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Our Reference: 048/OW/RRP-10

17 June 2019

Dear

MARINE (SCOTLAND) ACT 2010

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

DECISION NOTICE FOR A MARINE LICENCE TO CONSTRUCT, ALTER OR IMPROVE ANY WORKS AND DEPOSIT ANY SUBSTANCES OR OBJECTS IN THE SCOTTISH MARINE AREA FOR THE INCH CAPE OFFSHORE WIND FARM, APPROXIMATELY 15 – 22KM EAST OFF THE ANGUS COASTLINE

1 Application and Description of the Works

- 1.1 On 15 August 2018, Inch Cape Offshore Limited (Company Number SC373173) having its registered office at 5th Floor, 40 Princes Street, Edinburgh EH2 2BY ("ICOL" or "the Applicant"), submitted to the Scottish Ministers an application under Part 4 of the Marine (Scotland) Act 2010 ("the 2010 Act") for a marine licence ("the OWF Marine Licence") to construct and operate the marine renewable energy works ("the Works") associated with the proposed Inch Cape Offshore Wind Farm ("the Project").
- 1.2 The application was accompanied by an Environmental Impact Assessment report ("EIA Report") as required under the Marine Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended) ("the 2017 MW Regulations") and a Habitats Regulations Appraisal report ("HRA Report") as required under the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended) and the Conservation of Habitats and Species Regulations 2017 (collectively referred to as "the Habitats Regulations").

- 1.3 In addition to the application, the Applicant has also applied for a marine licence under the 2010 Act in respect of the construction and operation of the offshore transmission infrastructure associated with the Project ("the OfTI Marine Licence"). The Applicant has also applied for consent under section 36 of the Electricity Act 1989 (as amended) ("the s.36 Consent") to construct and operate an offshore generating station and for a declaration extinguishing public rights of navigation under section 36A of the Electricity Act 1989. Separate decision notices will be issued in respect of these applications.
- 1.4 The Works comprise of the construction and operation of an offshore wind farm, including:

An offshore energy generating station at the Site located approximately 15-22km off the Angus coastline, to the east of the Firth of Tay, as shown in Figure 1, comprised of either:

- 1. A) No more than 72, three-bladed horizontal axis Wind Turbine Generators ("WTG") each with;
 - a. A maximum height to blade tip of 215 metres (measured from Lowest Astronomical Tide ("LAT"));
 - b. A maximum rotor diameter of 167 metres;
 - c. A minimum blade tip clearance of 32.6 metres (measured from Mean Sea Level ("MSL"));
 - d. A maximum blade width of 6.0 metres; and
 - e. A nominal turbine spacing of 1,278 metres.

OR;

- B) No more than 40, three-bladed horizontal axis WTG each with;
 - a. A maximum height to blade tip of 291 metres (measured from LAT);
 - b. A maximum rotor diameter of 250 metres;
 - c. A minimum blade tip clearance of 27.6 metres (measured from MSL);
 - d. A maximum blade width of 7.8 metres; and
 - e. A nominal turbine spacing of 1,278 metres.

Where the final design agreed through the Development Specification and Layout Plan ("DSLP") falls between A and B, the collision risk to birds must be no greater than assessed in the Appropriate Assessment. If required by Scottish Ministers the Applicant must provide evidence of this using the best available science.

2. No more than 72 substructure and foundations and ancillary equipment. Substructure and foundation design for the WTG will be chosen from the following options:

- a. Jacket with pin piles;
- b. Jacket with suction piles;
- c. Monopile;
- d. Jacket with gravity base; or
- e. Gravity base structures.
- 3. No more than 190km of inter-array cabling.

All as described in the Application.

1.5 The location and boundary of the site (hereinafter "the Site") is shown delineated in red in Appendix 1.

This decision notice contains the Scottish Ministers' decision to grant regulatory approval for the Works detailed above, in accordance with regulation 23 of the 2017 MW Regulations.

2 Summary of the 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; and
 - An <u>HRA Report</u>.
- 2.2 In April 2017, the Applicant submitted a <u>scoping report</u> and a request for a scoping opinion in respect of the Project to the Scottish Ministers. Following consultation with statutory and other consultees, a <u>scoping opinion</u> was issued by Scottish Ministers on 28 July 2017, advising on the scope of the impacts to be addressed and the methods of assessment to be used within the EIA Report. Separate addendums providing advice on the marine mammals and ornithology aspects of the scoping report were issued on 3 August 2017 and 10 August 2017 respectively. <u>Further clarifications and updates</u> in relation to the advice contained in the Ornithology scoping opinion addendum were issued between September and December 2017.
- 2.3 The Applicant 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 Applicant had substantial evidence from the previous Environmental Statement submitted on 1 July 2013 ("the 2013 ES") 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 2013. A number of receptors were scoped out of the assessment completely, including: 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 MW Regulations. As the request for a scoping opinion was made before 16 May 2017, the transitional arrangements within the 2017 MW Regulations applied.
- 2.5 A summary of the environmental information provided in the EIA Report is given below.

2.6 Fish and Shellfish ecology

- 2.6.1 Impacts on shellfish and salmon migration were scoped out of the EIA Report during the scoping phase and following further consultation on discussion papers produced by the Applicant in the period before it submitted its Application. These discussions papers (on particle motion, salmon migration behaviour and the impacts of suspended sediment and smothering on scallops) were appended to the EIA Report for information only and were subject to consultation during 2017/18. Scottish Ministers confirmed that the findings of these discussion papers were valid and therefore further assessment of the effects on salmon migration behaviour, the impacts of suspended sediment and smothering on scallops and the effects of particle motion was not required in the EIA Report.
- 2.6.2 During the construction phase, the EIA Report identified potential impacts resulting from barrier effects, disturbance or physical injury associated with construction noise on hearing specialist fish species (herring, sprat, cod and shad). Within the EIA Report, the Applicant has committed to mitigation measures to reduce the potential noise impacts on fish species, through the incorporation of a soft-start procedure during piling operations. This procedure is likely to reduce mortality effects, as a result of fish leaving the affected area during the period of piling operations.
- 2.6.3 The residual effects of construction phase impacts, from the Project both in isolation and in-combination with the other Forth and Tay Developments, were deemed to be not significant in EIA terms.

2.7 <u>Marine mammals</u>

- 2.7.1 Displacement and Permanent Threshold Shift ("PTS") from piling operations and disturbance from increased noise from geophysical systems during the construction (and decommissioning) phase were assessed in the EIA Report. All other construction phase impacts and all operation and maintenance impacts were scoped out of the EIA Report.
- 2.7.2 The effects during the decommissioning phase (for both the offshore wind farm and offshore transmission infrastructure) were considered to be equivalent to, or potentially lower, than those associated with the construction phase as decommissioning will not involve piling activities. The

use of geophysical surveys during the decommissioning phase were deemed to be equivalent to the impacts associated with the construction phase.

- 2.7.3 The Applicant committed to a range of mitigation measures in the EIA Report to reduce the effects on marine mammals including the implementation of marine mammal protection plans for pile driving and geophysical survey systems and the utilisation of a soft-start procedure during piling operations.
- 2.7.4 The potential residual effects of the Project were projected to be negligible in all cases, with the exception of the effect of pile driving noise upon harbour porpoise, bottlenose dolphin, minke whale and harbour seal, where minor adverse impacts were anticipated when considering the Project in isolation.
- 2.7.5 The assessment of cumulative impacts considered the potential effects of pile driving noise in relation to all offshore wind farm projects in the Firths of Forth and Tay, and in the Moray Firth, and concluded potential significant effects on bottlenose dolphin, minke whale and grey seal.
- 2.7.6 In addition to the EIA Report, the HRA Report considered the impacts of the Projecton 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 Projectwould not adversely affect the integrity of these protected sites alone or in-combination with other plans or projects.
- 2.8 <u>Ornithology</u>
- 2.8.1 Impacts during the construction, operational and decommissioning phases were assessed in the EIA Report. Impacts scoped into the EIA Report were disturbance from the offshore export cable installation; displacement, barrier and collision impacts during the operational phase; impacts during the decommissioning phase; and cumulative displacement, barrier and collision impacts.
- 2.8.2 All impacts assessed in respect of the Project alone were considered to be of negligible or minor significance in the EIA Report.
- 2.8.3 In respect of cumulative collision impacts, two scenarios were assessed:
 - Scenario 1: The Project alongside the 2014 consented designs for Seagreen Phase 1 (comprising two offshore wind generating stations, Seagreen Alpha and Seagreen Bravo Offshore Wind Farms hereinafter known as ("Seagreen Phase 1")) and Neart na Gaoithe Offshore Wind Farm Electricity Generating Station ("Neart na Gaoithe"); and
 - Scenario 2: the Project alongside the 2017 designs for the revised Seagreen Alpha and Bravo offshore wind farms, ("the optimised Seagreen Project") and Neart na Gaoithe Offshore Windfarm (Revised Design).

- 2.8.4 In addition, during the breeding season, cumulative impacts with the European Offshore Wind Deployment Centre, Hywind Scotland Pilot Park Project, Kincardine Floating Offshore Windfarm and Forthwind Offshore Wind Demonstration Project were considered. During the non-breeding season, impacts from an additional North Sea wind farm developments were also considered for gannet and kittiwake.
- 2.8.5 During the operational phase, cumulative impacts predicted moderate effects on the regional breeding population of guillemot, razorbill (as a result of the impacts of displacement and barrier effects), kittiwake (when collision impacts were also included) and gannet (for collision only). These effects were not considered to be significant in EIA terms.
- 2.8.6 The Applicant considers it highly unlikely that Neart na Gaoithe and Seagreen wind farms will be built to the maximum extent of their 2014 consented envelopes, therefore the EIA Report concluded that the Scenario 1 outcome is underpinned by a precautionary approach. The Applicant committed to embedded mitigation, including an environmental clerk of works to ensure compliance with mitigation and best practice to reduce disturbance to bird species during the construction phase of the works.
- 2.8.7 The EIA Report concluded that no ecologically significant residual effects as a result of the Project, either alone or cumulatively, for any ornithology receptor had been identified.
- 2.8.8 In addition to the EIA Report, the HRA Report considered the impacts of the Projecton 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 Projectwould not adversely affect the integrity of these protected sites alone or in-combination with other plans or projects.
- 2.9 <u>Commercial Fisheries</u>
- 2.9.1 Impacts during the construction, operational, maintenance and decommissioning phases of the Project were considered within the EIA Report. The potential effects of decommissioning are considered to be equivalent to, or potentially lower than, the worst case effects assessed for the construction phase.
- 2.9.2 The EIA Report considered the worst case scenario as comprising the structures with the largest combined footprint, maximum duration of construction activities, associated safety zones and the highest number of WTGs (with smallest spacing) and maximum number of additional infrastructure. The EIA Report assessed a construction period of 24 months within a three year period, a total Project area of 150km² (with 4.24km² in total disturbed during construction) and progressive installation of WTGs and infrastructure.

- 2.9.3 The EIA Report states that commercial fishing will not be excluded from the Project site entirely during the construction phase, however, rolling safety zones of up to 500m will be implemented around major construction vessels. Installed infrastructure may also result in safety zones of 50m (as appropriate).
- 2.9.4 During the construction (and decommissioning) phase, impacts resulting from temporary loss or restricted access to fishing grounds were deemed to be of moderate residual significance for the scallop fishery. Impacts resulting from increased steaming times to fishing grounds were deemed to be of minor significance for all fisheries. Displacement of fishing activity was deemed to be of minor/moderate significance for all fisheries.
- 2.9.5 Operational phase impacts included the impacts arising from the physical presence of infrastructure leading to: reduction in access to, or exclusion from, established fishing grounds, gear snagging, additional steaming times 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 Project). The EIA Report states that it is expected that fishing activities will be able to be resumed to some degree within the Project site, recognising that certain fishing methods may be restricted in their ability to operate as normal.
- 2.9.6 During the operation and maintenance phase of the Project, impacts arising from complete loss or restricted access to fishing grounds were deemed to be of moderate significance for scallop fisheries and of minor/moderate significance for creel fishing and squid fisheries. Displacement of fishing activity into other areas was deemed to be of moderate significance for the scallop fisheries and of minor/moderate significance for creel fishing and squid fisheries.
- 2.9.7 A cumulative impact assessment was presented in the EIA Report. During the construction phase, the residual cumulative effects resulting from the impacts of temporary loss or restricted access to fishing grounds were reported as being of moderate significance for nephrops and scallop fisheries and of minor/moderate significance for squid and creel fisheries. The effects of increased steaming times were reported as being of minor/moderate significance for all four fisheries and displacement effects were reported as being of minor/moderate significance for squid and creel fisheries and moderate for nephrops and scallop fisheries.
- 2.9.8 During the operation and maintenance phase, the residual cumulative effects arising from complete loss or restricted access to fishing grounds were assessed as being of minor/moderate significance for squid and creel fisheries and of moderate/major significance for scallop fisheries. The EIA Report stated that the assessment of moderate/major impacts for scallop fisheries was based on a worst case scenario without the appliance of mitigation measures and on the assumption that scallop fishing does not

return to the Project site. Should fishing activity return, the EIA Report assessed that the residual effects will be reduced in significance from moderate/major to non-significant. Impacts from increased steaming times were deemed to be of minor significance. Impacts resulting from displacement of activity were deemed to be of minor/moderate significance for squid and creel fisheries and of moderate impact for scallop fisheries.

2.10 Shipping and Navigation

- 2.10.1 The impacts of the Project on shipping and navigation receptors during the operational phase were assessed within the EIA Report. Potential impacts were assessed resulting from increased vessel to vessel collision risk, creation of vessel to structure allision risk, and effects on anchoring operations and fishing gear snagging risk (navigational safety). In addition, the cumulative impact assessment presented in the EIA Report also considered the impacts of increased transit times and distances for commercial vessels, increase of visual confusion when navigating and deviations to avoid wind farm areas.
- 2.10.2 All effects were assessed as being of negligible/minor significance in EIA terms, with the exception of cumulative impacts. Following the application of mitigation measures, effects on commercial vessels as a result of increased transit times and distances, vessel to vessel collision risk, vessel to structure allision risk and increased visual confusion when navigating were assessed as being of moderate residual significance. For commercial fishing vessels, the impact of deviations to avoid the wind farm areas and creation of vessel to structure allision risk were assessed as being of minor/moderate residual significance. For recreational vessels, the impact of the creation of vessel to structure allision risk was identified as being of negligible/moderate significance. The Applicant committed to mitigation measures regarding lighting and marking requirements, keel clearance, marine co-ordination, communication and monitoring for the offshore export cables to address the impacts identified within the EIA Report.
- 2.10.3 Construction and decommissioning phase impacts were scoped out of the EIA Report, as the worst case parameters for these impacts have already been considered within the 2013 ES. The 2013 ES concluded that all construction phase impacts could be reduced to a negligible/low level following the implementation of additional mitigation measures.

2.11 <u>Military and Aviation</u>

2.11.1 The following potential impacts were considered in respect of the Project alone during its operational phase; wind turbines causing persistent interference to the Leuchers Station Primary Surveillance Radar ("PSR") from reflected turbine signals: wind turbines causing persistent interference to the Leuchars Station Precision Approach Radar ("PAR") from reflected turbine signals; wind turbines causing persistent interference to Remote Radar Head ("RRH") Brizlee Wood and RRH Buchan Air Defence Radar ("ADR") from reflected turbine signals; effects on activities carried out in military Practice and Exercise Areas ("PEXA"); and the use of helicopters for operation and maintenance of the Project area.

- 2.11.2 The cumulative effects of wind turbines causing persistent interference to the Leuchars Station PSR from reflected turbine signals and of wind turbines causing persistent interference to RRH Brizlee Wood and RRH Buchan ADR from reflected turbine signals were also considered.
- 2.11.3 With the exception of those effects relating to the use of helicopters for operation and maintenance (the residual effect of which is minor and not significant), all effects were considered to be major adverse, which is significant in EIA terms. However, a range of mitigation measures have been identified, some of which are temporary measures pending agreement of a long-term technical solution. Following the implementation of these additional mitigation measures, the residual effects of all impacts previously classified as of major adverse impact is reduced to being of minor adverse impact, which is not significant in EIA terms.

2.12 <u>Cultural Heritage</u>

- 2.12.1 The EIA Report considered impacts on the setting of a range of onshore receptors of varying degrees of cultural heritage significance during the operational phase. Construction phase impacts were scoped out of the EIA Report. Setting impacts were considered for a number of designated coastal heritage assets.
- 2.12.2 Impacts resulting from a change in setting of a number of designated coastal heritage assets were assessed as having a moderate effect on Tentsmuir Coastal Defences, St Andrews Cathedral and adjacent ecclesiastical remains and St Andrews Castle. These effects were not considered to be significant in EIA terms.
- 2.12.3 The cumulative assessment presented in the EIA Report considered the impact of the Project alongside WTGs from Neart na Gaoithe and Seagreen offshore wind farms in relation to the setting of each onshore receptor. During the operation and maintenance phase, setting changes were deemed to have a moderate effect on Bell Rock Lighthouse Signal Tower, Ladyloan, Bell Rock Lighthouse, Tentsmuir Coastal Defences, St Andrews Cathedral and adjacent ecclesiastical remains and St Andrews Castle and a minor/moderate effect on Crail Airfield, pillbox, Foreland Head. These effects were not deemed to be significant in EIA terms.

2.13 Seascape and Landscape Visual Impact Assessment

2.13.1 The EIA Report concluded that the following potential effects were of minor or negligible adverse significance: impact of landfall construction activities on landscape receptors at Thorntonloch Beach; impact of landfall construction activities on visual receptors at Thorntonloch Beach; impact of the operational wind farm on landscape character; impact of aviation and navigation lighting on landscape character; and cumulative impacts on landscape character arising from the additional presence of the offshore wind farms.

- 2.13.2 A number of potential effects were assessed as being significant in: impact of the Project on the coastal character on east Fife and north-east East Lothian; impact of the Project on visual amenity within 35km; Impact of aviation and navigation lighting on coastal character along the eastern Fife coast; impact of aviation and navigation lighting on visual amenity within 30km; cumulative impacts on coastal character arising from the additional presence of the Project on receptors in east Fife and south-east Angus; and cumulative impacts on visual amenity arising from views of the Project in addition to other wind farms, where both Neart na Gaoithe offshore wind farm and the Project are viewed at closer range.
- 2.13.3 The residual effects of these potential impacts remain significant in EIA terms since no additional mitigation measures beyond the embedded mitigation have been identified.
- 2.14 <u>Socio-Economics</u>
- 2.14.1 Impacts on tourism were scoped out of the EIA Report, and the EIA Report assessed impacts related to the offshore elements of the Project on the Economic Study Area and across Scotland. The "Economic Study Area" was defined as the labour market catchment areas (60 minute drive-time catchments) around eight locations considered as representative of the type of locations that may be able to support the offshore wind sector (Leith, Rosyth, Dundee, Montrose, Methil, Burntisland, Cromarty Firth and Aberdeen).
- 2.14.2 Base and high scenarios were presented in the EIA Report. The base scenario assumed a moderate supply chain capacity capable of supplying around 36% of whole life expenditures from the Economic Study Area, 14% from the rest of Scotland and 18% from the rest of the UK. The high scenario assumed a more developed supply chain capable of supplying around 36% of whole life expenditure from the Economic Study Area, 14% from the rest of Scotland and 27% from the rest of the UK. Both scenarios presented assumed a worst case scenario of 560MW generating capacity.
- 2.14.3 The EIA Report estimated that net additional employment from the Project is estimated to be between 321 full-time equivalent ("FTE") and 832 FTE direct, indirect and induced construction jobs at an Economic Study Area level, dependent on the impact scenario considered. For the rest of Scotland, net additional employment from the Project was estimated to be between 108 FTE and 216 FTE direct, indirect and induced construction jobs (and a total of between 858 and 1854 net additional construction jobs in the UK). This would represent between £41.8 million and £108.2 million Gross Value

Added ("GVA") per annum at an Economic Study Area level and between £55.8 million and £136.2 million at a Scottish level.

- 2.14.4 During the operation and maintenance phase, the EIA Report estimated that the net additional employment generated would represent a new GVA at an Economic Study Area of between £4.9 million to £10.7 million per annum and £18.6 million per annum for Scotland as a whole. The Applicant estimated that 202 FTE jobs will be created in total (with 38 within the Economic Study Area and 42 within the rest of Scotland).
- 2.14.5 During the decommissioning phase the number of jobs is likely to be lower than those estimated for the construction phase. The EIA Report estimated that during the decommissioning phase approx. 110 FTE net additional jobs will be generated by the Project.

3 Consultation

- 3.1 In accordance with the 2017 MW Regulations, on 15 August 2018, the Applicant submitted an EIA Report and HRA Report describing the Works and giving an analysis of its environmental effects.
- 3.2 Advertisement of the Application 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 after regulatory approval is granted.

Document	Date received	Dates of consultation	Publication
EIA Report and	15 August 2018	21 August 2018 – 1 October 2018	The Courier (22 and 29 August 2018)
Application		21 August 2018 – 21 December 2018 (for Planning Authorities)	Arbroath Herald (24 and 31 August 2018)
			Edinburgh Gazette – (24 August 2018)
			The Scotsman (22 August 2018)
			Fishing News (30 August 2018)
			Applicant Website (30 August 2018

- 3.4 A summary of the responses received is set out at sections **Error! Reference source not found.**, 5 and 6. In addition, specialist advice was provided by Marine Scotland Science ("MSS") and the advice received is set out at section 7.
- 3.5 The responses to the consultation on the EIA Report are available to view <u>here</u>.
- 3.6 In addition, Scottish Natural Heritage ("SNH") was consulted on the Appropriate Assessment ("AA") completed by the Scottish Ministers.

4 Summary of statutory consultee consultation

- 4.1 Under the 2017 MW Regulations, the statutory consultees are as follows: SNH, the Scottish Environment Protection Agency ("SEPA") and Historic Environment Scotland ("HES"). The planning authorities whom the Scottish Ministers considered appropriate to consult in respect of the proposed Project are Aberdeenshire Council, 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 2010 Act.
- 4.3 <u>Aberdeenshire Council</u>
- 4.3.1 Aberdeenshire Council did not initially object to the application, subject to the resolution of the concerns regarding ornithology raised by SNH in its consultation response. Aberdeenshire Council advised that, whilst the potential for direct impacts within the local authority area are limited due to the distance from the Project, any impacts identified have been assessed against the Aberdeenshire Local Development Plan 2017 ("the 2017 Aberdeenshire LDP"). Aberdeenshire Council advised that the Project is likely to impact upon landscape, visual amenity, ecology and built heritage.
- 4.3.2 Aberdeenshire Council advised that the Project will likely be most prominent when viewed from the South East Coast Special Landscape Area ("SLA"). Aberdeenshire Council advised that Policy E2 Landscape of the 2017 Aberdeenshire LDP ("Policy E2") makes provision for developments which may impact upon the SLA where the effects are clearly outweighed by social, environmental or economic benefit of at least local importance. Following its review of the Seascape, Landscape and Visual Impact Assessment ("SLVIA"), Aberdeenshire Council consider that the Project would be permissible under Policy E2. Having reviewed the SLVIA presented, Aberdeenshire Council advised that the impacts of the Project (both in isolation and in-combination) are likely to be limited to the southern section of the SLA and, therefore, would not fundamentally alter the qualifying interests of the entire designation. Aberdeenshire Council noted that the

Project will make a significant contribution towards the transition to the low carbon economy.

- 4.3.3 Aberdeenshire Council advised that Policy E1 Natural Heritage of the 2017 Aberdeenshire LDP ("Policy E1") seeks to prevent developments which would have an unacceptable impact upon nature conservation sites. Aberdeenshire Council stated that it agreed with SNH's conclusions regarding the predicted impact of the Project on the Fowlsheugh Special Protection Area ("SPA") within Aberdeenshire. Aberdeenshire Council advised that the mitigation measures outlined in the EIA Report do not appear to suitably mitigate against the identified impacts on the SPA and would, therefore, not constitute appropriate compensatory measures as required by Policy E1.
- 4.3.4 Aberdeenshire Council further considered the Project in light of Policies HE1 and HE2 of the 2017 Aberdeenshire LDP as regards the built environment. Aberdeenshire Council advised that the Project would not have a direct impact upon heritage designations within Aberdeenshire but that the most likely impact would be a change on the setting of listed buildings and conservation areas within the south east Aberdeenshire coastline. Aberdeenshire Council advised, however, that due to the distance between the Project and the local authority area (approximately 22km at the closest point) the impacts of the Project in isolation on the historic context and setting of the area are likely to be minor.
- 4.3.5 Aberdeenshire Council concluded that the Project will likely have some degree of impact on the local authority area in relation to landscape/visual amenity, ecology and built heritage.
- 4.3.6 Aberdeenshire Council advised that it deferred to SNH advice as regards the potential ecological impacts of the Project. Aberdeenshire Council advised that a degree of uncertainty remained regarding the potential impacts of the Project and as to whether further mitigation measures could alleviate the impacts predicted in the EIA Report.
- 4.3.7 A response from the Applicant was forwarded to Aberdeenshire Council on 19 January 2019. The Applicant welcomed the comments submitted by Aberdeenshire Council and reiterated its commitment to working with SNH, Royal Society for the Protection of Birds Scotland ("RSPB Scotland") and other stakeholders to discuss ornithological matters further.
- 4.3.8 SNH advised that there would be an adverse effect on the site integrity of the Fowlsheugh SPA in respect of the black-legged kittiwake and razorbill qualifying interests as a result of the Project in-combination with the other Forth and Tay Developments (see further, SNH response at paragraph 4.13 below).
- 4.3.9 As SNH advised that there would be an adverse effect on the site integrity of the Fowlsheugh SPA in respect of the black-legged kittiwake and razorbill qualifying interests, Marine Scotland Licensing Operations Team ("MS-

LOT") contacted Aberdeenshire council to confirm its position. On 12 February 2019 Aberdeenshire Council advised that its original comments should be taken as an objection.

- 4.3.10 Aberdeenshire Council reiterated the comments made within its original response: namely that with regard to ecology, Aberdeenshire Council is aware of SNH's consultation response objecting to the Project partially on the basis of the predicted impact upon Fowlsheugh SPA within Aberdeenshire. Policy E1 seeks to prevent developments which would have an unacceptable impact upon nature conservation sites. In this instance, developments which would impact upon Fowlsheugh SPA to the extent indicated by SNH, would only be permissible where there are imperative reasons of overriding public importance, where there is no alternative solution, and where appropriate compensatory measures are implemented.
- 4.3.11 Aberdeenshire Council highlighted that the EIA Report indicates that embedded mitigation has been taken into account in assessing the impact of the Project on the qualifying interests of the SPA, as have wider best practice measures such as the employment of an environmental clerk of works. These measures have informed Aberdeenshire Council's assessment of the impact, and were considered by SNH in assessing the Application. Aberdeenshire Council states that the measures do not appear to suitably mitigate against the identified impact upon the SPA and therefore it considers that the mitigation measures would not constitute appropriate compensatory measures as required by Policy E1.
- 4.3.12 Aberdeenshire Council further stated as the it stands, the Project would not comply with Policy E1 as a result of the predicted impact upon Fowlsheugh SPA. The Scottish Ministers, however, concluded in their AA that, subject to the appliance of conditions, there would be no adverse effect on the site integrity of the Fowlsheugh SPA, and as such the Project is not considered to breach Policy E1 insofar as it relates to internationally designated nature conservation sites.
- 4.4 Angus Council
- 4.4.1 Angus Council did not object and advised that the impacts of the Project, in terms of material considerations relevant to Angus Council's administrative area, do not raise any new or significant issues. Angus Council stated that its comments provided on the 2014 Application remain valid. Angus Council considered the seascape and visual impacts of the 2014 Application to be significant and raised concerns regarding the impacts, particularly from aviation lighting, on the setting of the Bell Rock Lighthouse. Angus Council, however, did not object to the 2014 Application.
- 4.4.2 Angus Council considered that there would be significant impacts upon landscape and seascape character, however, these were not considered to be unacceptable. Angus Council stated that the WTGs would result in a significant visual impact, however, the visual impact on Angus was not considered to be unacceptable in its view.

- 4.4.3 Angus Council considered that its concerns regarding the lighting of the Project for both shipping navigation and aviation raised in response to the 2014 Application have been considered in greater detail in the EIA Report. However, Angus Council advised that it considered that there is a limitation to this assessment and that the night time viewpoints presented confirm that the lighting would be viewed in close association and at a greater height to the light at Bell Rock Lighthouse, thus resulting in significant impacts on the setting of the Bell Rock Lighthouse. Angus Council considered that the aviation and navigation lighting will have significant night seascape impacts and stated that further consideration of this matter is required. Angus Council stated that, if an appropriate technical solution is identified, the associated effects would be unlikely to be unacceptable.
 - 4.4.4 Angus Council stated its concerns in relation to cumulative impacts remain as per its concerns regarding the 2014 Application. Angus Council stated that a level of consistency is important to prevent the collective view of the Project, in-combination with Neart na Gaoithe and Seagreen Alpha and Seagreen Bravo offshore wind farms, being inconsistent or distorting seascape perspective. Angus Council highlighted that the Project incombination with the Neart na Gaoithe wind farm, would present a situation whereby larger turbines from the Project are located in the foreground, with smaller turbines in the background. Angus Council highlighted that these impacts would not be unacceptable, but that a co-ordinated approach to the finalised height of the Project and the Neart na Gaoithe wind farm should be considered further. Angus Council made further comments regarding the cumulative impacts of lighting associated with the Forth and Tay Developments. Angus Council stated that the lighting will be likely to be visible in prominent views from long distances across Angus, with navigation lighting likely to be visible from higher ground, increasing the cumulative impacts of the Forth and Tay Developments, with attendant impacts on the setting of the Bell Rock Lighthouse. Angus Council stated that further consideration is required in relation to lighting of the Forth and Tay Developments to ensure a consistent solution is identified to mitigate adverse impacts.
- 4.4.5 Angus Council stated that it concurs with the assessment of Historic Environment Scotland ("HES") regarding the impact of the Project on the Bell Rock Lighthouse. However, Angus Council highlighted that, in its opinion, the EIA Report has limitations in terms of assessing impacts of aviation and navigation lighting on the setting of the asset.
- 4.4.6 Angus Council noted the potential impacts on commercial fishing and recreational use of the waters, during the construction and operation phases of the Project, outlined in the EIA Report. Angus Council stated that the impacts could affect much of the Angus coastline (in particular the commercial fishing fleet, pleasure craft industries and yachting located at Arbroath Harbour and marine and commercial port operations at Montrose). Angus Council stated that disruption to these activities resulting access,

exclusion and increased steaming time, are regarded as material considerations. Angus Council considers that the potential socio-economic impacts on industry and tourism reported in the EIA Report have the potential to be higher and may, in some instances (particularly during the construction phase) be significant. Angus Council stated that these impacts were not considered to be unacceptable, subject to the mitigation measures being implemented.

- 4.4.7 A response from the Applicant was forwarded to Angus Council on 18 January 2019. The Applicant acknowledged Angus Council's concerns in relation to the impacts on the setting of Bell Rock Lighthouse. The Applicant stated that the worst-case scenarios for cumulative impacts and night time lighting presented in the EIA Report are not expected to occur. The Applicant stated that the night time lighting assessment presented in the EIA Report considered aviation lighting at full intensity, which would only occur in low visibility conditions (e.g. fog) and that these low visibility conditions were not replicated within the assessment.
- 4.4.8 The Applicant stated that it would not be possible to take the co-ordinated approach to the finalised height of the Forth and Tay Developments suggested by Angus Council, due to technical and commercial constraints. The Applicant, however, committed to reducing visual impacts as far as possible through consultation with Angus Council during the post-consent phase.
- 4.4.9 The Applicant maintained that the EIA Report provides a realistic assessment of the impacts on recreational yachting and fishing; however, the Applicant reiterated its commitment to the implementation of mitigation measures and that fishing and recreational vessels would not be restricted from entering the Project site during the operational phase.
- 4.4.10 Conditions have been attached to the s.36 Consent and OfTI Marine Licence mitigate the impacts highlighted by Angus Council, including the requirement to prepare, consult on and adhere to the terms of a Design Specification and Layout Plan ("DSLP"), Design Statement ("DS") and Lighting and Marking Plan ("LMP").
- 4.5 <u>Dundee City Council</u>
- 4.5.1 Dundee City Council had no detailed comments to make and advised that it did not object to the Project.
- 4.6 East Lothian Council
- 4.6.1 East Lothian Council did not object to the Project, subject to the application of conditions to any consent/regulatory approval granted to address its concerns. East Lothian Council advised that conditions relating to the intertidal works, light emission, noise, design layout and specification,

decommissioning and pollution prevention and control be attached to any consent or regulatory approval granted.

- 4.6.2 East Lothian Council advised that the Project will have a significant adverse cumulative impact on areas of the coast of East Lothian, beyond the 50km study area agreed at scoping. East Lothian Council advised that the increased size of the WTGs, when compared to the Original Consent, would increase the visual impact of the Project on views from East Lothian, particularly in-combination with the Neart na Gaoithe offshore windfarm.
- 4.6.3 East Lothian Council advised that the SLVIA presented in the EIA Report did not consider the impact on the SLA within East Lothian. East Lothian Council advised that the Applicant had failed to take into account the proposed SLA, despite being kept duly informed of the progress of the Local Landscape Designation Review and East Lothian Local Development Plan 2018 ("ELLDP") process. East Lothian Council advised that this information should have been included to facilitate public understanding of the impacts of the Project.
- 4.6.4 East Lothian Council provided information on the SLA not included within the EIA Report (Tantallon Coast SLA, Belhaven Bay SLA, Dunbar to Barns Ness Coast SLA, North Berwick to Seton Sands SLA) and advised that it would define the sensitivity of each SLA as High. East Lothian Council advised that the Project would introduce a permanent new feature to the seascape, changing the open undeveloped character of the seascape and introducing lighting to a previously dark scene. East Lothian Council advised that this would lead to the loss of an unbroken horizon line of the sea and could detract from the appreciation of the coast as a natural area.
- 4.6.5 East Lothian Council further advised that the impact of the Project on the A198 east of North Berwick has not been considered within the SLVIA, despite the closest point of the A198 to the Project falling within the agreed 50km study area (as advised in the scoping opinion). East Lothian Council stated that it had previously noted the importance of the A198 as a tourist route at scoping and that the Applicant had agreed to provide a wireline from this route. East Lothian Council advised that whilst this information had not been provided in the EIA Report, it was able to assess the landscape and visual impacts of the Project. East Lothian Council advised that it had no comments to make in respect of the historic environment for the offshore elements of the Project.
- 4.6.6 East Lothian Council advised that lighting, if visible from the East Lothian coast, will have a significant detrimental impact on the landscape character of the SLA. East Lothian Council advised, however, that due to the distance of the Project from the East Lothian Council area, the lights will be positioned below the horizon and thus will not impact on the appreciation of the landscape character of the views from East Lothian. However, due to the potential impacts arising from the visibility of lighting, East Lothian Council requested that a condition be placed on any consent or regulatory approval.

granted to monitor the impacts of lighting and for the implementation of mitigation measures, should light be visible from East Lothian. East Lothian Council further stated that maximum and minimum lighting requirements should be specified and that dimming should be required when visibility is greater than 5km. East Lothian Council provided detailed comments regarding matt finish and colour of the WTGs.

- 4.6.7 East Lothian Council provided detailed comments on the viewpoints presented in the EIA Report. East Lothian Council advised that, in its opinion, the SLVIA underestimates the magnitude of cumulative change that the Project will have on the viewpoints presented in the SLVIA and on the SLA. East Lothian Council advised that it considers the magnitude of cumulative change arising from the Project to be moderate, where the WTGs represent a notable increase in the proportion of the seascape and view affected by the Forth and Tay Developments. East Lothian Council advised that an offset gird layout may potentially address the issues arising from cumulative impacts. East Lothian Council advised that the Project would have impacts of moderate/major detrimental significance on both seascape character and visual amenity for viewpoint 26 (North Berwick Law). East Lothian Council further advised that the Project would have significant detrimental effects on the viewpoint from the A198 road east of North Berwick and moderate, but not significant effects, on the Tantallon Castle, Ravensheugh Sands and Yellowcraig viewpoints.
- 4.6.8 At scoping, East Lothian Council advised that the impacts of the Project on local weather should be considered. East Lothian Council noted that, following further discussion, the Scottish Ministers subsequently agreed that these impacts could be scoped out of the EIA Report. East Lothian Council noted that the Applicant had briefly considered these impacts in the EIA Report, but advised that provision for monitoring of weather effects should be included in any new consent granted.
- 4.6.9 East Lothian Council advised that it does not support developments which would have an adverse impact on the integrity of European sites within East Lothian, or involving such an effect on qualifying interest species of sites outwith East Lothian that visit East Lothian or its coast. East Lothian Council noted SNH's advice regarding adverse effects on the integrity of a Natura 2000 site but that the impacts of the Project would be less than those predicted for the Original Consent. East Lothian Council therefore advised that it considers the Project to be preferable to the Original Consent.
- 4.6.10 East Lothian Council advised that risks of pollution should be minimised and appropriate arrangements made if an incident, for which the Applicant is responsible, occurs via remediation. East Lothian Council noted that the EIA Report considers shipping collision risk to be moderate and moderate to minor for recreational vessels. East Lothian Council advised that conditions should be attached to any consent or regulatory approval granted to ensure environmental best practice is implemented and suitable financial arrangements are in place throughout the lifespan of the Project.

- 4.6.11 East Lothian Council advised that it does not consider that there will be any significant impacts on noise or air quality arising from the Project. On 27 September 2018, the Applicant confirmed that helicopters will not be operated over the East Lothian Council area. East Lothian Council requested that a specific condition be added to any consent or regulatory approval granted to secure this commitment, which was not stated explicitly in the EIA Report.
- 4.6.12 East Lothian Council requested that a condition be placed upon any consent granted regarding decommissioning and financial arrangements to support decommissioning. East Lothian Council further advised that, in its opinion, East Lothian should be considered as part of the community, should community benefits be considered.
- 4.6.13 A response from MS-LOT was provided to East Lothian Council on 31 January 2019, advising that should consent or regulatory approval be granted the Applicant will not be required to undertake monitoring of the impacts of the Project on recreational users, or any such remedial works required as a result of said monitoring, as no significant effects on recreational users were identified through the EIA process.
- 4.6.14 Further, MS-LOT advised that should consent or regulatory approval be granted the Applicant will not be required to undertake monitoring of the impacts of lighting and visibility from the East Lothian area, nor will the Applicant be required to replace said lighting with new systems/methods when such system/methods become available to address these concerns. MS-LOT further advised that the Applicant will not be required to dim the lighting when visibility is greater than 5km. Lighting and marking requirements will be agreed in consultation with the Ministry of Defence ("MOD"), the Civil Aviation Authority ("CAA"), NLB and MCA to ensure navigational safety. East Lothian Council, however, will be consulted on the terms of the LMP and the Applicant will be required to install the minimum lighting necessary to meet said navigational safety requirements, to reduce the impacts of lighting on the residents of East Lothian. Should the Applicant wish to alter the lighting and marking of the Works, the Applicant would be required to seek and obtain prior written approval from the Scottish Ministers.
- 4.6.15 MS-LOT further advised that air transport is a matter reserved to Westminster under the Scotland Act 1998 (Schedule 5, Head E4) and that the Scottish Ministers do not have devolved powers in connection with these matters (except in limited circumstances, which do not apply in this instance). MS-LOT, therefore, advised that a condition excluding the flight of helicopters over the East Lothian Council could not be attached to any consent or regulatory approval granted. In the event that helicopter operations are required, the Applicant will be required to provide details of said operations within the Operational and Maintenance Plan ("OMP") and East Lothian Council will be consulted on the terms of the OMP.

- 4.6.16 East Lothian Council will be consulted on the Construction Method Statement ("CMS") in order to identify and address its concerns relating to the intertidal works.
- 4.6.17 A response from the Applicant was forwarded to East Lothian Council on 7 February 2019. The Applicant noted East Lothian Council's comments regarding the SLVIA and the exclusion of the SLA within East Lothian and referred to a pre-submission meeting held between both parties on 13 March 2018, where the Applicant advised that the assessment would be carried out on the basis of extant Areas of Great Landscape Value ("AGLV") due to time constraints. The Applicant stated that the SLA cover similar areas to the AGLV assessed (with some revisions to boundaries) and are supported by Supplementary Planning Guidance, the underlying character of local designated areas remains largely unchanged. The Applicant stated that, whilst the AGLV assessed was not supported by documentation defining its qualifying characteristics, AGLV were afforded high sensitivity within the SLVIA.
- 4.6.18 The Applicant noted East Lothian Council's comments regarding potential impacts on the A198. The Applicant advised that the SLVIA presented in the EIA Report did not consider the A198 as no significant effects were anticipated and that the scope of the SLVIA had been agreed via the scoping process. The Applicant stated that no significant effects on viewpoints 25 and 26 had been identified within the SLVIA undertaken.
- 4.6.19 The Applicant noted East Lothian Council's comments regarding cumulative visual impacts with the Neart na Gaoithe Wind Farm and reiterated that no significant cumulative effects were identified within the SLVIA undertaken. The Applicant stated that multiple constraints would need to be taken into consideration regarding turbine locations (including landscape and visual considerations) and that the approach to the layout of WTGs is included in section 12.5.3 of the SLVIA and that issues regarding detailed site design and layout would be considered within the DSLP and DS.
- 4.6.20 The Applicant stated that it is content to investigate mitigation measures to reduce the potential effects of aviation lighting. The Applicant stated, however, that any solution would need to satisfy the needs of other stakeholders and meet health and safety obligations. The Applicant further stated that it did not consider that it was proportionate or appropriate to require monitoring of effects or replacement of lighting when new technology becomes available via consent conditions.
- 4.6.21 The Applicant noted East Lothian Council's comments regarding monitoring of impacts on local weather. The Applicant reiterated that these effects had been scoped out of the assessment and stated that it does not consider that there is a requirement to monitor weather effects given, in its view, the rarity of the potential impact and the negligible likelihood that there would be significant impacts.

- 4.6.22 The Applicant noted East Lothian Council's concerns regarding the potential visual impacts of the cable landfall location and cable marker boards on the Prestonpans Coast SLA. The Applicant stated that, once buried, there will be no visual impacts from the Offshore Export Cable ("OEC") during the operational phase. The Applicant stated that it would prefer not to install cable marker boards (particularly if horizontal direct drilling ("HDD") is used as the installation method), the requirement to install cable marker boards is related to navigational safety concerns and any proposal not to install cable marker boards would require further consultation and agreement with other stakeholders. The Applicant clarified that the offshore cable corridor is wider than the area indicated in the onshore planning application to ensure there is sufficient space for vessels to operate during cable installation activities. The Applicant confirmed that the cable would be installed in line with the onshore planning application documents.
- 4.6.23 The Applicant noted East Lothian Council's comments regarding impacts on Natura sites and qualifying interests and stated that it considers that the conclusions of the EIA Report remain valid. The Applicant considers that the precaution contained within the assessment could result in the impacts of the Project being overestimated. The Applicant committed to preparing an environmental management plan to address East Lothian Council's concerns regarding the potential risks of pollution.
- 4.6.24 The Applicant noted East Lothian Council's comments regarding paint finishes of the WTGs and stated that these would be agreed in consultation with stakeholders during the pre-construction phase.
- 4.6.25 The Applicant noted East Lothian Council's comments regarding potential impacts on recreational users and the need to monitor said impacts. The Applicant referred to the requirement within the 2017 EW Regulations for monitoring measures to be proportionate to the nature, size and location of the proposed Project and the significance of its effects on the environment. The Applicant stated that the EIA Report had not identified any significant effects on recreational users and therefore, the imposition of monitoring requirements regarding these effects would not be consistent with the terms of the EW Regulations.
- 4.6.26 The Applicant stated that it was content to submit a DP to address concerns regarding decommissioning.
- 4.6.27 Conditions have been attached to the s.36 consent and OfTI marine licence to mitigate the impacts highlighted by East Lothian Council, including the requirement to prepare, consult on and adhere to the terms of a DSLP, LMP, DP, CMS, Environmental Management Plan ("EMP") and Project Environmental Monitoring Programme ("PEMP") to address the concerns outlined above. Further, conditions have been attached to the s.36 consent and OfTI Marine Licence requiring the Applicant to bear the costs of any remediation works required and to obtain any other necessary statutory permissions/approvals prior to commencing the Works.

4.7 <u>Fife Council</u>

- 4.7.1 Fife Council did not object to the application. Fife Council advised that its concerns regarding the impact of the Original Consent on the seabird qualifying interests of the European designated sites in the Firth of Forth, in particular the Forth Islands SPA, in-combination with the other Forth and Tay Developments remained valid. Fife Council advised that it deferred to advice from SNH regarding these matters.
- 4.7.2 A response from the Applicant was forwarded to Fife Council on 18 January 2019. The Applicant maintained that the results of the EIA Report remain valid and that there will be no significant adverse effect on the site integrity of any SPA. The Applicant, however, reiterated its commitment to working with SNH, RSPB Scotland and other stakeholders to discuss ornithological matters further.

4.8 <u>Scottish Borders Council</u>

- 4.8.1 Scottish Borders Council did not object to the application. Scottish Borders Council advised that, the whilst the Project represents an increase in tip height from the Original Consent, the increase would be unlikely to create any significant effects due to the distance of the Project from the Borders coastline. Scottish Borders Council further advised that any effects resulting from the increase would be offset by the reduction in WTG numbers from the Original Consent.
- 4.8.2 Scottish Borders Council provided detailed comments on the kittiwake qualifying interest of the St Abb's Head to Fast Castle SPA, recommending conditions be attached to any consent or regulatory approval granted (including the requirement for a Piling Strategy ("PS") to ensure sequential pile driving is avoided in relation to other in-combination proposals). Further, Scottish Borders Council advised that a condition to enable mitigation (e.g. curtailment) be attached to any consent or regulatory approval granted to address any significant adverse impacts on seabird populations at St Abb's Head to Fast Castle SPA identified through monitoring mechanisms.
- 4.8.3 Scottish Borders Council, however, advised that it was content that SNH were considering the impacts of the Project on Special Areas of Conservation ("SAC") and SPAs fully.
- 4.8.4 A response from the Applicant was forwarded to Scottish Borders Council on 18 January 2019. The Applicant maintained that the results of the EIA Report remain valid and that there will be no significant adverse effect on the site integrity of any SPA. The Applicant, however, reiterated its commitment to

working with SNH, RSPB Scotland and other stakeholders to discuss ornithological matters further.

4.8.5 Conditions have been attached to the s.36 consent and OfTI Marine Licence requiring the Applicant to prepare, consult on and adhere to a PS and PEMP (to include monitoring of the impacts of the Project on ornithology and marine mammal receptors) to address the concerns raised. Further, conditions have been attached to the OfTI Marine Licence, requiring the Applicant to bear the costs of any remediation works required.

4.9 <u>Historic Environment Scotland ("HES")</u>

- 4.9.1 HES was content that the EIA Report provided sufficient information and HES did not object to the application. HES stated that the application does not raise historic environment issues of national significance. HES consider its key interest in the Project to be the impacts on the setting of two category A listed buildings Bell Rock Lighthouse (LB 5197) and Ladyloan, Bell Rock Lighthouse Signal Tower and Entrance Lodges (LB 21230). HES were content that there will not be a significant impact on the settings of these listed buildings as a result of the Project.
- 4.9.2 HES welcomed the references to their <u>Managing Change in the Historic</u> <u>Environment</u> guidance series and HES <u>Policy Statement</u> within the EIA Report. HES was content that the methodology utilised in the EIA Report was appropriate and provided some detailed comments on the methodology and assessment presented. HES had comments on the method used to rate the sensitivity of heritage assets (included at table 13.9 of the EIA Report). The method used means that no value is available for nationally important assets with a medium or low contribution for setting and therefore, HES stated that this has the potential to obscure the manner in which sensitivity is assigned in such cases.
- 4.9.3 HES welcomed the inclusion of visualisations and wirelines to support the conclusions of the EIA Report and made comments regarding the resolution of the documents. HES were, however, able to refer to visualisations for previous iterations of the scheme for context and stated that it was content adequate information had been provided.
- 4.9.4 HES welcomed the commitment to produce a Written Scheme of Investigation ("WSI") and a Protocol for Archaeological Discoveries ("PAD").
- 4.10 <u>Maritime & Coastguard Agency ("MCA")</u>
- 4.10.1 MCA advised that detailed discussion had taken place with the Applicant regarding traffic surveys. MCA advised that it accepted that the original Navigational Risk Assessment ("NRA"), the updated EIA Report, the traffic validation study and the Marine Guidance Note ("MGN") 543 checklist, as an equivalent to a new NRA. MCA advised that there are a number of issues

which would require further consideration, should any consent or regulatory approval be granted.

- 4.10.2 MCA stated that it had considered the initial layout design presented in figure 15.1 (Chapter 15, page 13) of the EIA Report and that the turbine layout design will require MCA approval prior to construction, to minimise the risks to surface vessels (including rescue boats) and Search and Rescue ("SAR") aircraft operating within the Project site.
- 4.10.3 MCA stated it was concerned with the scale of the Project, in-combination with the Neart na Gaoithe, Seagreen Alpha and Seagreen Bravo offshore wind farms and that the turbine layout and orientation would need to be discussed and agreed with MCA, should any new consent be granted, to mitigate these concerns. MCA advised that a SAR checklist will be required to be agreed prior to the commencement of any construction activities. MCA advised that a condition requiring the preparation and approval of an Emergency Response Co-Operation Plan ("ERCoP") would be required.
- 4.10.4 MCA advised that lighting and marking requirements would require further discussion with key stakeholders and provided further detail on the lighting and marking requirements for the Works.
- 4.10.5 MCA supported the use of safety zones throughout the lifespan of the Works, but stated that further detailed justification would be required for a 50m operational safety zone, based on significant evidence from the construction phases and the baseline NRA.
- 4.10.6 MCA stated that further work needs to be undertaken to define cable burial and protection methods, particularly close to shore, where impacts on navigable depth may become significant. MCA stated that any consented cable protected works must ensure existing and future safe navigation is not comprised. MCA stated it would accept a maximum of 5% reduction in surround depth referenced to Chart Datum. MCA stated that existing charted anchorage areas should be avoided.
- 4.10.7 MCA further advised that its preference would be to see linear progression of the construction programme, to avoid disparate construction sites across the Project site. The progression of the construction programme will be subject to agreement through the Construction Programme ("CoP") and CMS.
- 4.10.8 Conditions have been placed upon the s.36 consent and OfTI Marine Licence to mitigate the impacts highlighted by MCA, including the requirement to prepare, consult on and adhere to the ERCoP, Cable Plan ("CaP"), CoP, CMS, DSLP, Navigational Safety Plan ("NSP") and LMP.
- 4.10.9 Further, a condition has been attached to the OfTI Marine Licence requiring the Applicant to ensure that navigable depth is not altered by more than 5% (referenced to Chart Datum) unless otherwise agreed in writing by MS-LOT,

in consultation with the MCA and NLB. The NSP must take into account and adequately address all of the recommendations within the current MGN 543, and its annexes, or any other relevant documents which may supersede this guidance.

4.10.10 Safety Zones will be subject to consideration of a further application by the Applicant.

4.11 Northern Lighthouse Board ("NLB")

- 4.11.1 NLB stated that it requires the Applicant to establish a NSP and LMP, detailing the proposed lighting and marking for all phases of the Works. NLB further advised that it wishes to be consulted on the lighting and marking requirements during the decommissioning phase of the Works. NLB further advised that the lighting and marking may need to be altered or amended to reflect the neighbouring Neat na Gaoithe, Seagreen Alpha and Seagreen Bravo offshore wind farms, in order to form a cohesive and effective marking plan for the area.
- 4.11.2 NLB provided further details regarding the marking requirements during the construction phase. NLB also provided details regarding the marking and lighting requirements during the operational phase of the Works, including the requirement to adhere to the International Association of Marine Aids to Navigation and Lighthouse Authorities ("IALA") Recommendation O-139.
- 4.11.3 NLB provided further comments on the requirement to obtain a Statutory Sanction prior to the deployment of any navigational marking and lighting equipment, promulgation of information regarding the nature and timescales of the Project and the requirement to inform the United Kingdom Hydrographic Office ("UKHO") of the locations of the installed WTGs, cable routes and cable landing points.
- 4.11.4 NLB noted that a comprehensive contingency plan will be required, detailing the emergency response to all possible catastrophic failure and collision scenarios.
- 4.11.5 Conditions have been placed on the s.36 consent and OfTI Marine Licence to mitigate the impacts highlighted by the NLB, including the requirement to prepare, consult on and adhere to the ERCoP, NSP and LMP. Conditions have also been attached to the OfTI Marine Licence requiring that the Works are marked and lit in accordance with IALA Recommendation O-139.

4.12 <u>Scottish Environment Protection Agency ("SEPA")</u>

4.12.1 SEPA had no comments to make on the offshore elements of this applicationand 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).

4.13 <u>Scottish Natural Heritage ("SNH")</u>

- 4.13.1 SNH submitted an objection to the application based on the grounds that it predicted adverse effects on the site integrity of the Forth Islands SPA (with respect to the kittiwake, gannet and razorbill qualifying interests) and Fowlsheugh SPA (kittiwake and razorbill qualifying interests) as a result of the Project in-combination with the existing consents for the other Forth and Tay Developments. SNH advised that there would be no adverse effect on the site integrity of any SPA as a result of the Project in isolation.
- 4.13.2 SNH further advised that an adverse impact on the site integrity of the St Abb's Head to Fast Castle SPA, in respect of kittiwake as a qualifying interest, as a result of the Project in-combination with the existing consents for the Forth and Tay Developments could not be ruled out.
- 4.13.3 SNH advised that it agreed with the methodology and assessment presented in the EIA Report and the case presented by the Applicant regarding the use of site specific flight height information (option 1) in the collision risk modelling ("CRM"). SNH welcomed the inclusion of additional work exploring alternative methods of displacement and barrier impacts, which assisted in the formation of its advice. SNH provided detailed comments on the collision risk and displacement modelling and Population Viability Analysis ("PVA") Methods presented in the EIA Report.
- 4.13.4 SNH provided comments on the marine mammal assessment presented in the EIA Report. SNH advised that there would be no significant adverse effect on any SACs as a result of the Project in isolation or in-combination with any other plans or projects, subject to the appliance of conditions to any consent granted to mitigate concerns regarding the impacts of construction and piling activities on marine mammals.
- 4.13.5 SNH stated that a PS should be developed to mitigate the residual risk of PTS, as the predicted PTS effect zones are large. SNH advised, however, that it agreed with the conclusion within the EIA Report regarding the magnitude of impacts (low) and the significance of effect from PTS as minor for all species and scenarios presented. SNH stated that it accepted that there is no requirement to re-run the interim Population Consequences of Disturbance ("iPCoD") modelling for bottlenose dolphin with the 1% conversion factor. SNH advised that this approach would not change the outcome of the modelling presented using the 0.5% conversion factor.
- 4.13.6 SNH provided further advice regarding the requirement for European Protected Species ("EPS") licences during construction works.
- 4.13.7 SNH provided advice on the seascape, landscape and visual impacts of the Project. SNH advised that the in-combination effects on the Project and the other Forth and Tay Developments will contribute to widespread levels of significant adverse effects on sensitive landscape, seascape and visual receptors. SNH stated that the large height and extent of the Project will

introduce significant adverse effects on receptors along a substantial proportion of the coastline in South Aberdeenshire, Angus and Fife (including both daytime and night-time impacts) and would raise issues of national interest for SNH.

- 4.13.8 SNH stated that the cumulative impacts of the Project, the other Forth and Tay Developments and the operational European Offshore Wind Deployment Centre ("EOWDC") will introduce significant effects in the regional context, further constraining the onshore capacity for wind energy which is already limited.
- 4.13.9 SNH advised that it broadly agreed with the assessment presented in the EIA Report. SNH stated that it considered the magnitude of cumulative visual change has been underestimated within the EIA Report, whilst this does not change the overall assessment of significance of effect for the most part, SNH advised that the severity of the impact of the increased WTG height of the Project should be recognised. SNH stated that it disagreed with the conclusions within the EIA Report regarding the significance of adverse visual impacts for six of the 26 viewpoints presented SNH stated that these should be classed as 'major significant' and not 'moderate/major' (as a result of the greater magnitude of cumulative change resulting from the addition of larger WTG for the Project and the clearly visible lighting and rotation of the blades).
- 4.13.10 SNH advised significant adverse effects arising along the National Cycle Network Route 1 from South Aberdeenshire to Angus, along the East Coast main rail route between Montrose and Carnoustie, along the A92 (Coastal Tourist Route) and along the Fife Coastal Path (particularly between Anstruther East, Fife Ness and St Andrews and across the Firth of Tay).
- 4.13.11 SNH advised that physical/coastal processes (notably potential erosion on the vicinity of cable landfall referred to in the recent Dynamic Coast project (published 2017)) should be given consideration. SNH noted that physical processes had been scoped out in 2017. SNH advised that the Applicant should be required to prepare a Cable Laying Strategy (now known as a "CaP") to address the risks of the trenched cable becoming re-exposed.
- 4.13.12 SNH advised that it welcomed and supported the proposed mitigation included in the EIA Report (including the submission of a PS, CoP and PEMP) to mitigate potential impacts on fish (including diadromous fish) and shellfish.
- 4.13.13 SNH advised that a number of conditions relating to the pre-construction, construction, operational and decommissioning phases of the Works should be attached to any consent or regulatory approval granted, in order to mitigate the impacts detailed above.
- 4.13.14 The Applicant provided a response to SNH's comments on 6 December 2018. The Applicant welcomed the response provided by SNH but stated

that it disagreed with SNH's conclusion that the Project in-combination with the other Forth and Tay Developments would result in an adverse effect on the site integrity of the Forth Islands SPA, Fowlsheugh SPA and St Abb's Head to Fast Castle SPA. The Applicant advised that it considers that the assessment presented is precautionary and that added precaution at multiple levels (or within multiple parameters) of the assessment has resulted in an over-estimation of impacts. The Applicant provided detailed commentary of the precaution included in various parts of the ornithology assessment and stated that it maintains that there is no adverse effect on the site integrity of any SPA as a result of the Project in-combination with other plans and projects.

- 4.13.15 The Applicant acknowledged SNH's advice regarding seascape, landscape and visual impact assessment but stated that it considers the conclusions of the EIA Report to be valid. The Applicant considers that SNH's identification of additional viewpoints would not materially change the conclusion of the assessment. The Applicant further stated that stakeholders had agreed that EOWDC was outside the study area for the assessment.
- 4.13.16 The Applicant stated that it agreed with the conditions suggested by SNH for all receptors and that it would work with stakeholders to prepare and implement these plans. No subsequent response was received from SNH.
- 4.13.17 Conditions have been attached to the s.36 consent and OfTI Marine Licence requiring the Applicant to prepare, consult on and adhere to an EMP, CoP, PS, LMP, DSLP, DS, CaP, PEMP, Vessel Management Plan ("VMP"), DP and participate in the Forth and Tay Regional Advisory Group ("FTRAG") and the Scottish Marine Energy Research ("ScotMER") programme to address the concerns outlined above.

5 Summary of non-statutory consultee responses

- 5.1 A number of other bodies were consulted on the application and EIA Report and provided responses.
- 5.2 <u>Aberdeen International Airport</u> ("AIA") raised no objections and advised that the Project does not conflict with the aerodrome safeguarding criteria.
- 5.3 <u>BT Radio Network Protection</u> ("BT") advised that the Project should not cause interference to BT's current and presently planned radio network.
- 5.4 <u>Dunbar Fishermen's Association</u> ("DFA") advised that the preparation and placement of cables would cause disruption to fishing grounds and that, this disruption would result in loss of income for fishermen. DFA stated that compensation would be necessary and that this would need to be discussed further.
- 5.4.1 A response from the Applicant was forwarded to DFA. No subsequent response was received from DFA.

- 5.4.2 Conditions requiring the Applicant to prepare, consult on and adhere to a CaP and Fisheries Management and Mitigation Strategy ("FMMS") have been attached to the s.36 consent and OfTI Marine Licence to mitigate these concerns.
- 5.5 <u>Firth of Forth Lobster Hatchery</u> advised that the Project would impact lobster populations and the fishing community along the East Lothian coastline, with attendant impacts on local heritage.
- 5.5.1 A response from the Applicant was forwarded to Firth of Forth Lobster Hatchery. No subsequent response was received.
- 5.5.2 Conditions requiring the Applicant to prepare, consult on and adhere to a CaP and FMMS have been attached to the s.36 consent and OfTI Marine Licence to mitigate these concerns. The requirement to monitor impacts of the Project on commercial fisheries species has been included within the PEMP.
- 5.6 <u>The Ministry of Defence ("MOD"</u>) objected to the application on safeguarding grounds, citing unacceptable interference to RRH at Buchan and Brizlee Wood, due to the detectability of WTGs. MOD advised that the Project could have detrimental effects on the operation of air defence radar ("ADR"), due to the desensitisation of radar in the vicinity of WTGs and the creation of 'false' aircraft returns. MOD advised that the Project could reduce the Royal Air Force's ("RAF") ability to detect and manage aircraft in the United Kingdom's sovereign airspace.
- 5.6.1 MOD further objected on the grounds of unacceptable interference from the Project to the primary surveillance Air Traffic Control ("ATC") radar at Leuchars Station (formerly RAF Leuchars). MOD advised that the Project will be detectable from Leuchars Station and could desensitise the ATC radar, thus resulting in aircraft not being detected or creating 'unwanted' returns. MOD advised that this could hinder the ability to maintain situational awareness of all aircraft movements.
- 5.6.2 MOD advised that the Project will not adversely affect MOD offshore danger and exercise areas or defence maritime interests. The MOD advised, however, that the WTGs and offshore platforms should be fitted with appropriate aviation warning lighting to maintain the safety of military aviation.
- 5.6.3 MOD subsequently responded on 5 March 2019 to MS-LOT regarding suspensive conditions. MOD stated that both RRH Brizlee Wood and RRH Buchan are equipped with TPS 77 (or equivalent) type ADR. In 2018 MOD issued a public statement identifying that the established process by which wind farm developers have been able to submit proposals to determine whether the inbuilt capabilities of the TPS 77 type ADR, intended to address wind farm interference, could be employed to provide a technical mitigation

has been suspended until further notice pending a review of this capability. Therefore the MOD is not in a position to provide confirmation on suspensive conditions at this time. The MOD recognise the importance of the Inch Cape wind farm proposal, and they have been considering the issue of offshore wind farms and the impacts on air defence, however, it is a complex situation that causes fundamental concerns for defence and therefore needs to be fully considered.

- 5.6.4 Conditions requiring the Applicant to prepare, consult on and adhere to an Air Traffic Control Radar Mitigation Scheme ("ATC Scheme") and an Air Defence Radar Mitigation Scheme ("ADC Scheme"), and a LMP have been attached to the s.36 consent and OfTI Marine Licence to address MOD concerns. The MOD is not in a position to confirm suspensive conditions at this time. However, MS-LOT consider that the conditions attached to the s.36 consent mitigate the impacts on ATC Radar and ADR provide sufficient assurance that the MOD concerns will be dealt with prior to the Commencement of the Works.
- 5.7 <u>National Air Traffic Services Safeguarding</u> ("NATS") advised that the Project does not conflict with its safeguarding criteria. Accordingly, NATS (En Route) Public Limited Applicant ("NERL") had no safeguarding objection to the Project.
- 5.8 <u>Port Seton Fishermen</u> ("PSF") objected to the Project due to concerns regarding the offshore export cable route and potential disruption arising from loss of access to fishing grounds.
- 5.8.1 A response from the Applicant was forwarded to PSF, confirming that further discussions with the fishing industry will take place and the mitigation measures which will be adopted by the Applicant. The Applicant confirmed that it will support training for local fishermen to become Offshore Fisheries Liaison Officers ("OFLO") and Fishing Industry Representatives ("FIR"). The Applicant further outlined that a Cable Burial Plan will be produced and regular monitoring of the cable route will be undertaken. The Applicant will further commit to an over-trawl ability assessment to provide assurance to the scallop fleet. The Applicant encouraged PSF to raise any concerns through the Commercial Fisheries Working Group ("CFWG"). No subsequent response was received from PSF.
- 5.8.2 Conditions requiring the Applicant to prepare, consult on and adhere to a CaP and FMMS have been attached to the s.36 consent and OfTI Marine Licence to mitigate these concerns. The requirement to monitor impacts of the Project on commercial fisheries species has been included within the PEMP. Conditions have also been attached requiring the Applicant to participate in the Forth and Tay Commercial Fisheries Working Group ("FTCFWG").
- 5.9 <u>River Tweed Commission</u> ("RTC") 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.

- 5.9.1 RTC advised that salmon passing through the Project site are vulnerable to seal predation and new information has shown that the bases of WTGs can act as artificial reefs, attracting and thus altering the foraging patterns of seals. RTC consider that the influence of underwater structures on predation of salmon migration has not been fully considered in the EIA Report.
- 5.9.2 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.
- 5.9.3 A response from the Applicant addressing RTC's concerns was shared with RTC. The Applicant acknowledged RTC's objections and highlighted that a report on 'Salmon Migration Behaviour'¹ had been prepared to provide justification as to why impacts on diadromous fish could be scoped out of the EIA Report. The conclusions of this report had been agreed with Scottish Ministers in November 2017. The Applicant provided RTC with a map detailing the recaptures of Tweed fish at sea. The Applicant acknowledged that WTGs are known to alter the foraging pattern of seals, the Applicant advised that compensatory support for rivers suffering as a consequence would be considered, should further data support this. The Applicant acknowledged that uncertainties regarding salmon migration would need to be discussed further and consideration given to appropriate post-consent monitoring and mitigation. No subsequent response was received from RTC.
- 5.9.4 Conditions have been attached to the s.36 consent and OfTI Marine Licence which will implement the commitments outlined in the EIA Report, including the requirement for the Applicant to prepare, consult on and adhere to the terms of a PEMP, EMP, PS and to participate in the FTRAG and ScotMER programme.
- 5.10 <u>Royal Society for Protection of Birds (Scotland) ("RSPB Scotland")</u> submitted an objection to the application due to potential impacts on internationally important seabird populations. RSPB Scotland did acknowledge that the impacts of the Project were predicted to be less than those from the Original Consent. RSPB Scotland advised that the impacts of the Project incombination with the other Forth and Tay Developments would result in population scale effects, which are significant in EIA terms and would constitute an adverse effect on the site integrity of SPAs.
- 5.10.1 RSPB Scotland provided detailed comments regarding impacts on kittiwake, gannet, guillemot, razorbill and puffin. RSPB Scotland advised that the predicted impacts on the kittiwake qualifying interest of the Forth Islands SPA, Fowlsheugh SPA and St Abb's Head to Fast Castle SPA would result

¹ Salmon Migration Behaviour Report, October 2017. Available here: <u>http://marine.gov.scot/sites/default/files/00528343.pdf</u> (Last accessed 19/12/2018)

in an adverse effect on the site integrity, due to the scale of predicted impacts on the population. RSPB Scotland reached this conclusion in light of the declining kittiwake population at all three SPAs. RSPB Scotland stated that the total predicted collision impacts for gannet, in-combination with the other Forth and Tay Developments and UK North Sea wind farms, amount to significant impacts and that any conclusion regarding effects on the site integrity should be considered in light of the knowledge that 20% fewer gannets will occur, regardless of population increase or decrease over the 50 year timeframe. RSPB Scotland advised that there is a lack of empirical data to inform the displacement effects on auks (puffin, razorbill and guillemot) and that the estimated effects presented should be treated with caution. RSPB Scotland advised that the auk populations are experiencing relatively stable or increasing trends, however, in its opinion the scale of impacts predicted, particularly for razorbill, are concerning.

- 5.10.2 RSPB Scotland provided detailed comments on the methodologies used in the EIA Report and advised that the EIA Report omits a full assessment on the non-SPA bird colonies which show connectivity with the Forth and Tay Developments as an assessment of the impacts to seabirds during the nonbreeding season has not been included. RSPB Scotland advised that the risks are posed to individuals from these colonies throughout the year. RSPB Scotland further disagreed with the Applicant's conclusion that there will be no adverse effect on site integrity for the Forth Islands SPA with respect to kittiwake.
- 5.10.3 RSPB Scotland stated that the site-specific flight altitudes recorded for kittiwake and gannet are lower than those reported in the literature and that sufficient explanation regarding these differences has not been provided in the EIA Report. RSPB Scotland stated that it did not agree with the conclusions of the EIA Report regarding the discrepancies in these figures and that a biologically meaningful argument should be presented if the outputs of CRM using option 1 are to be utilised.
- 5.10.4 A response from the Applicant was forwarded to RSPB Scotland on 6 December 2018, confirming that the Applicant's position remained unchanged. No subsequent response was received from RSPB Scotland.
- 5.10.5 Conditions have been attached to the s.36 consent and OfTI Marine Licence requiring the Applicant to prepare, consult on and adhere to the PEMP, EMP and CMS to address these concerns. The Applicant is also required to participate in the FTRAG and ScotMER programme, to contribute to improved understanding of the impacts of the Project, both in isolation and in-combination, on seabird populations.
- 5.11 <u>Seagreen Wind Energy Limited</u> ("Seagreen") highlighted that the design envelopes for the Seagreen Alpha and Seagreen Bravo offshore wind farms utilised in the cumulative impact assessments within the EIA Report had been refined and updated since the information was shared with the Applicant Seagreen highlighted that this may have implications for the

representation of the impacts of the optimised Seagreen Project incombination with the Project. Seagreen advised that the outputs of the collision risk modelling for the revised Seagreen designs represent a reduced number of collisions when compared to the EIA Report. Seagreen further highlighted that the cumulative assessments completed by the Applicant for fish and marine mammals rely on the Seagreen Phase 1 consented design envelopes and therefore do not consider the use of monopiles as a foundation option, which would represent the worst case scenario for these receptors. Seagreen consider that the marine mammal modelling assessment outcomes for the Project will be inconsistent with Seagreen's assessment for the optimised Seagreen Project and may underestimate the impacts of underwater noise (particularly on bottlenose dolphin), due to the exclusion of the optimised Seagreen Project from the quantitative assessment of disturbance impacts.

- 5.12 <u>Scottish Fishermen's Federation</u> ("SFF") submitted an objection to the application due to concerns regarding potential impacts on commercial fishing interests. SFF advised that the Project represented a conflict with several policies contained within the Scottish National Marine Plan ("NMP") including Chapter 4, General Policies 4, 13, 17, 18 and 19 and Chapter 6, Sea Fisheries Policies 1, 2 and 3.
- 5.12.1 SFF advised that conditions should be attached to any consent granted, to mitigate the impacts of the Project on the fishing industry. SFF advised that it wishes to be consulted on various post-consent plans (including the Commercial Fisheries Management Plan now known as the Fisheries Management and Mitigation Strategy ("FMMS")) to ensure its concerns are addressed. SFF also advised that monitoring of the main fisheries activities in the area (scallops, squid, nephrops, lobster, cod, herring, sprat and shad) would be required. SFF did recognise that the impacts of the Project may represent an improvement when compared to the predicted impacts of the Original Consent.
- 5.12.2 SFF advised that it did not agree with the conclusions of chapter 7.9 of the EIA Report, which concluded that potential conflicts with commercial fisheries interests had been adequately considered and addressed. SFF contended that sufficient action has not been taken to address concerns regarding the offshore export cable route and impacts on nephrop grounds. SFF advised that scour protection for inter array cables should be restricted to within the 50m safety zone and that the Branch laying option for inter array cabling should be the preferred option. SFF advised that cable protection using rock or mattresses is not suitable for scallop fishing and, therefore, burial should be the preferred option. SFF advised that further restrictions on fishing activities beyond the construction impacts, caused by unburied cable, rock or mattress dumping, should be avoided.
- 5.12.3 SFF highlighted that whilst the Project will contribute to energy security, consideration should also be given to food security. SFF advised that it considers that the socio-economics assessment presented in the EIA Report

(chapter 16) does not properly address the worst case displacement scenarios. SFF stated that £10.3 million first sale value of fish could be lost, potentially 218 vessels and 335 jobs could be impacted, with attendant impacts on the onshore supply chain. SFF recognised the importance of early engagement on the content of any DP for the Project.

- 5.12.4 A response from the Applicant was forwarded to SFF on 29 November 2018 addressing the comments raised by SFF. The Applicant reaffirmed its commitment to the consent conditions outlined in the EIA Report (including the FMMS and Fisheries Liaison Officer ("FLO")) and confirmed that its position remains unchanged.
- 5.12.5 SFF subsequently responded on 17 December 2018, reiterating the importance the role of the FLO and the Commercial Fisheries Mitigation Strategy (now known as the FMMS) and its concerns regarding the impacts of the Project on commercial fisheries interests. SFF reiterated the requirement for compensation for affected parties and that it expects an agreement to be put in place regarding a protocol to protect any static gear from damage prior to the commencement of construction and that this should be reflected in the FMMS. SFF confirmed that the commitment to a consent condition requiring a DP would satisfy its concerns regarding the decommissioning phase of the Works.
- 5.12.6 Conditions have been attached to the s.36 consent and OfTI Marine Licence requiring the Applicant to prepare, consult on and adhere to a VMP, DP and FMMS to address these concerns. The SFF will be consulted on all relevant post-consent plans. The Applicant will be required to prepare and deliver a PEMP to monitor the impacts of the Project on a range of receptors, including commercial fisheries. Further, the Applicant is also required to participate in the FTCFWG and ScotMER programme, to contribute to an improved understanding of the impacts of the Project on commercial fisheries.
- 5.13 <u>Tay District Salmon Fishery Board</u> ("Tay DSFB") submitted an objection to the application and advised that its objection would be maintained until an agreed and accepted monitoring and mitigation strategy is produced by the Applicant.
- 5.13.1 Tay DSFB raised concerns regarding potential negative impacts on Atlantic salmon and sea trout arising from the Project. Tay DSFB requested that, should any consent or regulatory approval be granted, conditions should be attached regarding monitoring and mitigation measures. Tay DSFB advised that, should monitoring work identify any negative impacts, then conditions should be attached to the consent requiring mitigation measures. Further, should these issues be unable to be resolved, the Tay DSFB advised that compensatory activities in the affected catchments should be considered.
- 5.13.2 Tay DSFB expressed its willingness to participate in the development of such measures. Tay DSFB provided details of potential monitoring work which could be undertaken (including monitoring the effects of piling noise on

migrating salmon and sea trout, the impact of electromagnetic fields and the risk of increased predation from seals). Tay DSFB advised that it is keen to re-engage with the FTRAG.

- 5.13.3 A response from the Applicant was forwarded to Tay DSFB acknowledging its objection. The Applicant recognised that uncertainties regarding the impacts on diadromous fish migration need to be considered further and addressed via appropriate mitigation and monitoring measures, however the Applicant maintained that it is unlikely that the Project will result in significant impacts on diadromous fish populations. The Applicant proposed that conditions requiring the preparation and implementation of a PS, PEMP and CoP would ensure any impacts are minimised. No subsequent response was received from Tay DSFB.
- 5.13.4 Conditions have been attached to the s.36 consent and OfTI Marine Licence which will implement the commitment to participate in the FTRAG and require the Applicant to prepare, consult on and implement a PEMP, to include monitoring of impacts on diadromous fish.
- 5.14 <u>Transport Scotland</u> ("TS") did not have any objections to the application. TS noted that the EIA Report does not indicate how any of the turbine or foundation components or structures will be transported via road network to the port, prior to loading onto the delivery vessel. TS note the commitment included in the EIA Report to prepare a Traffic and Transport Plan in the unlikely event that abnormal loads are required during the construction phase of the Project. TS advised that should abnormal load movements be required on the trunk road network, an assessment of the route to site will be required. TS advised that conditions should be attached to any consent granted, requiring the Applicant to prepare, consult on and adhere to the terms of a Construction Traffic Management Plan ("CTMP"), prior to the commencement of deliveries to site, in order to minimise interference and maintain the safety and free flow of traffic on the trunk roads.
- 5.15 A condition has been attached to the s.36 consent and OfTI Marine Licence requiring the Applicant to prepare, consult on and adhere to a CTMP, should any major offshore components require onshore abnormal load transport. TS will be consulted on any CTMP prepared.

6 Representations from other organisations and members of the public

6.1 No public representations were received.

7 Advice from Third Parties

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

7.2 <u>Marine Mammals</u>

- 7.2.1 MSS provided detailed comments on the marine mammal assessment presented in the EIA Report. MSS maintain that the use of the 1% noise modelling conversion factor would be more precautionary, based on current best scientific evidence. MSS advised that the contour maps for low and high frequency cetaceans and seals indicated that the cumulative PTS zones are larger when the 1% conversion factor is used, as opposed to the 0.5% rate. MSS advised, however, that it agrees with the conclusions of the Applicant and SNH that the magnitude of impact is low and that the significance of effect from PTS is low for all species and scenarios. MSS advised that this conclusion was also valid for the disturbance assessment.
- 7.2.2 MSS acknowledged that the use of Acoustic Deterrent Devices ("ADDs") has been incorporated into the noise modelling assessment. MSS further noted that the Applicant does not intend to use ADDs as a mitigation measure, following consideration of the outputs of further modelling undertaken. MSS noted that there are some inconsistencies in the EIA Report regarding the use of ADDs which should be checked.
- 7.2.3 MSS agreed with SNH that some scenarios presented do have large effect zones for cumulative PTS for minke whale, at distances which may make current mitigation practices ineffective. MSS note that an EPS licence for injury may be required, however, MSS stated that this is likely to be a precautionary measure.
- 7.2.4 MSS agreed with the mitigation measures outlined in the SNH response of 28 September 2018.
- 7.2.5 The Applicant provided a response to MSS's comments, welcoming the comments received and noting the potential need for the inclusion of minke whale within an EPS licence application for injury. The Applicant noted MSS's comments regarding the use of ADDs and noted that specific mitigation requirements for piling will be agreed through the development of the PS.
- 7.3 <u>Marine Fish Ecology</u>
- 7.3.1 MSS advised that it is broadly in agreement with the conclusions presented in the EIA Report.
- 7.3.2 MSS welcomed the embedded mitigation included in the EIA Report and the commitment to the purpose of the relevant conditions attached to the Original Consent.
- 7.4 <u>Diadromous Fish</u>
- 7.4.1 MSS advised that it had previously reviewed the salmon behaviour migration report (Appendix 9C of the EIA Report) and report on particle motion (Appendix 9D of the EIA Report) prior to formal submission of the EIA Report.

MSS did not have further comments to make on these papers. MSS noted that the Applicant had reviewed the existing HRA material and that this review may be helpful should further appraisal be required at a future date.

- 7.4.2 MSS noted that the EIA Report had concluded that returning adult salmon would migrate north, close to the coast, thus avoiding the construction work. MSS noted that prior to this migration, adults will have migrated south, probably further offshore, which could bring them into proximity of the construction work. MSS noted that substantial numbers of emigrating smolts and returning adults will migrate through the general area and that these are associated with some of Scotland's most important salmon rivers.
- 7.4.3 MSS advised that the Applicant should participate in the ScotMER programme. The Applicant provided a response to MSS, confirming that it will commit to further engagement with MSS regarding mitigation and monitoring measures.

7.5 <u>Commercial Fisheries</u>

- 7.5.1 MSS noted that it had previously provided comments on the EIA Report prior to submission and that further information had been provided in the final EIA Report, as regards the FTCFWG and dropped objects procedure. MSS noted that further information had not been provided in relation to bottom towed fishing gears, nor the FMMS, however, MSS noted that the Applicant had committed to both topics as part of consent conditions.
- 7.5.2 MSS had no additional comments to make on the baseline data used, the identified fisheries impacted and the significance levels of effects.

7.6 <u>Ornithology</u>

- 7.6.1 MSS provided detailed comments on the ornithology assessment presented in the EIA Report and HRA Report. MSS noted that the assessed impacts of the Project are less than those predicted for the Original Consent. MSS noted that objections to the application had been submitted by SNH and RSPB Scotland.
- 7.6.2 MSS advised that the Applicant had followed the advice provided in the scoping opinion, and in subsequent clarifications, regarding CRM. MSS provided further advice regarding the use of site-specific flight height data (option 1) and recent research publications regarding its use, but noted that generic flight-height (option 2) data results will be utilised in the AA. MSS noted that SNH advised that the use of site specific flight height data would 'have reduced the impacts significantly' as regards the kittiwake qualifying interest of the St Abb's Head to Fast Castle SPA.

- 7.6.3 MSS advised that the presentation of displacement effects using the new Seabird Offshore Renewable Development ("SeabORD") tool provided useful additional context.² MSS noted RSPB Scotland's comments regarding the lack of empirical data to support the displacement assessment.
- 7.6.4 MSS noted that SNH had advised that the collision risk modelling impacts used in the PVA (for the impacts following both displacement and collision) were from option 2 of the CRM, resulting in significantly greater assessed impacts for gannet and kittiwake when compared to outputs using option 1.
- 7.6.5 MSS further noted SNH's objection to the application in-combination with the other Forth and Tay Developments. MSS advised that the outputs from the assessment prepared for the Seagreen Alpha and Seagreen Bravo offshore wind farms should be considered, once available, to provide additional context.
- 7.6.6 The Applicant provided a response to MSS's comments welcoming the comments received. The Applicant stated that it does not consider that SNH and RSPB Scotland have considered the level of precaution built into the assessment fully and that the conclusions of the EIA Report and HRA Report regarding impacts on site integrity remain valid. The Applicant provided a detailed overview of the precaution included within the assessment for further context.

7.7 <u>Socio-Economics</u>

- 7.7.1 The Marine Analytical Unit ("MAU") reviewed the application and provided detailed comments on the socio-economics assessment included. MAU previously provided detailed comments on the draft EIA Report and reiterated that its previous advice remains valid. MAU stated that its concerns have not been adequately addressed.
- 7.7.2 MAU advised that the impacts of displacement in the energy supply chain have not been considered in the assessment and, therefore, this could overestimate the positive economic impacts of the Project.
- 7.7.3 MAU provided further comments regarding the economic multipliers used to determine direct and induced employment impacts which could result in an overestimation of the positive impacts of the Project (by overestimating the number of FTE jobs created within the Economic Study Area).
- 7.7.4 MAU advised that the socio-economic analysis included is exclusively focussed on economic outcomes and does not consider potential impacts on wider social indicators (such as poverty, demand for public services and impact on environmental health).

² SeabORD: A tool to estimate the fate of birds displaced by offshore renewable energy developments. Available here: <u>https://www2.gov.scot/Topics/marine/marineenergy/mre/current/SeabORD</u> (Last accessed 18/12/2018)

7.7.5 The Applicant provided a response to MAU's comments outlined above, stating that it considers that the conclusions of the assessment remain valid. The Applicant stated that it considers project-specific displacement is highly unlikely in the circumstances and that displaced jobs are not directly comparable. The Applicant provided details of the multiplier values used and where these values were sourced from and advised that, as due to uncertainties regarding the location of the facilities to be utilised during the construction and operation phase of the Project, the Economic Study Area has been defined based on assumed labour market catchment areas.

7.8 <u>Summary</u>

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

9.1 <u>Environmental Matters</u>

- 9.1.1 Scottish Ministers are satisfied that an environmental impact assessment has been carried out. Environmental information including the EIA Report has been produced and the applicable procedures regarding publicity and consultation laid down in regulations have been followed. The environmental impacts of the Project have been assessed and the Scottish Ministers have taken the environmental information into account when reaching their decision.
- 9.1.2 The Scottish Ministers are satisfied that the Applicant, 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.
- 9.1.3 The Scottish Ministers have had regard to the desirability of the matters mentioned in the previous paragraph and the extent to which the Applicant has done what it reasonably could to mitigate the effects of the Project on those features, and are satisfied that the Applicant has done what it reasonably could with regard to mitigation.
- 9.1.4 The Scottish Ministers have considered fully and carefully the application, EIA Report, HRA Report, all relevant responses from consultees, MSS and third party representations received.
- 9.2 <u>Main Determinative Issues</u>

- 9.2.1 The Scottish Ministers, having taken account of all relevant information, consider that the main determining issues are:
 - The extent to which the Project 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 Project 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.

9.3 <u>Scottish Government Policy Context</u>

- 9.3.1 The NMP, formally adopted in 2015, and recently reviewed in Spring 2018, provides a comprehensive statutory planning framework for all activities out to 200nm. Scottish Ministers must take authorisation and enforcement decisions, which affect the marine environment, in accordance with the NMP.
- 9.3.2 The policies of particular relevance to this Project 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'.
- 9.3.3 The Project 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 ("NRIP"). 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.

- 9.3.4 Scottish Planning Policy 2014 ("SPP") sets out the 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 NRIP. Communities can also gain new opportunities from increased local ownership and associated benefits.
- 9.3.5 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.
- 9.3.6 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. It 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.
- 9.3.7 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 power.

9.4 Impacts of the Project on the environment

- 9.4.1 Impacts on marine mammals, seabirds, European sites and European offshore marine sites
- 9.4.1.1 The Habitats Regulations require Scottish Ministers to consider whether the proposed Project 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.

- 9.4.1.2 Owing to the view of SNH that the Project 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, Buchan Ness to Collieston Coast 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 proposed Special Protection Area ("pSPA"), MS-LOT, on behalf of the Scottish Ministers, as the "competent authority", was required to carry out an AA.
- 9.4.1.3 For marine mammal species the main impact of the Project would be from noise during construction due to piling operations and, in particular, incombination impacts with the other Forth and Tay Developments and wind farms in the Moray Firth.
- 9.4.1.4 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 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 those associated with the Original Consent, the precaution in the assessment methods and the advice from SNH. Scottish Ministers concluded that the Project, 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 incombination with other plans and projects. The AA provides detail on the noise propagation modelling and populating modelling undertaken to inform the assessment.
- 9.4.1.5 In addition to the SAC qualifying interests above, other cetaceans (which are also European protected species) could be affected by the Project, in particular harbour porpoise and minke whale. These species were considered in the EIA Report. In its response of 28 September 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 and any regulatory approval granted.
- 9.4.1.6 For bird species, the main impacts come from either collision and/or displacement and barrier effects. SNH considered that there would be a Likely Significant Effect ("LSE") 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 and razorbill.
- 9.4.1.7 After receiving information provided by the Applicant, SNH submitted a formal objection to the Project on 28 September 2018. SNH's objection was on the basis that the Project in-combination with Neart na Gaoithe, and Seagreen Phase 1 would lead to an adverse effect on the site integrity of the Forth Islands SPA, with respect to kittiwake, razorbill and gannet, and Fowlsheugh SPA, with respect to kittiwake and razorbill. SNH further advised that there could be an adverse effect on the site integrity of the St Abb's Head to Fast Castle SPA with respect to kittiwake. On 24 January 2019, SNH advised that an adverse effect on the site integrity of the St Abb's Head to Fast Castle SPA could not be ruled out in respect to kittiwake.
- 9.4.1.8 SNH did, however, advise that the impacts from the Project would be less than those associated with the Original Consent.
- 9.4.1.9 RSPB Scotland also objected to the Project, both in isolation and incombination with the other Forth and Tay Developments, due to unacceptable impacts on the seabird qualifying interests of the above listed SPAs. However, RSPB Scotland did recognise that the Project represents a reduction in predicted impacts from the Original Consent on internationally important seabird populations.
- 9.4.1.10 The AA considered the conservation objectives, 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, subject to the appliance of conditions, the Project would not adversely affect the site integrity of the Forth Islands SPA, Fowlsheugh SPA or St Abb's Head to Fast Castle SPA either alone or incombination with other projects. Full details of the assessment methodology is provided in the AA.
- 9.4.1.11 In reaching their conclusions in the AA, Scottish Ministers have given considerable weight to SNH's advice. The methods advised by SNH through scoping and subsequent clarifications have been incorporated into the assessment. As such, divergence from SNH advice is limited to differing conclusions in relation to site integrity of 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, Scottish Ministers have taken account in the AA of the entire context of the assessment, in particular its highly precautionary assumptions, which make it very unlikely that 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 the assessed impact to be reasonable and are convinced that there will be no

adverse effect on the site integrity of any of the SACs, SPAs or the pSPA considered in the AA.

- 9.4.1.12 Scottish Ministers are currently in the process of identifying a suite of new marine SPAs in Scottish waters. 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 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 SPP (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.
- 9.4.1.13 It is not a legal requirement under Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna or flora ("the Habitats Directive") or the Habitats Regulations for the AA to assess the implications of the Project on the pSPA. Nevertheless, the AA includes an assessment of implications upon this site in accordance with domestic policy. Scottish Ministers are 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
- 9.4.1.14 SNH advised that the Project 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 Complex pSPA. The completed AA came to the same conclusion.
- 9.4.1.15 Considering article 4(4) of the Birds Directive, Scottish Ministers concluded that the Project will not cause pollution or deterioration of habitats and any disturbance will be negligible.
- 9.4.1.16 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 review their decision authorising the Project as soon as reasonably practicable following the formal designation of the pSPA. If required, this will include a supplementary AA being undertaken concerning the implications of the Project 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 Project have been fully considered in the current AA.

- 9.4.1.17 Conditions requiring the Applicant to prepare, consult on and adhere to a CMS, EMP, PS, VMP and PEMP, and to participate in the FTRAG and ScotMER Programme have been attached to the s.36 consent and OfTI Marine Licence to mitigate these concerns.
- 9.4.1.18 Scottish Ministers consider that, having taken into account the information provided by the Applicant, 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 Project on marine mammals, seabirds, European sites or European offshore marine sites which would require regulatory approval to be withheld.
- 9.4.2 Impacts on diadromous fish
- 9.4.2.1 In its scoping advice, SNH advised that diadromous fish should be scoped out of both EIA and HRA. MSS further advised that, since the completion of the original assessment, further research had been undertaken and significant findings regarding the behaviour of diadromous fish had been published. The scoping opinion, therefore, advised that the Applicant should review these findings and consider whether the findings would impact the conclusions of the previous assessment. If the Applicant deemed that the new information did not impact the conclusions of the previous assessment, the scoping opinion advised that the Applicant would be required to justify this decision.
- 9.4.2.2 The Applicant submitted a report on salmon migration behaviour to MS-LOT in October 2017, setting out its review of the recent information in relation to salmon migration research and proposal not to include further assessment of diadromous fish within the EIA Report. MS-LOT subsequently confirmed that the Applicant had provided sufficient justification that the baseline information and conclusions of the previous assessment remained valid. MS-LOT therefore confirmed that no further assessment was required within the EIA Report. The salmon migration behaviour report was included as an appendix to the EIA Report for context (Appendix 9C). MSS advised that that substantial numbers of salmon may be migrating through the general area. Within the EIA Report, the Applicant has committed to mitigation measures to reduce the potential noise impacts on fish species, through the incorporation of a soft-start procedure during piling operations.
- 9.4.2.3 Consultees raised concerns regarding the potential for increased predation by seals around installed WTGs. In its response to RTC, the Applicant advised that compensatory support for rivers suffering as a consequence of the effects of increased predation, would be considered, should evidence of the impacts be provided. The Applicant further acknowledged the uncertainties around salmon migration behaviour and committed to further discussion regarding potential monitoring and mitigation requirements.
- 9.4.2.4 A condition requiring the Applicant to prepare, consult on and adhere to a PEMP (to include monitoring of the impacts of diadromous fish) and PS have been attached to the s.36 consent and OfTI Marine Licence to mitigate

concerns regarding this receptor. The Applicant is also required to participate in the ScotMER programme, which includes research and monitoring work relating to the impacts of offshore renewable energy developments on diadromous fish.

- 9.4.2.5 Scottish Ministers consider that, having taken into account the information provided by the Applicant, the responses of the consultative bodies and having regard to the conditions attached to the s.36 consent and OfTI Marine Licence, there are no outstanding concerns in relation to the impact of the Project on diadromous fish which would require regulatory approval to be withheld.
- 9.4.3 Impacts on commercial fisheries
- 9.4.3.1 Moderate significant effects were identified by the Applicant on several commercial fisheries throughout the lifespan of the Project, however, the Applicant concluded that the application of mitigation measures would reduce the significance of these effects to minor.
- 9.4.3.2 The SFF responded on behalf of its members, objecting to the application. The SFF objected to aspects of the assessment presented in the EIA Report, particularly in relation to loss of access to fishing grounds during all phases of the Works, the socio-economic assessment presented and the route of the offshore export cable, SFF raised concerns regarding resumption of fishing activities following conclusion of the construction phase of the Project and the options for burial of the offshore export and inter array cables. SFF further requested monitoring of the impacts of the Project on commercial fished stocks in the area, in particular squid fisheries and nephrops, should be required.
- 9.4.3.3 SFF confirmed that it was content that concerns regarding the decommissioning phase of the Works could be addressed via a consent condition requiring the preparation and approval of a DP. The SFF highlighted the importance of the role of the FLO and the preparation and implementation of a FMMS in addressing its concerns.
- 9.4.3.4 Conditions requiring the Applicant to prepare, consult on and adhere to a FMMS (to include monitoring of commercial fisheries), CaP, DP and PEMP (to include monitoring of commercial fisheries) and to participate in the FTCFWG have been attached to the s.36 consent and OfTI Marine Licence to mitigate concerns regarding commercial fisheries.
- 9.4.3.5 Scottish Ministers consider that, having taken into account the information provided by the Applicant, the responses of the consultative bodies and having regard to the conditions attached to the s.36 consent and OfTI Marine Licence, there are no outstanding concerns in relation to the impact of the Project on commercial fisheries which would require regulatory approval to be withheld.
- 9.4.4 Impacts on seascape, landscape and visual amenity

- 9.4.4.1 SLVIA was undertaken for the Project in-combination with Neart na Gaoithe and Seagreen Phase 1 and the new proposals for the Forth and Tay Developments. Impacts on the coastal character of east Fife, north-east East Lothian and within 35km of the Project were assessed as being significant. Further, significant impacts resulting from aviation and navigation lighting on visual amenity within 30km of the Project and cumulative impacts on coastal character in east Fife and south-east Angus were identified in the SLVIA.
- 9.4.4.2 SNH advised that the cumulative impact of the Forth and Tay Developments would introduce significant effects in the regional context. SNH and East Lothian Council both disagreed with the level of significance assigned to viewpoints with the SLVIA presented, but did not object to the Project on these grounds.
- 9.4.4.3 Angus Council, East Lothian Council and SNH agreed that the Project would result in significant adverse effects due to the increased height of the WTGs, particularly when compared to the Original Consent. All recognised that these impacts may be offset slightly by the reduction in the number of WTGs to be installed compared to the Original Consent.
- 9.4.4.4 Angus Council advised that, whilst the Project would have significant impacts upon landscape and seascape character, these impacts were not considered to be unacceptable. Angus Council and East Lothian Council both advised that detailed consideration of aviation and navigation lighting requirements should be undertaken, to mitigate impacts on the night seascape. Further, Angus Council and East Lothian Council both advised that consideration of cumulative impacts should be undertaken when approving the final layouts of the Forth and Tay Developments with a view to mitigating potential impacts.
- 9.4.4.5 East Lothian Council requested that a condition be placed on any consent granted to monitor the impacts of aviation lighting and to address the impacts of aviation lighting, should such lighting be visible from East Lothian. East Lothian Council further suggested that maximum and minimum lighting requirements should be included within any consent condition and that the Applicant should be required to dim the lighting when visibility is greater than 5km. On 31 January 2019, MS-LOT subsequently advised East Lothian Council that the Applicant would not be required to monitor the impacts of aviation lighting, dim lighting or replace the lighting should new technologies become available. MS-LOT advised, however, that the Applicant will be required to adhere to the minimum requirements of the CAA, MOD, NLB and MCA in order to minimise the impacts on the residents of East Lothian, whilst ensuring navigational safety.
- 9.4.4.6 The exact lighting and marking requirements for the Project will be agreed by consultees within the LMP required by the s.36 consent and OfTI Marine Licence. East Lothian Council will be consulted on the content of the LMP and will have the opportunity to comment on the lighting requirements at this stage.

- 9.4.4.7 The Applicant stated, in its response to Angus Council dated 18 January 2019, that the night time lighting assessment presented in the EIA Report was based on aviation lighting operating at maximum intensity. Night time lighting would only be operated at such intensity in periods of low visibility, such as fog, which was not accounted for within the assessment presented. The Applicant stated that the worst case cumulative and night time lighting scenarios presented in the EIA Report would, therefore, be unlikely to occur. The Applicant further stated that a co-ordinated approach to the final layouts of the Forth and Tay Developments would not be possible, due to technical and financial constraints.
- 9.4.4.8 Conditions requiring the Applicant to prepare, consult on and adhere to a LMP, DSLP and DS have been attached to the s.36 consent and OfTI Marine Licence. Aberdeenshire Council, Dundee City Council, East Lothian Council and SNH will be consulted on the DSLP, SNH will be consulted on the DS and the DS will be provided for information to the planning authorities. SNH and East Lothian Council will be consulted on the LMP.
- 9.4.4.9 Scottish Ministers consider that, having taken into account the information provided by the Applicant, the responses of the consultative bodies and having regard to the conditions attached to the s.36 consent and OfTI Marine Licence, there are no outstanding concerns in relation to the impact of the Project on seascape, landscape and visual amenity which would require regulatory approval to be withheld.
- 9.4.5 Impacts on cultural heritage
- 9.4.5.1 Moderate significant effects were predicted as a result of the Project incombination with the other Forth and Tay Developments on the Isle of May Priory. The priory is a scheduled monument and an uninterrupted view of the Project would be visible to visitors. These impacts were not discussed in the responses received.
- 9.4.5.2 HES did not object to the application and stated that the Project did not raise historic environment issues of national significance.
- 9.4.5.3 Angus Council stated that it agreed with HES's assessment regarding the impacts of the Project on the setting of the Bell Rock Lighthouse, however, Angus Council advised that the EIA Report was limited in its assessment of the impacts of aviation and navigation lighting on the setting of this cultural heritage asset.
- 9.4.5.4 Conditions requiring the Applicant to prepare, consult on and adhere to a DSLP, PAD and DS have been attached to the s.36 consent and OfTI Marine Licence to mitigate these concerns.
- 9.4.5.5 Scottish Ministers consider that, having taken into account the information provided by the Applicant, the responses of the consultative bodies and having regard to the conditions attached to the s.36 consent and OfTI Marine Licence, there are no outstanding concerns in relation to the impact of the

Project on cultural heritage which would require regulatory approval to be withheld.

- 9.4.6 Impacts on aviation and defence
- 9.4.6.1 MOD submitted an objection to the application on safeguarding grounds, due to unacceptable interference to ATC radar at Leuchars Station and ADR at RRH Buchan and RRH Brizlee Wood and attendant impacts on air safety. MOD requested that further engagement take place with the Applicant to identify a technical solution to mitigate impacts. The MOD is not in a position to confirm suspensive conditions at this time. However, MS-LOT consider that the conditions attached to the s.36 consent to mitigate the impacts on ATC Radar and ADR provide, sufficient assurance that the MOD concerns will be dealt with prior to the Commencement of the Works.
- 9.4.6.2 MOD further requested that the WTGs are fitted with appropriate aviation warning lighting. Further requirements regarding aviation lighting were recommended by NLB and MCA and the requirements for aviation and navigation lighting will be implemented through consent conditions.
- 9.4.6.3 NATS and AIA had no safeguarding objections to the application.
- 9.4.6.4 East Lothian Council recommended that a condition should be attached to any consent granted, preventing the use of helicopters over the East Lothian Council area throughout the lifespan of the Project. As air transportation is a matter reserved to Westminster (under the Scotland Act 1998), the Scottish Ministers do not have devolved powers to intervene in these matters. If, however, helicopters are to be used during any phase of the Project, the Applicant is required to include further details regarding their usage within the Operation and Maintenance Programme ("OMP") and East Lothian Council will be consulted on the terms of the OMP. The Applicant confirmed that it is, however, unlikely that helicopter operations will be required and that helicopter operations will not take place over the East Lothian area.
- 9.4.6.5 Conditions requiring the Applicant to prepare, consult on and adhere to an LMP, DSLP, OMP, EMP, DS, CMS, NSP, a technical mitigation proposal for ADR, and ATC Scheme, have been attached to the s.36 consent to address these concerns.
- 9.4.6.6 Scottish Ministers consider that, having taken into account the information provided by the Applicant, the responses of the consultative bodies, and having regard to the conditions attached to the s.36 consent including amendments made in relation to the ATC Scheme and the technical mitigation proposal for ADR, there are no outstanding concerns in relation to the impact of the Project on aviation and defence which would require regulatory approval to be withheld.
- 9.4.7 Renewable energy generation and associated policy benefits

- 9.4.7.1 The key environmental benefit of the Project is to offset greenhouse gas ("GHG") emissions that might otherwise be produced by other means of electricity generation. Over the lifetime of the Project, carbon emissions from fabrication, construction, operation and decommissioning will be offset by the net reduction in emissions through the low carbon wind energy technology.
- 9.4.7.2 There are multiple benefits associated with the Project, 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 ("EU") renewable energy targets.
- 9.4.7.3 The proposed installed capacity of the Project will be around 700MW (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,³ it is estimated that, depending on the fuel type displaced, 428,627 tonnes of carbon dioxide will be saved each year. In addition, it is estimated that the Project will generate enough electricity each year to meet the needs of the equivalent of 468,696 Scottish households per year.
- 9.4.8 *Economic benefits*
- 9.4.8.1 SPP advises that economic benefits are material issues which must be taken into account as part of the determination process. SPP also confirms the Scottish Ministers' aim 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 Project would support the development of the domestic renewable energy industry and offset GHG emissions.
- 9.4.8.2 Whilst impacts on tourism were scoped out of the EIA Report, the Applicant assessed socio-economic impacts related to the offshore elements of the Project on the Economic Study Area and across Scotland.
- 9.4.8.3 The Applicant has estimated that net additional employment from the Project is estimated to be between 321 FTE and 832 FTE direct, indirect and induced construction jobs at an Economic Study Area level, dependent on the impact

³ <u>https://www.gov.scot/Topics/Statistics/Browse/Business/Energy/onlinetools/ElecCalc</u> (Last accessed: 23/01/2019)

scenario considered. For the rest of Scotland, net additional employment from the Project was estimated to be between 108 FTE and 216 FTE direct, indirect and induced construction jobs (and a total of between 858 and 1854 net additional construction jobs in the UK). This would represent between \pounds 41.8 million and \pounds 108.2 million GVA per annum at an Economic Study Area level and between \pounds 55.8 million and \pounds 136.2 million at a Scottish level.

- 9.4.8.4 During the operation and maintenance phase, the Applicant estimates that the net additional employment generated would represent a new GVA at an Economic Study Area of between £4.9 million to £10.7 million per annum and £18.6 million per annum for Scotland as a whole. The Applicant estimates that 202 FTE jobs will be created in total (with 38 within the Economic Study Area and 42 within the rest of Scotland).
- 9.4.8.5 The Applicant estimates that during the decommissioning phase the number of jobs is likely to be lower than those estimated for the construction phase. However, it is estimated that during the decommissioning phase approx. 110 FTE net additional jobs will be generated.
- 9.4.8.6 Angus Council stated that it considers that there is the potential for the negative socio economic impacts on commercial fisheries to be higher than predicted in the EIA Report. Angus Council, however, does not consider these impacts to be unacceptable, providing the mitigation measures set out in the EIA Report are applied.
- 9.4.8.7 In its consultation response, the SFF stated that the EIA Report did not include full consideration of the potential negative socio-economic impacts resulting from the impacts on commercial fisheries receptors. PSF and DFA raised further concerns regarding the economic consequences of disruption.
- 9.4.8.8 MAU advised that the socio economic assessment presented overestimates the impacts of the Project. On this basis MAU highlighted issues with the assessment regarding economic multipliers and the assessment of displacement effects.
- 9.4.8.9 The Scottish Ministers consider that there is sufficient information regarding the socio-economic impacts of the Project 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 Scottish Ministers have weighed the impacts of the proposed Project, and the degree to which these can be mitigated, against the economic and renewable energy benefits which would be realised. Scottish Ministers have undertaken this exercise in the context of national and local policies.
- 10.3 Scottish Ministers have considered the extent to which the Project accords with and is supported by Scottish Government policy, the terms of the SPP, the NMP, local development plans and the environmental impacts of the Project, 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 Project to reducing carbon dioxide emissions and the socio-economic and the renewable energy benefits of the Project.
- 10.4 Scottish Ministers are satisfied that many of the environmental issues have been appropriately addressed by way of the design of the Project and through mitigation measures, and that the issues which remain are, on balance, outweighed by the benefits of the Project. In particular, Scottish Ministers are satisfied that the proposal will not adversely affect the integrity of the Forth Islands SPA, Fowlsheugh SPA, St Abb's Head to Fast Castle 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.
- 10.5 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.
- 10.6 In their consideration of the environmental impacts of the Project, Scottish Ministers have identified conditions to be attached to the consent to reduce and monitor environmental impacts. These include requirements for preconstruction, construction and operational monitoring of birds, commercial fisheries, marine mammals and diadromous fish and the preparation, consultation, approval and implementation of a CMS, EMP, OMP and VMP.
- 10.7 A condition requiring the appointment of an Environmental Clerk of Works ("ECoW") and defining the terms of the ECoW's appointment has been attached to the s.36 consent and OfTI Marine Licence. The ECoW will be required to monitor and report on compliance with all consent conditions, monitor that the Project is being constructed in accordance with plans and the terms of the Application, the s.36 consent, OfTI Marine Licence, OWF Marine Licence and all relevant regulations and legislation. The ECoW will also be required to provide quality assurance on the final draft versions of

any plans and programmes required under the s.36 consent, OfTI Marine Licence and OWF Marine Licence.

- 10.8 Scottish Ministers have concluded that the Applicant 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 conditions attached to the s.36 consent, OfTI Marine Licence and OWF Marine Licence.
- 10.9 Scottish Ministers are satisfied, having regard to current knowledge and methods of assessment, that this reasoned conclusion, as required under the 2017 MW Regulations, is still up to date.
- 10.10 Subject to the conditions set out in Appendix 2, Scottish Ministers **grant a marine licence**, under Part 4 of the Marine (Scotland) Act 2010 to construct, alter or improve any works and deposit any substances or objects in the Scottish marine area for the Inch Cape Offshore Wind Farm.
- 10.11 The embedded mitigation and any additional mitigation identified in the EIA Report has been incorporated into the conditions of this marine licence and/or s.36 consent and OfTI Marine Licence granted. The conditions also capture monitoring measures required under Regulation 24 of the 2017 MW Regulations.
- 10.12 In accordance with the 2017 MW Regulations, the Applicant 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 Applicant must provide copies of the public notices to the Scottish Ministers.
- 10.13 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</u> <u>website</u>.
- 10.14 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</u> <u>Courts</u>. Your local Citizens' Advice Bureau or your solicitor will be able to advise you about the applicable procedures.

Yours sincerely,

Marine Scotland Licensing Operations Team A member of the staff of the Scottish Ministers 17 June 2019

DEFINITIONS

- **"2014 Application"** means the Application letter and Environmental statement and marine licence applications submitted to the Scottish Ministers by Inch Cape Offshore Limited on 1 July 2013;
- "AA" means the Appropriate Assessment;
- "ADD" means Acoustic Deterrent Devices;
- "ADR" means Air Defence Radar;
- "AGLV" means Areas of Great Landscape Value;
- "Application" means the EIA Report, HRA Report and supporting documents submitted by the Company on 15 August 2018 to construct and operate an offshore generating station and transmission works;
- "Applicant" means Inch Cape Offshore Limited (SC373173, 5th Floor, 40 Princes Street, Edinburgh EH2 2BY);
- "ATC" means Air Traffic Control;
- "Commencement of the Works" means the date on which the first construction activity occurs in accordance with the EIA Report submitted by the Company on 15 August 2018;
- "CRM" means collision risk modelling;
- "dSPA" means draft Special Protection Area;
- "ECoW" means Environmental Clerk of Works;
- "EIA" means Environmental Impact Assessment;
- "EIA Report" means Environmental Impact Assessment Report;
- "EOWDC" means European Offshore Wind Deployment Centre;
- "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;
- "FIR" means Fishing Industry Representatives;
- "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 previous and existing consents for Neart na Gaoithe Offshore Wind Farm (granted October 2014 and December 2018), 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 Report" 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;
- "OEC" means Offshore Export Cable;
- "OFLO" means Offshore Fisheries Liaison Officers;
- "OfTI" means Offshore Transmission Infrastructure;
- "PAM" means passive acoustic monitoring;
- "PAR" means Precision Approach Radar;
- "PEXA" means military Practice and Exercise Areas;
- "PLI" means Public Local Inquiry;
- "PAR" means Precision Approach Radar;
- "**Project**" means the Inch Cape Offshore Wind Farm, approximately 15-22km east of the Angus coastline, at Arbroath;
- "pSPA" means Proposed Special Protection Areas;
- "PSR" means Primary Surveillance Radar;
- "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;
- "SeabORD" means Seabird Offshore Renewable Development tool;
- "SLVIA" means Seascape, Landscape and Visual Impact Assessment;
- "SLA" means Special Landscape Area;
- "SNCBs" means statutory nature conservation bodies;
- "SPA" means Special Protection Area;
- "s.36" means section 36 of the Electricity Act 1989 (as amended);
- "s.36A" means section 36A of the Electricity Act 1989 (as amended);
- "the Original Consent" means the s.36 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 that the Company currently holds.
- **"TMZ**" means Transponder Mandatory Zone;

- "the 2013 ES" means <u>Environmental Statement</u> submitted by the Company on 1 July 2013 for the application made for the Original Consent;
- "the 2014 Application" means the application submitted by the Company on 1 July 2013;
- "WTG" means wind turbine generators; and
- "ZTV" means Zone of Theoretical Visibility.

Organisations and Companies

- "AIA" means Aberdeen International Airport;
- "BT" means BT Radio Network Protection;
- **"CAA**" means the Civil Aviation Authority
- "CFWG" means Commercial Fisheries Working Group;
- "DFA" means Dunbar Fishermen's Association;
- "EU" means European Union;
- "FMS" means Fisheries Management Scotland;
- "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;
- "NATS" means National Air Traffic Service Safeguarding;
- "NERL" means NATS (En Route) Public Limited Company;
- "NLB" means the Northern Lighthouse Board;
- "PSF" means Port Seton Fishermen;
- "RAF" means the Royal Air Force;
- "RAG" means Regional Advisory Group;
- "RTC" means River Tweed Commission;
- "RSPB Scotland" means The Royal Society for the Protection of Birds 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;
- "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

- "the 2017 Aberdeenshire LDP" means the Aberdeenshire Local Development Plan 2017
- "ADR scheme" means Air Defence Radar Mitigation Scheme;
- "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;
- "DP" means Decommissioning Programme;
- "DS" means the Design Statement;
- "DSLP" means Development Specification and Layout Plan;
- "ELLDP" means East Lothian Local Development Plan;
- "EMP" means Environmental Management Plan;
- "ERCoP" means Emergency Response Co-operation Plan;
- "FMMS" means Fisheries Management and Mitigation Strategy;
- "LMP" means Lighting and Marking Plan;
- "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;
- "PAD" means Protocol for Archaeological Discoveries;
- "PEMP" means Project Environmental Monitoring Programme;
- "Policy E1" means Aberdeenshire Policy E1 Natural Heritage;
- "**PS**" means Piling Strategy;
- "SPP" means Scottish Planning Policy 2014;
- "Transit Plan" 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;
- "VMP" means Vessel Management Plan; and
- "WSI" means Written Scheme of Investigation.

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 Habitats Regulations" means 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 1994 Habitats Regulations"** means the Conservation (Natural Habitats, & c.) Regulations 1994 (as amended);
- "the 2017 EW Regulations" means The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 (as amended); and
- "the 2010 Act" means the Marine (Scotland) Act 2010.

MS.MarineRenewables@gov.scot



MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

LICENCE TO CONSTRUCT, ALTER OR IMPROVE ANY WORKS AND DEPOSIT ANY SUBSTANCES OR OBJECTS IN THE SCOTTISH MARINE AREA

Licence Number: 06781/19/0

The Scottish Ministers (hereinafter referred to as "the Licensing Authority") hereby grant a marine licence authorising:

Inch Cape Offshore Limited 5th Floor, 40 Princes Street Edinburgh EH2 2BY

Under Marine (Scotland) Act 2010,

- 1) To construct, alter or improve any Works within the Scottish marine area in or over the sea, or on or under the seabed; and
- 2) To deposit any substance or object (except for dredge spoil) within the Scottish marine area, either in the sea or on or under the seabed.

as required in the execution of the Works (including construction, operation and maintenance) described in Part 2 of this licence. The licence is subject to the conditions detailed in Part 3 of this licence.

This licence remains in force from **17 June 2019** until **31 December 2073** or until the Works have been decommissioned in accordance with an approved Decommissioning Programme prior to this date and for which a separate marine licence is required.

Signed:

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For and on behalf of the Licensing Authority Date of issue: 17 June 2019

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Marine Laboratory, 375 Victoria Road, Aberdeen AB11 9DB60www.scotland.gov.uk/marinescotland



1. PART 1 – GENERAL

1.1 Interpretation

In this licence, unless otherwise stated, terms are as defined in sections 1, 64 and 157 of the Marine (Scotland) Act 2010, and

- 1. "2010 Act" mean the Marine (Scotland) Act 2010;
- 2. "Application" means the application letter, marine licence applications, the Environmental Impact Assessment report and the Habitats Regulations Appraisal report submitted to the Licensing Authority by the Licensee on 14 August 2018 to construct, operate and maintain the Inch Cape Offshore Wind Farm;
- "ADD" means Acoustic Deterrent Devices;
 "CAA" means Civil Aviation Authority;
- 5. "CaP" means Cable Plan;
- 6. "CMS" means Construction Method Statement;
- 7. "Commencement of the Works" means the date on which the first vessel arrives on the Site to begin carrying on any Licensed Activities in connection with the construction of the Works;
- 8. "Completion of the Works" means the date on which the Works have been installed in full, or the Works have been deemed complete by the Licensing Authority, whichever occurs first;
- 9. "Contractor Reports" means reports detailing that the name and address of any agents, contractors or subcontractors appointed to carry out any part, or all, of the Licensed Activities:
- 10. "CoP" means Construction Programme;
- 11. "CTMP" means Construction Traffic Management Plan;
- 12. "Decommissioning of the Works" means removal of the Works from the seabed, demolishing or dismantling the Works;
- 13. "Decommissioning Programme" means the programme for decommissioning the Works, to be submitted by the Licensee to the Licensing Authority under section 105(2) of the Energy Act 2004 (as amended);
- 14. "DP" means Decommissioning Programme;
- 15. "DGC" means Defence Geographic Centre;
- 16. "DS" means Design Statement;
- 17. "DSLP" means Development Specification Layout Plan;
- 18. "EMP" means Environmental Management Plan;
- 19. "ERCoP" means Emergency Response Co-operation Plan;
- 20. "F-Gas Regulation" means Regulation No 517/2014 of the European Parliament and of the Council of 16 April 2014 on Fluorinated Greenhouse Gases;
- 21. "Final Commissioning of the Works" means the date on which the last wind turbine generator constructed forming the Works has supplied electricity on a commercial basis to the National Grid, or such earlier date as the Licensing Authority deems the Works to be complete;
- 22. "FLO" means Fisheries Liaison Officer;
- 23. "FMMS" mean Fisheries Management and Mitigation Strategy;
- 24. "FMS" means Fisheries Management Scotland;
- 25. "FTCFWG" means Forth and Tay Commercial Fisheries Working Group;
- 26. "FTRAG" means Forth and Tay Regional Advisory Group or any successor group for the purpose of advising the Licensing Authority on research, monitoring and mitigation

programmes for, but not limited to, ornithology, marine mammals, diadromous and commercial fish;

- 27. "GIS" means Geographic Information System;
- 28. "HES" means Historic Environment Scotland;
- 29. **"IALA"** means International Association of Marine Aids to Navigation and Lighthouse Authorities;
- 30. "IHO Order" means International Hydrographic Organization Order;
- 31. "LAT" means Lowest Astronomical Tide;
- "Licensee" means Inch Cape Offshore Limited having its registered office at 5th Floor, 40 Princes Street, Edinburgh, EH2 2BY and registered in Scotland having its registered company number as SC373173;
- 33. "Licensed Activities" means any activity or activities listed in section 21 of the 2010 Act which is, or are authorised under this licence;
- 34. "LMP" means Lighting and Marking Plan;
- 35. "MCA" means Maritime and Coastguard Agency;
- 36. "MEDIN" means Marine Environmental Data and Information Network;
- 37. "MGN" means Marine Guidance Note;
- 38. "MHWS" means Mean High Water Spring Tide;
- 39. "MMO" means Marine Mammal Observer;
- 40. "MOD" means Ministry of Defence;
- 41. "MSL" means Mean Sea Level;
- 42. "NLB" means Northern Lighthouse Board;
- 43. **"Noise Registry"** means the marine noise registry developed by the Department for Environment, Food and Rural Affairs ("DEFRA") and the Joint Nature Conservation Committee ("JNCC") to record human activities in UK seas that produce loud low to medium frequency (10Hz-10kHz) impulsive noise;
- 44. "NSP" means Navigational Safety Plan;
- 45. "**OCNS list**" means the definitive ranked list of registered products held by the Offshore Chemical Notification Scheme, as assessed for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002 (as amended);
- 46. "OfCom" means Office of Communications;
- 47. "OMP" means the Operation and Maintenance Programme;
- 48. **"OSPAR Convention"** means the Convention for the Protection of the Marine Environment of the North-East Atlantic;
- 49. "PAD" means Protocol for Archaeological Discoveries;
- 50. "PAM" means Passive Acoustic Monitoring;
- 51. "PEMP" means the Project Environmental Monitoring Programme;
- 52. "PS" means the Piling Strategy;
- 53. "Radar" means Primary Surveillance ATC Radar at Leuchars Station;
- 54. "RSPB Scotland" means Royal Society for the Protection of Birds Scotland;
- 55. "SEPA" means Scottish Environment Protection Agency;
- 56. "SFF" means Scottish Fishermen's Federation;
- 57. **"Site"** means the total area of approximately 150 km² delineated in red in Figure 1 contained in Part 4 of this licence;
- 58. "SMWWC" means the Scottish Marine Wildlife Watching Code;
- 59. "SNH" means Scottish Natural Heritage;
- 60. "TAR" means Transportation Audit Report;
- 61. "TPC" or "TPV" means Third Party Certification or Verification;
- 62. "**Transit Plan**" 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 Works and transiting to the site from relevant ports;
- 63. "TS" means Transport Scotland;

- 64. "UKHO" means United Kingdom Hydrographic Office;
- 65. **"Vessel Reports"** means reports detailing the operators, vessels and vehicles engaging in the Licensed Activities;
- 66. "VMP" means the Vessel Management Plan;
- 67. "WDC" means Whale and Dolphin Conservation;
- 68. "WGS84" means World Geodetic System 84;
- 69. **"Works"** means the Inch Cape Offshore Wind Farm as described in Part 2 of this licence or any part thereof; and
- 70. "WTG" means Wind Turbine Generators.

1.2 Contacts

All correspondence or communications relating to this licence should be addressed to:

Marine Scotland Licensing Operations Team Marine Laboratory 375 Victoria Road Aberdeen AB11 9DB

Email: <u>MS.MarineRenewables@gov.scot</u>

1.3 Other authorisations and consents

The Licensee is deemed to have satisfied itself that there are no barriers or restrictions, legal or otherwise, to the carrying out of the licensed activities in connection with the Works. The issuing of this licence does not absolve the Licensee from obtaining such other authorisations and consents, which may be required under statute.

1.4 Variation, suspension, revocation and transfer

Under section 30(1) of the 2010 Act, the Licensing Authority may by notice vary, suspend or revoke this licence, if it appears to the Licensing Authority that there has been a breach of any of its provisions or for any such other reason that appears to be relevant to the Licensing Authority under section 30(2) or (3) of the 2010 Act.

Under section 30(7) of the 2010 Act, on an application made by the Licensee, the Licensing Authority may vary a licence if satisfied that the variation being applied for is not material.

Under section 30(8) of the 2010 Act, on an application made by the Licensee, the Licensing Authority may transfer this licence from the Licensee to another person.

Under the 2010 Act variations, suspensions, revocations and transfers of licences are subject to the procedures set out in section 31 of the 2010 Act.

1.5 Breach of requirement for, or conditions of, licence

Under section 39 of the 2010 Act it is an offence to carry on a Licensable Marine Activity without a marine licence and it is also an offence to fail to comply with any condition of a marine licence.

1.6 Defences: actions taken in an emergency

Under section 40 of the 2010 Act, it is a defence for a person charged with an offence under section 39(1) of the 2010 Act in relation to any activity to prove that:

- (a) the activity was carried out for the purpose of saving life, or for the purpose of securing the safety of a vessel, aircraft or marine structure, and
- (b) that the person took steps within a reasonable time to provide full details of the matter to the Licensing Authority as set out in section 40(2) of the 2010 Act.

1.7 Offences relating to information

Under section 42 of the 2010 Act, it is an offence for a person to make a statement which is false or misleading in a material way, knowing the statement to be false or misleading or being reckless as to whether the statement is false or misleading, or to intentionally fail to disclose any material information for the purpose of procuring the issue, variation or transfer of a marine licence or for the purpose of complying with, or purporting to comply with, any obligation imposed by either Part 4 of the 2010 Act or the provisions of this licence.

1.8 Appeals

Under Regulation 3(1) of the Marine Licensing Appeals (Scotland) Regulations 2011 a person who has applied for a marine licence may by summary application appeal to the sheriff of any sheriffdom against a decision taken by the Licensing Authority under section 29(1) of the 2010 Act.

2. PART 2 – THE WORKS

2.1 Description of the Construction Works

An offshore energy generating station at the Site located approximately 15-22km off the Angus coastline, to the east of the Firth of Tay, as shown in Figure 1, comprised of either:

- 4. A) No more than 72, three-bladed horizontal axis WTG each with;
 - f. A maximum height to blade tip of 215 metres (measured from Lowest Astronomical Tide ("LAT"));
 - g. A maximum rotor diameter of 167 metres;
 - h. A minimum blade tip clearance of 32.6 metres (measured from Mean Sea Level "MSL");
 - i. A maximum blade width of 6.0 metres; and
 - j. A nominal turbine spacing of 1,278 metres.

OR;

- B) No more than 40, three-bladed horizontal axis WTG each with;
 - f. A maximum height to blade tip of 291 metres (measured from LAT);
 - g. A maximum rotor diameter of 250 metres;
 - h. A minimum blade tip clearance of 27.6 metres (measured from MSL);
 - i. A maximum blade width of 7.8 metres; and
 - j. A nominal turbine spacing of 1,278 metres.

Where the final design agreed through the Development Specification and Layout Plan ("DSLP") falls between A and B, the collision risk to birds must be no greater than assessed in the Appropriate Assessment. If required by the Licensing Authority the Licensee must provide evidence of this using the best available science.

- 5. No more than 72 substructure and foundations and ancillary equipment. Substructure and foundation design for the WTG will be chosen from the following options:
 - f. Jacket with pin piles;
 - g. Jacket with suction piles;
 - h. Monopile;
 - i. Jacket with gravity base; or
 - j. Gravity base structures.
- 6. No more than 190km of inter-array cabling.

All as described in the Application.

2.2 Location of the Works

All geographical co-ordinates contained within this licence are in latitude and longitude format World Geodetic System 84 ("WGS84").

The Works are located at the Site being the area bounded by joining the following points:

56° 35.678' N 002° 10.138' W	56° 35.039' N 002° 09.502' W
56° 28.632' N 002° 10.002' W	56° 27.796' N 002° 02.839' W
56° 26.892' N 002° 02.814' W	56° 25.339' N 002° 07.558' W
56° 25.381' N 002° 13.808' W	56° 28.695' N 002° 17.228' W
56° 31.383' N 002° 17.178' W	56° 34.660' N 002° 14.929' W

2.3 Description of the construction materials used and Substances and Objects deposited

This licence authorises the deposit of the undernoted substances and objects and the use of the undernoted construction materials required in connection with the Works, subject to the maximum amounts as specified below:

Construction Materials

Quantities detailed below are indicative only.

Steel/Iron	436,000 tonnes
Plastic/Synthetic	160,000 m ²
Concrete	900,000 m ³
Sand	800,000 m ³
Stone/Rock/Gravel	2,000,000 m³ (size range 15 – 200mm)
Concrete bags/mattresses	2,800 mattresses (dimensions 6 x 3 x 0.3 m) and
	volume 15,000 m ³
Cable	190,000m (190km)

Deposits

Associated moorings to support construction, maintenance and operation activities.

3. PART 3 – CONDITIONS

3.1 General conditions

3.1.1 Compliance with the Application and approved plans

The Licensee must at all times construct, operate and maintain the Works in accordance with this licence, the Application, the section 36 consent and the plans and programmes approved by the Licensing Authority.

Reason: To ensure compliance with the marine licence, the Application and the approved plans and programmes.

3.1.2 Licence conditions binding other parties

All conditions attached to this licence bind any person who for the time being owns, occupies or enjoys any use of the Works for which this licence has been granted in relation to those licensed activities authorised under item 5 in section 21(1) of the 2010 Act whether or not this licence has been transferred to that person.

Reason: To safeguard the obligations of the licence, in accordance with s.29(5) of the 2010 Act.

3.1.3 Vessels, vehicles, agents, contractors and sub-contractors

The Licensee must ensure that at least five days prior to its engagement in the Licensed Activities, the name and function of any vessel, vehicle, agent, contractor or sub-contractor appointed to engage in the Works and, where applicable, the master's name, vessel type, vessel IMO number and vessel owner or operating company are fully detailed in the Vessel Report. The Licensee must make the Vessel Reports and the Contractor Reports available on the Inch Cape Offshore Limited webpage: http://www.inchcapewind.com/publications/publications.

Any changes to the supplied details must be uploaded to the Vessel Report and the Contractor Report and the Licensing Authority must be notified, in writing, prior to any vessel, vehicle, agent, contractor or sub-contractor which has not yet been notified to the Licensing Authority engaging in the Licensed Activities.

Only those vessels, vehicles, agents, contractors or sub-contractors detailed in the Vessel Report are permitted to carry out any part of the Licensed Activities.

The Licensee must satisfy itself that any masters of vessels or vehicle operators, agents, contractors or sub-contractors are aware of the extent of the Licensed Activities and the conditions of the licence.

All masters of vessels or vehicle operators, agents, contractors and sub-contractors permitted to engage in the Works must abide by the conditions of this licence.

The Licensee must give a copy of this licence, and any subsequent variations made to this licence in accordance with section 30 of the 2010 Act, to the masters of any vessels, vehicle

operators, agents, contractors or sub-contractors permitted to engage in the Works and must ensure that the licence and any such variations are read and understood by those persons.

Reason: To ensure all parties involved in the Works are aware of the licence and its conditions to reduce the risk of a breach of the licence, in accordance with s.39(1)(b) of the 2010 Act.

3.1.4 Force Majeure

Should the Licensee or any of its agents, contractors or sub-contractors, by any reason of *force majeure* deposit anywhere in the marine environment any substance or object, then the Licensee must notify the Licensing Authority of the full details of the circumstances of the deposit within 48 hours of the incident occurring (failing which as soon as reasonably practicable after that period of 48 hours has elapsed).

Force majeure may be deemed to apply when, due to stress of weather or any other cause, the master of a vessel or vehicle operator determines that it is necessary to deposit the substance or object other than at the Site because the safety of human life or, as the case may be, the vessel, vehicle or marine structure is threatened. Under Annex II, Article 7 of the OSPAR Convention, the Licensing Authority is obliged to immediately report force majeure incidents to the OSPAR Commission.

Reason: To provide a defence for the Master to protect himself and his crew in bad weather conditions, in accordance with s.40 of the 2010 Act.

3.1.5 Material alterations to the licence application

If, after the granting of the licence, any information upon which the granting of this licence was based has altered in any material respect, the Licensee must notify the Licensing Authority of this fact, in writing, as soon as is practicable.

Reason: To inform the Licensing Authority of any material changes to the licensed activities and allow consideration of any requirement for variation in accordance with s.30(3) of the 2010 Act.

3.1.6 Submission of plans and specification of studies and surveys to the Licensing Authority

The Licensee must submit plans and the details and specifications of all studies and surveys that are required to be undertaken under this licence in relation to the Works, in writing, to the Licensing Authority for its written approval. Commencement of the studies or surveys and implementations of plans must not occur until the Licensing Authority has given its written approval to the Licensee.

Plans or the specification of studies and surveys prepared pursuant to another consent or licence relating to the Works by the Licensee or by a third party may also be used to satisfy the requirements of this licence.

Reason: To ensure that the Licensing Authority is kept informed of the progress of the Works, in accordance with s.29(3)(c) of the 2010 Act.

3.1.7 Submission of reports and notifications to the Licensing Authority

The Licensee must submit all reports and notifications to the Licensing Authority, in writing, as are required under this licence within the time periods specified in this licence. Where it would appear to the Licensee that there may be a delay in the submission of the reports or notifications to the Licensing Authority, then the Licensee must advise the Licensing Authority of this fact as soon as is practicable and no later than the time by which those reports or notifications ought to have been submitted to the Licensing Authority under the terms of this licence.

The reports must include executive summaries, assessments and conclusions and any data will, subject to any rules permitting non-disclosure, be made publically available by the Licensing Authority or by any such party appointed at its discretion.

Reports prepared pursuant to another consent or licence relating to the Works by the Licensee or by a third party may also be used to satisfy the requirements of this licence.

Such reports will include, but not be limited to a TAR, the Noise Registry, MMO records and all appropriate reports as stipulated with a PEMP.

Reason: To ensure that all reports and notifications are submitted within a reasonable timescale after the licence is granted, in accordance with s.29(3)(c) of the 2010 Act.

3.1.8 Chemical usage

The Licensee must seek prior written approval from the Licensing Authority for any chemicals in an open system which are to be utilised in the construction, operation and maintenance of the Works. Requests for approval must be submitted in writing to the Licensing Authority no later than one month prior to its intended use or such other period as agreed by the Licensing Authority. The Licensee must ensure that no chemicals are used in an open system without the prior written approval of the Licensing Authority.

If the proposed chemical is on the OCNS list, the approval request must include the chemical name, volume or quantity to be used, the OCNS list grouping or rank and the proposed frequency of use.

If the proposed chemical is not on the OCNS list, the approval request must include details of chemical to be used, including safety data sheet, depth and current at the Site, quantities or volumes and the proposed frequency of use.

The Licensee must notify the Licensing Authority of the types of chemicals to be used in a closed containment system prior to use.

The Licensee should take all practicable steps to avoid leakages from a closed containment system into the Scottish marine area. Any such leakages must be reported to the Licensing Authority as soon as practicable.

Reason: To minimise the environmental impact in the event of a release through the use of authorised chemicals in the interest of protecting the environment, in accordance with s.29(2)(b) of the 2010 Act.

3.1.9 Fluorinated greenhouse gases

The Licensee must ensure that all equipment to be utilised in the Works which contains fluorinated greenhouse gases (hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and other greenhouse gases that contain fluorine, listed in Annex I of Regulation No 517/2014 of the European Parliament and of the Council of 16 April 2014 on Fluorinated Greenhouse Gases ("F-Gas Regulation") or mixtures containing any of those substances) must take precautions to prevent the unintentional release ('leakage') of those gases. The Licensee must take all measures which are technically and economically feasible to minimise leakage of fluorinated greenhouse gases.

Where leakage of fluorinated greenhouse gases is detected, the Licensee must ensure that the equipment is repaired without undue delay.

The Licensee must ensure that all equipment to be utilised in the Works that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO2 equivalent or more and not contained in foams is checked for leakage in accordance with Article 4 of the F-Gas Regulation. Records of these checks must be kept in accordance with Article 6 of the F-Gas Regulation. These records must be submitted to the Licensing Authority annually and immediately in the event of discovery of leakage.

Where the equipment is subject to checks for leakage under Article 4(1) of the F-Gas Regulation and leakage in the equipment has been repaired, the Licensee must ensure that the equipment is checked by a suitably certified person within one calendar month after the repair to verify that the repair has been effective. In such event, the Licensing Authority must be informed of the date of discovery, date of repair and date of inspection.

Reason: To ensure compliance of the Works with the F-Gas Regulation and the Fluorinated Greenhouse Gases Regulations 2015, in accordance with s.29(2)(b) of the 2010 Act.

3.1.10 Environmental protection

The Licensee must ensure that all reasonable, appropriate and practicable steps are taken at all times to avoid or minimise damage to the Scottish marine area caused as a result of the undertaking of the Licensed Activities.

The Licensee must ensure that all personnel adhere to the SMWWC where appropriate during all construction, operation and maintenance activities authorised under this licence.

The Licensee must ensure that any debris or waste material placed below MHWS level during the construction of the Works is removed from the Site, unless agreed otherwise by the Licensing Authority, as soon as is reasonably practicable, for disposal at a location above the MHWS level approved by SEPA or such other relevant authority if disposal is to take place outwith Scotland.

The Licensee must ensure that, where practicable, all substances and objects deposited during the Works are inert (or appropriately coated or protected so as to be rendered inert) and do not contain toxic elements which may be harmful to the marine environment, the living resources which it supports or human health.

The Licensee must ensure that the risk of transferring marine non-native species to and from the Site is kept to a minimum by ensuring appropriate bio-fouling management practices are implemented during the construction, operation and maintenance of the Works.

The Licensee must ensure that if oil based drilling muds are utilised they must be contained within a zero discharge system. Any drill cuttings associated with the use of water-based drilling muds situated within the Site need not be removed from the seabed.

Reason: To ensure environmental impacts are minimised, in accordance with s.29(2)(b) of the 2010 Act.

3.1.11 Availability of the licence for inspection

The Licensee must ensure that copies of this licence and any subsequent amendments or variations are available for inspection at any reasonable time by any person authorised by the Licensing Authority at:

- a. the premises of the Licensee;
- b. the premises of any agent, contractor or sub-contractor acting on behalf of the Licensee;
- c. any onshore premises directly associated with the Works; and
- d. aboard any vessel permitted to engaged in the Works.

Reason: To ensure the licence is available for the purpose of inspection, in accordance with <u>s.29(2)(b) of the 2010 Act.</u>

3.1.12 Inspection of the Works

Any persons authorised by the Licensing Authority must be permitted to inspect the Works. As far as reasonably practicable, Licensee must, on being given reasonable notice by the Licensing Authority (of at least 72 hours), provide transportation to and from the Site for any persons authorised by the Licensing Authority to inspect the Works. The licensee shall ensure that the Works are maintained at all times in good repair.

Reason: To ensure access to the Works for the purpose of inspection, in accordance with <u>s.29(2)(b) of the 2010 Act.</u>

3.1.13 Emergencies

If governmental assistance is required (including UK governmental assistance or the assistance of any UK devolved government) to deal with any emergency arising from:

- a. the failure to mark and light the Works as required by this licence;
- b. the maintenance of the Works; or
- c. the drifting or wreck of the Works.

to include the broadcast of navigational warnings, then the Licensee is liable for any expenses incurred in securing such assistance.

Reason: To ensure Licensee is aware of financial liabilities, in accordance with s.29(2)(b) of the 2010 Act.

3.1.14 Earlier marine licence

Should the Licensee proceed to undertake the Works under the authority of this licence, all Works authorised under the previous marine licence in favour of Inch Cape Offshore Limited, dated 10 October 2014 (licence number 04916/14/0) are not permitted.

Reason: To ensure Licensed Activities are in accordance with the environmental assessments and application, in accordance with s.29(2)(b) of the 2010 Act.

3.2 Conditions specific to the Works

3.2.1 Conditions applicable to all phases of the Works

3.2.1.1 Incident Reporting

In the event of any breach of health and safety or environmental obligations relating to the Works during the period of this Licence, the Licensee must provide written notification of the nature and timing of the incident to the Licensing Authority 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 Licensing Authority within a period of time to be agreed by the Licensing Authority.

Reason: To keep the Licensing Authority informed of any such incidents which may be in the public interest, in accordance with s.29(3)(c) of 2010 Act.

3.2.1.2 Bunding and storage facilities

The Licensee must ensure suitable bunding and storage facilities are employed to prevent the release of fuel oils and lubricating fluids associated with the Works and associated equipment into the marine environment.

Reason: To ensure pollution prevention is undertaken, in accordance with s.29(2)(b) of the 2010 Act.

3.2.1.3 Decommissioning

There must be no Commencement of the Works unless a DP has been submitted to and approved in writing by the Licensing Authority. The DP must outline measures for the decommissioning of the Works, restoration of the sea bed and will include without limitation, proposals for the removal of the Works, the management and timing of the works and, environmental management provisions.

The Works must be decommissioned in accordance with the approved DP, unless otherwise agreed in writing in advance with the Licensing Authority.

This licence does not permit the Decommissioning of the Works, for which a separate marine licence is required.

Reason: To ensure that decommissioning is carried out according to the approved Decommissioning Programme under an appropriate licence, in accordance with s.29(3)(d) of the 2010 Act.

3.2.2 Prior to the Commencement of the Works

3.2.2.1 Commencement date of the Works

The Licensee must, prior to and no less than one calendar month before the Commencement of the Works, notify the Licensing Authority, in writing, of the Commencement of the Works authorised under this licence.

Reason: To inform the Licensing Authority of the commencement date of the Works, in accordance with s.29(3)(c) of the 2010 Act.

3.2.2.2 Charting requirements

The Licensee must, prior to the Commencement of the Works, provide the positions and maximum heights of any WTG and construction equipment to the UKHO, for nautical charting purposes, and to the Defence Geographic Centre, for aviation purposes.

Reason: To reduce the navigational risk to other legitimate users of the sea, in accordance with s.29(2)(b) of the 2010 Act.

3.2.2.3 Monitoring of Marine Mammals

Prior to the Commencement of the Works, the Licensee must appoint an MMO. When appointed, the MMO must, as a minimum, maintain a record of any sightings of marine mammals and maintain a record of the action taken to avoid any disturbance being caused to marine mammals during noisy activities. The Licensee must provide the Licensing Authority with the MMO records no later than six months following Commencement of the Works, and thenceforth at such other periods as agreed with the Licensing Authority.

Reason: To ensure environmental impacts are minimised, in accordance with s.29(2)(b) of the 2010 Act.

3.2.2.4 Noise Registry

The Licensee must complete and submit a proposed activity form in the online Noise Registry for all aspects of the Works that will produce loud, low to medium frequency (10Hz-10kHz) impulsive noise no later than seven days prior to Commencement of the Works. If any aspects of the Works differ from the proposed activity form in the online Noise Registry, the Licensee must complete and submit a new proposed activity form no later than seven days prior to Commencement of the Works.

Reason: To ensure compliance with reporting requirements on marine noise, in accordance with s.29(3)(c) of the 2010 Act.

3.2.2.5 Third Party Certification or Verification

The Licensee must no later than three calendar months (or such other period as agreed with the Licensing Authority) prior to the Commencement of the Works, provide the Licensing

Authority with TPC or TPV (or a suitable alternative as agreed in writing with the Licensing Authority) for the lifespan of the Works.

Reason: To provide independent certification or verification of the technology, materials or equipment, in accordance with s.29(2)(b) of the 2010 Act.

3.2.2.6 Construction Programme

The Licensee must, no later than six months prior to the Commencement of the Works, submit a CoP, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with SNH, MCA, NLB and any such other advisors or organisations as may be required at the discretion of the Licensing Authority. The CoP must set out:

- a. The proposed date for Commencement of the Works
- 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 Works infrastructure;
- d. Contingency planning for poor weather or other unforeseen delays; and
- e. The scheduled date for Completion of the Works.

The final CoP must be sent to Aberdeenshire Council, Angus Council, East Lothian Council, Fife Council and Dundee City Council for information only.

Reason: To confirm the timing and programming of construction in accordance with s.29(3)(a) and (c) of the 2010 Act.

3.2.2.7 Construction Method Statement

The Licensee must, no later than six months prior to the Commencement of the Works, submit a CMS, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with SNH, MCA, NLB and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

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 Works.
- 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 Works.

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 a DS, the EMP, VMP, an NSP, the PS, the CaP and the LMP.

The final CMS must be sent to Aberdeenshire Council, Angus Council, East Lothian Council, Fife Council and Dundee City Council for information only.

Reason: To ensure the appropriate construction management of the Works, taking into account mitigation measures to protect the environment and other users of the marine area in accordance with s.29(3)(a) of the 2010 Act.

3.2.2.8 Piling Strategy

The Licensee must, no later than six months prior to the Commencement of the Works, submit a PS, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with SNH, FMS, WDC and any such other advisors as may be required at the discretion of the Licensing Authority.

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 PAM, MMO, use of ADD and monitoring to be employed during pile-driving, as agreed by the Licensing Authority.

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 and Atlantic salmon.

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

Reason: To mitigate the underwater noise impacts arising from piling activity in accordance with s.29(3)(a) and (c) of the 2010 Act.

3.2.2.9 Development Specification and Layout Plan

The Licensee must, no later than six months prior to the Commencement of the Works, submit a DSLP, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with the MCA, NLB, SNH, MOD, CAA, SFF, Aberdeenshire Council, Dundee City Council, East Lothian Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

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 micrositing), including information on WTG spacing, WTG identification/numbering, seabed conditions, bathymetry, confirmed foundation type for each WTG and any key constraints recorded on the site;
- b. A list of latitude and longitude co-ordinates accurate to three decimal places of minutes of arc for each WTG. This should also be provided as a Geographic Information System ("GIS") shape file using WGS84 format;
- c. A table or diagram of each WTG dimensions including height to blade tip (measured above 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.

The final DSLP must be sent to Angus Council and Fife Council information only.

Reason: To confirm the final Works specification and layout in accordance with s.29(3)(a) of the 2010 Act.

3.2.2.10 Design Statement

The Licensee must, no later than six months prior to the Commencement of the Works, submit a DS in writing, to the Licensing Authority.

The DS, which must be signed off by at least one qualified landscape architect, as instructed by the Company prior to submission to the Licensing Authority, must include representative wind farm visualisations from key viewpoints as agreed with the Licensing Authority, based upon the final DSLP as approved by the Licensing Authority as updated or amended. The Licensee must provide the DS, for information only to Aberdeenshire Council, Angus Council, Dundee City Council, East Lothian Council, Fife Council, SNH, MCA and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

Reason: To ensure that the Works are carried out in accordance with the approved details, and to inform interested parties of the final wind farm scheme proposed to be built in accordance with s.29(3)(c) of the 2010 Act.

3.2.2.11 Environmental Management Plan

The Licensee must, no later than six months prior to the Commencement of the Works, submit an EMP, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with SNH, RSPB Scotland, WDC, FMS and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

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

- a. All construction as required to be undertaken before the Final Commissioning of the Works; and
- b. The operational lifespan of the Works from the Final Commissioning of the Works until the cessation of electricity generation (environmental management during decommissioning is addressed by the DP).

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 Works. It must address, but not be limited to, the following over-arching requirements for environmental management during construction:

- a. Mitigation measures to prevent significant adverse impacts to environmental interests, as identified in the Application and pre-consent and pre-construction monitoring or data collection, and include the relevant parts of the CMS (refer to condition 3.2.2.7);
- 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 Licensing Authority 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 Licensee and the Licensing Authority or FTRAG, at intervals agreed by the Licensing Authority. Reviews must include, but not be limited to, the reviews of updated information on construction methods and operations of the Works 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 a PEMP.

Reason: To ensure that all construction and operation activities are carried out in a manner that minimises the impact on the environment, and that mitigation measures contained in the Application, or as otherwise agreed, are fully implemented in accordance with s.29(3)(a) and (c) of the 2010 Act.

3.2.2.12 Vessel Management Plan

The Licensee must, no later than six months prior to the Commencement of the Works, submit a VMP, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with SNH, WDC, Forth Ports, MCA, NLB, SFF and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

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; and
- c. Location of working port(s), the routes of passage, how often the 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 Works.

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

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

Reason: To mitigate the navigational risk to other legitimate users of the sea in accordance with s.29(3)(a) and (c) of the 2010 Act.

3.2.2.13 Operation and Maintenance Programme

The Licensee must, no later than three months prior to the commissioning of the first WTG, submit an OMP, in writing, to the Licensing Authority for its written approval. Such approval may only be granted following consultation by the Licensing Authority with SNH, MCA, NLB, SFF, WDC, East Lothian Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

The OMP must set out the procedures and good working practices for operations and the maintenance of the WTGs, substructures, and inter-array cables of the Works. 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.

The final OMP must be sent to Aberdeenshire Council, Angus Council, Dundee City Council and Fife Council for information only.

Reason: To safeguard environmental interests during operation and maintenance of the offshore generating station, in accordance with s.29(2)(b) of the 2010 Act.

3.2.2.14 Navigation Safety Plan

The Licensee must, no later than six months prior to the Commencement of the Works, submit an NSP, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with MCA, NLB and any other navigational advisors or organisations as may be required at the discretion of the Licensing Authority. 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; and
- f. Buoyage.

The Licensee must confirm within the NSP that they have taken into account and adequately addressed all of the recommendations of the MCA in the current MGN 543, and its annexes that may be appropriate to the Works, 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 in accordance with s.29(3)(a) and (c) of the 2010 Act.

3.2.2.15 Emergency Response Co-operation Plan

The Licensee must, no later than six months prior to the Commencement of the Works, submit an ERCoP for the construction, operation, maintenance and decommissioning phases of the Works in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with the MCA and the NLB and any other navigational advisors or organisations as may be required at the discretion of the Licensing Authority.

The ERCoP should follow the MCA guidance. The ERCoP must be developed in discussion with the MCA and be in accordance with condition 18 of the Section 36 consent.

Reason: For emergency response planning relating to the Works and requirements for Search And Rescue ("SAR") helicopter operations in and around the Works in accordance with s.29(3)(a) of the 2010 Act.

3.2.2.16 Cable Plan

The Licensee must, no later than six months prior to the Commencement of the Works, submit a CaP, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with SNH, MCA, SFF, East Lothian Council and any such other advisors, organisations or other fisheries representatives as may be required at the discretion of the Licensing Authority.

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 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 seabed is deployed; and
- f. Methodologies for inter-array cable inspection with measures to address and report to the Licensing Authority any exposure of inter-array cables.

Any licensed cable protection works must ensure existing and future safe navigation is not compromised. The Licensing Authority 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 Licensing Authority.

Reason: To ensure all environmental and navigational issues are considered for the location and construction of the inter-array cables in accordance with s.29(3)(a) and (c) of the 2010 Act.

3.2.2.17 Lightning and Marking Plan

The Licensee must, no later than six months prior to the Commencement of the Works, submit a LMP, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with SNH, MCA, NLB, CAA, MOD, East Lothian Council and any such other advisors or organisations as may be required at the discretion of the Licensing Authority.

The LMP must provide that the Works 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 Licensing Authority's 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 the IALA Recommendation O-139 or any other documents that may supersede this guidance prior to approval of the LMP.

The final LMP must be sent to Aberdeenshire Council, Angus Council, Dundee City Council, and Fife Council for information only.

Reason: To ensure navigational safety and the safe marking and lighting of the Works and mitigate the navigational risk to other legitimate users of the sea in accordance with s.29(3)(a) of the 2010 Act.

3.2.2.18 Navigation and Charting

The Licensee must, no later than one calendar month prior to Commencement of the Works, notify the UKHO of the proposed works to facilitate the promulgation of maritime safety information and updating of admiralty charts and publications through the national Notice to Mariners system.

The Licensee must, no later than one calendar month prior to the Commencement of the Works and following confirmation of the approved DSLP by the Licensing Authority (refer to condition 3.2.2.9), provide the positions and maximum heights of any WTGs and construction equipment to the UKHO, for nautical charting purposes, and to the DGC, for aviation purposes. The Licensee must, no later than one calendar month prior to Commencement of the Works, ensure that local mariner's organisations and local fishermen's organisations and HM Coastguard are made fully aware of the Works through local Notice to Mariners or by any other appropriate means.

The Licensee must ensure that details of the Licensed Activities are promulgated in the Kingfisher Fortnightly Bulletin, no later than one calendar month prior to the Commencement of the Works to inform the commercial fishing industry of the vessel routes and the timing and location of the construction activities.

The Licensee must, no later than eight weeks prior to the Commencement of the Works, complete an "Application for Statutory Sanction to Alter/Exhibit" form and submit this to the NLB for the necessary sanction to be granted.

Reason: To reduce the navigational risk to other legitimate users of the sea, in accordance with s.29(2)(b) of the 2010 Act.

3.2.2.19 Air Traffic Control Radar Mitigation Scheme

The Licensee must, prior to the Commencement of the Works, submit an ATC Scheme, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation of the ATC Scheme with the MOD.

The ATC Scheme is a scheme designed to mitigate the impact of the Works upon the operation of the Primary Surveillance ATC Radar at Leuchars Station ("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 Works on the Radar and must be in place for the operational life of the Works provided the Radar remains in operation.

No WTGs forming part of the Works 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 Licensing Authority have confirmed this in writing. The Works must thereafter be operated fully in accordance with the approved ATC Scheme.

Reason: To mitigate the adverse impacts of the Works on the Air Traffic Control Radar, in accordance with s.29(3)(a) of the 2010 Act.

3.2.2.20 Air Defence Radar Mitigation Scheme

The Licensee must, prior to the Commencement of the Works, submit an ADR Scheme, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation of the ADR Scheme with the MOD.

This proposal must address the impacts on the Air Defence Radar at Remote Radar Head ("RRH") Buchan and RRH Brizlee Wood.

Reason: To mitigate the adverse impacts of the Works on the Air Defence Radar, in accordance with s.29(3)(a) of the 2010 Act.

3.2.2.21 Project Environmental Monitoring Programme

The Licensee must, no later than six months prior to the Commencement of the Works, submit a PEMP, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with SNH, RSPB Scotland, WDC, SFF, FMS and any other environmental advisors or organisations as required at the discretion of the Licensing Authority. The PEMP must be in accordance with the Application as it relates to environmental monitoring.

The PEMP must set out measures by which the Licensee must monitor the environmental impacts of the Works. Monitoring is required throughout the lifespan of the Works where this

is deemed necessary by the Licensing Authority. Lifespan in this context includes preconstruction, construction, operational and decommissioning phases.

The Licensing Authority must approve all initial methodologies for the above monitoring, in writing and, where appropriate, in consultation with FTRAG referred to in condition 3.2.2.22 of this licence.

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 Works. 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 Licensing Authority may require the Licensee 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 Licensing Authority) 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 Licensee to contribute to data collection or monitoring of wider strategic relevance, identified and agreed by the Licensing Authority.

Due consideration must be given to the ScotMER programme, or any other successor programme formed to facilitate these research interests.

Any pre-consent monitoring or data collection carried out by the Licensee to address any of the above issues prior to the determination of this marine licence may be used in part to discharge this condition subject to the written approval of the Licensing Authority.

The PEMP is a live document which will be regularly reviewed by the Licensing Authority, at timescales to be determined by the Licensing Authority to identify the appropriateness of ongoing monitoring. Following such reviews, the Licensing Authority may, in consultation with the FTRAG, require the Licensee to amend the PEMP and submit such an amended PEMP, in writing, to the Licensing Authority, for its 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 Licensing Authority.

The Licensee must submit written reports and associated raw and processed data of such monitoring or data collection to the Licensing Authority at timescales to be determined by the Licensing Authority. Consideration should be given to data storage, analysis and reporting. Marine Environmental Data and Information Network ("MEDIN") standards, or suitable equivalent to be agreed with the Licensing Authority should be adhered to.

Subject to any legal restrictions regarding the treatment of the information, the results are to be made publicly available by the Licensing Authority, or by such other party appointed at its discretion.

The Licensing Authority may agree, in writing, that monitoring may be reduced or ceased before the end of the lifespan of the Works.

Reason: To ensure that appropriate and effective monitoring of the impacts of the Works is undertaken, in accordance with s.29(3)(a) and (c) of the 2010 Act.

3.2.2.22 Regional Advisory Group

The Licensee must participate in the FTRAG or any successor group, established by the Licensing Authority for the purpose of advising the Licensing Authority on research, monitoring and mitigation programmes for, but not limited to, ornithology, marine mammals, diadromous and commercial fish. The extent and nature of the Licensee's participation in the Regional Advisory Group is to be agreed by the Licensing Authority.

Reason: To ensure effective environmental monitoring and mitigation is undertaken at a regional scale in accordance with s.29(3)(c) of the 2010 Act.

3.2.2.23 Fisheries Management and Mitigation Strategy

The Licensee must no later than six months prior to the Commencement of the Works, submit an FMMS, in writing, to the Licensing Authority for its written approval in consultation with SFF and any such other fisheries representatives as may be required at the discretion of the Licensing Authority. Commencement of the Works cannot take place until such approval is granted. The FMMS must be defined and finalised in consultation with the FTCFWG. In order to inform the production of the FMMS the Licensee must monitor or collect data as relevant and agreed with the Licensing Authority.

The FMMS must include a Transit Plan, which must lay out guidelines to address potential interactions with fishing activity for vessels operating in and around the site and transiting to the site.

As part of any finalised FMMS, the Licensee must produce and implement a mitigation strategy for each commercial fishery that can prove to the Licensing Authority that they would be adversely affected by the Works. The Licensee must implement all mitigation measures committed to be carried out by the Licensee within the FMMS. Any contractors, or sub-contractors working for the Licensee, must co-operate with the fishing industry to ensure the effective implementation of the FMMS. The Licensee must remain a member of the FTCFWG, or any successor group formed to facilitate commercial fisheries dialogue.

Reason: To mitigate the impact on commercial fishermen in accordance with s.29(3)(c) of the 2010 Act.

3.2.2.24 Environmental Clerk of Works

Prior to the Commencement of the Works, the Licensee must, at its own expense, and with the approval of the Licensing Authority in consultation with SNH, appoint an independent ECoW. The ECoW must be appointed in time to review and approve the draft version of the first plan or programme submitted under this licence to the Licensing Authority, in sufficient time for any pre-construction monitoring requirements, and remain in post until agreed by the Licensing Authority. The terms of appointment must also be approved by the Licensing Authority 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 licence;
- b. Responsible for the monitoring and reporting of compliance with the licence conditions and the environmental mitigation measures for the Works authorised by this licence;
- c. Provision of on-going advice and guidance to the Licensee in relation to achieving compliance with licence 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 Licensing Authority at timescales to be determined by the Licensing Authority;
- 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 Works are being constructed in accordance with the plans and this licence, 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 to the Licensing Authority; and
- h. Agreement of a communication strategy with the Licensing Authority.

Reason: To ensure effective monitoring of and compliance with the environmental mitigation and management measures associated with the Works in accordance with s.29(2)(b) and (c) of the 2010 Act.

3.2.2.25 Fisheries Liaison Officer

Prior to the Commencement of the Works, an FLO, must be appointed by the Licensee and approved, in writing, by the Licensing Authority (following consultation with SFF and the FTCFWG). The FLO must be appointed by the Licensee for the period from Commencement of the Works until the Final Commissioning of the Works. The identity and credentials of the FLO must be included in the EMP (referred to in condition 3.2.2.11). The FLO must establish and maintain effective communications between the Licensee, any contractors or sub-contractors, fishermen and other users of the sea during the construction of the Works, and ensure compliance with best practice guidelines whilst doing so.

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

- a. Establishing and maintaining effective communications between the Licensee, any contractors or sub-contractors, fishermen and other users of the sea concerning the overall Works 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 Works; 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 in accordance with s.29(3)(b) and (c) of the 2010 Act.

3.2.2.26 Protocol for Archaeological Discoveries

The Licensee must, no later than six months prior to the Commencement of the Works, submit a PAD which sets out what the Licensee must do on discovering any marine archaeology during the construction, operation, maintenance and monitoring of the Works, in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may be given only following consultation by the Licensing Authority with HES and any such advisors as may be required at the discretion of the Licensing Authority. The Reporting Protocol must be implemented in full, at all times, by the Licensee.

Reason: To ensure any discovery of archaeological interest is properly and correctly reported in accordance with s.29(3)(a) of the 2010 Act.

3.2.2.27 Construction Traffic Management Plan

In the event that major offshore components require onshore abnormal load transport, the Licensee must, no later than six months prior to the Commencement of the Works, submit a CTMP in writing, to the Licensing Authority for its written approval. Commencement of the Works cannot take place until such approval is granted. Such approval may only be granted following consultation by the Licensing Authority with Transport Scotland and any such other advisors as may be required at the discretion of the Licensing Authority.

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 Works. All construction traffic associated with the Works must conform to the approved CTMP; and
- 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 Works.

Reason: To maintain the free flow and safety of the trunk road network in accordance with <u>s.29(3)(a) of the 2010 Act.</u>

3.2.3 During construction of the Works

3.2.3.1 Transportation Audit Report

The Licensee must submit to the Licensing Authority a detailed TAR for each calendar month during the construction phase of the Works. The TAR must be submitted within 14 days of the end of each calendar month.

The TAR must include the nature and quantity of all substances and objects deposited and materials used in construction (as described in Part 2 of this licence) in that calendar month. Alterations and updates can be made in the following month's TAR. Where appropriate, nil returns must be provided.

If the Licensee becomes aware of any substances, objects or materials on the TAR that are missing, or becomes aware that an accidental deposit has occurred, the Licensee must notify the Licensing Authority as soon as practicable. The Licensee must undertake such survey as directed by the Licensing Authority to locate the substances, objects and materials. If the Licensing Authority is of the view that any accidental deposits have occurred and should be removed, then the materials must be removed by the Licensee as soon as is practicable and at the Licensee's expense.

Reason: To confirm that the deposits made were in accordance with the application documentation, in accordance with s.29(3)(c) of the 2010 Act and that any accidental deposits are recovered or charted appropriately in accordance with s.29(3)(c) of the 2010 Act.

3.2.3.2 Navigational safety

The Licensee must notify the UKHO of the progress of the construction of the Works to facilitate the promulgation of maritime safety information and updating of admiralty charts and publications through the national Notice to Mariners system.

The Licensee must ensure that progress of the Works is promulgated regularly in the Kingfisher Fortnightly Bulletin to inform the commercial fishing industry of the vessel routes and the timing and location of the construction activities.

The Licensee must in the case of damage to, or destruction or decay of, the Works, notify the Licensing Authority, in writing, as soon as reasonably practicable, following such damage, destruction or decay. The Licensee must carry out any remedial action as required by the Licensing Authority, following consultation with the MCA, the NLB or any such advisers as required by the Licensing Authority.

The Licensee must ensure that any vessels permitted to engage in the construction of the Works are marked in accordance with the International Rules for the Prevention of Collisions at Sea whilst under way, and in accordance with the UK Standard Marking Schedule for Offshore Installations if the vessel is secured to the seabed.

The Licensee must ensure that no radio beacon or radar beacon operating in the marine frequency bands is installed or used on the Works without the prior written approval of the Office of Communications ("OfCom").

The Licensee must ensure that navigable depth is not altered by more than 5% referenced to Chart Datum unless otherwise agreed, in writing, with the Licensing Authority in consultation with the MCA and NLB.

Reason: To reduce the navigational risk to other legitimate users of the sea, in accordance with s.29(2)(b) of the 2010 Act.

3.2.3.3 Markings, lighting and signals of the Works

The Licensee must ensure that the Works are marked and lit in accordance with an approved LMP at all times. The LMP and any subsequent amendments must be approved by the Licensing Authority following consultation with the SNH, NLB, MCA, CAA, East Lothian Council and the MOD. The display of unauthorised marks or lights is prohibited.

The Licensee must ensure that the Works are marked and lit in accordance with IALA Recommendation O-139.

Unless otherwise approved by the Licensing Authority, the LMP must include but not be limited to:

- a. the lighting requirements of the MCA, NLB, CAA and MOD;
- b. that the boundary WTG, where they are more than 900m apart, must be lit with a single 2000 candela, red aviation light, flashing Morse 'W' in unison with all other boundary WTG;
- c. that all other WTG must be fitted with a fixed single red 200 candela aviation light for Search and Rescue ("SAR") purposes; and
- d. that all WTG aviation lights should be compatible with night vision imaging systems.

The Licensee must ensure that during the construction phase the Site boundary is marked by a mixture of lit Cardinal Mark and lit Special Mark buoys, to be agreed with NLB. These buoys must be a minimum of 3 metres in diameter at the waterline, have a focal plane of at least 3 metres above the waterline and be fitted with a topmark and radar reflector. The light range on these buoys must be 5 Nautical Miles. AIS Aids to Navigation (AtoN) must be fitted to Cardinal Marks.

Reason: To ensure safe appropriate marking and lighting of the offshore Works, in accordance with s.29(2)(b) of the Marine (Scotland) Act 2010.

3.2.4 Conditions upon Completion of the Works

3.2.4.1 Date of Completion of the Works

The Licensee must, no later than one calendar month following the Completion of the Works, notify the Licensing Authority, in writing, of the date of Completion of the Works.

Reason: To inform the Licensing Authority of the Completion of the Works, in accordance with <u>s.29(3)(c) of the 2010 Act.</u>

3.2.4.2 Nature and quantity of substances and objects deposited and materials used in construction

The Licensee must, no later than one calendar month following the Completion of the Works submit a final audit report, in writing, to the Licensing Authority stating the nature and quantity of all substances, objects placed below MHWS and all materials used in construction within the Scottish marine area under the authority of this licence.

Reason: To confirm that the deposits made and material used were in accordance with the Application and in accordance with s.29(3)(c) of the 2010 Act.

3.2.4.3 Noise Registry Close Out

The Licensee must complete and submit a close-out report for all aspects of the Works that produced loud, low to medium frequency (10Hz-10kHz) impulsive noise in the online Noise Registry no later than 12 weeks from the Completion of the Works.

Reason: To ensure compliance with reporting requirements on marine noise, in accordance with s.29(3)(c) of the 2010 Act.

3.2.4.4 Navigational safety

The Licensee must notify the UKHO of the Completion of the Works to facilitate the promulgation of maritime safety information and updating of admiralty charts and publications through the national Notice to Mariners system.

The Licensee must, within one month of the Completion of the Works, provide the "as-built" positions and maximum heights of all WTG, along with any sub-sea infrastructure, to the UKHO for aviation and nautical charting purposes.

The Licensee must, as per the requirements of the MCA's MGN 543 and supplementary updates, complete post-installation hydrographic surveys of the Site or subsections thereof, to the IHO Order 1a survey standard. On completion of these surveys, the data and a corresponding report of survey must be supplied to the UKHO, with notification to the MCA hydrography manager and the Licensing Authority.

The Licensee must ensure that local mariners, fishermen's organisations and HM Coastguard, in this case the National Maritime Coastguard Centre are made fully aware of the Completion of the Works.

The Licensee must ensure that the Completion of the Works is promulgated in the Kingfisher Fortnightly Bulletin to inform the commercial fishing industry. The Licensee must, where any damage, destruction or decay is caused to the Works, notify the Licensing Authority, in writing, of such damage, destruction or decay as soon as reasonably practicable following such damage, destruction or decay. The Licensee must carry out any remedial action which the Licensing Authority advises the Licensee, in writing, as requiring to be taken, which may include a requirement to display aids to navigation, following consultation by the Licensing Authority with the MCA, the NLB or any such advisers as required.

The Licensee must ensure that the WTG are actively monitored during the operation and maintenance phases. The Licensee must ensure that a contingency plan is in place to respond to any reported catastrophic failures which may result in the WTG, or part(s) thereof, breaking loose and becoming a buoyant hazard. This contingency plan should include the transmission of local radio navigation warnings.

The Licensee must ensure that no radio beacon or radar beacon operating in the marine frequency bands is installed or used on the Works without the prior written approval of the OfCom.

The Licensee must not exhibit, alter or discontinue navigational lighting of the Works without the statutory sanction of the Commissioners of Northern Lighthouses. An 'Application for Statutory Sanction to Exhibit/Discontinue' form must be completed by the Licensee as fully as possible and returned to the NLB for the necessary sanction to be granted prior to exhibiting, altering or discontinuing navigational lighting.

Reason: To reduce the navigational risk to other legitimate users of the sea, in accordance with s.29(2)(b) of the 2010 Act.

3.2.4.5 Markings, lighting and signals of the Works

The Licensee must ensure that the Works are marked and lit in accordance with an approved LMP at all times. The LMP and any subsequent amendments must be approved by the Licensing Authority following consultation with the SNH, NLB, MCA, CAA, East Lothian Council and the MOD. The display of unauthorised marks or lights is prohibited.

The Licensee must ensure that the Works are marked and lit in accordance with IALA Recommendation O-139

Reason: To ensure safe appropriate marking and lighting of the offshore Works, in accordance with s.29(2)(b) of the 2010 Act.

3.2.4.6 Operation and Maintenance of the Works

The Licensee must operate and maintain the Works in accordance with an approved OMP.

The OMP and any subsequent amendments must be approved by the Licensing Authority. The Licensing Authority must be notified at least three calendar months or such other period

as agreed by the Licensing Authority in advance of any maintenance of the Works not included in the OMP and involving licensable marine activities not covered under this licence.

Reason: To ensure compliance with the approved OMP to prevent decay of the Works and to ensure that any maintenance work is carried out under an appropriate licence in accordance with s.29(3)(b) of the 2010 Act.

3.2.4.7 Restoration of the Site to its original condition

The Licensee must take all reasonable, appropriate and practicable steps at the end of the operational life of the Works to restore the Site to its original pre-construction condition, or to as close to its original condition as is reasonably practicable, in accordance with ta PEMP and the DP and to the satisfaction of the Licensing Authority.

Should the Works be discontinued prior to expiry date of this marine licence, the Licensee must inform the Licencing Authority in writing of the discontinuation of the Works.

A separate marine licence will be required for the removal of Works.

Reason: To mitigate the effects of the activity on the Site, in accordance with s.29(3)(e) of the 2010 Act.

3.2.4.8 Charting requirements

The Licensee must, within one month of the final Completion of the Works, provide the coordinates accurate to three decimal places of minutes of arc for each WTG, position and maximum heights of the WTG to UKHO and the Defence Geographic Centre for nautical charting and aviation purposes.

Reason: To reduce the navigational risk to other legitimate users of the sea, in accordance with s.29(2)(b) of the 2010 Act.

3.2.4.9 Final Commissioning of the Works

The Licensee must, no more than one calendar month following the Final Commissioning of the Works, notify the Licensing Authority, in writing, of the date of the Final Commissioning of the Works.

Reason: To inform the Licensing Authority of the Final Commissioning of the works, in accordance with s.29(3)(c) of the 2010 Act.

4. PART 4 – PROJECT LOCATION

Figure 1 – Inch Cape Offshore Limited Wind Farm

