Council, Fife Council, Scottish Borders Council 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 this guidance prior to the approval of the LMP. The LMP must also detail the navigational lighting requirements detailed in International Association of Marine Aids to Navigation and Lighthouse Authorities ("IALA") IALA Recommendation O-139 or any other documents that may supersede this guidance that may supersede this guidance prior to approval of the LMP.

Reason: To ensure navigational safety and the safe marking and lighting of the Development.

21. Aviation Radar

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 Leuchars Airfield ("the Radar") and the air traffic control operations of the MOD which is reliant upon the Radar. The ATC Scheme must set out the appropriate measures to be implemented to mitigate the impact of the Development on the Radar and must be in place for the operational life of the Development provided the Radar remains in operation.

No WTGs forming part of the Development may 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 must thereafter be operated fully in accordance with the approved ATC Scheme.

Reason: To mitigate the adverse impacts of the Development on the Radar [aerodrome navigations systems and or radar stations].

22. Charting requirements

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, any Offshore Substation Platforms ("OSPs") and construction equipment to the United Kingdom Hydrographic Office ("UKHO") for aviation and nautical charting purposes. The Company must, within one month of the Final Commissioning of the Development, provide the coordinates accurate to three decimal places of minutes of arc for each WTG and OSP, position and maximum heights of the WTGs and OSPs to the UKHO for aviation and nautical charting purposes.

Reason: For aviation and navigational safety.

23. **Project Environmental Monitoring Programme**

The Company must, no later than six months prior to the Commencement of the Development, submit a Project Environmental Monitoring Programme ("PEMP"), in writing, to the Scottish Ministers for their written approval. Such approval may only be granted following consultation by the Scottish Ministers with SNH, RSPB Scotland, WDC, SFF, FMS, RTC, Tay DSFB, Esk DSFB, Forth DSFB, and any other environmental 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.

The Scottish Ministers must approve all initial methodologies for the above monitoring, in writing and, where appropriate, in consultation with the FTRAG referred to in condition 24 of this consent.

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 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 or data collection as relevant in terms of the Application, and any subsequent monitoring or data collection for:
 - 1. Birds;
 - 2. Marine Mammals;
 - 3. Commercial Fisheries;
 - 4. Marine fish;
 - 5. Diadromous fish;
 - 6. Benthic communities; and
 - 7. Seabed scour and local sediment deposition.
- b. The participation by the Company to contribute to data collection or monitoring of wider strategic relevance, identified and agreed by the Scottish Ministers.

Due consideration must be given to the Scottish Marine Energy Research ("ScotMER") programme.

Any pre-consent monitoring or data collection carried out by the Company to address any of the above issues may be used in part to discharge this condition subject to the written approval of the Scottish Ministers.

The PEMP is a live document and which will be regularly reviewed by the Scottish Ministers, at timescales to be determined by them 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 the FTRAG, and any

other environmental, or such other advisors as may be required at the discretion of the Scottish Ministers.

The Company must submit written reports and associated raw and processed data of such monitoring or data collection to the Scottish Ministers at timescales to be determined by them. Consideration should be given to data storage, analysis and reporting and be to <u>MEDIN data standards</u>.

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.

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

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

24. **Regional Advisory Group**

The Company must participate in any Forth and Tay Regional Advisory Group ("FTRAG") or any successor group, 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, marine mammals, diadromous and commercial fish. The extent and nature of the Company's participation in the Regional Advisory Group is to be agreed by the Scottish Ministers.

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

25. **Fisheries Management and Mitigation Strategy**

The Company must no later than six months prior to the Commencement of the Development, submit a Fisheries Management and Mitigation Strategy ("FMMS"), in writing, to the Scottish Ministers for their written approval in consultation with SFF. The Company must also remain a member of the Forth and Tay Commercial Fisheries Working Group ("FTCFWG"), or any successor group formed to facilitate commercial fisheries dialogue, to define and finalise the FMMS.

In order to inform the production of the FMMS the Company must monitor or collect data as relevant and agreed with Scottish Ministers.

As part of any finalised FMMS, the Company must produce and implement a mitigation strategy for each commercial fishery that can prove to the Scottish Ministers that they would be adversely affected by the Development. The Company must implement all mitigation measures committed to be carried out by the Company within the FMMS. Any contractors, or sub-contractors working for the Company, must co-operate with the fishing industry to ensure the effective implementation of the FMMS.

Reason: To mitigate the impact on commercial fishermen.

26. Environmental Clerk of Works

Prior to the Commencement of the Development, the Company must at its own expense, and with the approval of the Scottish Ministers in consultation with SNH, appoint an independent Environmental Clerk of Works ("ECoW"). The ECoW must be appointed in time to review and approve the draft version of the first plan or programme submitted under this consent to Scottish Ministers, in sufficient time for any preconstruction monitoring requirements, and remain in post until agreed by the Scottish Ministers. The terms of appointment must also be approved by the Scottish Ministers in consultation with SNH.

The terms of the appointment must include, but not be limited to:

- a. Quality assurance of final draft versions of all plans and programmes required under this consent;
- b. Responsibility for the monitoring and compliance of the consent conditions and the environmental mitigation measures for all wind farm infrastructure;
- c. Provision of on-going advice and guidance to the Company in relation to achieving compliance with consent conditions, including but not limited to the conditions relating to and the implementation of the CMS, the EMP, the PEMP, the PS, the CaP and the VMP;
- d. Provision of reports on point b & c) above to the Scottish Ministers at timescales to be determined by the Scottish Ministers;
- e. Induction and toolbox talks to onsite construction teams on environmental policy and procedures, including temporary stops and keeping a record of these;
- f. Monitoring that the Development is being constructed in accordance with the plans and this consent, the Application and in compliance with all relevant regulations and legislation;
- g. Reviewing and reporting incidents/near misses and reporting any changes in procedures as a result; and
- h. Agreement of a communication strategy with the Scottish Ministers.

Reason: To ensure effective monitoring of and compliance with the environmental mitigation and management measures associated with the Development.

27. **Fisheries Liaison Officer**

Prior to the Commencement of the Development, a Fisheries Liaison Officer ("FLO"), must be appointed by the Company and approved, in writing, by the Scottish Ministers (following consultation with SFF and the FTCFWG. The FLO must be appointed by the Company for the period from Commencement of the Development until the Final Commissioning of the Development. The identity and credentials of the FLO must be included 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:

- Establishing and maintaining effective communications between the Company, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall Development and any amendments to the CMS and site environmental procedures;
- b. The 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 facilitate engagement with the commercial fishing industry.

28. Marine Archaeology Reporting Protocol

The Company must, no later than six months prior to the Commencement of the Development, submit a Marine Archaeology Reporting Protocol ("MARP") 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 Historic Environment Scotland ("HES") and 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.

29. **Construction Traffic Management Plan**

The Company must, no later than six months prior to the Commencement of the Development submit a Construction Traffic Management Plan ("CTMP") 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 CTMP must include but not be limited to:

a. A mitigation strategy for the abnormal loads on the trunk road network including any accommodation measures required, incorporating the removal of street furniture, junction widening, or traffic management of road based traffic and transportation associated with the construction of the Development. All construction traffic associated with the Development must conform to the approved CTMP.

b. Any additional signing or temporary traffic control measures deemed necessary due to the size or length of loads being delivered as a result of the Development.

Reason: To maintain the free flow and safety of the trunk road network.

DEFINITIONS AND GLOSSARY OF TERMS

"AA" means the Appropriate Assessment;

"ADD" means Acoustic Deterrent Devices;

"ADR" means Air Defence Radars;

"AHEP" means Aberdeen Harbour Expansion Project;

"AIS" means Automatic Identification System;

"the Application" means the EIA Report, HRA Report and supporting documents submitted by the Company on 16 March 2018 to construct, operate and maintain an offshore generating station and transmission works, it also includes the EIA Addendum relating to ornithology submitted by the Company on 26 July 2018;

"ATC" means Air Traffic Control;

"Commencement of the Development" means the date on which the first construction activity occurs in accordance with the EIA Report submitted by the Company on 16 March 2018;

"the Company" means Neart na Gaoithe Offshore Wind Ltd (Company Number SC356223, Atria One, 144 Morrison Street, Edinburgh, United Kingdom, EH3 8EX;

"dSPA" means draft Special Protection Area;

"the Development" means the Neart na Gaoithe Offshore Wind Farm, approximately 15.5km East of Fife Ness;

"ECoW" means Environmental Clerk of Works;

"EIA" means Environmental Impact Assessment;

"EIA Addendum" means the addendum of additional information submitted by the Company on 26 July 2018;

"EIA Report" means Environmental Impact Assessment Report;

"EPS" means European Protected Species;

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

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

"FLO" means Fisheries Liaison Officer;

"Forth and Tay Developments" means combinations of the existing consent for Neart na Gaoithe Offshore Wind Farm (granted October 2014), the existing consent for Inch Cape offshore wind farm (granted October 2014) and the application for new consent (submitted August 2018), the existing consents for the Seagreen Alpha and Seagreen Bravo offshore wind farms (granted October 2014) and the applications for new consents (submitted September 2018); "FTE" means full-time equivalent;

"GHG" means greenhouse gas;

"GIS" means Geographic Information System;

"GVA" means Gross Value Added;

"HDD" means Horizontal Direct Drilling;

"HRA" means Habitat Regulations Appraisal;

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

"iPCoD" means interim Population Consequences of Disturbance;

"LAT" means Lowest Astronomical Tide;

"LSE" means Likely Significant Effect;

"MMO" means marine mammal observer;

"MW" means megawatt;

"NnG" means the Neart na Gaoithe Offshore Wind Farm;

"OEC" means Offshore Export Cables;

"Original Consent" means the s.36 consent and marine licences (which the Scottish Ministers granted in October 2014) held by the Company for an offshore wind farm development within the same boundary as the current Application;

"OSPs" means Offshore Substation Platforms;

"PAM" means passive acoustic monitoring;

"PEXA" means military Practice and Exercise Areas;

"PLI" means Public Local Inquiry;

"pSPA" means Proposed Special Protection Areas;

"PTS" means Permanent Threshold Shift;

"PVA" means population viability analysis;

"the Radar" means the Primary Surveillance Radar at Leuchars Airfield;

"RRH" means Remote Radar Head;

"SAC" means Special Area of Conservation;

"SAR" means Search and Rescue;

"ScotMER" means Scottish Marine Energy Research Programme;

"SPA" means Special Protection Area;

"SNCBs" means statutory nature conservation bodies;

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

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

"TMZ" means Transponder Mandatory Zone;

"the 2014 Application" means the application submitted by the Company on 13 July 2012;

"VHF" means Very High Frequency;

"WTGs" means wind turbine generators; and

"ZTV" means Zone of Theoretical Visibility.

Organisations and Companies

"BT" means BT Radio Network Protection;

"CoS" means Chamber of Shipping;

"DFA" means Dunbar Fishermen's Association;

"Esk DSFB" means Esk District Salmon Fishery Board;

"EU" means European Union;

"EHT" means Eyemouth Harbour Trust;

"Forth DSFB" means Forth District Salmon Fishery Board;

"FMS" means Fisheries Management Scotland;

"FP" means Forth Ports;

"FTCFWG" means the Forth and Tay Commercial Fisheries Working Group;

"FTRAG" means Forth and Tay Regional Advisory Group;

"HES" means Historic Environment Scotland;

"ICOL" means Inch Cape Offshore Limited;

"MAU" means Marine Scotland Marine Analytical Unit;

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

"MSS" means Marine Scotland Science;

"MCA" means the Maritime and Coastguard Agency;

"MOD" means the Ministry of Defence;

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

"MSS" means Marine Scotland Science;

"NATS" means National Air Traffic Service;

"NOAA" means National Oceanic and Atmospheric Administration

"NLB" means the Northern Lighthouse Board;

"NnGOWL" means Neart Na Gaoithe Offshore Wind Ltd;

"RAG" means Regional Advisory Group;

"RTC" means River Tweed Commission;

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

"RYA Scotland" means Royal Yachting Association Scotland;

"SEPA" means The Scottish Environment Protection Agency;

"Seagreen" means Seagreen Wind Energy Limited;

"SFF" means The Scottish Fishermen's Federation;

"SNH" means Scottish Natural Heritage;

"SS" means Sport Scotland;

"SSC" means Scottish Seabird Centre;

"Tay DSFB" means Tay District Salmon Fishery Board;

"TS" means Transport Scotland;

"UKHO" means United Kingdom Hydrographic Office; and

"WDC" means Whale and Dolphin Conservation.

Plans and Programmes

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

"CaP" means Cable Plan;

"CMS" means Construction Method Statement;

"CoP" means Construction Programme;

"CTMP" means Construction Traffic Management Plan;

"De-confliction Notice" means a plan which sets out measures to be taken to avoid or reduce the impact of vessel movement on the local fishing industry and to promote a sustainable coexistence. It will include indicative transit routes for vessels operating in and around the development and transiting to the site from relevant ports;

"DP" means Decommissioning Programme;

"DS" means the Design Statement;

"DSLP" means Development Specification and Layout Plan;

"EMP" means Environmental Management Plan;

"ERCoP" means Emergency Response Co-operation Plan;

"FMMS" means Fisheries Management and Mitigation Strategy;

"LDP" means Local Development Plans;

"LMP" means Lighting and Marking Plan;

"MARP" means Marine Archaeology Reporting Protocol;

"MGN" means Marine Guidance Note;

"NMP" means the National Marine Plan;

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

"NRA" means Navigation Risk Assessment;

"NRIP" means National Renewables Infrastructure Plan

"NSP" means Navigational Safety Plan;

"OMP" means Operation and Maintenance Programme;

"PEMP" means Project Environmental Monitoring Programme;

"PRMS" means Primary Radar Mitigation Scheme;

"PS" means Piling Strategy;

"SPP" means Scottish Planning Policy 2014; and

"VMP" means Vessel Management Plan.

Legislation

"the Birds Directive" means Council Directive 79/409/EEC of 2 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 30th November 2009;

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

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

"the Habitats Regulations" mean the Conservation of Habitats and Species Regulations 2017 and the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended);

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

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

"the 1994 Habitats 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 2017 EW Regulations" means The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended);

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

"the 2017 MW Regulations" means the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended);

"the 2017 Offshore Habitats Regulations" means the Conservation of Offshore Marine Habitats and Species Regulations 2017; and

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